THE CHEMISTRY OF AUSCHWITZ
Germar Rudolf

The
Chemistry
of
Auschwitz

The Technology and Toxicology
of Zyklon B and the Gas Chambers
———
A Crime-Scene Investigation

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Preface

While I was making the last changes to this book in preparation for its publication, yet another Holocaust Remembrance Day – January 27th – passed with its many commemoration events. On that memorable day in 1945, the Red Army overran the infamous Auschwitz Camp. For the Politics of Memory, it is business as usual. Those equipped with finely tuned societal seismographs, however, have noticed that something is afoot.

The most-recent indicator for this was an article written by Jewish activist David Cole, and published in the conservative mainstream periodical *Taki’s Magazine* (Cole 2016). Cole had been dabbling for a while in Auschwitz research, and had burned his fingers in the process. Yet he had gained some insights which are worth considering. We will encounter him and his work later in the present book. In the just-mentioned article, Cole had the following to say about Auschwitz:

“Ah, Auschwitz. Yes, here’s where we still have a problem. […] there are genuine problems with what is commonly claimed to be part 3 [of the Holocaust]—that in 1943 Auschwitz-Birkenau was ‘renovated’ to become an ultra-super be-all end-all extermination facility. To me, the evidence just isn’t there, and the evidence that does exist calls that claim into question. […] Orthodox historians] backed themselves into a corner by putting Auschwitz, with its phony, postwar tourist-attraction ‘gas chamber’ and its complete lack of documentary evidence supporting a killing program, front and center as the heart of the Holocaust. They’re in so deep at this point that they can’t back off. It’s surprisingly easy to get the leading lights of anti-denial to admit as much one-on-one. Rick Eaton has been the senior researcher at the Simon Wiesenthal Center for thirty years. He’s as major a player in the fight against Holocaust denial as anyone on earth. Two years ago, I corresponded with him (under a pseudonym, of course... he’d never speak directly with the likes of me!) regarding the Auschwitz problem. I explained my thesis to him, that Auschwitz, having various ‘issues’ that call the credibility of extermination claims into question, should not be used to represent the Holocaust. He agreed […].

Keep in mind that even though I was using a pseudonym, I was not...
falsely claiming to be anyone of note. In other words, Eaton made that admission to a complete nobody, a total stranger. One gets the feeling that many of these experts are secretly longing for the day when they can be open about the ‘Auschwitz problem’ and move past it [...]"

If you want to find out why we have a problem with Auschwitz, the answer is in your hands, because the research forming the basis of the present study is what made Cole and other Jewish intellectuals take a closer, critical look into the orthodox Auschwitz narrative. In fact, in order to get an update on the latest research results, Cole got in touch with me in order to get some input before preparing the above article, among other things.

So, if the historian Eaton from the Simon Wiesenthal Center and Cole can acknowledge that this research has revealed a profound problem with the mainstream Auschwitz narrative, can’t we all do the same?

Of course we can.

But when I started to take a look at that “problem” in the late 1980s, it wasn’t a matter of course at all. A good part of that trail had yet to be blazed, and it wasn’t going to be easy. Let me briefly describe my journey along that path as a primer to what you are going to read in this book.

As a German citizen, I started my journey in that country. In 1985, while I was studying in West Germany’s capital Bonn, the West-German parliament discussed whether the law should be tightened in order to make things more difficult for Holocaust deniers. At that time, I was merely 20 years old and still in the first half of my university studies of chemistry. I did not object to tightening the law against Holocaust deniers. After all, who could argue against outlawing the vile propaganda lies of Nazis, anti-Semites and other extremists? For justice’s sake, however, I thought back then that such laws should be applied equally against the deniers of all genocides.

Roughly a year later and by mere coincidence, I actually met such a denier for the first time, a self-declared right-wing radical. Discussing the topic with him at a bar under the influence of a couple of beers left some bad-tasting memories. His arguments, for instance that it wasn’t six but “only” three million victims, seemed crass at best. Although I agreed with his analysis that the Holocaust is misused to suppress patriotic movements in particular in Germany, his evident political motives made me deem him untrustworthy.

Another three years later, a libertarian friend of mine gave me the book Was ist Wahrheit? (What Is Truth?) by Paul Rassinier. Rassinier, a French socialist, had established his own pacifist resistance group against the German occupiers during the Second World War. In that context, he helped Jews flee to Switzerland. He was caught by the Germans and promptly deported to the Buchenwald Camp. A short while later, he was sent to the underground production facility of the so-called “V-Waffen” (retaliation weapons = missiles) of the Mittelbau Concentration Camp under terrible circumstances. He survived
the war only barely. What would you expect such a person to write about his experiences in the camps?

What I read in this book was the opposite of what I had expected. Rassinier accuses his fellow inmates of exaggerations and lies, and he profoundly challenges the traditional Holocaust narrative. He gives all kinds of reasons for this, and although I considered them comprehensible, they were difficult to verify. His book could not so easily be swept aside as the drivel of a Nazi and anti-Semite, simply because Rassinier was not a Nazi, quite to the contrary. He was not a perpetrator, but rather a victim; not an anti-Semite, but someone who had risked his life to help Jews. This book turned my moral worldview upside down. But because I was not a historian, I neither felt called upon nor competent to do anything about the matter.

A few months after that, in the summer of 1989, I read another book which dealt with the political misuse of Germany’s attempt to come to terms with its past. The author was the Swiss political scientist Dr. Armin Mohler, who had researched and published on this topic since the 1960s. I had read earlier editions of his relevant studies. Yet what I read in this new edition was a little too much to digest: Mohler reports in it that a U.S. expert for execution technologies had recently (1988) written an expert report, in which he claimed to have proved that the purported gas chambers at Auschwitz and Majdanek could neither have functioned nor been used as such. One of his arguments were chemical analyses that showed that no traces of the poison gas used back then – “Zyklon B” – could be detected in the walls of the gas chambers.

Excuse me? How can you look for traces of gas 45 years later and expect to find anything in the first place? GAS! Hello??! Gas blows away; it’s that simple.

Or maybe it’s not that simple. Back then I was in the process of writing my master’s thesis, hence was about to become an accredited chemist. But I was too stupid to understand why somebody would carry out analyses like that. Therefore, I went to the library of the research center where I was working at that time, and I consulted a chemical encyclopedia. Question: What is “Zyklon B”? Next question: Can this substance cause a chemical reaction which makes it possible to find chemical traces in exposed masonry in the long run? And if so, what kind of reaction? And under what circumstances? And which factors would influence that reaction? And how stable are the products of that reaction? And, and, and…

These questions were all basically chemical in nature, hence within my field of professional expertise. The problems were hair-raising, and the repercussions of any solution to this problem were possibly far-reaching. What should I do? This time I could not talk my way out of it by claiming that I am not a chemist and could therefore not contribute anything.
As a first step, I got myself a copy of the report by that U.S. expert. That in itself was an obstacle course, because it turned out that the German edition of this technical report had been banned in Germany where the constitution expressly says that censorship does not exist. Well, great! I instantly asked myself: “Where the heck do we live?” So, I got myself an English edition instead, which I translated step by step. While so doing, I found factual mistakes and deficiencies galore which, as it turned out later, were only the tip of the iceberg (on this see my footnotes and comments in Leuchter et al. 2015). Something had to be done to iron out those shortcomings and to put that entire matter on a solid foundation. But who would tackle such a hot potato?

If I get involved in that matter, doesn’t that amount to my admitting indirectly that the question “Were there any homicidal gas chambers at Auschwitz?” could by answered any differently than with a YES? By taking that question seriously, doesn’t that turn me into a doubter? Doesn’t that make me already half a denier? A justifier of the propaganda of Nazis, anti-Semites, right-wing radicals, and so on? Do I want that?

I was raised in a society which indoctrinates people that they must not doubt the orthodox Holocaust narrative; that doubting it is evil. Hence, I felt guilty only because Rassinier and this U.S. execution expert had aroused doubts in my mind. At the same time, however, I was convinced that this feeling of guilt wasn’t right; that a society which condemns doubt and ostracizes doubters puts itself in the wrong. An enlightened society welcomes doubts and answers them with rational arguments. Only dictatorships suppress doubts and counterarguments, and persecute doubters and dissidents.

I was facing an interesting challenge that evidently went far beyond the chemical issues raised. How far it reached I did not quite fathom initially. This, however, was exactly what made the matter even more enticing. Hence, I accepted the challenge. The result of this you are now holding in your hands (or viewing on your screen) in an updated and greatly expanded edition.

I have described the events leading to the present book more thoroughly elsewhere, to which I refer the interested reader to Rudolf 2016c. Allow me to add a few words here about the history of this study. An early version of the present book had been written on request of a defense lawyer in the style of an expert report. Since late 1991, it was presented as evidence in criminal proceedings against so-called “Holocaust deniers,” and I myself appeared as a chemistry expert witness at various trials. I was never allowed to testify in court about that topic, though. Although German courts of law are not allowed to reject expert witnesses who are already in the courtroom and who can testify expertly on the case’s matters of fact, that did not bother the respective judges at all. They simply violated German procedural rules, and one of these judges even threatened me with prosecution in case I dared testify along the lines of the defense’s motion – before I had uttered even the slightest peep.
All kinds of personalities of public life pulled out all the stops to prevent me from continuing my activities as an expert witness. In the end, the German Federal Supreme Court even changed case law by determining that in Germany no one is anymore allowed under the threat of prosecution to even merely file a motion to introduce evidence which argues along the line of the present book.

The reason for this was explained to me in 1993 by Prof. Dr. Arndt Simon, at that time managing director at the Max Planck Institute for Solid State Research, where I worked on my PhD thesis back then:

“Every era has its taboo. Even we researchers have to observe the taboo of our era. We Germans may not address this topic; others have to do this. We have to accept that we Germans have less rights than the others.”

That can’t be true, can it? Would you accept it, dear reader, if someone said, “Negroes have less rights than the others”? Or “Jews have less rights than the others”? If not, then why are some of you may be merely shrugging your shoulders when it is directed against Germans?

Hence, I wouldn’t let go. Consequently, my situation grew increasingly precarious. I had even reason to fear that they would lock me up for my research and throw away the keys. Finally, the pressure on me became so unbearable that in 1996 I decided to leave Germany for good, which I succeeded in doing after quite a steeplechase. I have described the details of this post-history of the present book, which is considerably more dramatic than its pre-history, elsewhere as well (Rudolf 2012, 2016c).

In the present edition of this study, I could not include the biographical background of this book, which might be even more interesting to some than my technical and chemical studies. Doing so would have inflated the book to more than 700 pages. That was out of the question also because one version of this edition has been printed throughout in four colors due to the more than one hundred color illustrations. My biographical essays, however, hardly have any illustrations, hence it would have been inefficient in terms of production costs and hence sales price to include them here. I may point out, though, that
both of my autobiographical books can be downloaded from the internet as free PDF files:

– *Hunting Germar Rudolf*: germarrudolf.com/?p=3764

With that said, I wish you happy reading!

Germar Rudolf, Red Lion, Pennsylvania, USA, February 5, 2017
1. Prelude

1.1. Slow Death in U.S. Gas Chambers

On June 15, 1994, dramatic events unfolded during the carrying out of a death sentence. David Lawson, sentenced to death for a capital felony, was scheduled to be killed by hydrogen cyanide in the gas chamber located in the state prison of Raleigh, North Carolina – but the prisoner refused to assist his executioners.\(^1\) Lawson repeatedly held his breath for as long as possible and took only short breaths in between.\(^2\) Lawson exhibited enormous willpower, calling out to both executioners and witnesses throughout his execution:

“I am human.”

At first his cry was clearly audible, but as the minutes went by he became less and less understandable and finally, more than ten minutes into the execution, there was just a mutter. He was declared dead only after eighteen minutes. The witnesses to the execution were horrified. The warden of the prison, who had also supervised the execution, was so shaken that he resigned. Because of this execution fiasco, executions with poison gas have been abandoned for a short period of time in the USA and replaced with lethal injections.

By early March 1999, however, this horror had already been forgotten.

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1 For a detailed description of this execution see Krueger 1994.
This time, the victim was a German national. Despite intervention by the German government, Walter LaGrand was executed in the state prison at Florence, Arizona. LaGrand’s death struggle against lethal cyanide gas lasted eighteen minutes. Thirty witnesses peered through a bulletproof window as the confessed, convicted murderer died horribly behind a steel-reinforced door.\(^3\)

It is now clear to the experts, and especially to those still waiting on death row, that a quick and painless execution by gas requires the cooperation of the intended victim. Prisoners about to be gassed were usually encouraged to inhale deeply as soon as the cyanide was released in order to make their deaths come easily. However, if an intended victim was uncooperative, the execution could easily become a fiasco. By simply refusing to take the deep breaths needed to quickly inhale a lethal dose of cyanide, the agony could last for more than eighteen minutes, even under ideal conditions. Publications in the United States reveal that executions lasting from 10 to 14 minutes are the rule, rather than the exception. Amnesty International calls them “botched executions.”\(^4-6\)

The method used in US-American execution gas chambers was introduced in 1924. The expense to kill just one single person is tremendously high, since neither the witnesses, nor the prison personnel or the environment may be endangered by the poison gas released for such an execution. Reinforced-glass windows, massive, heavy, hermetically-sealed steel doors, powerful ventilation systems with a device to burn the evacuated poisonous gases, and a chemical treatment of the chamber interior to neutralize all remaining traces of the poison make this execution method the most cumbersome of all.\(^5\)

During the last two decades of the 20th century, the only technical expert in the United States specializing in building and maintaining this equipment was Frederick A. Leuchter Jr., sometimes referred to in the media as “Mr. Death,”\(^8\) since his profession was the design, construction and maintenance of various kinds of execution devices.\(^9\)

\(^3\) Freitag 1999; Mannheimer Morgen, March 5, 1999.
\(^4\) The News & Observer, Raleigh (N.C.), June 11, 1994, p. 14A (according to the prison warden, normally 10-14 min.).
\(^5\) Duffy 1962, p. 101 (13-15 min.); Duffy was warden of San Quentin Prison for almost 12 years, during which time he conducted the execution of 88 men and 2 women, many of them executed in the local gas chamber.
\(^6\) Trombley 1992, p. 13 (approximately 10 minutes or more.); Amnesty International, Botched Executions, Fact Sheet December 1996, distributed by Amnesty International USA (more than 7 min). See also more recently Christianson 2010; this last book will be quoted more often in Section 7.1., where I will discuss this issue more thoroughly.
\(^7\) Re. the technical proceedings see Leuchter/Faurisson/Rudolf 2015, pp. 193-224.
\(^8\) Such is the title of a documentary movie directed by Errol Morris about Fred Leuchter, shown at the Sundance Film Festival in Park City (Utah, USA) on January 27, 1999 (see Morris 1999/2001/2003. The original version first shown on Jan. 27, 1999 during the Sundance Film Festivals was reworked after protests.
\(^9\) The following paragraphs were adapted from M. Weber 1998.
Figure 2: View into the execution gas chamber of the State Penitentiary in Florence, Arizona, USA.
A feature article in *The Atlantic Monthly* (Feb. 1990), for example, factually described Leuchter as

“the nation’s only commercial supplier of execution equipment. [...] A trained and accomplished engineer, he is versed in all types of execution equipment. He makes lethal-injection machines, gas chambers, and gallows, as well as electrocution systems [...]”

Similarly, a lengthy *New York Times* article (October 13, 1990), complete with a front-page photo of Leuchter, called him “The nation’s leading adviser on capital punishment.”

In his book about “America’s Capital Punishment Industry,” Stephen Trombley confirms that Leuchter is, in fact,

“America’s first and foremost supplier of execution hardware. His products include electric chairs, gas chambers, gallows, and lethal injection machines.
He offers design, construction, installation, staff training and maintenance.” (Trombley, p. 8)

Killing someone in a gas chamber is very dangerous for those who carry out the execution, above all because the dead body of the victim is saturated with lethal gas. After the execution, explains Leuchter (ibid., p. 98):

“You go in. The inmate has to be completely washed down with chlorine bleach or with ammonia. The poison exudes right out through his skin. And if you gave the body to an undertaker, you’d kill the undertaker. You’ve got to go in, you’ve got to completely wash the body.”

Bill Armontrout, warden of the Missouri State Penitentiary in Jefferson City, confirms the danger (ibid., p. 102):

“One of the things that cyanide gas does, it goes in the pores of your skin. You hose the body down, see. You have to use rubber gloves, and you hose the body down to decontaminate it before you do anything [else].”

In Leuchter’s opinion, gas-chamber use should be discontinued, not just because of the cruelty of this method of execution, but because of his beliefs relating to gas chambers as such (ibid., p. 13):

“They’re dangerous. They’re dangerous to the people who have to use them, and they’re dangerous for the witnesses. They ought to take all of them and cut them in half with a chain saw and get rid of them.”

With a career built on the motto “Capital punishment, not capital torture,” Leuchter took pride in his work. He was glad to be able to ensure that condemned prisoners die painlessly, that the personnel who carried out executions were not endangered, and that taxpayer dollars were saved.

1.2. Hydrogen Cyanide – a Dangerous Poison

Hydrogen cyanide, is not, of course, utilized solely for the purpose of executions in U.S. gas chambers, but for much more beneficial purposes as well. Since approximately the end of WWI, hydrogen cyanide, or HCN, has been used to exterminate vermin such as bedbugs, lice, corn weevils, termites, cockroaches, and other pests. It is, of course, important to be extremely cautious while applying hydrogen cyanide in order to avoid disaster, because it is in many ways a highly dangerous poison.

The residents of a house in Los Angeles, California, had to learn this in a quite painful way shortly before Christmas 1947. They had hired the Guarantee Fumigation Company to destroy the termites which threatened to eat up the wooden structure. The pest controllers, however, were apparently not very competent, because when using a container of pressurized HCN to fill the house, which had been wrapped up like a Christmas present, they exceeded
safe limits and pumped in too much gas. (Figure 4). Due to unknown reasons, the mixture of air and HCN, which can be highly explosive under certain circumstances, ignited during the fumigation. The resulting explosion destroyed the entire dwelling.

However, hydrogen cyanide has yet another insidious characteristic: it is highly mobile. This mobility is highly welcome when it comes to killing vermin: Wherever fleas and bugs try to hide, the gas will still reach them! Unfortunately, hydrogen cyanide does not restrict itself to attacking vermin. Rather, it indiscriminately seeps into the smallest cracks and even penetrates porous substances such as felt sealing materials and thin walls, thereby leaking into areas where it is not welcome. Failures on the part of disinfestors to ensure that all places to be fumigated are adequately sealed off have been described in toxicological literature (Moeschlin 1986, p. 300):

A gassing requires 1-2% by volume, while an explosion requires 6% by volume or more; see, in this regard, Section 6.3.

“How to get rid of termites,” Life, Dec. 22, 1947, p. 31; a much smaller accident occurred during an attempt to euthanize a cat, whose intense scratching on the execution-chamber walls created a spark that made the poison gas, which evidently had been administered in too high a concentration, explode. The cat escaped. The press did not report the kind of poison gas used, though (“Lethal Gas Chamber…” 1936).
“Example: J.M., a 21-year-old female home decorator, was working in the basement of the house, the second floor of which was being treated for vermin with cyanide gas. Due to insufficient sealing during fumigation, the gas penetrated the corridors, where it poisoned the disinfestor, and reached the cellar through air shafts. Mrs. M. suddenly experienced an intense itching sensation in her throat followed by headache and dizziness. Her two fellow workers noticed the same symptoms and they all left the cellar. After half an hour, Mrs. M. returned to the cellar whereupon she suddenly collapsed and fell unconscious. Mrs. M. was taken to a hospital together with the unconscious exterminator. Mrs. M. recovered and was released. The exterminator, by contrast, was pronounced dead on arrival.”

The dangers of this type of poison gas are not merely restricted to persons in the same house in which fumigation is taking place. Large quantities of gas may penetrate the open air and endanger the entire neighborhood, as shown by an accident in the fall of 1995 in a Croatian holiday resort:12

Figure 5: How not to get rid of termites: The concentration of hydrogen cyanide used was too high. One single spark, and the entire house blew up.

12 DPA 1995, p. 7. Research has failed to determine which toxic gas was involved. Since hydrogen cyanide is one of the most poisonous and most rapidly diffusing of all gases used in disinfestation, the reported damage would have been at least as great if caused by hydrogen
“That failed profoundly. Three local residents suffering from symptoms of poisoning and a number of surviving woodworms were the results of the botched action against vermin in a church in the Croatian holiday resort of Lovran, close to Rijeka. The exterminator’s clumsy work necessitated the evacuation of several hundred residents of the locality.

The exterminators tried to treat the Church of the Holy Juraj for woodworms during the night, using the highly toxic gas. But since they failed to seal off the church appropriately, the gas seeped into surrounding houses in which people were already asleep. ‘Fortunately, the people woke up immediately because of cyanide, even if hydrogen cyanide was not in fact involved in this accident. A number of additional examples are described by K. Naumann 1941.

Figure 6: Church of the Holy Juraj (St. George) in Lovran, Croatia (Aconcagua, Wiki Commons)
sudden attacks of nausea – that’s what saved them from certain death,’ wrote the newspaper Vecernji List. Three residents nevertheless suffered severe intoxication. The mayor decided to evacuate the center of the town. The exterminators were arrested. The woodworms survived. dp’’

But that is still not all: on top of this, hydrogen cyanide is also a persistent poison. It adheres wherever it is utilized, especially in a moist environment. Deadly cyanide gas continues to evaporate slowly from moist objects for hours and days, involving a long-term environmental hazard where sufficient ventilation cannot be assured.

A 1935 case of accidental HCN poisoning in the USA highlights this. A residential home had been fumigated with HCN, and subsequently thoroughly ventilated for 24 hours. However, that wasn’t good enough, because the workmen hired to recondition the premises who entered the house right afterwards “complained of sickness during their work.”

This led to an extended scientific study, in the course of which several standard-size houses were fumigated with HCN and subsequently ventilated for 24 hours. After this, the HCN quantities remaining at various locations in these houses were measured meticulously. Some of these houses were furnished and filled with the usual personal property; others were unfurnished. One series of gassings occurred during the summer, the other during the winter. The results of these scientific experiments were published four years later and stated among other things (Page/Lubatti/Gloyns, p. 31):

“1. All windows should be kept open for 24 hr. unless this leads to the entry of rain or snow.
2. A ventilation period of 24 hr. is generally sufficient for an empty house of normal construction. A longer period may be required for a furnished house or for a house which (a) is damp, (b) contains an unusual proportion of dead space, (c) contains rooms without windows providing adequate communication with the open air.

(c) Precautions
1. Fumigation of clothing and particularly of bedding in a house, as a regular practice, is definitely undesirable.
2. Upholstered furniture should be placed in such a position as best to facilitate airing. Cushions, etc. should be spread out singly on furniture which is not upholstered. […]
4. If the house contains a considerable quantity of absorbent material or if the fabric is likely to be unusually absorptive, e.g. if partitions of insulating board are employed, or if the construction of the house, or any other circumstances, suggest that a period of 24 hr. airing may not be sufficiently long, all doors and windows should be closed after performing the tests with benzidine acetate–copper acetate, and these tests should be repeated after the house has remained closed for 2 hr. This will allow absorbed gas to be given off and to
build up a concentration in the air space. If this is still not greater than [...] 0.0009 % by vol., reoccupation may be permitted.”

Later in the present study, we will encounter moist rooms, chock-full of moist objects and without appropriate means of ventilation, which are said to have been filled with HCN.

The danger of lingering amounts of hydrogen cyanide is also emphasized by an especially dramatic and simultaneously macabre accident in the United States in the fall of 1998 (S. Ball 1998):

Los Angeles Times

Oct. 13, 1998 | STEVE BALL, TIMES STAFF WRITER

9 Hurt after Student’s Apparent Suicide by Cyanide

Toxic fumes produced when a college student from Orange County died of an apparent suicide Monday forced the evacuation of an Iowa dormitory and the hospitalization of nine people, authorities said.

Carl T. Grimm, 20, a sophomore from Placentia, ingested potassium cyanide about 7:30 a.m. in his dormitory room at Grinnell College, a private liberal arts school about 50 miles east of Des Moines, Iowa, Grinnell Fire Chief Jerry Barns said.

Four paramedics who responded to the call at Younkers Hall came in contact with fumes from the poison, as did two college staff members and three other students.

Grimm was taken to Grinnell Regional Medical Center, where he was pronounced dead. […]

The others who became ill on the Iowa campus were treated and released from the hospital. […]

Firefighters sent to the dormitory evacuated the three-story structure until the Des Moines Hazardous Materials Unit arrived to ventilate the building.

Authorities could not say immediately where or how Grimm acquired the potassium cyanide.

Another case, which occurred somewhat differently, nevertheless led to an accident which was no less tragic. Salts of cyanide, which release cyanide gas in the presence of moisture, are used for the separation of gold and silver during the processing of precious metals. In the case in question, a company was engaged in the processing of the cyanide-rich residues of such chemical reactions contained in large tanks, which is not without risk. The employer irresponsibly directed the workers, who were not equipped with gas masks or
protective clothing, to go into the tanks, which were still releasing cyanide gas. The consequences were tragic:

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Department of Justice

Department of Justice National News Release
MONDAY, MAY 10, 1999

On May 7, the jury in Pocatello, ID, found that Allan Elias ordered employees of Evergreen Resources, a fertilizer manufacturing company he owned, to enter and clean out a 25,000-gallon storage tank containing cyanide without taking required precautions to protect his employees. Occupational Safety and Health Administration inspectors repeatedly had warned Elias about the dangers of cyanide and explained the precautions he must take before sending his employees into the tank, such as testing for hazardous materials and giving workers protective gear.

Scott Dominguez, an Evergreen Resources employee, was overcome by hydrogen cyanide gas while cleaning the tank and sustained permanent brain damage as a result of cyanide poisoning. […]

Over a period of two days in August 1996, Elias directed his employees – wearing only jeans and T-shirts – to enter an 11-foot-high, 36-foot-long storage tank and clean out cyanide waste from a mining operation he owned. Elias did not first test the material inside the tank for its toxicity, nor did he determine the amount of toxic gases present. After the first day of working inside the tank, several employees met with Elias and told him that working in the tank was giving them sore throats, which is an early symptom of exposure to hydrogen cyanide gas.

The employees asked Elias to test the air in the tank for toxic gases and bring them protective gear – which is required by OSHA and which was available to the defendant free of charge in this case. Elias did not provide the protective gear, and he ordered the employees to go back into the tank, falsely assuring them that he would get them the equipment they sought. Later that morning, Dominguez collapsed inside the tank. And he could not be rescued for nearly an hour because Elias also had not given employees the required rescue equipment. [13]

Even this example fails to convey the full scope of the insidious nature of cyanide gas, since it does not just kill by means of inhalation; even a gas mask may prove insufficient, especially if a person is sweating heavily. Hydrogen cyanide is dissolved most readily on moist surfaces, and it easily penetrates

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[13] Occupational Safety & Health Administration, news release, May 10, 1999; Allan Elias was sentenced to 17 years in prison on April 28, 2000, www.justice.gov/archive/opa/pr/2000/April/239enrd.htm; an entire book has been written about the case: Hilldorfer/Dugoni 2004. The cyanide-contaminated sludge in the tank also contained phosphoric acid, resulting in the accelerated release of cyanide gas.
the skin. This was proven by a dramatic accident in 1995 in a cave in the French city of Montérolier (“Un expert…,” 1998):

“The death of nine persons on June 21, 1995, in the cave of Montérolier (Seine-Maritime) was said to have been caused by the release of cyanide gas originating from the poison gas used during the First World War, the so-called Vincennite. This was announced Wednesday by former Professor of Physical Chemistry Louis Souléié. […] At a press conference in Buchy, he said that ‘neither the children nor the firemen rushing to the rescue – one of whom wore a gas mask – died of carbon monoxide poisoning.’ […] ‘Even six days after their deaths, a cyanide concentration twice as high as the fatal dose was still observed in the victims’ blood.’

According to the professor’s remarks, the three children lit a fire in the cave and threw a Vincennite bomb found in the cave into the fire. The bomb exploded. The gas caused the deaths of three children, four firemen, the father of one of the children and an amateur spelunker.

According to Prof. Souléié, the deaths of the firemen looking for the children in the cave, including the fireman wearing a gas mask, were due to the fact that hydrogen cyanide dissolves in the sweat and penetrates the body through the skin, where it causes poisoning.”

Similar to this was a case in the late 1990s that occurred in the storage space of a Hong Kong company trading in industrial chemicals. Three small flasks containing a dilute solution of hydrogen cyanide had been left out in a room uncovered overnight. The next day, a 19-year old female employee who had been in the room for four hours was found unconscious on the floor. The owner of the company, a physicist, rescued the girl and returned to the room to open windows for ventilation. After having spent some 10 minutes in that room, he also entered into an intensive care unit due to severe dizziness. Both patients were discharged days later from the hospital.

Other victims of hydrogen-cyanide poisoning included the firemen called onto the scene. Four firemen, ranging in ages from 25 to 35, wearing a self-contained breathing apparatus along with the normal structural fire-fighter’s protective outfit, experienced mild symptoms of HCN poisoning after spending from 5 to 30 minutes in the affected room. Their symptoms included flushing, dizziness, headache, throat discomfort, chest tightness, and skin and eye irritation, and gave cause for them to be treated at the hospital. Another 50-year-old fireman wearing no such protective clothing or breathing apparatus, who stood 100 feet outside of the room in a corridor, developed chest discomfort, flushing, headache, and eye and skin itchiness, and had to be decontaminated at the hospital as well.

The authors describing the case concluded (Lam/Lau 2000):

“Rescuers should wear full protective clothing and SCBA [self-contained breathing apparatus] to avoid poisoning themselves during rescue attempts.”
Because cyanide is readily absorbed from routes including the skin, mucous membranes, and by inhalation, structural firefighter’s protective clothing is not ideal as the ears are exposed and the hydrogen cyanide gas diffuses through the fabrics. [...] in the animal study, hydrogen cyanide gas was absorbed through skin of dogs and guinea pigs and caused fatal outcomes. It is highly likely that the toxic symptoms in cases three to six [fire fighters inside room] are because of absorption of highly concentrated hydrogen cyanide gas through their intact skin. Therefore, firemen should wear special chemical protective clothing covering all parts of the body before entering the contaminated site. Case number 7 [fire fighters outside room] also alerts us to the extensiveness of cyanide gas’s diffusion.”

1.3. The Acid That Causes Blue Stains

Great excitement was caused by a strange occurrence in a Protestant church at Wiesenfeld, Upper Franconia, Germany, in the spring and summer of 1977. The congregation had renovated the deteriorating church at great expense during the previous year, but now they faced a disaster. Huge blue stains were found to have formed in all parts of the plastered interior of the church. The experts having renovated the church were now called in for consultation, and found themselves confronted by a riddle which was only solved by a chemical analysis of the stained portions of the walls. The entire interior surface of the church was impregnated by Iron Blue.¹⁴ No explanation could be found for this in the literature. It nevertheless proved possible to reconstruct the sequence of events.

A few weeks after the re-plastering of the church with a water-resistant cement mortar, the entire church had been fumigated with Zyklon B (hydrogen cyanide) to exterminate woodworms in the choir stalls. The hydrogen cyanide released by the Zyklon B did not just kill the woodworms: it also re-

¹⁴ Iron Blue is the ISO term (ISO 2495) for iron cyanide blue pigments of various composition, which are also known as Berlin Blue, Turnbull’s Blue, Prussian Blue, Vossen Blue®, Milori Blue, Paris Blue, French Blue, China Blue, Bronze Blue, Steel Blue, Ink Blue, among others, and as ferric ferrocyanide.
acted chemically with the plaster. The hydrogen cyanide contained in the Zyklon reacted with the iron oxides contained in concentrations of 1-2% in all plasters, thus forming Iron Blue, a highly stable compound well known for centuries.15

Another case had occurred five years earlier in 1972 in the Catholic church of St. Michael in Unter­griesbach, Bavaria. Here, too, the church had been recently refurbished with fresh plaster, which turned blue after the church had been gassed with Zyklon B to combat woodworms, just as it would happen in Wiesenfeld five years later.16

Reports of blue pigmentation of walls resulting from fumigation with hydrogen cyanide for the destruction of vermin in areas with moist, ferrous plaster are not unknown in technical literature, as shown by a recent survey.17 The prerequisite for this reaction ap­

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15 G. Zimmermann 1981, relating to the case of building damage occurring in August 1976 in the Protestant church at D-96484 Meeder-Wiesenfeld. I wish to thank Mr. W. Lüftl, Vienna, for discovering this information, as well as Mr. K. Fischer, Hochstadt am Main, who was held liable for damages as responsible architect, and who supplied me with further details. In English, with comments: G. Rudolf, “Wood Preservation through Fumigation with Hydrogen Cyanide: Blue Discoloration of Lime- and Cement-Based Interior Plaster,” in: Rudolf 2003a, pp. 557-561.


17 Emmerling 1995. Whether the examples cited in the paper may perhaps refer to the above-mentioned case only in a roundabout way, must remain open for the time being. Carl Hermann Christmann reports the case of a farm building belonging to an 18th century monastery; the farm building was sold to a farmer following deconsecration, and the farmer then used it as a barn. Approximately 20 years ago, an investor converted the beautiful Baroque building into a luxury holiday restaurant. The existing interior plaster was repaired and painted white. After some time, blue stains appeared in the white paint; the stains were identified by a consulting expert as Iron Blue. The expert assumed that the former owner must have fumigated the building with hydrogen cyanide between 1920 and 1940, which then caused the stains 40-50 years later. Personal communication from C.H. Christmann according to his recollection on July 13, 1999; Mr. Christmann was unfortunately unable to relocate the source of the information. I would be extremely grateful for any references to passages in the literature in relation to this or any other similar case.
pears to be that the fumigated plaster must be new and must contain high hu-
midity. In other cases, there was also damage to the structure and interior in-
stallations, but no blue stains, perhaps because the plaster was old and had
already set.\textsuperscript{18}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure9.png}
\caption{Inky blue stains on the plaster of a church fumigated with hydrogen cyanide (black and white only in G. Zimmermann 1981).}
\end{figure}

\textsuperscript{18} In one case, the fumigation of a church freshly painted with iron-free lime paint led to dark stains caused by the polymerization of hydrogen cyanide: Grosser/Roßmann 1974.
2. The Coup

2.1. Fred Leuchter on Auschwitz and Majdanek

On February 3, 1988, Fred Leuchter received an unexpected visitor at his home in Boston, Massachusetts. A professor of French, Greek and Latin, as well as critic of testimonies, texts and documents, from the University of Lyon II – Dr. Robert Faurisson – had an unusual assignment in mind: He wanted to persuade Leuchter, in his capacity as an expert in execution technology, to prepare a professional opinion to be used in a criminal trial then taking place in Toronto, Canada. More precisely, Dr. Faurisson wanted to convince Leuchter to determine whether or not the generally alleged mass exterminations with hydrogen-cyanide gas in the concentration camps of the Third Reich were technically possible. Until that time, Leuchter had never questioned the existence of German homicidal gas chambers. When Prof. Faurisson showed him some mostly technical documents, however, Leuchter began to have doubts about the technical feasibility of the alleged homicidal gassings and agreed to come to Toronto to view additional documentation.

After this meeting and on the assignment of defense counsel, he then traveled to Poland with his wife (who was also his secretary), his draftsman, a video cameraman and a translator, to make a technical examination of the concentration camps at Auschwitz, Auschwitz-Birkenau and Majdanek for the above trial. He returned to the United States and wrote a 192-page report (including appendices). He also brought 32 test samples taken from the masonry in the crematoria at Auschwitz and Birkenau, or rather their ruins. These are the locations where the alleged gassings are said to have taken place. As a control sample, he also took a sample from a Zyklon-B-disinfestation chamber, where only lice had been killed. The background of these samples is as follows:

Almost all the concentration camps of the Third Reich contained facilities for the disinfestation of lice carried by inmate clothing. Various methods were used to accomplish this objective: hot air, hot steam, several different poison gases, and towards the end of the war even microwaves. Delousing was urgently needed in particular because lice carry epidemic typhus, a disease with a history of repeated outbreaks in eastern and central Europe. Epidemic typhus appeared again during WWII, where it claimed hundreds of thousands of vic-

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19 Re. background and course of the criminal proceedings, viewed from the perspective of the defense see Lenski 1990; a longer compilation of the entire trial: Kulaszka 1992. As far as I know, the plaintiff has not published anything about this case.

20 Parts of this section are based on Faurisson’s description of how the Leuchter Report came to be: Faurisson 1988.

21 According to a private communication by Robert Faurisson, most of Leuchter’s text was actually written by Faurisson himself.
tims, not only in the concentration camps and prisoner-of-war camps, but among soldiers at the front. Since WWI, the most-effective and the most-widely used means for the extermination of lice and other pests, was hydrogen cyanide, marketed under the trade name Zyklon B (see Leipprand 2008).

It has been known for decades that, within buildings in which Zyklon B is known to have been used to delouse inmate clothing, the walls exposed to hydrogen cyanide exhibit massive, blotchy, bluish discoloration. I will discuss these stained walls in more details in Section 6.2. At this point it suffices to state that this blue discoloration is due to Iron Blue, which I mentioned already in Section 1.3. As mentioned there, this blue pigment is formed in a chemical reaction by hydrogen cyanide with certain components of masonry, if the conditions favor it. This substance can still be observed in surviving delousing facilities today, hence is obviously a very stable compound. Which
exact conditions are conducive to the formation of this pigment, and how stable it really is, will be discussed in detail in Chapter 6.

Professor Faurisson was the first person to point out that this blue discoloration is absent from the supposed homicidal gas chambers at Auschwitz. Faurisson’s idea was to analyze samples from the masonry in the alleged homicidal gas chambers for traces of poison gas or its compounds (cyanides) and compare them with samples taken from the delousing chambers. Fred Leuchter followed this suggestion when doing his on-site investigations in Auschwitz in 1988.

On April 20 and 21, 1988, Leuchter took the stand as an expert witness in the courtroom in Toronto. He reported on his research and developed his conclusions. The atmosphere in the courtroom was tense. Leuchter’s testimony was straightforward and at the same time sensational: According to Leuchter, there had never been any possibility of mass extermination of human beings by gassing either in Auschwitz, or in Birkenau, or in Majdanek (Leuchter/Faurisson/Rudolf 2015, p. 56):

“It is the best engineering opinion of this author that the alleged gas chambers at the inspected sites could not have then been, or now, be utilized or seriously considered to function as execution gas chambers.”

Shortly before Leuchter, another witness was questioned: Bill Armontrout, warden of the Maximum-Security Prison in Jefferson City, Missouri. It was Armontrout who, at the request of Defense Attorney Barbara Kulaszka, pointed out that no one in the United States understood the operation of gas chambers better than Fred A. Leuchter. Armontrout himself confirmed in court the great difficulties involved in killing people with poison gas, as Robert Faurisson had done before him.

Following Leuchter, Prof. James Roth, director of a chemical laboratory in Ashland, Massachusetts, also took the witness stand to describe the results of his analysis of the 32 masonry samples, the origins of which had been unknown to him: All samples taken from the gas chambers supposedly used for mass human extermination exhibited either no or only negligible traces of
cyanide, while the sample from the delousing chambers taken as a control exhibited enormously high cyanide concentrations.

2.2. First Reactions

Leuchter’s report and subsequent testimony shook the foundations of Holocaust history, the story of the “Nazi gas chambers.” It cannot surprise that his expert report spread quickly among all those who had always harbored a “different” view about the Third Reich and the minorities persecuted by it. But its impact reached beyond that, because for the first time revisionist claims found attention, if not even acceptance, among wider circles of the general populace (see Nolte 1993; R. Czernin 1998). Alarmed by this development, those opposing any Revision of the orthodox Holocaust narrative began to systematically destroy Leuchter’s reputation and thus his livelihood. Among other things, he was falsely accused of having claimed to be an engineer, which he wasn’t. He was even sued, although the case was settled outside of court with an agreement between Leuchter and the litigating Engineering Board by Leuchter declaring that he will be a law-abiding citizen, as he had been all his life. The settlement included an unpublished declaration by Leuchter, with which he stated that had never claimed to have been a registered, professional engineer, that he will not do it in the future either, and that he will not “recant or change anything he ever did or said.” The mainstream media did not report the fact that these proceedings against Leuchter ended without a whimper.

Attacks against Leuchter as a person may be impressive for many, but they are absolutely irrelevant when it comes to the facts of the matter. After all, whether the claims Leuchter made in his expert report are correct or not does not depend on which academic degree he has. What matters are his factual arguments.

When I first heard about the existence of the Leuchter Report, I was not at all interested in who its author was or in which context he had prepared the report. I wanted to read it and verify its validity. Back then I worked my way through the report sentence by sentence. While doing so, I noticed several obvious technical mistakes which suggested that the author could not possibly have an education as a scientist or a technician. I therefore considered the entire expert report as potentially unreliable. In addition, this work contained only very few sources allowing the reader to verify what Leuchter claims. All in all, I considered this expert report fascinating, if its claims were true, but not convincing. My reaction to it was not, however, to nag about the deficien-

cies of the Leuchter Report, but rather to do a better job with the present work. I began the initial literature research for it in the fall of 1990.

In addition, in 2005 I issued the first edition of a critically commented edition of the Leuchter Report which is suffused with correcting and supplementing footnotes to such a degree that the text in the footnotes is almost as long as the original report (Leuchter/Faurisson/Rudolf). The text of the original Leuchter Report was left intact, since by now it has become a historical document itself. Yet I hope that this unchanged text will not mislead the reader to take every one of Leuchter’s words at face value, because when discussing the topic along Leuchter’s line of argument, this would only lead to embarrassments when facing critical and knowledgeable individuals. For details about my critique of Leuchter’s report, I direct the reader’s attention to this critical edition.

Of course, I was not the only one who noticed the deficiencies of the Leuchter Report. I will subsequently list some of the responses which have come to my knowledge, and I will make brief comments about them. A more-thorough discussion of the most-relevant among these responses can be found in Section 8.4 toward the end of this first part of the present book, after I have presented the facts relevant to the matter at hand.

2.3. Attempts at Refutation and Their Assessment

First of all, it is striking that many of the critiques of Leuchter’s expert report appeared in hardly accessible, at times even obscure publications. It is also indicative that Leuchter’s opponents pick every aspect of his work to pieces, whereas his supporters often tend to justify him uncritically and to remain silent about his mistakes. Neither side in this exchange seems to be willing or able to weigh Leuchter’s arguments objectively and critically and to both criticize his work where it is due and to admit to it where it is correct. While it is a heresy in orthodox circles to even refer to Leuchter as a person to be taken seriously, it is according to my experience almost a sacrilege in revisionist circles to criticize him. Both attitudes are profoundly wrong.

A fact-oriented discussion of the technical arguments on the Holocaust brought to the public by the Leuchter Report was started in France by an attempt at refutation by the French pharmacist Jean-Claude Pressac in the periodical Jour Juif. However, Pressac’s article could hardly qualify as an expert discussion, because he did not back up any of his technical

or scientific claims with evidence or specific scientific argumentation. Though he did point out several deficiencies in the *Leuchter Report*, he made several errors himself in chemical and engineering questions due to his own lack of expertise.  

Next came the late Dr. Georges Wellers, who was both Professor for Physiology and Biochemistry at France’s National Center for Scientific Research (*Centre National de la Recherche Scientifique, CNRS*) and president of the historical commission of the Center for Contemporary Jewish Documentation (*Centre de Documentation Juive Contemporaine, CDJC*) in Paris. He wrote an article narrowly focusing on only a few aspects of the *Leuchter Report* (Wellers 1989; German 1991). His paper is characterized by wishful thinking running contrary to physical reality and ignoring what witnesses claimed about the alleged homicidal gassings.  

The first response from Germany came in 1989 from Germany’s official Institute for Contemporary History (*Institut für Zeitgeschichte*). It was based on Pressac’s work, did not bother to back up any of its claims with evidence, and was therefore hardly useful, also due to the all-too-apparent lack of technical expertise of its author, historian Hellmuth Auerbach.  

A little later, in 1990, a contribution on the *Leuchter Report* appeared in an anthology on the Third Reich, authored by a 90-year-old German retired social worker Werner Wegner, who had qualifications neither in chemistry nor civil engineering, nor did he back up his technical claims (Wegner 1990). Instead of seeking the advice of qualified people on these matters, he drew his own conclusions – to his own massive embarrassment. On my question why German historian Dr. Rainer Zitelmann, the responsible editor of this anthology, included this ridiculous piece in his otherwise well-researched compilation, he indicated in a personal letter to me that he had to include the paper to avoid opposition to his book due to the fact that the other papers were ‘revisionist’ in tone.  

At the end of 1991, Austrian chemist Dr. Josef Bailer critiqued the *Leuchter Report* in a contribution to a booklet published in Austria (1991, pp. 47-52). This work is notable for largely ignoring the witness testimony on the

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27 H. Auerbach, Institut für Zeitgeschichte, letter to Bundesprüfstelle, Munich, Oct. 10, 1989; Auerbach, November 1989 (no day given), both published in Walendy 1990, pp. 32 and 34; somewhat shortened in Benz 1995, pp. 147-149.
28 In this regard, see my technical appraisal, first reprinted in Amtohn/Roques 1995, pp. 431-435; updated as “Institut für Zeitlegenden” in Rudolf 2016a, pp. 15-27.
procedures supposedly used during the gassings at Auschwitz and for the author’s surprising ignorance of the chemical process involved. Despite criticism directed at his study,30 Bailer repeated his unsustainable objections in a later publication without responding to his critics31. I will address Bailer’s critique more thoroughly in Subsection 8.4.1.

Roughly around the same time, the Auschwitz State Museum, motivated by chemical investigations conducted by Leuchter, ordered an expert report to be compiled. The Jan Sehn Institute for Forensic Research, Toxicology Division of Krakow, Poland, named after the late judge Jan Sehn, prepared a pilot study, which was confined to the analysis of masonry samples, on September 24, 1990, under the late Dr. Jan Markiewicz, professor for technical testing (Markiewicz et al. 1991). The report concluded that the reason why Leuchter’s samples from the homicidal gas chambers were mostly negative with respect to traces of cyanide was because the cyanide compounds had been exposed for more than 40 years to weathering, which these compounds were allegedly unable to withstand. Three of these authors from the Jan Sehn Institute later published additional findings (Markiewicz et al. 1994). Both studies, however, were based on a verifiably incorrect analytical method, so that their results were false.33 Correspondence with the authors failed to elucidate the reasons for the deliberate use of an incorrect method.34 I will return to this probably most important reaction to the Leuchter Report in Subsection 8.4.2.

In 1997, two reactions worth mentioning resulted from the distribution of a French translation of the first edition of the present work in France. Of them, only one addressed factual claims of my study (Clair 1997), without, however, addressing the scientific issues involved in a valid manner (Rudolf 1997a). The Chemistry Section of the French Academy of Sciences was only able to muster a declaration full of political polemics and personal vituperations without addressing any factual issues (La Vieille Taupe/Guillaume 1997).

30 Gauss 1993a; 1993b, pp. 290-293.
34 Ibid., pp. 59-67.
The first critique of the *Leuchter Report* that deserved to be called at least partially scientific was published on the Internet in 1998 by an American Ph.D. chemist, Dr. Richard J. Green. Green also criticized the first German-language edition of the present study, unfortunately engaging in massive political name-calling as well (Green 1998a&b). In the ensuing exchange\(^{35}\) Green avoided any discussion of the central issues.\(^{36}\) This reaction from the U.S. will be analyzed more closely in Subsection 8.4.4.

In 1999, the Dutch cultural historian Dr. Robert Jan van Pelt, professor of the history of architecture in Canada, produced an expert report on Auschwitz for the defense in the libel case of British Historian David Irving against U.S. author Deborah Lipstadt (van Pelt 1999; cf. Rudolf 2000a&b). It appeared in a revised and expanded version as a book in 2002 (van Pelt 2002). This is the first book in the English language which discusses various revisionist arguments, although it fails to mention even one of the many books and papers written by Carlo Mattogno, the most prolific and knowledgeable revisionist researcher. Van Pelt rests his case mainly on Pressac’s works (primarily the one of 1989), although he hardly ever mentions him. He deals with chemical and toxicological issues only in passing, referring to the papers by R. Green. Since the works by van Pelt don’t bring up new arguments of interest in the present context, I will not discuss them here in more detail. Anyone interested in a thorough critique ought to read Mattogno’s *The Real Case for Auschwitz* (2015a).

The last contribution critical about the Leuchter Report and also about my present work which is known to me and was published prior to the present book going to press was authored by the biochemist Dr. Achim Trunk (Trunk 2011). On the little more than two pages, however, where he addresses the topic, he merely repeats briefly some of the arguments proffered by Josef Bailer and Richard Green, which is why I won’t address Trunk in the present study.\(^{37}\)

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\(^{35}\) For a detailed essay on the deficiencies of these contributions see Rudolf 1998, 1999a.

\(^{36}\) Green/McCarthy 1999. About a third of the article consists of political accusations and vilification. For a response, see Rudolf 1999b; Green’s reaction to this (Green 2000), was again filled with political polemics and evasions of the core issues; see my rebuttal: Rudolf 2003c; see also G. Rudolf, “Green Sees Red,” in: Rudolf/Mattogno 2016, pp. 71-88.

\(^{37}\) Trunk’s contribution was discussed in Mattogno 2016c, pp. 24-37; as well as Rudolf 2016a, pp. 373-381.
Most of the above-mentioned attempted refutations of the *Leuchter Report* and subsequent discussion with other revisionists are marred by personal insinuations about the motivations of persons making use of revisionist arguments, or by polemical digressions, neither of which is conducive to the scientific discussion. The reason for this irrational behavior is that the topic addressed here is emotionally highly charged and fraught with ideologies. Only if one can control one’s emotions and can exclude political prejudices and wishful thinking, however, will it be possible to get closer to the truth.
3. No Politics

The question of whether or not systematic mass killings of Jews in homicidal gas chambers specifically constructed for the purpose of accomplishing their extermination took place under the National Socialist regime is apparently still viewed as a political issue, as might have been at least understandable during the war during which it arose. Whether or not a moral appraisal of the National Socialist regime depends on the existence or non-existence of gas chambers is disputable. A political evaluation of the Third Reich may significantly depend upon this moral evaluation. Since the present discussion contains neither a moral nor political evaluation of a long-defunct regime, I shall make no moral or political statements. Personally, I am inclined to judge a politician or political system of the past on the basis of what s/he, or it, was able to leave behind for their respective nation – everything else follows from this. That must suffice at this point.

Revisionists are repeatedly accused of wanting to whitewash National Socialism, redeem it, or even resurrect nationalistic-authoritarian political systems, or assist in a breakthrough of nationalism. That may be true for some revisionists, but certainly not for all of them. But be that as it may, the fact is that political suspicions do not contribute anything to the factual debate, as they cannot refute factual arguments. When it comes to discussing facts, it is therefore irrelevant both what the revisionists want and what others accuse them of wanting.

While researching, our highest goal must at all times be to discover how historical events actually occurred – as the 19th-Century German historian Leopold Ranke maintained. For example, historians should not place research in the service of making criminal accusations against Genghis Khan and the Mongol hordes, nor to whitewash any of their wrong-doings. Anybody insisting that research be barred from exonerating Genghis Khan of criminal accusations would be the object of ridicule and would be subject to the suspicion that he was, in fact, acting out of political motives. If this were not so, why would anyone insist that our historical view of Genghis Khan forever be defined solely by Khan’s victims and enemies?

The same reasoning applies to Hitler and the Third Reich. Both revisionists and their adversaries are entitled to their political views. The accusation, however, that revisionists are only interested in exonerating National Socialism and that such an effort is reprehensible or even criminal, is a boomerang: This accusation implies that it is deemed unacceptable to partially exonerate National Socialism historically, and by so doing, always also morally. But by declaring any hypothetical exoneration based on possible facts as unacceptable, one admits openly not to be interested in the quest for the truth, but in
incriminating National Socialism historically and morally under any circumstances and at all costs. And the motivation behind this can only be political. Hence, those accusing revisionists of misusing their research for political ends have themselves been proven guilty of exactly this offense. It is therefore not necessarily the revisionists who are guided by political motives — though quite a few of them certainly are — but with absolute certainty all those who accuse the revisionists of harboring reprehensible motives. Although many consider the anti-fascist motives of those combatting revisionism as morally worthwhile, they remain political motives that are hostile to discovering and evaluating the factual issues at hand.

In short, our research must never be concerned with the possible “moral” spin-off effects of our findings in relation to politicians or regimes of the past or present, but solely with the facts. Anyone who argues otherwise is the enemy of knowledge.
4. A Brief History of Forensic Examinations of Auschwitz

4.1. Introduction

On June 7, 1993, the Max Planck Institute for Solid State Research in Stuttgart issued an internal memorandum informing its employees that a doctoral candidate there – the author of this book – had been dismissed because of private research he had done on Auschwitz. The institute explained in its memorandum, among other things:

“In light of the terrible genocide committed by the rulers of the Third Reich, we consider current investigations about the exact procedure of the murders just as reprehensible as speculations about the number of those murdered.”

Hence one of the world’s leading scientific research institutes stated to its personnel that it is not only unethical, but reprehensible and a cause for dismissal, should they dare to determine exact numbers and procedures. This is not without irony, since it is coming from an institute whose only right to exist is its scientists’ determining exact numbers and procedures.

This does not change the fact, however, that many people are deeply moved by the question whether or not the monstrous crime alleged should be the subject to careful scrutiny by means of thorough forensic analysis. The following is an attempt to answer this question by offering a brief overview on forensic examinations of the purported crime scenes at Auschwitz which have been conducted thus far.

4.2. The Moral Obligation of Forensic Examination

Does it really matter how many Jews lost their lives in the German sphere of influence during the Second World War? Is it so important, after so many years, to attempt painstakingly to investigate just how they died? After all, it is surely morally correct that even one victim is too many; and nobody seriously denies that many individuals fell victim to National Socialism.

To affirm these things, however, is not to raise a valid objection – moral or otherwise – to the scientific investigation of a crime held to be unique and unparalleled in the history of mankind. Even a crime that is alleged to be uniquely reprehensible must be open to a procedure that is standard for any other crime: namely, that it can be – must be – subjected to a detailed material investigation. I will go even one step further: whoever wants to postulate that a crime is unique must be prepared for a uniquely thorough investigation of the alleged crime before its uniqueness is accepted as fact.
If, on the other hand, someone sought to shield so allegedly unparalleled a crime from investigation by erecting a taboo of moral outrage, the creators of that taboo would, at least morally, themselves commit a singular offense: imputing unparalleled guilt, beyond any critique and defense. For if the principle behind this were elevated to a general one, this would mean that everyone who is accused of an extreme, unique crime loses all rights to any defense. That would be the end of all rule of law.

To demonstrate just what kind of double standard is being applied to “the Holocaust” (generally defined as the purposeful annihilation, chiefly by gassing, of millions of Jews by the National Socialists), let us note the international reaction to several recent examples of mass murder or “crimes against humanity.”

In 1949, a trial started in southwest France which caused as much attention in France as did the Nuremberg War Crimes Trial: Mme. Marie Besnard was accused of having murdered twelve people with arsenic. During this extraordinary court battle, 15 experts on medical, chemical, geological and analytical forensic made exhaustive analyses and time-consuming, extensive experiments with the aim of verifying whether the arsenic traces found in the buried victims stemmed from poison or were the result of as-yet-unknown concentration processes in buried corpses. Finally, after twelve years of research and argument of the fifteen experts, of whom eight were professors and one even a Nobel Prize laureate, Mme. Besnard was acquitted due to lack of evidence (Kelleher/Kelleher 1998; cf. Müller 2000).

After the collapse of the Soviet Union in 1991, numerous mass graves, containing altogether hundreds of thousands of bodies of victims of the Soviets, were discovered, excavated, and investigated. Not only was the number of victims determined, but in many cases the specific cause of death as well. In the same regions where many of these mass graves were found, some one million Jews are said to have been shot by the Einsatzgruppen during World War II. Yet no such grave has ever been reported found, let alone dug and investigated, in the more than half a century during which these areas have been controlled by the USSR and its successor states.

During the conflict in Kosovo in 1998-1999, rumors about mass killings by Serbs spread around the world, with claims of thousands of victims in huge mass graves. After the fighting was over, an international forensic commission arrived in Kosovo, searching, excavating and forensically investigating mass graves. These graves proved to be not only fewer than the Serbs’ Albanian opponents had alleged, but to contain only small fractions of the number of victims claimed. But be that as it may, fact is that those crimes were extensively investigated.

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38 This has changed only insignificantly in the 21st century; see Desbois 2010; and in response to earlier papers by Desbois: Mattogno 2015b.
39 See https://en.wikipedia.org/wiki/War_crimes_in_the_Kosovo_War.
Did the Allies attempt, during the Second World War and in the years immediately following, to find and to investigate mass graves of persons said to have been victims of the Germans? So far as is known, they made such attempts public only once: at Katyn. But the findings of the Soviet forensic commission, which blamed the mass murder of several thousand Polish officers buried there on the Germans, are today generally considered a fabrication. The report of the international forensic commission invited by the Germans in 1943, on the other hand, which found that the Soviets had carried out this mass murder, is today considered accurate even by the Russia’s government (Sanford 2005).

Why weren’t similar investigations launched during the various postwar tribunals dealing with events that are said to have unfolded at Auschwitz and elsewhere? Why has no defense lawyer ever demanded during those and similar proceedings what is common for any other murder trial, namely the submission of expert reports on the claimed murder weapon and the victims’ cause of death? Why did the world have to wait until 1988 to see such an expert report for the first time, no matter how flawed it may be? Well, the truth is that some forensic research was indeed done right after the war, but the results were not widely publicized. I’ll cover that in Section 4.4.

4.3. A Definition of Forensic Science

Forensic science is generally regarded as a supporting science of criminology. Its aim is to collect and to identify physical remnants of a crime, and from these to draw conclusions about the victim(s), the perpetrator(s), the weapon(s), time and location of the crime as well as how it was committed, if at all. This science is relatively new and entered the courtrooms only in 1902, when fingerprint evidence was accepted, in an English court, for the first time. The 1998 CD-ROM Encyclopedia Britannica writes about forensic science:

“A broad range of scientific techniques is available to law enforcement agencies attempting to identify suspects or to establish beyond doubt the connection between a suspect and the crime in question. Examples include the analysis of bloodstains and traces of other body fluids (such as semen or spittle) that may indicate some of the characteristics of the offender. Fibers can be analyzed by microscopy or chemical analysis to show, for instance, that fibers found on the victim or at the scene of the crime are similar to those in the clothing of the suspect. Hair samples, and particularly skin cells attached to hair roots, can be compared chemically and genetically to those of the suspect. Many inorganic substances, such as glass, paper, and paint, can yield considerable information under microscopic or chemical analysis. Examination of a docu-

40 Where “public” is the key. On the unsuccessful and unpublished search during the immediate postwar time for mass graves in former German alleged extermination camps see for instance Mattogno/Graf 2016, pp. 77-90.
ment in question may reveal it to be a forgery, on the evidence that the paper on which it is written was manufactured by a technique not available at the time to which it allegedly dates. The refractive index of even small particles of glass may be measured to show that a given item or fragment of glass was part of a particular batch manufactured at a particular time and place.”

Hence, forensic research is exactly what revisionists, starting with Robert Faurisson, have called the search for material evidence. The revisionists’ demand for such material evidence is entirely consistent with the normal practice of modern law enforcement. Also, as is generally acknowledged, forensic evidence is more conclusive than witness testimony or documentary evidence.

Even though forensic methods have hardly been applied with regard to Auschwitz, and certain conclusions of it may be illegal to publicize in several countries, there are a few examples which I shall discuss briefly in the following chapter.

4.4. Forensic Science and Auschwitz

4.4.1. Forensics in the Courts

4.4.1.1. The Polish Auschwitz Trials of 1946/1947

Politically influenced criminal proceedings conducted in the Stalinist Eastern Bloc have always been problematic. In particular, the trials against alleged German war criminals usually had the character of show trials (cf. for instance Bourtman 2008). Even the forensic “evidence” presented during those trials was often unsound, irrelevant or fabricated. For this it suffices to remind the reader of the Soviet mass murder at Katyn and elsewhere. The Soviet autopsy results were outright forgeries and lies designed to blame this crime on the Germans. Although Poles were victims of this crime, the result of this judicial farce was nevertheless accepted by the communist regime in Poland without scrutiny.

The Polish trials against German defendants accused of deeds allegedly committed during the German occupation are no exception from this Stalinist judicial travesty of the postwar period. They not only had the character of Stalinist show trials, but were also fraught with strong Polish nationalism, which during that period in time was genocidally anti-German in nature.

Considering this background, forensic testimony originating from Stalinist-communist sources ought to be viewed with a healthy amount of skepticism. With that said, let us now turn to such forensic testimony.

Between May 10, 1945 and September 26, 1946, the Polish investigating judge Jan Sehn and the Polish engineer Dr. Roman Dawidowski worked together to forensically investigate the crimes claimed to have been committed at Auschwitz. The result was a lengthy report which listed and explained ma-
terial and documentary evidence in support of the mass murder claim.\textsuperscript{41} This report contains most of the evidence which the French researcher Jean-Claude Pressac listed decades later in his 1989 book as “criminal traces” in support of mass-murder claims for Auschwitz. We will encounter and discuss a number of these “criminal traces” in the course of the present study. An exhaustive analysis of all of these traces, however, has already been published by Mattogno (2015a), to whom the interested reader’s attention is directed.

In the present context, I would like to focus on chemical research initiated by Jan Sehn. On June 4, 1945, Jan Sehn and the Polish prosecutor Edward Pachalski sent several objects found at the Auschwitz Camp to Dr. Jan Z. Robel of the Institute for Forensic Research (Instytut Ekspertyz Sądowych) in Krakow, requesting that they be tested for cyanide residues. Dr. Robel did as he was asked and submitted his results with a report dated December 15, 1945, which was submitted in evidence in the 1946 Polish trial against Rudolf Höss, one of the former Auschwitz camp commandants.\textsuperscript{42}

The Krakow forensic investigator received from Jan Sehn a large bag of hair, presumably cut from the heads of Auschwitz inmates, which also contained other objects (hair clips, hair needles, and a temple stem of some eyeglasses). Tested for cyanide residues, both hair and clips showed positive results. Mortar removed from the side wall of Morgue No. 1 (the alleged homicidal gas chamber) of Crematorium II at Birkenau was also submitted, but Dr. Robel did not mention this sample in his report at all. Finally, zinc-plated ventilation covers allegedly found in the ruins of that same room were tested for cyanide and found to have a positive result as well.

The tests conducted by the institute were mere qualitative, not quantitative, analyses. In other words, they could only determine whether cyanide was present, but not how much of it was there. As to whether or not homicidal gassing with hydrogen cyanide took place in Auschwitz, these analyses are worthless, for the following reasons:

1. There is no way of determining the origin and history of the hair and other objects contained in the bags in Auschwitz. Assuming that the analytic results are correct, from a chemical point of view the following can be noted: A positive test for cyanide in human hair proves only that the hair has been exposed to HCN (hydrogen cyanide). But that result does not suffice to establish that the persons from whom the hair came were killed

\textsuperscript{41} Files of the Höss Trial, APMO, Vol. 11, pp. 1-57.

\textsuperscript{42} Appendix No. 12 of Vol. 11a of the trial files; the text of both the requesting letter and Dr. Robel’s results were published in German in Dokumentationszentrum… 1991, pp. 38-40; Bailer-Galanda et al. 1995, pp. 82-86.
by cyanide. It is a good deal more likely that the hair had already been cut when it was exposed to the gas: in German as well as in Allied camps, it was standard to cut off prisoners’ hair for hygienic reasons. If hair over a certain length was later reused – a German wartime document indicates that this was common practice\(^{43}\) – it had to be deloused beforehand (often with Zyklon B, the active ingredient of which is hydrogen cyanide). Hence, positive cyanide results from loose hair or objects found in it do not prove human gassings.

2. We face a similar problem with the zinc-plated covers: their exact origin and history is unknown. In addition, Robel wrote that his tests resulted in a “light, greenish-blue discoloration” of the test solution caused by Iron Blue. Noticeable cyanide traces, however, would have led to an intensely blue discoloration, large amounts even to a dark discoloration with subsequent precipitation of the pigment. It can therefore be concluded that he found only small traces, if even that.

3. It would have been much preferable for the Krakow Institute to have analyzed wall samples of the alleged gas chambers – or to have mentioned the results of their analysis of the one wall sample that was actually submitted – rather than to have focused on the zinc-plated ventilation covers, for the following reasons:

a. Whereas the origin and history of these metal covers are uncertain, the origin and (at least partly) the history of the walls of the morgues allegedly used as homicidal gas chambers are known.

b. In contrast to cement and concrete, zinc-plated metal covers prevent the formation of stable iron-cyanide compounds.\(^{44}\) The developing zinc-cyanide compounds are relatively unstable and must be expected to vanish in a short period of time.\(^{45}\) In all likelihood, this renders Robel’s test irreproducible today.

c. The tendency of porous wall material in moist underground rooms to accumulate and to bind hydrogen cyanide, physically as well as chemically, is hundreds of times higher than that of sheet metal (see Section 6.7). In addition, the pigment forming in wall material is extremely long-term stable, hence such tests are reproducible even today (see Section 6.6).

\(^{43}\) Letter from the SS-Wirtschafts- und Verwaltungshauptamt, Oranienburg, to concentration camp commanders, August 6, 1942, USSR-511, IMT Vol. 39, pp. 552f. The letter ordered the recycling of prisoners’ hair twenty centimeters or more in length; but see also the critical remarks by Carlos W. Porter, www.cwporter.com/gussr511.htm.

\(^{44}\) Zinc prevents the formation of rust, which is required to form long-term-stable iron cyanides.

\(^{45}\) Like earth alkaline cyanides, zinc cyanides are slowly decomposed by humidity.
d. If the reason for Dr. Robel’s not mentioning the mortar sample is the fact that he found no noticeable cyanide traces in them, then this sheds a bad light on his honesty and thus on his entire report.

4. One important aspect of analytical forensics is that its results need to be reproducible. As mentioned before, this is not the case for the metal covers already for chemical reasons, even if they still exist, can be identified and their history ascertained.

4.4.1.2. The 1963-1966 Frankfurt Auschwitz Trial

Several expert reports were prepared during the so-called first Frankfurt Auschwitz trial, the best known being those of the Munich Institut für Zeitgeschichte (Institute for Contemporary History; Buchheim et al. 1964). However, none of these reports was forensic in nature. They addressed legal, historical, or psychological topics. Throughout this mammoth trial, the court, the prosecution and the defense never suggested that material traces of the alleged crime be secured and investigated. The prosecution had at its disposal numerous statements by witnesses and confessions by perpetrators, and it considered this material entirely sufficient to establish beyond reasonable doubt the existence of a program to exterminate Jews at Auschwitz and elsewhere during the Third Reich. The abundance of such evidence has since been used to argue that the lack of documentary and material evidence is irrelevant. That no material evidence was presented during the Frankfurt Auschwitz Trial was freely conceded by the court in its ruling:

“The court lacked almost all possibilities of discovery available in a normal murder trial to create a true picture of the actual event at the time of the murder. It lacked the bodies of the victims, autopsy records, expert reports on the cause of death and the time of death; it lacked any trace of the murderers, murder weapons, etc. An examination of the witness testimony was only possible in rare cases. Where the slightest doubt existed or the possibility of a confusion could not be excluded with certainty, the court did not evaluate the testimony of witnesses […]”

46 Throughout his writings, Adalbert Rückerl, one of the most prominent German prosecutors in “Holocaust cases,” dispenses with any mention of material evidence. Instead, he declares documentary evidence the best and most important form of evidence, even in the absence of material evidence for the authenticity and correctness of the documents themselves (in Weber/Steinbach 1984, p. 77). Rückerl reports that it is practically impossible to find a suspect guilty solely on documentary evidence, so that, especially given the increasing time span separating alleged crimes from trial, it is almost always necessary to fall back on witness testimony, even though its unreliability is clear, particularly in trials of so-called “National Socialist violent crimes” (Rückerl 1984, p. 249; 1978, p. 34; Rückerl 1972, pp. 27, 29, 31).

47 Such total naiveté, combined with legal incompetence, on behalf of the defense is best exemplified in Laternser 1966.

48 One of the most prominent German advocates of this thesis was Professor Ernst Nolte (1993, pp. 290, 293, 297).

4.4.1.3. The 1972 Vienna Auschwitz Trial

Between January 18 and March 10, 1972, two architects responsible for the design and construction of the crematoria in Auschwitz-Birkenau, Walter Dejaco and Fritz Ertl, were put on trial in Vienna, Austria.\(^{50}\) During the trial, an expert report by the Austrian accredited engineer Gerhard Dubin on the possible interpretation of the blueprints of the alleged gas chambers of the Auschwitz and Birkenau crematoria was presented to the court at the court’s own initiative. The report concluded that the rooms in question could not have been gas chambers, nor could they have been converted into gas chambers.\(^{51}\) Thanks to this first methodically sound expert report on Auschwitz, the defendants were acquitted.

4.4.2. Forensics outside the Courts

4.4.2.1. In Search of Mass Graves

In 1965 the Auschwitz State Museum commissioned the Polish company Hydrokop to drill the soil of the former Auschwitz-Birkenau Camp and to analyze the samples. It is not known whether this research was done in the context of the first Frankfurt Auschwitz trial, the main hearings of which had been concluded with the announcement of the verdict in August of 1965. The results of these soil probings, however, vanished into the museum’s archives. They have never been released, which by itself is revealing enough. Years later, however, several pages from this report were photocopied and sent to the German revisionist publisher Udo Walendy, who published them with commentary in an issue of his periodical (Walendy 1993, pp. 7-10). Traces of bones and hair allegedly found at several places might indicate mass graves. The few pages published by Walendy, however, do not reveal whether these findings led to an excavation or a subsequent forensic study of the traces. It is not even evident whether the bone and hair samples collected were human or animal remains. (Since Birkenau had a butcher shop to provide the camp with meat, animal offal might have been disposed of in garbage trenches in the camp’s vicinity.\(^{52}\)) In 1994, Franciszek Piper of the Auschwitz Museum confirmed those drillings, hiding it in a footnote.\(^{53}\)

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\(^{50}\) District Court Vienna (ref. 20 Vr 3806/64), Jan. 18 to March 10, 1972; cf. Loitfellner 2002, pp. 163-168; 2006, pp. 183-197.

\(^{51}\) Personal communications by Walter Lüftl, who interviewed Gerhard Dubin. See Gärtner 1997.


\(^{53}\) Gutman/Berenbaum 1994, p. 179, note 39; according to this, 42 of 303 samples “contained traces of human ashes, bones, and hair.” This investigation still awaits analysis.
4.4.2.2. Leuchter and the Consequences

As a result of the Leuchter report, forensic research on Auschwitz increased after 1988. Each time a researcher came to a conclusion contradicting the widely held views, he was socially ostracized and persecuted, like Prof. Faurisson, Fred Leuchter and the author of the present study, but when the results confirmed the reigning paradigms, the researchers were darlings of the media and politicians, like Jean-Claude Pressac, the researchers from the Jan Sehn Institute in Krakow (Markiewicz et al. 1994), and more recently Prof. Robert van Pelt (2002).

It must therefore be stated that forensic research on Auschwitz is not at all reprehensible, quite contrary to what the Max Planck Institute in Stuttgart wrote about this. Such research has always been done, more or less intensively. What is often considered to be reprehensible, however, is a research result that is unwanted by the authorities. This is an unfortunate bias, because science can prosper only where any result is openly and freely published and discussed without researchers fearing punitive measures.

The present book is an attempt to give the reader an update about the results of the ongoing forensic research on the two major camps of Auschwitz, the Stammlager or Main Camp close to the town of Auschwitz itself, and the Birkenau Camp some 3 km to the northwest of the town. May it not lead to more persecution and ostracism of its author than he already has experienced.\(^{54}\)

4.4.2.3. Autopsies

In a normal murder case, the forensic investigation of a victim’s body is extraordinarily important. Unfortunately, after the occupation of Auschwitz by the Red Army on January 27, 1945, no investigation of corpses seems to have been carried out with regard to the question of whether they died due to the effects of poison gas. In fact, such an examination could not really be expected, because the bodies of all gassing victims are said to have been cremated in one way or another. Of course, the lack of evidence does not support the charge, but rather contradicts it.

\(^{54}\) For this, see Rudolf 2012a, 2016c.
5. Auschwitz

5.1. On the History of the Camp

5.1.1. The Camp

Although the name of Auschwitz, a town in Polish Upper Silesia, is utilized as a synonym for the alleged National Socialist crime of an assembly-line extermination of Jews – frequently described as “unique” – thus far, worldwide, there has never been any comprehensive and balanced description of this concentration camp. In my opinion, only a few books, from the thousands on the subject written by orthodox historians, are worth selecting for the present discussion.

Danuta Czech’s Kalendarium (1989 & 1990), a work of Polish-Communist post-war propaganda, resembles a sort of catalogue of chronological listing of actual and invented individual events. The sources used to compile this work consist of German wartime documents selected according to unknown criteria, and of witness statements. When assembling her material, Czech did not attempt to draw a consistent image of the camp’s history by critically reviewing her material. The first version of this book was compiled by the Polish State Museum of Auschwitz in preparation and support of the first, large Auschwitz trial held in Frankfurt, Germany, between 1963 and 1965. It appeared in a number of issues of the German-language periodical Hefte von Auschwitz (later renamed into Auschwitz Studies) which had been established by the Auschwitz Museum for that specific purpose. Already the language chosen points at the target of this publication, since Poland at that time was radically anti-German and had basically outlawed the public use of the German language. This work must therefore be treated with the corresponding caution. It is nevertheless of great value, particularly if one wants to get a chronological overview of the orthodox interpretation of events at the Auschwitz Camp.

Jean-Claude Pressac’s works (1989 & 1993/1994) focus almost exclusively on only five buildings in the camp, the crematoria as locations of the claimed mass murder, but due to his lack of technical and architectural expertise, he nevertheless fails miserably in his self-appointed task of explaining the “technique and operation” of these buildings.\(^55\) On the upside, his books contain a

\(^{55}\) For a criticism of Pressac’s first book, see Faurisson 1991a&b; F.A. Leuchter, “The Fourth
plethora of document reproductions and photographs which are very valuable for the interested researcher.

Robert van Pelt and Deborah Dwork, in their history of the city of Auschwitz, deal only superficially with the subject of the concentration camp. Van Pelt’s more recent book (2002) is narrowly focused on homicidal gassings, does not really go beyond what Pressac already presented, and exhibits a crass inaptitude to deal with the historical documentation, as Mattogno has demonstrated (2015a).

In 1995, the Auschwitz Museum published a major collection of contributions on the camp’s history in a five-volume work, which in 2000 also appeared in English (Długoborski/Piper 1995/2000). The topic at the center of our interest here are discussed in volume 3 subtitled “Mass Murder,” which has some 280 pages. Unfortunately, the depth of this treatise leaves much to be desired, especially when considering that revisionists have presented studies on that topic which altogether are almost ten times as voluminous.

Books available on bookstore shelves are – for the most part – a compendium of witness reports, scattered amongst serious attempts at documentation and literary pretensions.

Only in the very early 1990s, i.e., since the collapse of the Communist regime in Eastern Europe, did the files of those agencies of the Third Reich become freely accessible for a certain period of time which allow a reliable history of the Auschwitz Camp to be written. Especially important in this regard are the files of the Zentralbauleitung der Waffen SS und Polizei Auschwitz (Central Construction Office of the Waffen SS and Police at Auschwitz), which are located in Moscow, the files of the Kriegsarchiv der Waffen SS (War Archives of the Waffen SS) in the Military-Historical Archives in Prague, and the files of Auschwitz Concentration Camp, located at the Auschwitz Museum. Since there are more than one hundred thousand documents in these archives, it will be necessary to wait for several years for the appearance of a seriously documented work on the topic. It must be considered certain that Leuchter Report,” in: Leuchter et al. 2015, pp. 213-230; for a critique of Pressac’s second book see: Rudolf 2016b; for a critique of the principles underlying Pressac’s method, see G. Rudolf, “Pressac: From Paul to Pseudo-Saul,” in: Rudolf/Mattogno 2016, pp. 25-36; for a general critique see also Mattogno 2015a; Pressac has also been the target of massive attacks from Jewish quarters for his unscientific methods; see also Rivarol, March 22, 1996, p. 8; ibid., April 12, 1996, p. 4; see also the criticism by Guillaume 1995; summarized by Boisdefeu 2009, esp. pp. 85-88.

van Pelt/Dwork 1996; see also the review by Mattogno 2000a.

Finkelstein 2000, p. 55: “Articulating the key Holocaust dogmas, much of the literature on Hitler’s ‘final solution’ is worthless as scholarship.”

Since the late 1990s, these archives have again been inaccessible to independent researchers, after the German government had exerted pressure to deny them access.

Rossiiskii Gosudarstvennii Vojennii Archiv (Russian national war archives, hereafter RGVA); in earlier years this archive bore the name “Tsentr Chranenija Istoriko-dokumental’nih Kollektsii”; see also the documents in the Gosudarstwenny Archiv Rossiiskoy Federatsii (National archives of the Russian federation, hereafter GARF).
such research, which is only just beginning, will lead to a further massive revision of our image of the Auschwitz concentration camp.\textsuperscript{60}

As far as the brief survey of the history of Auschwitz is concerned, I will rely in the following upon the statements of Jean-Claude Pressac, where his statements are undisputed (1989, 1993). Where corrections are necessary, I resort to the extensive research results by Carlo Mattogno.\textsuperscript{60}

The installations of the Auschwitz I camp, also known as the \textit{Stammlager} (Main Camp) and located on the outskirts of the city of Auschwitz, originally formed part of the barracks of the Austro-Hungarian Monarchy (later Poland), and were transformed into a concentration camp after the German invasion of Poland in September 1939. Camp II, located in the vicinity of the village of Birkenau (hence also known as Auschwitz-Birkenau) was erected after the start of the Russian campaign, officially as a \textit{Waffen} SS prisoner-of-war camp for the reception of Russian PoWs. Both camps belonged to the same complex, with many additional smaller camps in Upper Silesia,\textsuperscript{61} intended to supply manpower in the form of slave labor for the industries in the area, among them the chemical works built by the Germans on a large scale at Auschwitz, in particular the Buna-production works of the German industrial giant I.G. Farbenindustrie AG for coal refining (liquefaction and gasification plants for artificial rubber, fuel and lubricant production), located close to the settlement Monowitz east of Auschwitz, see Figure 22 (p. 63). The Birkenau Camp was used, among other things, for the reception of prisoners unfit for labor. The intended camp capacity of 200,000, according to the final planning situation, was unique among the concentration camps of the Third Reich. This capacity was, however, never even approximately achieved in actual construction.

Cramming together large numbers of people in the most restricted areas of camps whose sanitary infrastructure was just being developed caused serious health problems in all camps of the Third Reich. Both inmates and hundreds of civilians working in the camps (both Germans and Poles) could introduce all sorts of parasitic insects into the camp, in particular lice and fleas. Lice are the chief carriers of epidemic typhus, which was a widespread disease in Eastern Europe. Therefore, the camps were equipped – to the detriment of all sometimes only after some delay – with hygienic installations, including extensive disinestation installations, in which the clothing and personal effects of inmates, guards and civilian workers were disinfested. One of the insecticides most frequently used during those years was Zyklon B, which was the trade name of liquid hydrogen cyanide absorbed on a porous carrier material.

\textsuperscript{60} Carlo Mattogno has compiled an ambitious series about various aspects of the Auschwitz Camp, which is still being expanded; see the book entries in the bibliography as well as at the end of the present study.

\textsuperscript{61} With a maximum of 48 satellite camps in 1944; see http://auschwitz.org/en/history/auschwitz-sub-camps/
The inmates themselves were given a haircut upon admission, and were made to shower thoroughly. Since the camp was at times insufficiently equipped with disinfection installations and materials, also aided by carelessness during disinfection on the part of civilians working in the camp, typhus epidemics broke out repeatedly, killing large numbers of inmates as well as guards.

Due to the high mortality rate, these camps were equipped with cremation facilities. After a devastating typhus epidemic had broken out in the Auschwitz camps in summer 1942, during which 400 to 500 people died every day at peak times, plans were made to build four cremation facilities at Birkenau in the hope of being able to cope with the number of corpses. Of these four crematoria, however, two were severely damaged shortly after they were put into operation. Since it turned out that the capacity of the four Birkenau crematoria was much higher than needed, one of these crematoria was not repaired but was allowed to remain idle. The Auschwitz Main Camp possessed only one crematorium installation, which was retired with the opening of the installations at Birkenau in 1943.

Orthodox historians today assume that the above-mentioned cremation installations were not only used for the purpose initially planned, i.e., the cremation of inmates, but were also utilized for other purposes.

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62 In the Third Reich, hair cuttings exceeding a certain length is alleged to have been collected for industrial purposes, after previous delousing, see Note 43.

63 According to the Auschwitz Death Books, on August 15, 1942, 401 inmates died; on the 17th: 390; on the 18th: 477; on the 19th: 504; on the 20th: 498 (Staatliches Museum… 1995).
tion of inmates having died primarily of exhaustion and diseases, but were later misused for the mass extermination of inmates. According to these historians, the term “arbeitsunfähig” (unfit for labor), used in relation to prisoners, was equivalent in meaning to “undeserving of life.” The further inference was made that any arriving inmates who were unable to work were killed immediately. For this purpose, human beings are said to have been killed ("gassed") in certain rooms of the crematoria after a few structural modifications. This was allegedly done using Zyklon B, which was originally intended exclusively for vermin control. After their alleged murder, the victims are said to have been burnt, some of them in the cremation furnaces and some in open ditches.

According to witness accounts, a homicidal gas chamber is supposed to have existed in the crematorium of Auschwitz I (Main Camp); this location still exists today, intact, but has been the object of serious manipulation, as we shall see. Additional homicidal gas chambers are said to have existed in the Birkenau Camp, Auschwitz II. These gas chambers were allegedly located in the four crematoria of that camp, as well as in two farmhouses outside the actual camp itself that had been modified for homicidal gassing purposes.

Of the installations used for disinfestation in the Birkenau Camp using Zyklon B, only Buildings 5a and b (BW 5a/b) in Construction Sections 1a/b (Bauabschnitte 1a/b) remain intact. In these buildings, one wing each was temporarily used for the disinfestation of personal effects with hydrogen cyanide. The following Sections 5.2-5.5 will describe the structural features of these facilities. On this, see the maps of the Auschwitz Main Camp and the Birkenau Camp in Figures 24 and 25.

5.1.2. The Chemistry

In the previous subsection, I briefly mentioned the German industrial giant I.G. Farbenindustrie AG and its coal-refining activities near Auschwitz. Since the present book is about the chemistry of Auschwitz, and because these coal-refining activities, which were all chemical in nature, were of crucial importance to the German war effort, I will now describe in more detail the importance of the Auschwitz industrial region for Germany during the Second World War.

During World War I, Germany suffered a trauma by being cut off from a wide variety of pivotal supplies due to the British sea blockade. As a matter of fact, it is no exaggeration to say that Germany lost that war because of this blockade. Shortages of fuel and rubber paralyzed the German army, and the lack of food with the resulting starvation of the German population caused political radicalization and unrest.

This situation did not improve much after hostilities ended, for England and France kept a stranglehold on Germany by limiting much of its trade via
the strictures imposed on Germany by the Versailles Dictate. Hence, efforts to become more independent of foreign supplies of food and raw materials, which became one of Germany’s top priorities during World War I, remained very popular during the time of the Weimar Republic.

In order for those ambitions to be realized, however, Germany had to liberate itself from the shackles of Versailles. Once that was accomplished to a large degree by the Third Reich’s foreign policy in the mid-1930s, efforts of self-reliance mushroomed. At the center of those efforts was Germany’s attempt to make good use of its abundant coal reserves in combination with its chemical talents, which were unmatched in the world during those decades. Since Germany had no natural oil reserves to speak of, and had no reliable way of importing any natural rubber either, producing synthetic oil and rubber was among Germany’s top priorities, for without them, no industrialized nation could function.

German attempts to produce artificial rubber actually predate even World War One, because the first German patent for artificial rubber was filed already in 1909 (Imperial Patent No. 250,690, granted to Fritz Hofmann, employee of the Bayer Company). It was inspired by the escalating prices of natural rubber due to increased worldwide demand with the exponentially growing production of tires. Interest in producing artificial rubber spiked for the first time in Germany during the First World War, but ceased again at its conclusion, only to be revived in 1926, when a more-feasible method of synthesis was developed based on the use of 1,3-butadiene as a monomer (CH₂=CH–CH=CH₂; Reichspatent No. 511,145).

Throughout the early decades of synthetic-rubber production, one of the methods to obtain the above monomer, which was also used at the Auschwitz plant of the I.G. Farbenindustrie located near the Polish town of Monowitz, some 4 km east of Auschwitz (see map on p. 63), started with the production of calcium carbide (CaC₂ or CaC≡C) from coal and quicklime in an electric arc furnace:
CaO + 3 C → CaC₂ + CO
The rather dirty calcium carbide obtained this way was then hydrolyzed, resulting in the formation of gaseous acetylene (HC≡CH):
CaC≡C + 2 H₂O → HC≡CH + Ca(OH)₂
After German chemist Walter Reppe discovered more-modern methods of synthesizing a broad variety of chemicals from acetylene using metal catalysts, a three-step pathway to the production of 1,3-butadiene was developed which was the method of choice used at Auschwitz:
1. Reppe’s addition of two molecules of formaldehyde in the presence of transition metal catalysts to form butynediol:
   \[
   \text{HC≡CH} + 2 \text{CH}_2\text{O} \rightarrow \text{HO–CH}_2\text{C≡C–CH}_2\text{OH}
   \]
2. During the second step, 1,4-butynediol is hydrogenated to 1,4-butanediol:
   \[
   \text{HOCH}_2\text{C≡C–CH}_2\text{OH} + 2 \text{H}_2 \rightarrow \text{HOCH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{OH}
   \]
3. The final step (or two steps, if you wish) is the double dehydrolyzation to form 1,3-butadiene:
   \[
   \text{HOCH}_2\text{CH}_2\text{CH}_2\text{CH}_2\text{OH} \rightarrow \text{CH}_2=\text{CH–CH=CH}_2 + 2 \text{H}_2\text{O}
   \]
The last step in the synthesis of rubber, the polymerization, used sodium (Na) as a catalyst, which gave the final product the second syllable of its name – Buna rubber – and also the plants producing it: Buna factories.
Although early types of synthetic rubber were of low quality, this changed over the years, in particular after it was discovered that adding styrene improves the quality substantially, although it was still considerably inferior to natural rubber. Today, the majority of rubber used worldwide is synthetic in origin.

Even though research had made quite some progress regarding artificial rubber by the time Hitler rose to power in Germany, the country did not yet have the ability to mass-produce it. The initiative to kick-start mass production actually came from Hitler. In a 1936 memorandum about Germany’s next Four Year Plan, Hitler demanded (Treue 1955, p. 208):

“It is also evident to organize and secure the mass production of synthetic rubber. The assertion and similar evasions have to stop that the procedures are perhaps not entirely clarified. The question is not up for discussion as to whether we want to wait any longer, or else we lose time, and we will all be surprised by the hour of danger. […] The question of the costs of these raw materials is also utterly irrelevant, because it is still better that we produce expensive tires and can actually drive them than to sell theoretically cheap tires […] which due to the lack of raw materials cannot be produced, and hence are not driven either.”
As a result, construction for Germany’s first artificial-rubber plant under the aegis of Germany’s industrial giant I.G. Farbenindustrie was initiated in 1936 in the German town of Schkopau. Production began a year later. Further plants were built at Marl (1938) and Ludwigshafen (January 1941). Auschwitz was the fourth in line, for which the first plans were made in March 1941 (see Whitby et al. 1954, pp. 937-986; Streb 2003, pp. 97-132).

Hitler’s foresight was well-founded, for when war broke out, the collapse of natural rubber imports did not really affect Germany’s war efforts. In contrast to this, when Japan’s invasion of several south-Asian countries crippled the U.S.’s imports of natural rubber, the U.S. faced a serious crisis which threatened its war efforts (see Wilson 1943). It was overcome only due to concerted efforts to quickly kick-start artificial-rubber production in the U.S., based to no small degree on knowledge which the U.S. company Standard Oil had gained during their commercial relationships with the German I.G. Farbenindustrie AG. This cooperation, which had begun in 1927 and covered technical cooperation and mutual licensing arrangements, lasted until early 1940, thus several months into World War Two. While the U.S. profited hugely from these arrangements, Germany gained little, other than helping its main enemy defeat it (see esp. Howard 1947).

Another way of obtaining rubber that is also linked to Auschwitz is the cultivation of the Russian Dandelion, which initially had a rather low content of caoutchouc in its roots, but it is of the same quality as that of the common rubber tree. The plant’s valuable rubber content was discovered only in 1929 in the Soviet Union, but soon many nations started systematic breeding efforts to increase the plant’s rubber content. By 1941, the Soviet Union cultivated some 20,000 hectares of the plant with a yield between two to ten metric tons per hectare (Whaley/Bowen 1947, pp. 11, 142). Another source even reports that at that time the Soviet Union produced 30% of its rubber needs on some 67,000 hectares of land (van Beilen/Poirier 2007).

Germany had its own dandelion-breeding program, one section of which was conducted at an agricultural research station in Raisko, some 2 km south of Auschwitz, where several hundred camp inmates were employed (see map on p. 63). One of the men involved in this project was a certain Thies Christophersen, who wrote an autobiographical account of his wartime experiences at Auschwitz that gained some notoriety because it contested the orthodox Auschwitz narrative (Christophersen 1973). Germany’s dandelion-breeding program, however, never resulted in any noticeable production of natural rubber from this source. Germany successfully relied on its chemical prowess instead.

Germany’s chemical rubber factories were not just that, though. The broad variety of chemicals that could be synthesized starting with acetylene led to the production of a wide gamut of products. The new plant at Auschwitz was
also designed to produce more than just acetylene. In fact, all of these plants were also designed to produce oil in a process of coal liquefaction following the well-known Fischer-Tropsch synthesis, developed by the German chemists Franz Fischer and Hans Tropsch in the mid-1920s at the Kaiser Wilhelm Institute for Coal Research at Mülheim (now the Max Planck Institute for Coal Research). The aim was to make Germany less vulnerable in case of foreign conflicts by giving it at least a rudimentary supply of crucial chemicals usually derived from mineral oil: lubricants (oil and grease), fuels (gasoline, diesel, kerosene etc.) and paraffin-like substances used for further processing.

The first step in this process of coal liquefaction is the generation of process gas – also called synthesis gas or syngas – by burning coal in the presence of moisture and with little oxygen, resulting in a gas which is rich in carbon monoxide and hydrogen:

$$3 \text{C} + \text{O}_2 + \text{H}_2\text{O} \rightleftharpoons 3 \text{CO} + \text{H}_2$$

This extremely lethal syngas is subsequently further processed in a number of reactions with catalysts to form hydrocarbons of various lengths and complexities. Since the process is very energy-consuming, it cannot compete with the synthesis or distillation of hydrocarbons from natural gas and mineral oil. Major efforts to create coal-liquefaction plants were therefore largely limited to Germany prior to and during World War Two, and in more-recent times to nations facing prolonged oil embargoes, as for instance South Africa during apartheid with its SASOL plants.

I.G. Farben’s Auschwitz plant was to receive its coal supplies from the nearby coal mine “Fürstengrube,” whose mining capacity was slated to be increased from 550,000 metric tons in 1941 to 1.2 million metric tons in 1943 in order to cover both the huge energy demand of the process and the raw material for the various syntheses.\(^{64}\)

\(^{64}\) The projected mining capacity as well as the subsequently mentioned production capacities of the I.G. Farbenindustrie AG, Auschwitz branch, as well as the reasons why they were never achieved result from a number of minutes of construction conferences held at the company’s headquarters at Ludwigshafen. They were introduced as evidence during “The I.G. Farben Case”, Military Tribunal Case 6, as NI-11115f., \(\sim\)27, \(\sim\)30, \(\sim\)32, \(\sim\)38, \(\sim\)43f. Copies are apparently archived at the Fritz Bauer Institute, Frankfurt/Main; cf. www.wollheim-memorial.de/de/was_sollte_die_ig_auschwitz_produzieren.
Although the Auschwitz Buna plant was designed to produce some 30,000 metric tons of Buna-S rubber (a butadiene-styrene copolymer), 75,000 metric tons of gasoline, and 50,000 metric tons of diesel fuel per year, neither of these production branches was ever finished due to a lack of manpower and construction material. While the latter was a result of the general war situation, the former was primarily caused by typhus epidemics, which killed tens of thousands of the projected slave laborers and which forced the temporary shut-down of all activities at the construction site in late summer and early fall of 1942. I will return to the problem of epidemics in the next section. The only branch of the Auschwitz Buna plant that became operational was the production of methanol, with an output of some 30,000 metric tons in 1944.65

Had the Auschwitz branch of I.G. Farbenindustrie come online with its production of rubber, fuel and lubricants, it would have increased Germany’s production capacity in this regard by a quarter, hence also its capacity to wage war. But it never came to pass.

The importance that Auschwitz had in Germany’s economic plans can also be derived from the summary written right after the war by some of America’s greatest experts on German industry (U.S. Strategic..., p. 1):

“Wartime Germany was a chemical empire built on coal, air, and water. Eighty-four and a half per cent of her aviation fuel, 85 per cent of her motor gasoline, all but a fraction of 1 per cent of her rubber, 100 per cent of the concentrated nitric acid, basic component of all military explosives, and 99 per cent of her equally important methanol were synthesized from these three fundamental raw materials.

[...] The body of this industrial organism was the gas-generating plants which turned coal into process gases; its arms were the many plants that used those gases and other materials drawn from the coal to produce synthetic fuels and lubricants, chemicals, rubber, and explosive products.”

The Auschwitz Concentration Camp was meant to provide cheap slave labor for that crucial war effort. It should therefore not surprise that the German authorities invested enormous amounts of money – almost a billion dollars in today’s currency – in erecting and maintaining the camp, and providing for its inmates (Gerner et al. 2002). As mentioned before, those unfit for slave labor, however, are said to have been killed. The claimed murder weapons for this, Zyklon B in homicidal gas chambers, are the object of the present study.

Figure 22: Map of the Auschwitz area today (Google Maps 2015) with location of German facilities during the war.
Figure 23: Air photo of the I.G. Farbenindustrie chemical plants near Monowitz, taken on January 14, 1945 by the U.S. Air Force; photo captioned by the CIA in 1978 (National Archives and Records Administration, #305911; https://catalog.archives.gov/id/305911).
Figure 24: Map of Auschwitz I/Main Camp (concentration camp), according to the information brochure of the Auschwitz State Museum in 1991 (top) and satellite image by Google Earth (bottom; Dec. 2, 2016).

Block 1 - 28: inmate barracks
a: commandant’s house  i: guard station near camp entrance
b: main guard station  j: camp kitchen
c: camp commandant’s office  k: inmate registration building
d: administration building  l: camp warehouse, theatre building
e: SS hospital  m: new laundry
f,g: political department (Gestapo)
Figure 25: Map of PoW Camp Auschwitz II/Birkenau, approximately 2 km north-west of the Main Camp, construction situation as of the end of 1944. The shaded buildings still exist, some of them, however, only in the form of ruins or foundations (Crematoria II-V), the rest having been torn down by Polish civilians for building materials and fuel after the war. According to the information brochure of the Auschwitz State Museum, 1991.

BI-III: Construction Sectors I to III
Bla/b: women’s camp
Blia: quarantine camp
Blib: family camp
Blhc: Hungarian camp
Blld: men’s camp
Blle: gypsy camp
Blff: inmate hospital
KII: Crematorium II with “gas chamber”
KIII: Crematorium III with “gas chamber”

KIV: Crematorium IV with “gas chamber”
KV: Crematorium V with “gas chamber”
S: “Zentralsauna,” hot-air/steam disinfection
T: pond
1: Building 5a – Zyklon-B/hot-air disinfection
2: Building 5b – Zyklon-B disinfection
3: Inmate Barracks no. 13
4: Inmate Barracks no. 20
5: Inmate Barracks no. 3
Figure 26: Former PoW Camp Auschwitz II/Birkenau, satellite image by Google Earth (Dec. 2, 2016).

1: Zentralsauna  
a: fire-fighting pools
2: ruins of Crematorium II  
b: sewage treatment plants
3: ruins of Crematorium III  
c: pond next to Crematorium IV
4: ruins of Crematorium IV  
d: kitchen buildings
5: ruins of Crematorium V  
e: postwar memorial
5.2. Epidemics and the Defense against Them

5.2.1. Danger of Epidemics

Before the era of modern warfare, it had always been taken for granted that during a war epidemic disease caused more deaths among the soldiers and civilians than the use of weapons. It took the atomic bomb, deployed in a ruthless and criminal manner by the United States against unarmed people (whose government had already agreed to surrender) and in contravention to international law, to change this assumption.

The epidemic most feared in World War I at Germany’s eastern front was typhus. Typhus epidemics claimed uncounted thousands of lives among German soldiers at the Russian front and could be prevented from spreading into German territory after the end of the war only by the most rigorous of measures. Since that time, the danger of epidemics has been taken seriously by all German medical and military offices and personnel.

For example, the German encyclopedia *Der Große Brockhaus*, Vol. VI of the 1930 Leipzig edition, contains a comprehensive article on epidemic typhus. This acute infectious disease is spread only by the body louse:

“The disease is caused by Rickettsia prowazeki (discovered in 1910 by Ricketts and in 1913 by Prowazek), a microorganism found in the intestines and salivary glands of infected lice. […]”

After thoroughly describing the symptoms and the course of the disease, the encyclopedia continues:

Epidemic typhus occurs chiefly where unfavorable social and sanitary conditions prevail: in dank overcrowded living quarters, hospitals, prisons, emigration ships, caused by crop failures and price increases, thus also known as starvation, hospital, prison, ship or war typhus. Typhus is endemic in Russia, the Balkans, northern Africa, Asia Minor, and Mexico. According to Tar-
rassevich, 25-30 million people suffered from epidemic typhus in Russia in 1918-1921, which amounts to 20-23% of the population. […] Successful control and prevention of epidemic typhus consists of enforcing all measures available to destroy the body louse.”

The experiences of German physicians during WWII were no different (Wohlrab 1942; Hagen 1973). The topic of epidemics can be found in countless publications. Practical experiments were also conducted, which increased knowledge about fighting the causes of this disease. After the war, U.S. occupation forces collected data about typhus cases in Germany, which shows that the situation during World War II went increasingly out of control as the war progressed (see Chart 1).

Professor Dr. F. Konrich was completely justified in stating, in his 1941 publication “About sanitation facilities of German POW camps,” that epidemics such as those in question “[…] had long been extinct here [in Germany].” However, it also becomes quite understandable why all of the offices and institutions involved over-reacted when epidemic typhus went out of control in the Auschwitz Concentration Camp in early July 1942 (Mattogno 2016d, pp. 42-47, 69f.). Only by drastic measures taken to isolate and eradicate this epi-
demic, its spreading to the camp’s nearby civilian population could be prevented. Tragically, however, the epidemic inside the camp itself was brought under control only in the second half of 1943; hence it raged there for an entire year.

5.2.2. Epidemic Control with Zyklon B

One of the most efficient methods to fight lice and thereby to contain and eliminate typhus – and to kill other vermin like grain beetles, bugs, cockroaches, termites, mice, rats and many more as well – is their poisoning with highly volatile hydrogen cyanide.

Liquid hydrogen cyanide has a short shelf life and is extremely dangerous when handled incorrectly. At the end of the First World War, hydrogen cyanide was introduced onto the market in an easier-to-handle and safer form: porous materials soaked with hydrogen cyanide with the addition of a stabilizer and often also an irritant warning material, intended to warn people of low concentrations of hydrogen cyanide, which in lower concentrations has only a slight odor that many people cannot even smell at all.

This product, called Zyklon B®, was then packed in tin cans that could only be opened with a special tool. The number of patents filed for the additives to Zyklon B shows that there was no simple, clear solution to the problems relating to the stabilizers and irritant warning materials. Legally, there was a great difference between the stabilizer for Zyklon B and the irritant warning material. While a stabilizer for Zyklon B was required by German law, an irritant warning material, by contrast, was not legally required.70

70 Deutsche Reichsbahn Eisenbahnverkehrsordnung (EVO, German Reich railway regulations), annex C to §54 EVO, Vorschriften über die nur bedingt zur Beförderung zugelassenen Gegenstände vom 1. Okt. 1938 (Regulations on Objects Permissible for Restricted Transport Only, dated 1 October 1938), p. 50:

“Die Blausäure muß durch einen von der Chemisch-Technischen Reichsanstalt nach Art und Menge anerkannten Zusatz, der zugleich ein Warnstoff sein kann, beständig gemacht sein.” (The hydrogen cyanide must be stabilized by an additive, which may also be an irritant, in the manner and quantity recognized by the Chemical-Technical Reich’s Foundation.)

71 Gassner 1937, pp. 185f. The fact that Auschwitz concentration camp received Zyklon B
Zyklon B was licensed and produced by the Degesch corporation residing in Frankfurt. Until the end of the Second World War, it played an extraordinarily important role in the struggle against insect pests and rodents (Hecht 1928; Peters/Ganter 1935) in food warehouses, large-scale means of transport like trains and ships, both in Europe and in the U.S. (Peters 1938b). For example, Dr. G. Peters reports in his 1933 work Blausäure zur Schädlingsbekämpfung (Hydrogen Cyanide for Pest Control) on the fumigation of ships with hydrogen cyanide, which happened in the United States as early as 1910, and about tunnel facilities into which entire railway trains could be driven in order to be disinfested (see Figures 29 & 30).

The use of Zyklon B in public buildings, barracks, PoW and concentration camps was also featured in the literature of that time (Dötzer 1943; Haag 1943; Puntigam 1944a; Berg 1988). Of course, there were several other gaseous pest-control agents in addition to Zyklon B. Zyklon B continued to play

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72 Deutsches Reich 1941.
74 Peters 1942a; Degesch 1942, table of properties of the gaseous insecticide/pest control product used by Degesch.
an important role even after the war, until it was largely replaced by DDT and its successors (Kruse 1948; Kliewe 1951).

A large number of publications are available from both wartime and pre-war periods, to which I refer the interested reader.75 There are also contemporary guidelines on the fumigation of goods and rooms, describing the procedures in detail, both before and afterwards.76 These do not considerably differ from the regulations in application today.77 Based upon this, the following is a brief discussion of the technology and procedures employed.

Initially, for the disinfection of personal effects, ordinary rooms (10 to 30 m² surface area) were temporarily modified by making the windows and doors as gas-tight as possible by means of felt sealing material and paper strips, while providing for proper heating and ventilation of the rooms. Workers wearing gas masks spread Zyklon B evenly on the floor of the room containing the goods to be disinfested. This procedure was similar to what was then the regular fumigation of ordinary rooms for the destruction of vermin. Such converted rooms may be seen even today in the Auschwitz Main Camp. The use of temporarily sealed rooms for fumigation purposes is not without risk since the sealing is never perfect.

Later, special gas-tight chambers without windows were built, equipped with efficient heating and ventilation systems, and later also with circulating-air systems for a more-rapid circulation of the gas inside the room (so-called “Degesch-Kreislaufverfahren,” Degesch circulation procedure, see Figure 31, p. 74; Peters 1936, 1938a). Cans of Zyklon B were opened by means of a remote mechanism, so that the workers were no longer exposed to danger. The bottom of the can was automatically punctured and the preparation fell into a basket, into which a fan blew hot air, thus quickly evaporating the hydrogen cyanide and dissipating the resultant gas. These Degesch circulation devices were relatively small in size, a few m³, to economize on the expensive disinfectant.

Leipprand writes about the widespread use of Zyklon-B-disinfection facilities during the Third Reich (Leipprand 2008, p. 10):

“In 1940, stationary gas chambers were widespread to such an extent that the clothing of 5 million members of the Wehrmacht and prisoners were disinfested with hydrogen cyanide in them. The stationary gas chambers and the disinfection procedure had been developed to such a degree that an entire cycle of loading, gassing, ventilation and unloading could be achieved within 75 – 90 minutes in a circulation gas chamber […].”

75 Peters 1933; 1936, 1938a&b; 1942b; Dötzer 1943; Puntigam/Breymesser/Bernfus 1943; Puntigam 1944b; Wüstinger 1944; for a more-recent summary of this topic see Berg 1986; 1988; Ebbinghaus 1999, pp. 29-57.
76 Entseuchungs-...1939; Richtlinien...
77 Technische Regeln... 1990.
Figure 30a\&b: Railway disinfestation tunnel in Budapest, Hungary. Top: external view.

Left: internal view with blower in the background, top, suction duct beneath the ceiling and pressure duct on the floor (Peters 1938b, pp. 98f.).
These professional installations were often part of an entire hygienic complex. As a rule, such a building complex consisted of at least four sections, which were organized approximately as follows in terms of purpose (see Figure 32; Konrich 1941):

- **Undressing room, “dirty side.”** People to be deloused removed their soiled clothing and handed them over for laundry/disinfestation/disinfection.
- **Shower.** Subjects washed themselves after undressing, plus sometimes other procedures, such as haircuts, medical examinations, or at times even including a sauna.
- **Dressing room, “clean side.”** Their own cleaned and sanitized clothing was given back to the subjects or substitute clothing was issued to them, since the cleaning may have lasted many hours.
- **Disinfestation/Disinfection room.** An area to clean and process the clothing combined with a laundry.

It was not uncommon for a crematorium to be installed in the same building complex, as may still be seen at Dachau Concentration Camp today (near Munich), in which the new hygienic installation possesses a series of Degesch circulating-air devices for the disinfection of clothing, with an undressing

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**Figure 31:** Longitudinal section through a Degesch delousing chamber with circulation layout (Gassner 1943).

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**Figure 32:** Schematic organization of a hygiene complex: thin arrows: clothing pathway; thick arrows: subject pathway
and redressing room to the right and left of the inmate showers, as well as a crematorium. (The room labeled by the Dachau Museum as a “gas chamber” today was originally probably an inmate shower, which is indispensably in the above schema. When, by whom and why the design changes were made to present this room as a homicidal gas chamber has not been investigated so far.)

The concentrations of hydrogen cyanide used during the disinfestation of textiles might be very different according to the type of vermin and exterior conditions, and usually ranged from 5 to 30 g of hydrogen cyanide per m³ of air. The application time varied just as greatly, from under two hours to up to ten hours and more. In the more-modern installations with heating (higher than 25°C) and circulating air/ventilation installations, good results could be attained with concentrations of 20 g per m³ already after 1 to 2 hours. Disinfestation in ordinary rooms, on the other hand, could require up to 24 hours or more.

Fumigations with Zyklon B were dangerous, as I already explained in Section 1.2. That was no different at Auschwitz. Here is the text of a special order by the camp commandant Höss of Aug. 12, 1942.\textsuperscript{78}

“A case of indisposition with slight symptoms of poisoning by hydrocyanic gas which occurred today makes it necessary to warn all those participating in gassings and all other SS members that particularly upon opening fumigated rooms, SS members without mask must keep a distance of 15 meters from the chamber for at least five hours. In addition, particular attention should be paid to the wind direction.”

The Auschwitz garrison physician Dr. Eduard Wirths was just as clear in a letter on the disinfestation of inmate dwelling quarters:\textsuperscript{79}

“A According to a report by the disinfecter commissioned by me, SS Ober- scharführer K l e h r , a civilian worker, in spite of thorough instructions and reprimands, has broken into a dwelling hut by means of a duplicate key on

\textsuperscript{78} RGVA 502-1-32, p. 300; see Document 4 in the Appendix. Pressac’s translation, by the way, is slightly faulty (1989, p. 201).

\textsuperscript{79} RGVA 502-1-28, p. 25; see Document 5 in the Appendix.
Dec. 9, 1943. The hut was just being fumigated, and he could only fortuitously and at the last moment be prevented from stepping into the hut and thus saved from certain death. […] The SS Garrison Physician Auschwitz refers to the garrison order according to which no dwelling hut may be entered until it has been cleared by the disinfecter commissioned by me, SS Oberscharführer Klehr, and that a sentinel has to be posted in front of each fumigated dwelling until it has been cleared.”

5.2.3. Epidemic Control in Auschwitz

5.2.3.1. Terminology Used and Responsibilities

We shall use the technical terms established in the 1939 German Army Regulations (*Heeresdienstvorschrift* 194).76 since the camp personnel, *i.e.*, the physicians and the so-called disinfectors, were legally obligated to follow those regulations:

“Disinfection

Disinfection means [...] destroying the disease-(epidemic-)causing agents [bacteria] on objects, in rooms, in excretions and on the bodies of infectious persons.

Disinfestation

Disinfestation means: ridding rooms, objects and people of vermin (small life forms) that can transmit pathogens, cause economic damage to or annoy man.”

The regulation quoted lists all known physical and chemical means of disinfection and disinfestation. Similarly, a “work guideline” was released in 1943 by the Sanitation Institute of the Waffen SS: “Entkeimung, Entseuchung und Entwesung” (Sterilization, Disinfection and Disinfestation; Dötzer 1943).

The authority in charge of sanitation in the Waffen SS as well as in the concentration camps was the “Hygieneinstitut der Waffen-SS”80 (Sanitation Institute of the Waffen SS), established in 1942 in Berlin, which set up a branch office in 1943 in Rajska near Auschwitz with its “Hygienisch–bakteriologische Untersuchungsstelle Südost d. W-SS” (Sanitary and Bacteriological Testing Station Southeast of Waffen SS). The files from this testing station have survived (151 volumes dating from 1943 to 1945).81

The garrison physician (army medical officer) and the medical personnel were in charge of implementing all sanitary measures. This physician – and this was the case at Auschwitz as well – was to be consulted as subject expert in all relevant matters of construction planning and other things. Where hy-

80 RGVA 502-1-26, p. 117.
81 Boberach *et al.* 1991. So far, we are aware of approximately 110,000 laboratory examinations. Many highly informative reproductions can be found in *Hefte von Auschwitz/Auschwitz Studies.*
hydrogen cyanide was to be used, requirements called for specially trained expert personnel. In Auschwitz, this role was filled by the “disinfectors.”

During the time period of primary interest here, Dr. Eduard Wirths was the Auschwitz garrison physician starting on Sept. 6, 1942 until the end of the camp’s existence in early 1945.

5.2.3.2. Procedures Used

Generally, four procedures were used at Auschwitz for disinfestation and disinfection:

– hot air
– hot steam
– hydrogen cyanide
– microwaves

Data on the disinfestation and disinfection installations in operation in the Auschwitz and Birkenau camps may be taken from a listing dated January 9, 1943: “Hygienische Einrichtungen im KL und KGL Auschwitz”82 (Sanitary Facilities in POW and Concentration Camp Auschwitz) directed to the Amtsgruppenchef C (Berlin), and an “Aufstellung über die im KL. und KGL. Auschwitz eingebauten Entwesungsanlagen Bäder und Desinfektionsapparate”83

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82 RGVA 502-1-332, pp. 46/46a.
83 RGVA 502-1-332, pp. 9/10; see Document 6 in the Appendix.
(List of Disinfestation Facilities, Baths and Disinfection Systems Installed in POW and Concentration Camp Auschwitz), dated July 30, 1943.

The following capacities, taken from the last-mentioned document, relate to a 24-hour-a-day operation period.

a) In the concentration camp (protective-custody camp or Auschwitz Main Camp):
   - Block 1: One hot-air-disinfestation installation, manufactured by the Klein corporation for 1,800 people and approximately 3,600 blankets, since the fall of 1940, together with a large shower facility and a laundry between Blocks 1 and 2.
   - Block 3: One hydrogen-cyanide-gas-disinfestation installation (i.e., Zyklon B), for 1,400 people and approximately 20,000 pieces of laundry.
   - Block 26: One hot-air installation for 2,000 people.
   - Disinfestation building at Deutsche Ausrüstungs-Werke (German Equipment Works, i.e., Kanada I): 1 hydrogen-cyanide-gas-disinfestation installation (BW 28) for approximately 30,000 pieces of laundry, blankets, etc. (in operation since the summer of 1942).
   - Civilian-worker-disinfestation barracks: One hot-air-disinfestation installation, manufactured by the Hochheim corporation, with a daily capacity

84 According to Pressac, in operation since 1941/42 (1989, p. 25).
for 2,000 people, with large shower bath installation and disinfection apparatus, permanently installed.

b) In the POW camp (K.G.L. Birkenau):
   – BW 5a in B Ia: One disinestation apparatus (manufactured by the Werner company) and one hot-air apparatus (manufactured by Hochheim) for 2,000 people with large shower facility and sauna, in operation since November 1942. One chamber for hydrogen-cyanide fumigation was built for 8,000 blankets and was in operation after the fall of 1942.
   – BW 5b in B Ib: Installation as in BW 5a.

Furthermore, the following facilities were under construction:
– BW 32 (Zentralsauna) with 4 hot-air disinestation chambers (by Topf & Söhne) as well as 3 steam-disinfection devices for and a large shower bath for 7,000 men; completed in September 1943.
– Disinestation building in the Gypsy Camp with 4 hot-air-disinestation chambers (by Umluftapparatebau GmbH) with shower bath for 3,800 men; completed on Aug. 15, 1943.
– A mobile and a stationary shortwave delousing device for altogether 30,000 men daily (see Paragraph 5.2.3.6), installed in the reception building of the Main Camp (delivery was delayed until 1944).

Apart from this, there were a number of facilities for the SS troops which I will not list here in detail. One of them we will encounter again later: a shower and disinestation facility for the troops for 2000 men daily, installed in an
already existing building in Construction Sector III of the Birkenau Camp (Subsection 5.4.3).

The facilities BW 5a and 5b will be discussed more thoroughly in Subsection 5.2.4.

All the facilities listed therein were subject to modifications. The number of sanitary facilities increased with the number of inmates, as the two aforementioned documents already show. Although Pressac mentions 25 chambers operated with Zyklon B (1989, p. 550), he also counted the 19 chambers planned for BW 160, the reception building of the Main Camp, which were never used as such.

5.2.3.3. Results
The results could only be compiled if one knew the number of persons disinfested by means of the installation. These numbers have thus far remained unclear. Although Danuta Czech claims in her 1989 book that such documents on large time periods are available in the Auschwitz archive, we have so far been unable to examine them. As of the present writing, it is still impossible to make a reliable statement as to whether or not the existing disinfection installations were consistently in service for the indicated number of persons. As mentioned before, the typhus epidemic reached its tragic peak in the second half of August 1942, but it claimed many more victims for another full year. This clearly indicates that the capacity of the facilities available at least at that time did not suffice.

5.2.3.4. Basic Policy Decisions
Two policy decisions made by the SS-Hauptamt Haushalt und Bauten (SS Main Office Budget and Construction) in the Reich Administration of the SS and its successor no doubt also influenced the measures taken in the camp. The first decision of June 5, 1940\(^85\) stated that HCN would no longer be used, and replaced instead with a hot-air method. The reason for this was probably that the use of HCN in makeshift delousing chambers was not reliable and had caused many accidents and was thus deemed too dangerous. The second decision, issued on March 11, 1942,\(^86\) 21 months later, demanded the exact opposite by calling for the “[…] conversion of all delousing facilities to operation with HCN,” in which regard it was noted:

“Deviations therefrom – delousing by means of hot air or hot steam – are only permissible insofar as they involve temporary installations, in which the necessary safety for the handling of HCN is not ensured.”

\(^85\) RGVA 502-1-333, p. 145.
\(^86\) RGVA 502-1-336, p. 94.
A further letter from the Office C VI of February 11, 1943 to the Commandant again expressly states, probably with reference to the letter of June 5, 1940: “[…] as per the prohibition against the use of HCN for disinfestation […].” This means that all efforts were to be made to convert all facilities to be operated with the only really reliable method available – HCN – but that the use of HCN was allowed only where and if the necessary safety and reliability of the method was ensured, i.e., makeshift delousing chambers were as a rule not allowed to be operated with HCN.

Men in positions of authority, accustomed to making decisions, and faced with a dangerous epidemic capable of spreading to the civilian population with incalculable consequences, will always take suitable measures and act accordingly. Hydrogen cyanide (= Zyklon B) was the most-reliable disinfestation agent of its time (Peters/Rasch 1941a; Peters/Wüstinger 1940). The only problem was in finding a safe location for such facilities, perhaps outside the actual camp (see Subsection 5.4.3).

5.2.3.5. The Garrison Physician

On September 9, 1942, Dr. E. Wirths was stationed in Auschwitz as garrison physician. From the records, we may say that he performed his duties correctly; in this context, reference is made in particular to his massive criticism of the highest echelons (see Wieland in Mattogno 2016a).

As time went by, the number of inmates increased steadily, and unfortunately there were more than just one epidemic. I shall therefore briefly summarize, by means of examples, the conclusions reached by this physician and the steps he took in response.

On December 4, 1942, Dr. Wirths reported to headquarters about a discussion held in the administrative council of Bielitz District. The subject was epidemic typhus. A considerable number and range of persons had participated in the discussion, including the medical officer, the Wehrmacht, and representatives of the government. This illustrates how seriously the epidemic was taken:

“He reports that at present three large disinfestation, shower, and sauna facilities could be put into operation, specifically two facilities for the inmates and one for the members of the SS unit. The capacity of these facilities is some 3,000 to 4,000 persons per 24 hours. Zyklon-B disinfestation has been discontinued entirely, since it has been found that success is not 100% certain with this procedure.”

Buildings BW(e) 5a and 5b were intended for the inmates. The capacity of these disinfestation facilities was probably adequate for the number of inmates at this time. One must consider, however, that at this same time the structural

87 RGVA 502-1-332, p. 37.
88 RGVA 502-1-332, pp. 117/119.
shell for another 19 Degesch circulation-fumigation chambers was being completed in Building BW 160 of the Main Camp (admissions building). Another paragraph of the above letter states that the garrison physician of Kattowitz had provided the loan of two mobile boiler installations.

On April 18, 1943, Wirths reports to the commandant, with warning reference to the sewer system in Birkenau, and concludes that “[…] great danger of epidemics is inevitable.”

On May 7, 1943, in a discussion with the chief of Amtsgruppe C, SS Brigadier General and Major General of the Waffen SS Engineer Dr. Kammler and others, the garrison physician set out in Chapter “II. Bauten in Zuständigkeit des Standortarztes” (II. Buildings under the Charge of the Garrison Physician):

“[…] that the continued health of the inmates for the major tasks is not guaranteed, due to the poor toilet conditions, an inadequate sewer system, the lack of hospital barracks and separate latrines for the sick, and the lack of washing, bathing, and disinestation facilities.”

Dr. Wirths clearly pointed out the inadequacies and also how to rectify them.

At this point we must warn the reader, who may perhaps not be sufficiently aware of the historical context, not to jump to false conclusions. The reader may well lack an understanding of all the problems that were involved in obtaining materials as well as all the other factors required to build these facilities in wartime. Figuratively speaking, a written permission was required to purchase every brick.

We must also point out that, in those days in rural areas of Eastern Europe, a sewer system of any kind at all was exceptional to start with, and that this is all the more true for sewage-treatment facilities, virtually unknown at that time in Eastern Europe, which were built for both camps at great expenditure in resources and according to high technical standards. The same applies to crematoria, which I will discuss later. They were also built for hygienic reasons but were at that time practically unknown in many European countries.

89 RGVA 502-1-332, p. 219.
90 RGVA 502-1-233, pp. 33/38.
The above quoted document continues:

“The brigadier general acknowledges the foremost urgency of these matters and promises to do everything possible to ensure rectification of the shortcomings. He is somewhat surprised, however, that the medical side presents him with reports giving a very favorable account of the sanitary and hygienic conditions on the one hand, while he is then immediately confronted with reports to the exact opposite effect on the other hand. The chief of the Central Construction Office is hereby instructed to present suggestions for rectification by May 15, 1943.” (Emphasis added.)

It began with the toilet facilities, with regard to which he enforced changes that he considered necessary. For example: lids on the toilets, because otherwise “[…] a great danger of epidemics is inevitable.”91 These lids were ordered by the Head of Department C of the SS WVHA (Wirtschafts-Verwaltungshauptamt, Economic Administrative Main Office) on May 10, 1943.92 It ended with roofing matters related to the gypsy kindergarten:93

“For the deteriorated roofs of kindergarten Blocks 29 and 31 in the Gypsy Camp I request 100 rolls of roofing felt (very urgent.)”

In between, on May 28, 1943,94 he selected six circulating-air delousing facilities which – as was noted down in handwriting – were ordered on May 29, 1943 by the Building Administration’s expert on heating matters Jährling. Then there is an account of a water-quality test on June 1, 1943,95 etc. This extensive correspondence resulted in separate subject files in the filing system of the Central Construction Office, such as “Sanitary Conditions.”96

The physician’s field of work was great and varied and deserves its own monograph. He was even responsible for ensuring that the inmates’ kitchen personnel were frequently examined – including laboratory tests of their stool, etc. That Dr. Wirths truly saw to absolutely everything is obvious from the documents.

The garrison physician’s reminders and admonitions increased over time. On balance, one must conclude that, just as today, while there were opportunists and careerists in those days, there were also – as our example shows – SS men with backbone and a sense of duty, professional ethics and the courage to stand up for their beliefs.

At the end of the comments section of the Memorandum of May 9, 1943, we find:

91 RGVA 502-1-322, p. 219.
92 RGVA 502-1-322, p. 31.
93 Taken from a letter of March 23, 1944 to the Central Construction Office (Zentralbauleitung) in Auschwitz, RGVA 502-1-332, p. 175.
94 RGVA 502-1-332, p. 28.
95 RGVA 502-1-332, p. 212.
96 RGVA 502-1-149, p. 135.
“As stop-gap measure until that time, the brigadier general provides the loan of a new microwave delousing device.”

5.2.3.6. Microwave Delousing Facility

Perhaps one of the most-fascinating aspects of Auschwitz Concentration Camp is the installation of a stationary microwave facility, the world’s first technological predecessor to the microwave ovens in common use today. This technology was invented by Siemens in the late 1930s and developed to mass-production readiness during the war. This was a by-product of the powerful vacuum tubes built for the television transmission of the Berlin Olympics in 1936, the energy-rich radio waves of which killed the insects in the vicinity of the antenna. The development took place with financial assistance from the Wehrmacht, which hoped to achieve a perceptible improvement in the struggle against the epidemics raging in the east.

Since the inmates assigned to the armaments industries in the concentration camps were particularly valuable towards the end of the war, the Reich leadership decided not to put the first installation into operation at the eastern front for the disinfestation of soldiers’ clothing, but rather, in the largest labor complex in the Reich, in Auschwitz. Due to Allied bombing attacks, however, there was a one-year delay in the completion of this installation, which probably cost the lives of tens of thousands of inmates. The Auschwitz camp ad-

Figure 38: Document on the microwave delousing facility in the new laundry building of the Auschwitz Main Camp. Letter from the SS garrison physician E. Wirths to the camp’s administration of Nov. 29, 1944 (RGVA 502-1-255, p. 137):

“As I have found out, the gas chambers meant to be used for hydrogen-cyanide delousing are now to be converted to use Areginal. I point out that I don’t see a need for this conversion, since I have plenty of delousing capacity at my disposal with the microwave delousing facility currently installed there. Furthermore, the acquisition of both Areginal and Cyklon B is difficult already now.”
ministration had anticipated its installation as early as 1943 and had therefore postponed other delousing projects. This facility, put into operation during the summer of 1944, proved in fact to be of revolutionary effectiveness, both quick and cheap: personal effects were moistened and placed on one end of a conveyor belt and emerged at the other end a few minutes later, completely free of vermin and sterile to boot (see Nowak 1998; Nowak/Rademacher 2003, pp. 312-324; Lamker 1998; M. Weber 1999). In addition to this new technology, new insecticides also became widely available in 1944, among them most notably the so-called Lauseto (for Lausetod = lice death), which was a German tradename for DDT, produced under license from the Swiss chemical company Geigy (Weindling 2000, p. 380). The Auschwitz Camp received it in 1944 as well, reducing the need for Zyklon B even further: 9 metric tons in April, 15 tons in August, and 2 tons in October 1944 (Setkiewicz 2011b, p. 72).

5.2.4. Disinfestation Installations BWe 5a and 5b

The only structures remaining intact in Auschwitz-Birkenau today encompassing a wing for the disinfestation of personal effects with Zyklon B are Build-
ings (Bauwerk, BW) 5a and 5b in Construction Sections B1a and B1b, respectively. These buildings were planned as mirror images of each other. The west (respectively east) wing of these buildings were used, at least temporarily, for disinfection with Zyklon B. These rooms were expressly labeled “Gaskammer” (gas chamber) on the construction blueprints, see Figure 39.

This is no triviality: rather, it is important proof that, if we follow the extant documentation, the term “gas chamber,” at that time, referred exclusively to installations for the disinfection of personal effects, both by architects during the planning of such buildings, and by disinfection experts. The title of one of the most important contemporary publications on the subject of cyanide disinfection by F. Puntigam, H. Breymesser, E. Bernfus was, for example, Blausäuregaskammern [sic] zur Fleckfieberabwehr [hydrogen-cyanide gas chambers for the prevention of epidemic typhus], and the term used in an advertisement of the firm Degesch was likewise “gas chambers,” see Figure 34, p. 77. This was simply the ordinary designation for rooms used for the disinfection of personal effects.

In the absence of proof to the contrary, we must therefore always assume that the use of the term “gas chamber” in a German document from this period refers to a room for the disinfection of personal effects!
For this reason, *in the following*, the term gas chamber will be placed in quotation marks at all times (“gas chamber”), whenever the word refers to chambers for the execution of human beings. There are two reasons for this:

1. The German technical term *Gaskammer* originally pointed exclusively to disinfection chambers operated with toxic gas. To apply the same term to chambers intended for the execution of human beings is an incorrect use of the term at that time.

2. Simply for the sake of avoiding confusion as to the meaning of the word “gas chamber” in each case, a distinction must be made in writing – unless the term is clearly identified with additional words, like execution gas chamber or homicidal gas chamber, in which case I will not use quotation marks.

Figure 39 shows the ground plan of the two disinfection gas chambers of Building 5a and 5b approximately in their original condition. The disinfection chamber in Building 5a was transformed in the summer of 1943 and received two small hot-air chambers, as shown in Figure 40.

The buildings have ordinary brick walls and a concrete foundation built level with the ground, plastered and whitewashed on the interior with chalk-based mortar. The room in Building 5b has no separate ceiling; the roof's framework is covered from underneath with boards of an unknown material (perhaps Heraclite). Originally without windows, like building *BW* 5b today, the disinfection wing of *BW* 5a was equipped, during the building alterations, with windows firmly walled in which cannot be opened.

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97 J.-C. Pressac 1989, pp. 55-58: blueprints of Buildings 5a/b; pp. 59f.: exterior photos. I use here the designations of these buildings as used by Pressac: *BW* 5a for the eastern and 5b for the western building. The documents in the files of the Central Construction Office are contradictory in this regard. According to Plan No. 4758 of Oct. 8, 1943 (*RGVA*, 502-2-58, no page number), *BW* 5a was the western building, acc. to Plan No. 5320 of Oct. 23, 1943 (502-2-58, p. 13), the eastern building, and Plan No. 11481 of March 8, 1944 used 5a for both buildings (502-1-230, p. 174). The invoice of *Deutsche Ausrüstungswerke (DAW)* of Sep. 23, 1944 for a hot-air furnace set up on Sep. 14, 1944 “in 2 chambers” refers to 5b (502-1-328, p. 142). However, the eastern building was converted to hot-air disinfection with 2 chambers already in summer 1943, see Drawing No. 2540 for *BW* 5a(!) of July 5, 1943 (Plan No. 3561 of Sep. 16, 1943; *APMO* Negative No. 20932/5; Pressac 1989, p. 58). It is therefore unclear where the DAW set up the hot-air furnace a year later – unless the conversion took 14 months to complete.
In the gable wall of the disinsection room in BW 5b are two circular openings approximately 50 cm in diameter, corresponding to the former ventilation exhaust and air intake channels, Figure 42. The roof has three ventilation chimneys; there must have been three furnaces in this room during the time of operation (Pressac 1989, p. 53). The double doors, opening inwards and drawn onto the plans, have been replaced with single doors, also opening inwards. For the time being, one can only speculate on any equipment of the former disinsection chambers, as any equipment has been removed.

The room has a surface area of approximately 130 m², is open to the framework of the roof, and therefore has a volume of at least 400 m³. However, the space above 2 m in height must be considered unusable dead space, resulting in the waste of huge amounts of HCN/Zyklon B, since a quantity of Zyklon B of at least 4 to 5 kg (10 g per m³) cyanide content was necessary for just one gassing, regardless of whether the room contained only a few personal effects or whether the available volume was filled. For example, with 100 fumigation cycles per year (one every 3 or 4 days) approximately 0.8 tons of Zyklon B would have been consumed by this installation alone and by Building 5a, corresponding to 10% of the entire Zyklon-B deliveries to Auschwitz in 1942, with a total delivery of 7.5 tons.

The mass given on the label of a Zyklon-B can always referred to the net HCN content of the can, i.e., excluding the mass of the carrier material. That means for instance that a 1-kg Zyklon-B can consisted of 1 kg HCN, while the gross weight of such a can was 2.65 kg in the case of the Erco product (gypsum pellets); see Mattogno 2015c, pp. 69f.

Office of Chief of Counsel for War Crimes, British Military Tribunal, Case against B. Tesch
When one considers that there were other HCN-disinestation installations in Birkenau in addition to this one; that the deliveries to Birkenau Camp also supplied the related labor camps (toward the end of the camp’s history, 48 in number); and the fact that inmate barracks were also occasionally fumigated with this insecticide, it becomes clear that the quantities of Zyklon B delivered to Auschwitz Camp can actually be explained by normal delousing activities.

The annual delivery quantities were evidently too low to ensure successful disinestation of all personal effects and buildings in all camps in the Auschwitz complex, since typhus epidemics were never entirely eliminated.

How frequently the delousing chambers of BWe 5a and 5b were actually used for HCN disinestation has to remain open for the time being, since no documentation about this has been found yet, and also because the document cited above states that the use of Zyklon B had to be abandoned as early as December 1942 (at least in unsafe installations), i.e., just a few weeks after this installation was put into operation (see p. 81).

A remarkable feature of the disinestation gas chamber of Building BW 5b is a network of the water pipes, suspended by hooks fastened to the roof girders, visible in Figure 43. A few of the pipe endings are equipped with shower heads. The water pipes have no connection. Paradoxically, they end in the above-mentioned ventilation outlets, and can only have been installed after the removal of the ventilators installed there. There are, of course, shower rooms in these buildings, but in a very different location (see Figure 39). The shower installations once in existence there, however, have been entirely removed. Since the doors to these rooms were open in the early 1990s, any visitor could

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100 For each barracks, with a volume of approximately 1,000 m³, this means a requirement of 10 kg Zyklon B; the 100+ dwelling barracks in Birkenau Camp alone would have required a metric ton! See Mattogno 2015c, pp. 78f.
examine this peculiar construction. The original German drawings and documents of this building do not indicate that these pipes were installed during the German occupation, which means that they were probably installed after the war for an unknown reason. Since the camp served temporarily as an internment camp for the Polish authorities after the war, it is conceivable that this structure served as a makeshift shower after the war. Water might have been pumped into the pipes with hoses reaching up to the ventilation holes.

3. “Gas Chamber” in the Auschwitz I Main Camp

According to Pressac, no material or documentary evidence of the “gas chamber” allegedly installed in the crematorium of the Main Camp exists, but there are many witness accounts (1989, p. 123):

“As evidence to establish the reality of homicidal gassings there remain only the testimonies of participants, [...]”

These accounts, according to Pressac, are characterized by many contradictions, technical impossibilities, and general incredibility. He observes a “general tendency to exaggerate,” and explains the gross errors and technical impossibilities in the witness accounts and writings of camp commandant Höss by stating (p. 128):

“He was present, without seeing.”

That is, Pressac alleges that Höss had no idea of the methods, risks and dangers involved in the handling of Zyklon B. But this is in contradiction to an order issued by commandant Höss calling for caution during the fumigation of

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*Figure 44: “Reconstructed” Crematorium I at the Auschwitz Main Camp during the 1990s.*
barracks with Zyklon B – caution which had become necessary in view of several cases of accidental poisoning. This special order of the commandant warning of accidents involving Zyklon B gas, an order which was distributed throughout the camp, indicates a sense of duty to care for those inmates who were, allegedly nevertheless doomed to die from the effects of that same gas sooner or later. I will return to Höss’s postwar testimony at a later point.

Pressac, moreover, explains the form and basic tone of the testimony of SS Man Pery Broad as incorrect because this testimony is soaked in Polish patriotism, to say nothing of the transparent Polish hatred against SS men, although Broad was an SS man himself and had no links to Poland, and because Pressac found out that this “testimony” has been slightly reworked by the Poles, the original of which is missing. In other words, this “document,” obviously cobbled up by the Poles, is quite worthless insofar as a critical examination of its source is concerned. Nevertheless, Pressac considers the basic testimonies with regard to homicidal gassings to be correct (ibid., pp. 126-128).

The “gas chamber” in the Main Camp is a room in a ground-level building, which replaced a former kitchen building of the former Austro-Hungarian barracks located at the same spot (ibid., p. 129). The floor and ceiling of Crematorium I are of reinforced concrete, while the exterior walls are of brick.

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**Figure 45:** Ground plan of Crematorium I in Auschwitz I/Main Camp in its condition as of 1942. The morgue is at that time said to have been used as a “gas chamber” (Pressac 1989, p. 151).

masonry, insulated on the exterior by a coating of tar. Except for the access ways, the building is basically underground due to the fact that soil has been piled up against the walls. The interior walls are plastered and whitewashed.

Figure 45 shows the floor plan of the building in 1942, originally designed to serve as a normal crematorium with a morgue (ibid., pp. 151/153). This also explains the piles of earth on its sides, which were intended to ensure a steady, cool temperature. For the same reason, the partition between the morgue and the furnace room is double-walled with a heat-insulating air barrier in between.

Mattogno has found documentary evidence that this morgue initially had a ventilation system that worked rather poorly. This prompted SS Untersturmführer Maximilian Grabner, head of the Auschwitz Political Department, in June 1941 to urge the installation of a better system designed expressly to remove the unbearable, putrid smell of the corpses from the morgue.¹⁰¹ A much better system had already been offered by the company Topf & Söhne in February 1941, but its delivery apparently got delayed. In order to remedy the unbearable situation, a makeshift solution was subsequently created whose specifications are not entirely clear. That solution must have been good enough to make the camp authorities hesitate to install the professional system.

¹⁰¹ Letter by M. Grabner to the SS-Neubauleitung Auschwitz, June 7, 1941; RGVA, 502-1-312, p. 111; reproduced in Mattogno 2016e, p. 123.
finally delivered by the Topf Company in late 1941, because the documents indicate that the professional Topf system had not yet been installed by November 30, 1942. On that day, the head of the Central Construction Office wrote the following to the Topf Company:  

“The fitter you offered can start immediately with the installation of the ventilation system in the old crematorium at Auschwitz concentration camp.”

The extant documents suggest that this superior Topf system was in fact never installed at all. The makeshift ventilation system envisioned by Grabner in June 1941, obviously designed for a mere morgue, must therefore have been used as well during the room’s subsequent claimed repurposing as an execution facility. It goes without saying that a gas chamber using toxic gases requires a more efficient ventilation system.

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102 Letter by the head of the Zentralbauleitung, Bischoff, to the Topf Company, Nov. 30, 1942; RGVA, 502-1-314, p. 17; Mattogno 2016e, p. 22.

103 On the history of the ventilation system of the morgue of this crematorium see in general Mattogno 2016e, pp. 17-23.
than a mere morgue. It may therefore be assumed that the camp authorities would have at least installed the Topf system, if not further upgraded it, had they really intended to use the morgue for mass gassings. The Auschwitz SS decided instead, however, to let that system rust away in a warehouse.

The only architectural changes allegedly implemented during the claimed conversion to a chemical slaughterhouse concerned several holes in the roof: In order to be able to introduce Zyklon B for homicidal gassings, several holes are said to have been knocked through the roof. Although the witnesses don’t agree on their number (1, 2 or 6; Mattogno 2016e, p. 95), the Auschwitz Museum has ordained that there were four of them – a number not mentioned by any witness. Pressac also talks about several more holes for powerful fans, although that claim is backed up neither by material evidence nor by any document (Pressac 1989, pp. 131f.).

In 1996, Franciszek Piper, at that time head of the Auschwitz Museum, allegedly said the following on the issue of this room’s ventilation system (Desjardins 1996):

“In the case of Crema I there were no ventilators. The doors were opened and the gas was allowed to ventilate by convection.”

If he really said that, one may justly wonder about that historian’s lack of competence.

The question as to whether, and if so when and by whom, holes were knocked through the roof of this morgue or “gas chamber” deserves a closer look.

Pressac reproduces a photo of the roof of the crematorium, taken by the Soviets shortly after the liberation, in which three dark spots on the roofing felt are alleged to be traces of former Zyklon-B introduction holes, allegedly now covered up (1989, p. 149). The photograph reproduced in his book is, however, too poor in quality to permit anything to be seen with clarity, much less permitting any conclusion as to the construction or engineering. Mattogno has demonstrated that the locations of these spots have no relation to any
openings existing back then or today (Mattogno 2016e, pp. 96-98). Pressac’s speculation must therefore be viewed as groundless.

In the autumn of 1944, the crematorium was converted into an air-raid shelter. The alterations made, especially the addition of massive separation walls, can be seen in Figure 47 (Pressac 1989, p. 156). The alleged Zyklon-B-introduction holes as well as the ventilation holes are alleged to have been sealed at that time – provided they ever existed.

The construction work undertaken for this conversion is described in a document to the smallest detail.\textsuperscript{104} There is no mention of any filling in of any old existing holes pierced through the roof, but rather of the incorporation of gastight windows and doors as well as the piercing of new holes:

“Installation of gas-tight doors, window shutters, and windows,
Manufacture of openings in the masonry necessary for the heating ovens, as well as for the ventilation outlets and intakes and pipes.”

This is a strong indication that before this time there were neither gas-tight doors and windows nor any large openings for a ventilation system or for other purposes (Zyklon introduction), because such already-existing openings could either have been used, or the necessity to close them would also have been mentioned.

Direct access to the air-raid shelters, which evolved from the multiple division of the morgue/“gas chamber,” was possible through a newly added entrance with sluice/air lock, which until the early 2000s was fraudulently represented by the Auschwitz Museum as the entryway taken by the victims, although the “gas chamber” had no entrance in that location – as a matter of fact, it had no direct entrance from the outside at all (Pressac 1989, pp. 133f.). Toilets were likewise built into the former washroom at this time.

It is unknown in exactly what condition this building was in early 1945 when it was occupied by the Soviets. Jean-Claude Pressac, who has thoroughly investigated the Auschwitz Museum’s archives with the full support of the museum authorities, wrote about that (\textit{ibid.}, p. 133):

“It would appear that the photos of the interior showing the state of the premises were not taken at the beginning of 1945, which is a pity because the restructuring of the building back into a Krematorium began immediately after the liberation. […] Because of the lack of original documents and the transformations that have been made (see the drawing of the present state of the premises at the end of this chapter), it was not possible before to materially demonstrate the existence of a homicidal gas chamber in the former morgue of Krematorium I.”

We know that the Polish legal authorities initiated large-scale criminal investigations against the former camp commandant Rudolf Höss and against the entire staff of the Auschwitz camp garrison right after the camp’s Soviet occupation. For this they collected all kinds of evidence in support of mass-murder claims. Photos of the claimed mass-murder sites as found right after the Soviet occupation would have been of the utmost importance, in particular if they could support any mass-murder claims.

The fact that no such photos of the ceiling of the alleged former gas chamber in Crematorium I exist raises the suspicion that such photos would not have shown what the Soviet and Polish authorities wanted the world to believe. This suspicion is supported by the fact that no document exists regarding the changes made to this entire building after the camp’s Soviet occupation. This indicates that the motivation behind those changes was not to meticulously restore something as accurately as possible, but to cover up of fraudulent manipulations.

Today we can infer these post-war changes only by comparing the current state with German construction blueprints of the wartime.

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Figure 49: Ground plan of Crematorium I in Auschwitz I/Main Camp today, after the Polish manipulations of 1947 (Pressac 1989, p. 159).


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In 2016 the Auschwitz Museum admitted that no documentation of any kind exists on alterations evidently made in 1947; see Mattogno 2016f, p. 15.
The undocumented manipulation of evidence central to a criminal investigation is itself a crime, by the way. Wikipedia writes in its entry on “Spoliation of evidence” (Oct. 13, 2016):

“The spoliation of evidence is the intentional, reckless, or negligent withholding, hiding, altering, fabricating, or destroying of evidence relevant to a legal proceeding. Spoliation has two possible consequences: in jurisdictions where it is the (intentional) act is criminal by statute, it may result in fines and incarceration […].

The spoliation inference is a negative evidentiary inference that a finder of fact can draw from a party’s destruction of a document or thing that is relevant to an ongoing or reasonably foreseeable civil or criminal proceeding: the finder of fact can review all evidence uncovered in as strong a light as possible against the spoliator and in favor of the opposing party.”

In most countries, Poland included, tampering with evidence is illegal and can thus be prosecuted. Hence, we are not dealing merely with a case of sloppiness here, but with a potential crime of the Soviet and/or Polish officials involved in “reconstructing” Crematorium I right after the war, whoever they were.

But let’s now get to the details of these undocumented postwar manipulations. Figure 49 shows the floor plan of the crematorium in its present condition (Pressac 1989, p. 159). Comparing it with the plan of the same building as it existed in 1942 reveals all the changes. The access from the morgue/“gas chamber” to the present cremation room was newly placed after the war – not quite at the original location. The partitions in the air-raid shelter, including the wall to the washroom, which was, however, never part of the morgue (the later “gas chamber”), were torn down. Accordingly, the perplexed visitor sees two discharge pipes from two toilets inside the alleged “gas chamber.”

About today’s shafts, claimed to have been used for the introduction Zyklon B, Pressac writes (ibid., p. 133):

“Four openings supposedly for pouring Zyklon B were made in the roof (Photos 15 and 18) which was covered with roofing felt, thus hiding the traces of the original opening.”

He therefore suggests that the new openings were not made at the original locations, since they were covered by roof felt and thus could not be found. Pressac’s argument must cause astonishment, though, since the roof/ceiling is of unplastered bare concrete on the inside. It should have been quite easy to determine the locations of the original openings – now allegedly sealed – from the interior, and it would also have been quite easy to reopen them at their original locations.

Dr. Franciszek Piper, curator of the Auschwitz Museum, agreed with that when he stated in 1993 that the holes broken through the roof after the camp's liberation were put into the same locations as the original ones, since traces of
the old holes could be seen on the ceiling (Cole 1992, 28:38-28:51). No evidence exists for this, though, and since Dr. Piper wasn’t present back then (he was born in 1941), one wonders where he got this knowledge from, if not from mere wishful thinking.

The two cremation furnaces in the cremation room, as well as the chimney, which is without any functional connection outside the building, were built after the war as a reconstruction for propaganda purposes on the location of the original installations (Pressac 1989, p. 133).

In the summer of 1992, the U.S.-American David Cole, who is himself of Jewish descent, recorded on video what he experienced during a visit to Auschwitz (Cole 1992). During that visit, he managed to interview Dr. Piper, who admitted on camera that the “gas chamber” shown to tourists today is not in its original state. On the other hand, Cole also documented, however, how the museum’s tour guides tell visitors that this room is in exactly the same condition as it was when it was used as a “gas chamber” during the war. This dishonesty of the Museum was the main reason why Cole’s documentary attracted a lot of public attention between 1993 and 1996.

Evidently inspired by Cole’s video, the French journalist and vociferous opponent of revisionism Eric Conan wrote the following about these hitherto-concealed postwar manipulations (1995; cf. Faurisson 1995)

“Another delicate subject: What to do with the falsifications left behind by the communist administration? In the 50s and 60s, several buildings which had
disappeared or had been misappropriated were rebuilt with gross errors and displayed as authentic. Some, which were ‘too new,’ have been closed to the public. Not to mention the delousing gas chambers, which were sometimes presented as homicidal gas chambers. Those aberrations have helped the deniers a lot, who took the essence for their legends out of them. The example of Crematorium I is typical. In its morgue, the first gas chamber was installed. It operated for a short period of time in early 1942. The blocking of this area, which was essential for the gassings, disturbed the operation of the camp. End of April 1942, it was therefore decided to move the deadly gassings to Birkenau, where it was conducted on an industrial scale mainly with Jewish victims. The Crematory I was subsequently converted into an air-raid shelter with a surgery room. In 1948, when the museum was created, Crematory I was reconstructed in a supposed original state. Everything in it is false.\[106\] the dimensions of the gas chamber, the locations of the doors, the openings for pouring in Zyklon B, the furnaces, rebuilt according to the recollections of some survivors, the height of the chimney. At the end of the 70s, Robert Faurisson exploited those falsifications all the better because at that time the museum officials balked at admitting them.\[107\] An American revisionist\[108\] has shot a video in the gas chamber, still presented as authentic: one may see him questioning the visitors with his ‘revelations.’ […] For the moment, things remain as they are, and the visitors are not told anything. This is too complicated. One shall see later what to do.” (Emphases added.)

\[106\] In the original: “Tout y est faux: […]”
In view of these false “reconstructions” carried out after the war, the cultural historian Robert van Pelt arrived at the following, no-less-unequivocal conclusions in co-operation with Holocaust historian Deborah Dwork (1996, pp. 363f.):

“The architecture designed to enact the metamorphosis from Mensch to Untermensch was intact when the Soviets liberated the camp in 1945. All traces of it were removed subsequently. The guidebook for sale in the bookstore does not mention the building [Crematorium I] at all. Perhaps the men and women who created the museum could not reconcile its implications with their ideology of a resistance: an ideology that denied total victimization. Perhaps it was simply a question of resources and the need for tourist services. Whether for doctrinal or practical reasons, the destruction of the original arrangement within the present visitor reception center is a postwar obfuscation and a loss. There have been additions to the camp the Russians found in 1945 as well as deletions, and the suppression of the prisoner reception site is matched by the reconstruction of Crematorium I just outside the northeast perimeter of the present museum camp. With its chimney and its gas chamber, the crematorium functions as the solemn conclusion for tours through the camp. Visitors are not told that the crematorium they see is largely a postwar reconstruction.

When Auschwitz was transformed into a museum after the war, the decision was taken to concentrate the history of the whole complex into one of its component parts. The infamous crematoria where the mass murders had taken place lay in ruins in Birkenau, two miles away. The committee felt that a crematorium was required at the end of the memorial journey, and Crematorium I was reconstructed to speak for the history of the incinerators at Birkenau. This program usurpation was rather detailed. A chimney, the ultimate symbol of Birkenau, was re-created; four hatched openings in the roof, as if for pouring Zyklon B into the gas chamber below, were installed, and two of the three furnaces were rebuilt using original parts. There are no signs to explain these restitutions, they were not marked at the time, and the guides remain silent about it when they take visitors through this building that is presumed by the tourist to be the place where it happened.”

This argument of the “usurpation” is dynamite, because it suggests that the events alleged to have taken place in Crematorium I, events described by witnesses Rudolf Höss, Pery Broad and a few others, actually never took place at this location. By declaring these prominent witnesses to be liars, van Pelt and Dwork undermine the credibility of all other witnesses from the very outset, including those from Birkenau. We wonder if the authors are aware of this.

Cole’s video documentary with its many repercussions must have led to a change of heart among those responsible at the Auschwitz Museum. Nowadays large signs in front of the crematorium at the Auschwitz Main Camp inform visitors vaguely about most of these structural changes by showing plans of the conditions during the war and today. Of course, most visitors will
pay little attention to them and will continue to assume that the room shown to them was a gas chamber as labeled on those plans.

So what exactly was the condition of this building while its morgue is said to have served as a homicidal gas chamber?

It may at least be stated without fear of contradiction that the ceiling, exterior walls and pillars as well as the foundation of crematorium are in their original condition. If Zyklon-B-introduction holes and ventilation openings had existed in the reinforced-concrete roof, breaks in the reinforced-concrete structure would be visible from the interior in the corresponding places of the unplastered ceiling, since these cannot have been made to disappear without leaving visible traces.

In addition to today’s Zyklon-B-introduction shafts there are indeed three locations in what is presented today as the “gas chamber,” where the concrete has been breached in a circular pattern, which indicates that these may have been circular holes. (See Figures 52f. for two examples; a fourth hole is located in the air lock; see Figure 54, 1-4, for their location.)

The four openings in the concrete in existence today and presented as “Zyklon-B-introduction shafts” (marked A to D in Figure 54) are neither plastered, nor have the remains of the cut steel reinforcement rods been removed in a workmanlike manner. The holes have been planked with wood and sealed with tar. Such poor workmanship reflects neither the care required in handling a poisonous gas, nor standard German workmanship.

If the SS had put these holes in the concrete during the war, one must assume that they would have taken care to evenly distribute these holes in the ceiling of the original(!) morgue in order to ensure an even distribution of the Zyklon B inside the room. The shafts today, however, are only evenly distributed in the ceiling of this room if one considers the washing room, which was only incorporated after the war(!), as an integral part of the morgue (“gas
The staggered arrangement of the whole makes sense only if the area of the air lock added in 1944 was not part of the original morgue. But that area was part of the morgue. Thus, the arrangement of today’s introduction holes makes sense only if they were created especially for their present status as a falsely dimensioned “reconstruction for museum purposes” after the war. This becomes even more evident from Figure 55, which shows the same section of Crematorium I as in Figure 54 as a 3D model, yet in the current state. This shows that the holes’ locations were chosen with precision in order that crossing pairs are equidistant to the nearest transverse wall, leading to all four holes being somewhat evenly distributed over this room. This is the decisive evidence that these holes were created with regard to the measurements of the accidentally

Figure 54: Floor plan of the morgue (No. 4) of Crematorium I (situation in 1942, from Fig. 45) with surgery room (No. 2) and washing room (No. 3, with opening no. 4). A, B, C, D: location of current openings in the roof made after the war. 1, 2, 3, and 4: location of original openings of the air-raid shelter for ventilation and heating ducts, today closed.

Figure 55: Distances of each hole in the morgue’s roof of Crematorium I (today’s situation) to the nearest traversal wall (Mattogno 2016f, p. 24).

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109 Following the pattern of Mattogno 2016b, p. 354.

110 Bailer-Galanda 1991, p. 1, regarding Leuchter’s statements about Crematorium I: “2. He confuses museum reconstructions of the gas chamber, which are meant to give the observer an impression of the historical events, with real functioning gas chambers.”
enlarged morgue/“gas chamber,” and have nothing to do with the original morgue.

As mentioned earlier, there are four circular spots of some 35 cm in diameter visible in the ceiling of Crematorium I, which at some point might have been holes going all the way through the roof. They have been crudely filled with plaster, but since the reinforcement iron bars have not been removed from these holes,¹¹¹ these iron bars are rusting.¹¹² Due to this the plaster comes crumbling down, which the museum’s janitors diligently sweep away. Figure 54 shows their location (1-4), together with the four openings added after the war “for museum purposes” (A-D). The walls shown are as they have been when the building’s morgue was allegedly used as a “gas chamber.” It is obvious that these circular openings, now closed, cannot have anything to do with alleged Zyklon-B-introduction holes:

1. Hole 4 is located in the wash room, not in the morgue, which alone is said to have been misused as a “gas chamber.”
2. Hole 1 is in a corner of the morgue where the air lock of the air-raid shelter was located (see. Figure 47), which for decades has been falsely labeled “victims’ entry.” It is therefore reasonable to assume that this hole as well as the others served as ventilation openings for the shelter.
3. The steel reinforcement rods have not been removed from these holes. That would not have prevented them from being used as ventilation holes for a shelter, but it would have made it difficult to render the hole gasproof.
4. The distribution of the three holes located within the morgue over the morgue’s roof/ceiling is so irregular that it can be ruled out with technical certainty that they served to distribute anything throughout the former morgue.
5. Mainstream historiography claims that the openings were square or rectangular. These holes are circular.

Based on all these arguments, it can be concluded with certainty that at the time of the alleged use of this room as a “gas chamber,” there were no openings for the introduction of Zyklon B.

Furthermore, there was no direct access to the “gas chamber” from the outside. The victims would have had to enter through the corpse room (laying-out room), or through the furnace room. They would, therefore, have had to file

¹¹¹ Since no Zyklon-B pellets were to be filled in through those holes, there was no need to remove the reinforcement bars.
¹¹² Steel reinforcement rods in concrete are only practicable when the iron is deeply embedded in the concrete and therefore protected for decades against corrosion by the very durable alkaline environment of the concrete, since concrete is only slowly carbonated by the carbon dioxide (CO₂) in the environment, resulting in a neutralization of its pH value. The reinforcement rods in the ceiling of the morgue in question have been exposed to the air, and the thin patches of mortar of dubitable quality cannot protect it efficiently, so the pH value drops quickly (i.e., becomes less alkaline), particularly when rainwater containing CO₂ penetrates the concrete; see the crack in Figure 52, which would quickly allow the entry of rainwater.
past the corpses of their already-murdered companions in misery – truly a macabre spectacle. There could be no successful deception of the victims and camouflage, nor could there be any hope of willing co-operation or acquiescence on the part of the inmates under such circumstances.

Another remarkable feature of the room under consideration results from German wartime blueprints: The door between the morgue and the furnace room was a door swinging both ways. It can be seen both on a construction blueprint of November 30, 1940, when the room undoubtedly was planned as a morgue, and on another blueprint of April 1, 1942 (see Figure 56), at a time when the room supposedly served as a homicidal gas chamber.

This door was still there when the crematorium was taken out of commission in the summer of 1943, as results from a blueprint of the building for its conversion to an air-raid shelter dated September 21, 1944 (Figure 47, p. 93). When the camp was liberated, that door had been walled up, though, hence the conversion plan did not fully agree with the actual changes implemented.

Such a swinging door makes perfect sense when moving heavy loads through that door (e.g. corpses). Yet it is technically impossible to make such a door gas-tight and to lock up behind it a crowd of hundreds of panicking people.

Pressac’s unfounded claim that the room was equipped with a gas-tight door in 1941 to make the room fit for its claimed use as an execution gas chamber (1989, p. 131) is therefore obviously wrong. His reference to a wooden door without a peephole, which is still being kept in Crematorium I, is misleading (ibid.). As Mattogno has demonstrated, this door was found among the ruins of Crematorium V and is today merely stored in Crematorium I (Mattogno 2016e, p. 138), just like an air-raid-shelter door made of steel, which was perhaps meant to be fitted into the door opening leading to the former furnace room when the building was converted to an air-raid shelter,

\[113\] Nov. 30, 1940: RGVA, 502-1-312, p. 135; April 10, 1942: RGVA, 502-2-146, p. 21; Sept. 21, 1944: 502-2-147, p. 20, although its orientation is inverted.
but which was not used due to the opening having been walled up instead (ibid., p. 137).

The lack of a direct access to the “gas chamber” as well as the evident unsuitability, for a homicidal gas chamber, of the swinging door between this room and the furnace room have been expressed by Robert Faurisson with the following words:

“No doors, no destruction.”

5.4. “Gas Chambers” in the Birkenau Camp

5.4.1. Crematoria II and III

5.4.1.1. Point of Departure

These crematoria are entirely comparable in size, equipment, and manner of construction to other similar installations built in the Third Reich at that time, as well as with those built today. In this connection, reference is made to the trial of the builder of the cremation installations in Birkenau Camp. In 1972, the court acquitted the two defendants, master builder W. Dejacó and master builder F. Ertl, since suspicion of aiding and abetting in mass murder could not be sustained. An expert report prepared for this trial and based on the surviving blueprints and documents on the construction of the crematoria led to the conclusion that these buildings could not have been used or modified so as to serve as instruments of mass murder (see Paragraph 4.4.1.3).

In an interview with Walter Lüftl, one of the master builders at Auschwitz, senior engineer Walter Schreiber, the former supervisor of Dejacó and Ertl, stated as follows on the planning of these crematoria:

“Lüftl: In which areas were you active?
Schreiber: As senior engineer, I inspected the civil project of the Huta Corporation and negotiated with the Central Construction office of the SS. I also audited the invoices of our firm.

L.: Did you enter the camp? How did that happen?
S.: Yes. One could walk everywhere without hindrance on the streets of the camp and was only stopped by the guards upon entering and leaving the camp.

L.: Did you see or hear anything about killings or mistreatment of inmates?

114 The present writer has before him a sketch of the ground plan of the crematorium, built in 1939, of the Sachsenhausen concentration camp, which is similar in design and dimensions to Crematoria II and III at Auschwitz, yet no mass murders are alleged to have occurred at Sachsenhausen. Compare with this the construction design of modern crematoria: Boehlke 1974, in particular, the crematorium plan on p. 117, including a doctor’s office; cf. Neufert 1962, pp. 423f.

115 Werner Rademacher 2004. Schreiber was the Supervising Engineer at the Kattowitz branch of the Huta Corporation, which built the crematoria at Birkenau. He died in 1999.
S.: No. But lines of inmates in a relatively poor general condition could occasionally be seen on the streets of the camp.

L.: What did the Huta Corporation build?

S.: Among other things, Crematoria II and III with the large morgues.

L.: The prevalent opinion (considered to be self-evident) is that these large morgues were allegedly gas chambers for mass killings.

S.: Nothing of that sort could be deduced from the plans made available to us. The detailed plans and provisional invoices drawn up by us refer to these rooms as ordinary cellars.

L.: Do you know anything about introduction hatches in the reinforced concrete ceilings?

S.: No, not from memory. But since these cellars were also intended to serve as air-raid shelters as a secondary purpose, introduction holes would have been counter-productive. I would certainly have objected to such an arrangement.

L.: Why were such large cellars built, when the groundwater level in Birkenau was so extremely high?

S.: I don’t know. Originally, however, above-ground morgues were to be built. The construction of the cellars caused great problems in water retention during the construction time and sealing the walls.
L.: Would it be conceivable that you were deceived and that the SS nevertheless had gas chambers built by your firm without your knowledge?

S.: Anyone who is familiar with a construction site knows that is impossible.

L.: Do you know any gas chambers?

S.: Naturally. Everyone in the east knew about disinfection chambers. We also built disinfection chambers, but they looked quite different. We built such installations and knew what they looked like after the installation of the machinery. As a construction firm, we often had to make changes according to the devices to be installed.
Figure 60: Morgue #1 of Crematorium II in Birkenau, collapsed roof, February 1997. Background: the collapsed crematorium building to the right, the memorial to the left. Foreground: The last of the seven concrete pillars poking through the roof. A meter or so to the left: a hole chopped through the roof to gain access to the area below (see Figure 82, p. 137). (February 1997)
L.: When did you learn that your firm was supposed to have built gas chambers for industrial mass killing?
S.: Only after the end of the war.
L.: Weren’t you quite surprised about this?
S.: Yes! After the war, I contacted my former supervisor in Germany and asked him about it.
L.: What did you learn?
S.: He also only learned about this after the war, but he assured me that the Huta Corporation certainly did not build the cellars in question as gas chambers.

L.: Would a building alteration be conceivable after the withdrawal of the Huta Corporation?

S.: Conceivable, sure, but I would rule that out on the basis of time factors. After all, they would have needed construction firms again, the SS couldn’t do that on their own, even with inmates. Based on the technical requirements for the operation of a gas chamber, which only became known to me later, the building erected by us would have been entirely unsuitable for this purpose with regard to the necessary machinery and the practical operation.

L.: Why didn’t you publish that?

S.: After the war, first, I had other problems. And now it is no longer permitted.

L.: Were you ever interrogated as a witness in this matter?

S.: No Allied, German, or Austrian agency has ever shown an interest in my knowledge of the construction of Crematoria II and III, or my other activities in the former Generalgouvernement [German occupied Poland]. I was never interrogated about this matter, although my services for the Huta Corporation in Kattowitz were known. I mentioned them in all my later CVs and employment applications. Since knowledge about these facts is dangerous, however, I never felt any urge to propagate it. But now, as the
lies are getting increasingly bolder and contemporary witnesses from that
time like myself are slowly but surely dying off, I am glad that someone is
willing to listen and to write down the way it really was. I have serious
heart trouble and could die at any moment; it’s time now."

Prof. van Pelt has stated as follows on Crematorium II:116

“*Auschwitz is like the holy of holies. I prepared years to go there and to have
a fool [Leuchter] come in, come in completely unprepared, it’s sacrilege.*

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116 van Pelt’s testimony in Errol Morris’s documentary movie *Mr. Death*, internet version; time
given in [min:sec:frame].
Somebody who walks into the holy of holies and doesn’t give a damn.”

[00:40:59-00:41:20]

“Crematorium II is the most lethal building of Auschwitz. In the 2,500 square feet of this one room, more people lost their lives than any other place on this planet. 500,000 people were killed. If you would draw a map of human suffering, if you created a geography of atrocity, this would be the absolute center.”

[00:55:44-00:56:15]

Van Pelt’s testimony emphasizes the importance of Crematorium II (and Crematorium III, built as a mirror image of Crematorium II, although allegedly not used quite as intensively), which will be discussed in the following.

A special, separate morgue with better ventilation was then used, as is usual today, as a laying-out room for the victims of possible epidemics. This cellar is designated as an “Infektionsleichenkeller” (infection-corpse morgue) in the technical literature. Figure 58 is the floor plan of Morgue #1 (alleged “gas chamber”) of Crematorium II, which was designed mirror-symmetrically to Crematorium III. Figure 59 shows the cross section through Morgue #1 (various blueprints in Pressac 1989, pp. 319-329). As may be seen from the cross section, these morgues are located almost completely below ground. The long and narrow type of construction, the underground location, as well as the lack of communication with the cremation rooms result in an even, cool tempera-
ture in these areas. This corresponds to them having been planned as morgues, which is how they are labeled in the blueprints.

The planning of such large cellars is not astonishing when one considers that several hundred inmates a day had succumbed during the worst periods of the epidemics raging in Auschwitz, and that these corpses had to be stored somewhere at least temporarily. The compelling interpretation of the original design of these rooms as harmless morgues is shared even by Pressac (ibid., p. 264).

The documentation reproduced by Pressac shows that these installations were derived from an earlier 1941 plan for a new crematorium in the Main Camp (ibid., p. 183). The access road to the crematoria in Birkenau was located on the side of the chimney wing (see Figure 67). The original plan for the Main Camp, however, provided for an access road on the other side of the building. Moreover, the high groundwater level of the terrain in Birkenau did not permit location of the morgue completely underground. The cellars were therefore raised a little to prevent them from floating on the groundwater. Together with the layer of earth on top of the cellars, these had thus become insurmountable for vehicles and carts. Direct access to the cellars from the outside was therefore blocked. For this reason, an additional flight of stairs was incorporated to the office rooms of Morgue #3 as well as a flight of stairs at the end of Morgue #2 (see Figure 67).

See Gärtner/Rademacher 2003; Mattogno 2003a; both reprinted in Part 3 of Mattogno 2016g.
Possibly as a result of the dramatically altered military situation after the German defeat of Stalingrad in the winter of 1942-43, all construction plans were reduced in costs and manpower requirements wherever possible. Maybe as a result of this, the new stairways did not have corpse chutes as the old stairway. Several other cost-reducing changes were made on Crematorium III. Defects in the quality of the cheap material used for Crematoria IV and V might have contributed to their early breakdown (see next chapter).

The original basement stairways with corpse chutes of Crematoria II and III had already been finished by then, although they might not have been used a lot, since there was no direct access from the road. That these stairs were built at all indicates a hasty modification of the old plans for the Main Camp to the new situation in Birkenau.

The walls of the morgue consist of double brick masonry with a layer of waterproofing in between for insulation (ibid., pp. 325, 327). The interior walls are plastered with a hard, cement-rich material, the ceiling and support pillars of reinforced concrete show the marks of wooden planking and are therefore not plastered. The roof, made of reinforced concrete, is insulated on the outside by a layer of tar, which is protected from environmental and mechanical damage by a rather thin, screed-like layer of cement covering it. The layers of tar both on top of the roof as well as between the two brick walls were indispensable as a water barrier due to the high groundwater in the swampy region of Birkenau. Both morgues had several drains.

5.4.1.2. The Search for “Criminal Traces”

Jean-Claude Pressac was the first Western researcher to dig through the mountains of documentation at the Auschwitz Museum and later through the documentation of the Central Construction Office stored in Moscow. He was also the first to create the now-widely used term “criminal trace.” Due to the total absence of documents proving the erection of homicidal “gas chambers,” Pressac resorted to a semantic trick by attributing criminal significance to harmless documents which were said to constitute circumstantial evidence that something was not quite right about the crematoria at Auschwitz. Based on the progress in research, however, all these “criminal traces,” which were compiled by Pressac and others using sometimes fantastic cerebral acrobatics, have collapsed (cf. esp. Mattogno 2015a, pp. 25-228). The most-notable of them are listed and briefly refuted in the following. (Page numbers in parentheses refer to Pressac 1989.)

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118 On the costs and overview of the design of Crematoria II and III see Pressac 1989, p. 187, as well as Documents 1f. in the Appendix.
5.4.1.2.1. New Cellars Stairways

Fact 1: Additional access ways via stairways from the outside were later incorporated into the cellars of Crematoria II and III.

Incorrect additional allegation: The corpse chute at the old, original stairway entrance was demolished.\textsuperscript{119}

Incorrect conclusion: The construction of new stairways \textit{without} corpse chutes with the simultaneous demolition of the original corpse chute could mean only one thing: no more corpses were to go sliding into the cellars but rather people who were still able to walk down a few steps. Hence, they had to be alive while entering, and were killed \textit{after} they had entered the building (pp. 213, 218).\textsuperscript{119}

Correct conclusion: The new stairways were necessary based on the alteration in the plans, see the previous chapter. This is supported by the heading of the plan for the new stairways: “Change of cellar access to road side” (pp. 183f., 302f.).\textsuperscript{120} The corpse chute, furthermore, wasn’t even demolished. In fact, it appears in all following plans as shown by Pressac himself:

- Plan 2136 of the Central Construction Office of 22 February 1943 for Crematorium III (p. 305);
- Plan 2197 of the Central Construction Office of 18 March 1943 for Crematorium II (p. 307);
- Plan 109/15 of the firm Huta of 24 September 1943 for Crematoria II and III (p. 327);
- Plan 109/16A of the firm Huta of 9 October 1943 for Crematoria II and III (p. 328).

Moreover, Crematoria II and III were undoubtedly used during their entire period of operation for the temporary storage of the bodies of persons having died of “non-genocidal” causes (epidemics, exhaustion, age, execution etc.), awaiting cremation, which amounted to many thousands of bodies, after all. If it were true that stairways without chutes could only be used by living persons still capable of climbing stairs on their own, then one might be permitted to ask: how did the corpses of persons having died of “non-genocidal” causes get into the morgue (or wherever they were stored)? Of course, they were carried, and sometimes certainly even a few steps up and down – and not only inside the crematorium, but also on the way from where they had died to the crematorium. It was therefore possible to get corpses into a building without a chute. Missing chutes therefore do not prove that only living people could end up there. The fact that the SS did not build a new corpse chute by the new stairway can probably be explained by the fact that the costs of the crematorium were running out of control due to the constant changes in plans, and because it was desired or necessary to keep the costs down.

\textsuperscript{119} Gray 2000, §7.61, 13.76, 13.84.

\textsuperscript{120} With regard to the original plans by Walter Dejaco, see Pressac 1993, Document 9.
5.4.1.2.2. Gassing Cellar, Undressing Room, and Showers

Fact 1: There are documents of the SS Central Construction Office which mention an “Auskleidekeller” (stripping room) in Crematorium II (pp. 433ff.).

Fact 2: There is a document which mentions a “Vergasungskeller” (gassing cellar,) in Crematorium II (p. 432, letter by Karl Bischoff, head of the Central Construction Office, of Jan. 29, 1943):

“The planking of the reinforced concrete ceiling of the corpse cellar [referring to Morgue #2] could not yet be stripped because of the effect of frost. This is,
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however, of no importance, because the gassing cellar can be used for this instead.”

Fact 3: There is a document which lists “14 Brausen” (14 showers) for Crematorium III (p. 430).

Fact 4: Pieces of wooden planking left in the underside of the ceiling of Morgue #1 in Crematorium II are visible even today (p. 488).

Incorrect conclusion: Morgue #1 of Crematoria II & III was built as a homicidal “gas chamber,” equipped with “false” shower heads, which were fastened to the pieces of wood left in the concrete and used to deceive the victims; Morgue #2 was used as the undressing room for the victims.121

Correct conclusions: The term “Vergasungskeller” does not clarify, in which way “gas” and “cellar” are linked here: for homicidal, for disinfection, or for other purposes. The meaning of this term cannot be reconstructed with precision, because the correspondence to which this letter refers has been “lost,” although the majority of all the other documents of the Central Construction Office has been preserved. From a memo of the Topf firm written on February 17, 1943, it can be deduced, however, which room was meant.122

121 See the four pages in Pressac 1989 just mentioned; Gray 2000, §13.69, 13.82.
122 First mentioned by Pressac 1996. The document was made available in a brochure in 2005 prepared for an exhibition on Topf & Söhne in Germany in the context of a Holocaust-memorial exhibition at the Berlin Holocaust Museum, which took place from January to April 2006. It is reproduced online at www.codoh.com/library/document/879; and in print in Butz 2015, p. 478.
“Herr Schultze called and informed us as follows: The aeration blower no. 450 for the gas cellar [Gaskeller] cannot be found there [i.e. at Auschwitz], although it is said to have been shipped by us.”

The terms “Gaskeller” and “Vergasungskeller” were obviously used for the same room, and from the ventilation system described in this document it derives that it was Morgue #1. It is evident, however, that these terms were not used in connection with a top-secret mass-extinction program, because Schultze’s phone call about the “gas cellar” was made to a civilian company, and Bischoff’s letter containing the term “gassing cellar” was prepared in several copies and dutifully filed away. Orthodox historians nonetheless make the unfounded claim that these were “slip-ups” or “mistakes” deviating from the otherwise-maintained rules of secrecy, including a “code language.”

It derives from Bischoff’s letter that the “gassing cellar” – Morgue #1 – could take on the role of the other, not yet operational morgue. Orthodox historiography has it that the words “can be used for this” referred to the undressing of the victims, which was to be carried out in the homicidal gas chamber instead of Morgue #2. However, the letter continuous by stating that the ventilation system had not yet been delivered due to freight restrictions, and that this system will be ready on February 20. Why would anyone have forced the alleged gassing victims to temporarily undress in the claimed homicidal gas chamber, if they could not have been gassed at all due to the missing ventilation system?

In addition, it would have been no problem at all for any alleged victims to undress themselves in a room still containing planking on the ceiling. This reference makes more sense for a room planned to be used as a morgue, which was not to be filled with corpses for several days in order to avoid them having to be carried around again, once the planking was to be removed.

As A.R. Butz rightly pointed out, the technical term “gas cellar” usually referred to a gas shelter during the war, i.e., to a room providing safety from air raids with poison gas (Butz 2015, pp. 473f.). Samuel Crowell has thoroughly documented the German wartime regulations for the construction of air-raid shelters (1997a&b, 2011), which made their inclusion in new structures obligatory. Since Crematoria II & III were the only solid structures with basements in the Birkenau Camp, it is logical to assume that at least one room in the basements of these buildings was designed to serve as a gas-tight air-raid shelter in case of need. As we have seen before, this was also confirmed by the senior engineer involved in the construction of these buildings (see p. 105). Hence, the use of the term “Vergasungskeller” in the document mentioned above may simply have been a misnomer for “Gaskeller.” Mattogno has pointed out, though, that no document indicates that any of the morgues was equipped as auxiliary air-raid shelters (2000b). He opines that the term “gassing cellar” originates from the disinfestation wing of Buildings 5a and 5b,
which was also called “gassing room,” meaning that the basement room in question was temporarily planned to serve as an auxiliary delousing chamber (2015a, pp. 60-63).

Regarding the alleged fake showers, it should be kept in mind that by the 1940s no neat plastic dowels existed yet. There was therefore only one way to fasten installations to bare concrete walls and ceilings: conical pieces of wood were cast into the concrete, onto which electrical lines, lamps, water pipes, and other installations were screwed tightly. The existence of such pieces of wood in the ceiling of Morgue #1 does not prove that shower heads were fastened there. It is more probable that lamps or electrical lines were installed there.

Nor is there any proof that the “showers” mentioned in the document were “false,” as stated by Pressac. In actual fact, the Central Construction Office temporarily considered expanding the Birkenau crematoria into hygiene centers equipped with disinfection installations, inmate showers and undressing rooms, but nevertheless later drastically downsized these plans. Carlo Mattogno has produced extensive documentation in support of this argument, which I will summarize here (Mattogno 2000b, 2015a, pp. 148-157):

At the behest of the garrison physician, a thoroughgoing program was launched at Birkenau in early May 1943 with the official designation “Special measures for the improvement of the hygienic installations.” The official order for this arrived at Birkenau on May 14, 1943, yet measure for the urgently needed improvement of the camp’s hygienic conditions were evidently taken already prior to the issuance of that order.

For instance, in an “itemization” by the Topf Company dated 13 April, 1943 concerning requested metals to be used in the construction of certain machinery for Crematorium II at Auschwitz, the following item appears:124

“2 Topf disinfection furnaces for Crema II in the PoW Camp Auschwitz.”

On May 13, 1943, the head of the Auschwitz Central Construction Office, Karl Bischoff, drew up a “Report on the work scheduled for immediate action program at PoW camp Auschwitz,” with which the civilian employee Jährling was charged with installing the “the showers in the undressing room of Crematorium III.”125

On May 15, Bischoff sent the following “urgent telegram” to the Topf Company:126

124 APMO, BW 30/34, p. 47; see Document 3 in the Appendix. The Topf Company also produced hot-air-disinfection devices.
125 RGVA, 502-1-83, p. 338.
126 APMO, BW 30/34, p. 40; similar a report by Bischoff to Kammler of May 16, 1943, RGVA, 502-1-83, p. 311.
“On Monday bring the overdue warm water project for approximately 100 showers. Installation of water heater or boiler in the still-under-construction trash incinerator in Crematorium III or flue for the purpose of utilizing the high temperature of the emissions.”

On June 5, 1942, Topf sent Drawing D60446 to the Central Construction Office “regarding the installation of the boilers in the trash incinerator.” This project involved the installations intended for Crematorium II.\(^{127}\)

In an undated “questionnaire” apparently written in June 1943 regarding the Birkenau crematoria, in answer to the question, “Are the exhaust gases utilized?,” the head of the Central Construction Office, Bischoff, responded: “planned but not carried out,” and in response to the following question: “If yes, to what purpose?,” Bischoff answered: “for bath facilities in Crematorium II and III.”\(^{128}\)

Finally, there is an invoice from the firm VEDAG, Vereinigte Dachpappen-Fabriken Aktiengesellschaft (United Roofing-Felt Factories, Incorporated) dated July 28, 1943, with the subject “Auschwitz-crematorium” referring to “completed sealing work for the disinfestation facility” (emphasis added) which was carried out between May 21 and July 16, 1943.\(^{129}\)

The two Topf disinfestation furnaces were later actually installed in the Zentralsauna, and the project of installing 100 showers in Crematorium III (and in Crematorium II) were later drastically downsized to only 14 showers.

Since, as was shown in Subsection 5.2.2, the installation of hygiene centers with showers, disinfestation, undressing and dressing rooms and adjacent crematoria is not at all unusual, the “traces” adduced by Pressac and van Pelt turn out to have been incorrectly interpreted.

5.4.1.2.3. “Gas-tight Doors” for Crematorium II

Fact 1: Morgue #1 in Crematorium II was equipped with gas-tight doors with a peephole (pp. 434-436).

Fact 2: An initially planned double door opening to the inside of Morgue #1 was replaced by a single door opening to the outside (pp. 285, 302).

Incorrect conclusion 1: Morgue #1 in Crematorium II was converted into a homicidal “gas chamber,” equipped with a gas-tight door sporting peepholes to observe the victims’ demise.\(^{130}\)

Incorrect conclusion 2: Doors opening to the inside of Morgue #1 would have been blocked by gassing victims piling up in front of it so that the doors could not have been opened. Realizing this, the SS changed the doors to open to the outside.

\(^{127}\) RGVA, 502-1-336 (page number illegible).

\(^{128}\) RGVA, 502-1-312, p. 8.


Correct conclusions 1:

Even if a peephole was not entirely necessary for a disinfection chamber, it has nevertheless been proved that the disinfection-chamber doors installed in Auschwitz were also equipped with just such peepholes, as shown in the photograph reproduced here (Figure 69; see Pressac 1989, pp. 46-50). Peepholes were in fact required for all disinfection doors, because anyone entering a disinfection chamber had to be observed by another person from the outside in order that, in case of an accident, help could be provided immediately.131

One document indicates that gas-tight doors measuring 100 cm × 192 cm were ordered for Morgue #1 (the “gas chamber”) of Crematoria II and III.132 But since the same kind of door was also ordered for the inmate sauna in building BW 5a (for hygienic and health reasons the inmates had a sauna, see Figure 40), this merely shows that gas-tight doors do not prove any homicidal intent per se.133

On the delivery plan, i.e., the final plan for Crematorium II, the size of the doors is drawn in as 190 cm × 170 cm, 30 cm less-wide than on older plans. Hence this gas-tight door would not have fit.134 Based on the ruins, it must be possible even today to establish whether the door was possibly walled in to

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132 Pressac 1989, p. 436. In the inventory list on p. 430, a handwritten entry mentioning a gas-tight door only appears in Crematorium II.

133 RGVA, 502-1-328, p. 70: “Herstellung von 2 Stck. Gasdichte Türen 100/200 für die Sauna.”

make it even narrower and whether there are any traces of door frames and hinges. Excavations would be necessary to determine this.

Willy Wallwey has shown that the “gas-tight” doors manufactured at Auschwitz by inmates from wooden planks could not have been gas-tight in a technical sense. The planks did not close hermetically, the fittings were simply fastened through the wood by means of bolts, and the seals consisted of felt strips (Nowak/Rademacher 2003, pp. 324-336).

One has to consider that a hypothetical homicidal-gas-chamber door would have to open outwards – a door opening inwards would be blocked by victim bodies lying in front of the door. In order to be escape-proof, such doors
would require an especially sturdy arrangement, because the locks and hinges would have to be capable of resisting the pressure of hundreds of panicking people.

The pressure exerted by such masses of people becomes apparent when one recalls the photographs of panicky spectators at football/soccer matches. Separating fences and partitions between individual spectator blocks are commonly trampled down like mere blades of grass in such situations. In any case, a simple wooden door, rendered provisionally gastight, as have been found in Auschwitz, photographs of which are amply reproduced by Pressac in his book (pp. 46-49, 425-428, 486, 500; see Figure 69), could never have resisted such pressure.

In this context, a comparison of the flimsy wooden doors as found in Auschwitz (used for delousing purposes only) with technically gastight, massive iron doors as used for executions in U.S. homicidal gas chambers is revealing, compare Figure 69 with Figure 10 (page 32).

The installation of a door with felt seals in Crematorium II may have been temporarily considered either in connection with the temporarily considered expansion into a hygiene center or because it was desired to use the only solid reinforced-concrete basement room in the Birkenau Camp as an air-raid shelter, as remarked by senior engineer Schreiber. Several witness testimonies suggest indeed that this cellar was actually used as an air-raid shelter for in-

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135 See for instance the so-called Heysel Stadium disaster of May 29, 1985, when a concrete wall collapsed under the onslaught of hundreds of panicking people, www.youtube.com/channel/UC6RrOMLWEe3Y1xMWMkvCK7A.
mates. This would also explain other more minor “traces” which cannot be discussed here. Samuel Crowell has shown in several articles the extent to which the SS actually built air-raid-shelter installations not only for themselves but also for the camp inmates (Crowell 1997b; 1998, 2000; 2011).

Correct conclusions 2: The change in orientation of the doors was probably instigated by the design of this morgue’s ventilation system. Since the air inlet of this system had a higher resistance than the outlet (see next chapter), a considerable subpressure was caused in Morgue #1, constantly sucking air in from the rest of the building. This is a desired effect for a morgue where many corpses had to be stored, so that unpleasant smells would not reach other parts of the building. A double door opening to the side with a lower pressure (inside Morgue #1) would open automatically, whereas a door opening to the side of higher pressure closes automatically due to the direction of the draft.

136 Former inmate Miklos Nyiszli (1993, p. 128) alleges that the inmates took refuge in the gas chamber during air raids. Martin Gilbert (1981, p. 309) quotes the testimony of a female survivor, according to which she, together with many other female arriving inmates, was led to a darkened room to remain there during an air raid. What is most interesting about this testimony is the description of the manner in which some of the women became hysterical during the air raid and believed that they were inhaling poison gas. Another conclusion which could be drawn from this testimony is that the SS were concerned with protecting their inmates from air raids, and that there must have existed several such air-raid shelters at Birkenau, which must have been gas-tight, that however remained entirely unnoticed and unstudied (from Crowell 1997b, p. 242, fn. 4). Another survivor reports that the inmates were regularly led into an air-raid shelter during Allied air raids in 1944 (Rushton 1998).
5.4.1.2.4. Ventilation Systems

**Fact:** All rooms in Crematoria II and III were equipped with efficient ventilation installations.\(^{137}\)

**Incorrect conclusion:** Morgues #1 of Crematoria II and III were converted into homicidal “gas chambers” equipped with installations for the intended purpose of extracting poison gases.\(^{138}\)

**Correct conclusion:** It is in fact inconceivable that a large morgue without windows and with only one door filled with innumerable bodies of the victims of epidemic disease would *not* be equipped with a ventilation system. The capacity of the ventilation system, however, proves that these installations were designed for typical morgues.\(^{139}\) The capacity of the blowers can be gleaned from invoices sent to the Central Construction Office by the Topf corporation after installation of the systems.\(^{140}\) According to this, both Morgues #1, *i.e.*, the alleged “gas chambers” (in the invoice designated as the “B-room”), were each equipped with a 4,800 m\(^3\)/hr intake and exhaust blower,\(^{141}\) while for the “L-room” (the so-called “undressing room”) only one exhaust blower was installed with a flow rate of 10,000 m\(^3\)/hr.\(^{142}\)

When considering the volume of the two morgues (Morgue #1: 504 m\(^3\); Morgue #2: 900 m\(^3\)), this results in (4,800÷504 =) approximately 9.5 air exchanges per hour for the alleged, planned “gas chambers,” and in (10,000÷900 =) approximately 11 air exchanges per hour for the undressing rooms. How come the SS assumed that the “gas chambers” would need less ventilation than the undressing rooms, or even less than the dissecting rooms, laying-

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\(^{137}\) The ventilation ducts of Morgue #1 are visible in the plans published by Pressac 1989, pp. 224, 289; chapter on the ventilation installations of Crematoria II and III: pp. 355ff.; engine power of the ventilation installations for all rooms in Crematoria II and III: p. 374 and 377; size of the ventilation outlets: p. 234; photo of an outlet cover in the ventilation outlets: p. 233.

\(^{138}\) For Pressac see previous footnote; similar van Pelt 1999, p. 208; Gray 2000, §7.62.

\(^{139}\) See in this regard Mattogno 2016h, pp. 173-176.


\(^{141}\) The engines’ power, originally set for 2 HP in a November 1941 estimate when the building’s exact specifications had not yet been fully defined, was increased in March 1942 to 3.5 HP – at a time when no criminal intentions can be imputed. The innocuous nature of this power increase is confirmed by the fact that the engine powers were increased proportionally for *all* the other rooms as well. Since the fan types and thus the flow rates remained unchanged, this change was caused by a more-accurate estimate of the system’s internal friction. This means that the initially calculated back-pressure of 40 mm water column was too low. Incremental calculations for estimating the ventilation-shaft resistances in Crematoria II & III according to engineering handbooks, as performed by Dipl.-Ing. Winfried Zwerenz and me in 1990, have shown that the back pressure to be expected would probably have been higher (in the region of 50-60 mm water column), due, particularly, to the primitive lids with many small holes covering the fresh-air-intake openings. See also Mattogno 2016i.

\(^{142}\) J.-C. Pressac gives the output of these blowers at 8,000 m\(^3\)/hr, but without proving it (together with Robert van Pelt in: Gutman/Berenbaum 1994, pp. 210, 232). He probably erroneously and impermissibly increased the fan’s flow rate proportionally to the increased engine power. See the previous note.
out rooms and wash rooms, which had an even greater capacity of approximately $13\frac{1}{3}$ air exchanges per hour?

Wilhelm Heepke’s classic work on the construction of crematoria states that a morgue requires a minimum of 5 air exchanges per hour and 10 during intensive use (1905, p. 104). Thus it is clear that the ventilation installations provided for the morgues were designed, in terms of orders of magnitude, for morgues in intensive use or for morgues containing the bodies of epidemic-disease victims.

For comparison: professionally designed Zyklon-B-disinfestation chambers with circulating-air systems were equipped with 72 air exchanges per hour (Peters/Wüstinger 1940, p. 195). Furthermore, it should be mentioned that the original plans for a new crematorium in the Main Camp from 1941 — a time when even Pressac admits that the SS had no criminal intentions — provided for 17(!) air exchanges per hour for the dissecting room(!) and the morgues (Pressac 1993, p. 18). This exchange rate is considerably higher than what was later installed for all rooms of the redesigned Crematoria II and III, including the alleged “gas chambers.” Thus, on the way from beneficial planning to allegedly sinister redesign, the air-exchange rates — including that for the claimed homicidal gas chamber — had been drastically reduced (probably in order to reduce costs). This is thus the final refutation of any argument on the alleged criminal characteristics of the ventilation installations in these crematoria.

5.4.1.2.5. Pre-heated Morgues

Fact: The morgues of Crematoria II and III were never heated, although a heating system was temporarily considered; in addition, water pipes in Morgue #1 were removed (pp. 221, 223, 286).

Incorrect conclusion: Morgues need no heating for normal operational functioning. Crematoria II and III were converted into homicidal “gas chambers,” (intended to be) equipped with a heating system so that “the gas would work more rapidly.” It was necessary to eliminate the plumbing system in the morgue because panic-stricken inmates would have damaged the pipes.143

Correct conclusion: According to expert literature, morgues do indeed need some kind of heating equipment, because corpses must be protected from the effects of frost and freezing temperatures in winter (Neufert 1962, pp. 423f). Hence, under normal operation, morgues would have been equipped with heating devices, but the initial plans to equip the morgues in Auschwitz with heaters were cancelled,144 rendering the argument obsolete. Regarding the removal of the water pipes, a “non-criminal” explanation follows logically:

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143 See the previous page number re. Pressac; similar van Pelt 1999, p. 296; Gray 2000, §7.68.
144 Pressac 1989, p. 230. The waste heat of the forced-draught blowers was to be used, but since these burned out and were removed, the entire pre-heating project was cancelled.
Since no heating was ever installed in these morgues, there was a danger that the water pipes would have burst in freezing temperatures due to the lack of any heating (if the pipes could not be completely drained). In order to prevent burst pipes and a subsequent flooding of the morgues, the pipes were removed.

5.4.1.2.6. “Cremation with Simultaneous Special Treatment“

Fact: With regard to the “Electrical supply and installation of the concentration camp and prisoner of war camp” a file memo of the Auschwitz Central Construction Office of January 29, 1943 states:  

“This putting into operation [of Crematorium II] can however only extend to restricted use of the available machines (in which case cremation with simultaneous special treatment [original: “Sonderbehandlung “] will be made possible) since the [electrical] supply leading to the crematorium is too weak for its output consumption. “

Incorrect conclusion: Since the “special treatment” mentioned apparently required electricity and because the homicidal gas chamber possessed an electrical ventilation, R.J. van Pelt concludes that “Sonderbehandlung” referred to homicidal gassings, which were made possible by operating the ventilation despite a reduced power supply (van Pelt/Dwork 1996, p. 330).

Correct conclusion: First, it is not apparent from this document whether or not electricity is required for “special treatment.” Furthermore, on January 29, 1943, the ventilation installation for the morgue had not yet even been delivered, let alone installed and put into operation. Commencement of the installation was not anticipated before February 10. Installation was only charged to the account on February 22, 1943. Therefore, the “available machines” on January 29, 1943, did not include the ventilation system. Actually, the concept of “special treatment” in this connection has no “criminal” significance at all, as Mattogno has described in detail (2004b, 2016d, pp. 95-102):

5.4.1.2.7. “Gas Testers“ and “Indicator Devices for HCN Residues“

Fact 1: There is a telegram of February 26, 1943, by means of which heating technician Jährling of the Topf & Söhne furnace-construction firm orders “10 gas testers” for Crematorium II:

“Ship instantly 10 gas testers as discussed; submit cost estimate later.”

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145 RGVA 502-1-26, p. 21, Jan. 29, 1943.  
146 File memo by Kirschnek dated 29 January 1943. APMO, BW 30/34, p. 105.  
147 Topf, invoice no. 171 dated 22. February 1943 relating to the installation for the ventilation of Crematorium II. RGVA, 502-1-327, pp. 25-25a.  
Fact 2: There is a letter from the Topf corporation of March 2, 1943, which, referring to the above telegram, mentions “Anzeigegeräte für Blausäure-Reste” (indicator devices for HCN residues). Incorrect conclusion: The SS ordered the indicator devices in order to verify whether the ventilation of the “gas chamber” was successful after completion of mass murder with hydrogen cyanide in Crematorium II. Correct conclusion: According to the technical literature, “gas testers” are flue-gas analyzers intended to determine the composition of furnace exhaust gases (Akademischer Verein Hütte 1942, p. 1087). Such devices were standard equipment in crematoria. That the above-mentioned order referred to such devices is clear from the fact that they were ordered by a heating technician from a furnace-construction firm. The letter in reply from the Topf corporation dated March 2, 1943, stating that one must first find out who marketed these devices, has been revealed on several occasions to be an absurdity:

- According to contemporary literature, devices for the detection of HCN residues were called “Blausäurerestnachweisgeräte” (HCN residue detection devices) or “Gasrestnachweisgeräte für Zyklon” (Gas-residue-detection devices for Zyklon; Richtlinien...). Since the Topf & Söhne corporation, according to the letter, had already received information on the possibility of procurement of such devices from three firms, the correct name of these devices must in the meantime have penetrated even to Topf & Söhne.
- Furthermore, these detection devices are based on a wet chemical method which possessed no “indicator” and could not, therefore, be designated as indicator devices. On the other hand, the gas testers mentioned in the telegram had a physico-chemical sensor connected to a dial (see Figure 73).
- According to contemporary regulations, testing with HCN-residue-testing devices was obligatory in every disinfestation action using hydrogen cyanide in order to test whether the ventilation of a fumigated room had been successful before it could be entered without a gas mask. Since disinfestation had been performed on a large scale in Birkenau since 1941, it is categorically impossible that no one should have concerned himself with the possibility of ordering such devices before early 1943!
- Since the creation of Birkenau Camp in 1941, the SS garrison doctor for Auschwitz Camp was responsible, among other things, for the ordering, administration, and use of Zyklon B and all materials for its handling (disinfestation installations, gas masks, HCN-residue-detection devices, etc.). He therefore had three years’ experience in this business. Why then should the Central Construction Office, which was neither competent in this mat-
ter nor authorized, have issued the order for the procurement of HCN-residue-detection devices in 1943?

– The order was sent by the expert for furnace systems Jährling, and the response letter by the Topf Company has a handwritten note in the receipt stamp of the Central Construction Office indicating that civilian engineer Jährling was indeed in charge of the matter. Jährling, however, was the Central Construction Office’s expert in charge of furnace systems. Hence this was definitely a matter concerning furnace systems, not poison-gas facilities.

– In addition to cremation furnaces, the Topf Company also produced hot-air-disinfestation furnaces as well as silo fumigation installations which were, however, not operated with HCN. Why then should the heating technician Jährling, a civilian engineer, order devices, of which he had no knowledge, from a firm, which obviously did not even know the supplier of the devices, when the health service of Auschwitz Camp had already been supplied with these devices by the Tesch & Stabenow corporation for two years and therefore knew the supplier? There was very probably even a supply of them in stock at the camp.

– The Central Construction Office’s ordering telegram clearly states that they expected immediate delivery of the gas testers “as discussed,” implying that the Topf Company had them in stock. In addition, this order was so urgent that the legally prescribed official procedure of getting cost esti-

\[\text{152} \quad \text{Hydrogen cyanide would form poisonous residues with moist food. The gases Areginal and Cartox were used; see Kunike 1941, pp. 53f.}\]
mates prior to an order was ignored. That does not fit to Topf’s search for weeks for a supplier of unknown items with an inevitably unknown price.

– The number ten matches the ten smoke flues of the Crematoria II and III, in which gas testers would have been or were installed.

I am therefore convinced that this reply from the Topf Company is a forgery, for instance by replacing the letter’s original text (which perhaps contained the subsequently submitted cost estimate) with a new text. Or else one has to assume that the individuals signing this letter (the cremation specialist engineer Kurt Prüfer and Topf’s chief engineer Fritz Sander) completely misunderstood the telegram and went off on a weeks-long wild-goose chase for something that can neither have been requested nor be lacking at Auschwitz. At any rate, that letter’s text as it is today makes no sense at all.

5.4.1.2.8. Zyklon-B-Introduction Holes

Fact 1: There are witness testimonies claiming that there were three or four square holes measuring 70 cm in the roofs of both Morgues #1 of Crematoria II and III, through which Zyklon B is alleged to have been introduced for the purpose of mass killings.  

Fact 2: There are two photographs showing objects on the roof (see further below).

Incorrect conclusion: The photos confirm the witness statements.

Correct conclusion: Pressac reproduced a photo of Crematorium II of around February 10, 1943, showing three objects located on the roof of Morgue #1 (p. 340; the fourth object obviously lies behind the cellar). The same photograph also appears in Danuta Czech’s book (1989, p. 454), see Figure 74. The decisive detail is magnified in Figure 75. If these objects are really Zyklon-B-introduction shafts, as Pressac believes, then one must assume that the objects are:

a) of equal size
b) regularly aligned
c) evenly distributed along the roof
d) nearly the same color and
e) casting approximately the same shadows.

Figure 75 points out the outlines of the cellar, indicating its breadth as well as the approximate width of the three objects. Despite the mediocre resolution of the photograph, it may be concluded that these objects are of differing widths, not evenly distributed over the roof, but stand, on the contrary, close together.

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153 Henryk Tauber: Pressac 1989, p. 484; Müller 1979, p. 95; Charles Sigismund Bendel: Kogon et al. 1993, p. 163 (he speaks of only two openings); Michal Kula: ibid., p. 166; for a summary and critique of some of these and other witness accounts on these alleged openings and introduction devices, see Rudolf 2000a, pp. 34-37; and Rudolf 2000b&c.
It also seems peculiar that the shady side of the first object seen from the left, compared with those of the other two objects, is remarkably light in color. Figure 77 shows the alignment of perspective, viewed from above, on which these objects can possibly be located (Boisdefeu 1994, p. 168). As none of the requirements set forth above is met, the argument that these objects are above-roof parts of Zyklon-B-introduction shafts must be rejected.
It should be mentioned in passing that these objects are not to be seen in other photographs of the morgue, see Figure 76 taken on January 20, 1943 (Czech 1989, p. 398; Pressac 1989, p. 335), as well as another photograph reproduced by Pressac and taken in the summer of 1943. It will therefore be necessary to find another explanation for the objects in the photograph taken in February 1943, such as, for example, that some sort of objects had been placed on the roof – perhaps in the course of constructing the building, undertakings which were obviously still underway – or less likely that the picture has been retouched at a later date.

Figure 76: Photograph of Crematorium II from Jan. 20, 1943, similar in perspective to Figure 74, but without objects on the roof of Morgue #1. (Czech 1989, p. 398; Pressac 1989, p. 335).

Figure 77: Schematic drawing of a view onto Morgue #1 of Crematorium II. Longitudinal dotted line: the concrete longitudinal beam with the 7 supporting pillars. Drawn in as three intersecting red lines: vanishing lines somewhere upon which the center of the three objects located on the roof must have been located. Obviously, they were not evenly distributed along the roof. Green shapes: actual location of the two openings in existence today (following Boisdefeu 1994, p. 168).

154 1989, p. 341. Although Pressac claims that Zyklon-B-introduction shafts are there, nothing of the sort can be seen.
Figure 78 shows an enlargement of an Allied air photo of Birkenau Camp, taken on August 25, 1944 (north is to the left). Of particular interest are the dark spots on Morgue #1 (“gas chambers”) of both crematoria (red arrows), of which it is known today that there are no introduction shafts for Zyklon B.

If the Zyklon-B-introduction shafts really possessed the dimensions of 70 cm (2 1/3 ft) on each side as described by the witnesses, this cannot be reconciled with the spots on the air photo, which are approximately 2 to 3 m² in area (20-23 ft²).

It must be noted that the chimneys of the inmate barracks as well as the large crematorium chimneys are rich in contrast, symmetrical, and straight. The spots on Morgue #1 of both crematoria, by contrast, form an angle of approximately 75-80° (Crematorium III) or 80-90° (Crematorium II, irregular) to the arrangement of the main wing of Crematorium II (see schematic drawing Figure 79). If these spots were shadows of elevated objects of any kind, these shadows would have to exhibit the same alignment as those of the crematorium chimney of Crematorium II, the chimney of an inmate barracks, and other sharply conspicuous parts of the picture. The actual shadows, in contrast to the spots above, form a 45° angle to the main direction of Crematoria II and III (see Figure 79).

155 Allied aerial photographs, National Archives Air Photo Library, Washington, D.C., RG 373 Can F 5367, exp. 3185; first published by the CIA: Brugioni/Poirier 1979; see also J. Ball 2015, pp. 64f.

156 Lenski 1990, pp. 356ff., testimony of aerial photographic appraiser Kenneth R. Wilson, pp. 8927-8941e of the trial transcript; see also Kulaszka 1992, pp. 353f. According to Wilson, the spots on the photos dated Sept. 13, 1944 cannot be seen.
We know that the chimney of Crematorium II was 15 m high (Pressac 1989, p. 329). It casts a shadow on the picture which is five times as long as the spots on the roof of Morgue #1 (“gas chamber”) of Crematorium III (length of shadow of chimney: 20 m, that is, the angle of the sun was approximately 37°, length of the spots on Morgue #1 (“gas chamber”) of Crematorium III: approximately 4 m). This means simply that the alleged Zyklon-B-introduction shafts would have projected 3 m above the roof of Morgue #1 (“gas chambers”) of Crematorium III in order to cast such long shadows, which may be ruled out as impossible.

Absence of spatial height, irregular shape, incorrect size (length and width), and wrong, irregular direction of the spots therefore prove definitively that these spots are neither the shadows of any objects, nor can they be the legendary Zyklon-B-introduction shafts. The irregular, vague nature of these spots, as well as the fact that they are missing on at least one air photo, gives rise to the conclusion that they are the retouching of a forger, added at a later time. John C. Ball, a Canadian mineral exploitation geologist knowledgeable in interpreting air photos, has suggested that the air photos were tampered with while they were in the possession of the CIA.

157 J. Ball 2015, pp. 69, 91, Morgue #1 of Crematorium II, photograph dated 13 September 1944, RG 373 Can B 8413, exp. 6V2.
158 The manipulations on this picture are overly abundant, such as, for example, a drawing of a group of inmates accidentally marching over the roof of a barracks! See J. Ball 2015, pp. 62-
As a result of the long-lasting wrong interpretation of these spots on this air photo, the otherwise-unfounded allegation was made that the alleged Zyklon-B-introduction shafts were aligned linearly on the middle of the roof in case of Morgue #1 (“gas chamber”) of Crematorium II, and aligned alternating to the left and to the right of the middle of the roof in case of Morgue #1 of Crematorium III, according to the location of the spots on this air photo. The alternating alignment, however, would contradict the argument that the Zyklon-B-introduction columns were aligned behind the concrete support pillars in order to conceal them so that the entering victims would not become suspicious. As a matter of fact, no introduction column could have been hidden behind a concrete pillar, because this would have necessitated the opening of a hole not only through the reinforced concrete roof, but also through the massive longitudinal support beam, see Figure 58, which would have compromised the stability of the entire morgue. Hence, an alignment to the left and/or right of the support pillars would have been unavoidable.

After the building was destroyed towards the end of the war – by whom does not matter – one occasionally encounters the attitude that the remaining ruins are fakes, and that the original installations have disappeared without a trace. Thus, the author of the present book was rejected as an expert witness by a court on December 6, 1991, and May 5, 1992, on the grounds that his research on the “gas chambers” was fully irrelevant since, as it was allegedly well known, the structures in Auschwitz were only fakes, the authentic “gas chambers” having disappeared without a trace.159

Such absurd auxiliary hypotheses aiming at explaining away the unequivocal results set forth here are of course impermissible. Such a hypothesis would require that the Poles rebuilt the crematoria true to the original for many millions of zlotys after the war, only in order to blow them up and turn them into ruins. This is not only grotesque, but there is not the slightest trace of any evidence to support it.

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159 County Court Munich, ref. 451 Cs 112 Js 3326/90 and ref. 432 Cs 113 Js 3619/90.
Such statements merely testify to the technical incompetence of the judges entrusted with these matters. It is a shame that such individuals are given the power to decide the fate of others in these disputes.

When I visited the Birkenau Camp in the summer of 1991, the roofs of the morgues of both crematoria were broken in pieces and had collapsed. The roof of Morgue #1 of Crematorium III was utterly destroyed on the ground and broken in small pieces (see Figure 68, p. 117). The roof of Morgue #1 of Crematorium II, however, was still relatively intact, so that an examination of those ruins was still rather meaningful. This situation remained pretty much unchanged until early 2000. The photographs reproduced and discussed here were made between 1991 and 1997.

Figure 60 (p. 108) shows the collapsed roof of Morgue #1 of Crematorium II in 1997, seen from its south end along its entire length. The last support column, seen from the south, pokes through the roof. Somewhat to the left of it is a hole that has been chopped through the concrete roof. It provides access to the area below (see also the photo of this southern section of the roof in Figure 64, p. 112, as well as the close-up photo of this access hole in Figure 82, p. 137). The last-but-one support column, seen from the south, was still supporting a part of the roof back then. One can discern how the fragments of the roof buckle up in this area due to that column. As a result of this buckling, a major, irregular crack formed in this area which still has some of the original
reinforcement bars running through it, see the photo showing this buckling part of the roof, as well as the close-up photos in Figure 63a-c (p. 111).

More toward the center of this basement room, the roof was also still fairly well connected in one piece, with no major visible holes or gaping cracks, except for an almost-square-shaped hole visible in Figure 62 (p. 110) at the bottom left. Close-up photos of that hole are reproduced in Figures 84 to 86 (p. 140). We will discuss that hole in more detail later.

The northern section of this morgue’s roof, which is closest to the main part of the Crematorium, was more-thoroughly destroyed than the southern part, see Figure 61a (p. 109). Yet even here, clearly visible holes are missing, except for an area where the roof was severely damaged. However, a dense network of reinforcement bars runs all through this large, irregularly shaped hole, see the section enlargement of this area in Figure 61b (p. 109). Evidently only the concrete was destroyed here, while the structure of reinforcement bars was left relatively undamaged.

The southern section of the morgue which was accessible through the access hole is partly shown in Figures 81 (p. 136) and 83 (p. 139). Groundwater was standing in the lower-lying parts of this basement room even in mid-summer of 1991. Large parts of the masonry work and concrete ceiling accessible there were relatively well protected from wind and weather. There are no visible signs of erosion or corrosion. In his first book, Pressac shows illustrations of the intact circular openings through the ceiling of Morgue #2 of Crematorium II, through which the ventilation duct once ran, as well as images of the rectangular ventilation holes through the concrete ceiling of the furnace room of Crematorium III (Pressac 1989, pp. 365f.), which I will refer to later.
Figures 89-94 (p. 144) show four of the five openings in the ceiling of the furnace room of Crematorium III as of December 1991. They were used to dissipate radiant heat from the cremation furnaces. The ceiling collapsed during the demolition of the furnace room, and some of the five holes were damaged to some degree during the process.

If the four Zyklon-B-introduction holes described by witnesses really existed, with the wire-mesh columns installed inside them as will be discussed later, then what observations were to be expected?

1. Several hundred people, locked into a cellar with a very small floor area, anticipating death, would panic and attempt to escape, damaging everything that stood in their way. There exist statements to that effect by witnesses. According to Henryk Tauber, for instance, the victims allegedly demolished all the equipment in this room:

   “The people going to be gassed and those in the gas chamber damaged the electrical installations, tearing the cables out and damaging the ventilation equipment.”

Under these circumstances, all objects in that room not solidly constructed and not bolted in a panic-proof fashion would have been either damaged or destroyed. Wire-mesh columns, as they have been described by certain witnesses, would have been among the first casualties of such a mass panic. To prevent this, their outer framework would have to have been of solid steel, but certainly not of fragile wire-mesh construction.

2. These columns would, in addition, have to have been solidly anchored in the concrete ceiling, the floor, and the concrete pillars. But since solid anchoring dowels did not yet exist at that time, hoop irons would have been cast into the concrete during the construction of the cellar, spread out to a “dovetail” inside the concrete. If carried out after completion of the building, holes would have been drilled into the concrete, and hoop irons would have been cast in cement filling these holes, see Figure 87 (p. 141). In both cases, a removal of such cast-in hoop irons would have been impossible. All one could do is cut them off with a saw or a welding torch. Hence, if any introduction device was ever installed in these morgues, traces of such hoop irons must still be present.

3. Furthermore, the steel reinforcement rods in the reinforced concrete would have to run wreath-like around the hole, and would be capable of verification by means of induction devices, even today.

4. Since, in addition, the morgues’ roofs were covered with a layer of soil approximately half a meter thick, the entire construction would have to be

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161 I am grateful to Carl Hermann Christmann, a certified building engineer, for this information.
162 I am grateful to Robert Faßbender, a certified building engineer, for this information, who also provided the drawings (Faßbender 2003).
protected against the intrusion of soil and rainwater, and in so doing it would have been indispensable to build chimney-style shafts around the holes up to and above the layer of soil.

Nothing of the kind can be found on the roof of Morgue #1 of Crematorium II, which has remained largely intact. The only two holes which can be found today of anything approaching the alleged size involved and somewhat regular and rectangular in shape were obviously crudely pierced at a later time, as may been seen in Figures 84 and 82 (p. 137). Even Pressac admits that these are the only holes visible today (1989, p. 354). Nevertheless, his lavishly illustrated book includes not one clear photograph of these two existing holes.

All other smaller breakthroughs, cracks, and openings in the roofs of Morgues #1 (“gas chamber”) of Crematorium II and III visible today are breaks in the reinforced concrete effected at a later time with the iron reinforcing rods sticking out or running through them. Nowhere does one find cleanly poured concrete edges or rough, chiseled out edges with some remaining plaster work; there are no remains of ascending concrete or brick/mortar shafts; no steel reinforcement rods running other than would be expected for an ordinary flat roof without holes; and there are no traces of any hoop irons, dovetails, or any other means of anchoring any device to the morgue’s floor, ceiling, or concrete pillars.

If any holes were used as Zyklon-B-introduction holes, they would have to have been broken through following completion of the roof, i.e., shortly be-
fore the commencement of the alleged mass murders.\footnote{163} Such holes with no plasterwork to finish their rough edges, however, could neither have been sealed against escaping poison gas, nor against intruding soil and water, nor would it have been possible to safely install any panic-proof introduction devices in them. Using such crude holes would truly be an incredibly stupid piece of bungling.

But there is more. In the opening shown in Figure 84, the reinforcement rods were only cut at one point and bent back. In 1991 they still possessed their full length. Theoretically speaking, one could have bent them back again and welded them back together with their stumps at the other end.

This remark from the first edition of my expert report enticed the Australian Dr. Fredrick Töben during his visit to the camp in February 1997 to try to bend back two of the reinforcement rods. Much corroded as they were, however, they merely broke off. Töben simply let them drop into the hole to the bottom, see the photos reproduced in Figures 85f., which he took before and after his failed attempt. Another rod was broken off later by an unknown person (see Mattogno 2016b, pp. 333-335).

There is, of course, no trace of any reinforcement rods running in a wreath-like pattern around the hole. This hole, therefore, can never have been used as an introduction hole, since it was evidently never finished. And what makes matters worse: this is still the “best” of all the holes and cracks in this roof in

\footnote{163} The ceiling was finished towards the winter of 1942/43, while the mass exterminations allegedly began in March 1943; see Pressac 1989, pp. 338f.
existence today. All others are even more irregular and filled with reinforcement rods.

No apparatus, using the technology available at that time, could be anchored in such crudely pierced, unplastered holes, from which the reinforcement rods were not even removed; therefore, no gas-introduction device could ever have been firmly installed, let alone sealed from the exterior. This means that the entire environment including the supposed perpetrators would have been endangered by the gas streaming out of the opening. The supposed victims could furthermore only have been prevented by force from escaping through these holes, or even throwing the Zyklon B back out through the hole, since these holes could obviously not be closed.

We might even go much further in this direction: we can tell from the concrete when at least one of the two large holes was pierced. An opening pierced through the concrete of the roof of one of the morgues under consideration (“gas chamber”) – after its concrete roof had been poured and cured – would inevitably have had the consequence, when the building was blown up, that breaks and fissures caused to the roof by the explosion would have run preferentially through these holes.

The reason for this is that explosions exert extraordinarily great forces, and that the formation of cracks is favored by any weakness in the structure, since the tension peaks attain very high values in the vicinity of acute angles (notch effect, see Figure 88; see Neuber 2001). In particular holes which have damaged the structure of the concrete already due to their incorporation following completion of the structure, represent not only points of likely fracture, but points of inevitable fracture. This is made more obvious by Figures 89 to 94 (p. 144). Although the explosion pressure in the furnace room, on an even level with the ground, could turn aside in all directions, and the roof remains relatively intact to the attic, three of the five furnace room ventilation holes, cleanly cast and reinforced in the concrete roof, were destroyed. In the case of two of the other holes, clearly visible cracks formed at the corners, visible in the photos reproduced by Pressac (1989, pp. 365f.).

In the morgues of Crematoria II and III, the explosion pressure could only escape upward, causing their roofs to be much more seriously damaged than the roof of the furnace room. The only two holes with a somewhat geometric shape in the roof of Morgue #1 of Crematorium II, however, are conspicuous for having remained relatively intact. In the case of the hole in Figure 84, all the cracks and fissures run around this hole! On the spot, one furthermore
recognizes the arbitrary arrangement of this hole in a location at which the roof of the morgue is undamaged.

This alone proves with technical certainty that this hole was broken through \textit{after} the destruction of the roof! Consequently, even those researchers who support the orthodox thesis no longer assume that this hole was one of those through which Zyklon B is said to have been poured in (Keren/McCarthy/Mazal 2004).

The chisel marks on the edge of the hole in Figure 82 resemble those in Figure 84 to such a degree that it is reasonable to assume the same history for both holes.\footnote{164}

There were therefore no holes in the ceilings of these rooms through which the poison gas preparation could have been introduced by means of wire-mesh pillars or otherwise, as described by witnesses.

These two holes probably have their origin in the investigations conducted by the Polish investigative judge Jan Sehn after the end of the war. In his already-mentioned letter to the Institute for Forensic Research in Krakow, with which several objects were submitted in order to have them tested for cyanide residues (see Paragraph 4.4.1.1), it is stated that a mortar sample had been taken from the side wall of Morgue #1 of Crematorium II, and the ventilation covers that were submitted for analysis allegedly originated from the same

\footnote{164} Mattogno (2016b) argues that the size of this hole increased over the years, probably because the Auschwitz Museum wanted to give it a more regular, rectangular shape.
room. The expert report compiled by Sehn and his expert Dr. Roman Dawidowski, in which all kinds of criminal traces are listed, does not mention any openings at all in the roof of that room, which had already collapsed back then. One may therefore assume that no such holes existed. But then, how could one gain access to that room in order to take a mortar sample and to find the ventilation covers, since the entry area was completely buried in rubble? They forced their entry by chopping two holes in the roof! That also explains why those reinforcement rods were never removed: they merely needed to be bent back in order to allow access to the area underneath. Unfortunately, this criminal manipulation of evidence seems to have remained undocumented, just as were those committed at Crematorium I of the Main Camp.

Prof. van Pelt remarked accurately with regard to the lack of any appropriate holes in the roof of that room:¹⁶⁵

“Today, these four small holes that connected the wire-mesh columns and the chimneys [on the roof of Morgue #1, Crematorium II] cannot be observed in the ruined remains of the concrete slab. Yet does this mean they were never there?”

An interesting question, which the professor of architectural history answers as follows:

“While there is no certainty in this particular matter, it would have been logical to attach at the location where the columns had been some framework at the bottom of the gas chamber ceiling, and pour some concrete in the holes, and thus restore the slab.”

Van Pelt’s claim that the camp administration could have filled the holes in the ceiling with concrete in the fall of 1944 in order to restore the ceiling, is without evidence to support it. But at least Prof. van Pelt believes that the SS administration acted logically, in that they allegedly attempted to efface all trace of their alleged crime. But does van Pelt really believe that it would have made more sense to fill up the holes with concrete instead of removing the entire roof of the “gas chamber,” as was done with the roofs of Morgues #2, the “undressing rooms”? An Allied air photo taken on December 21, 1944, shows that the roof of the other morgue, which is not alleged to have been used to commit any murders, was completely removed (J. Ball 2015, p. 109). Obviously, the whole matter makes no sense.

To believe van Pelt, we must believe that the SS arbitrarily created architectural relics to confuse later tourists and Holocaust researchers instead of destroying the roof entirely, as in the case of the undressing room. This seems too absurd to be taken seriously.

But if van Pelt had the most rudimentary knowledge of architecture, he would know that it is impossible to close holes measuring 70 × 70 cm (that is almost half a square meter!) from a concrete roof without leaving clearly visi-

¹⁶⁵ van Pelt 1999, p. 295; see also the criticism by Renk 2001.
ble traces. Actually, however, there are no traces of openings in the roof later closed with concrete.

In addition, concrete patches filled in later would have flown out of these holes during an explosion like a cork out of a shaken champagne bottle, thus making the holes just as visible as they were before. On closer inspection, Prof. van Pelt’s allegation turns out to be not only demonstrably wrong, but utterly absurd.

But at least Prof. van Pelt agrees with the revisionists that there are no remains of these alleged holes. In remarking that there are no such traces, van Pelt has in fact proven that there were never any holes in the ceiling of this
room, and, consequently, no Zyklon-B-introduction holes of any nature whatever, and, consequently, no introduction of any poisonous substances whatever in the manner described by the witnesses. He has proven that his witnesses were testifying falsely, which casts a bad light on all the witnesses who have testified about mass murder with poison gas at Auschwitz. He has demonstrated that there is no reliable proof for mass murder with poison gas at Auschwitz.

It is nice to see that the Professor of Architectural History Robert Jan van Pelt came to the same conclusion in 2000 as I did in 1991 (as described in the first edition of my expert report in 1993) when I investigated the ceiling of the alleged “gas chamber” of Crematorium II of Birkenau. Only our further conclusions are somewhat divergent…

I may introduce another witness at this point who contacted David Irving by e-mail after conclusion of Mr. Irving’s legal proceedings against Deborah Lipstadt in May 2000. He is an engineer named Paul Barford; his colleagues are assisting in the conservation and restoration of the camp for the Auschwitz Museum administration. He informed David Irving that, during his trial, investigations were made in complete secrecy at Auschwitz with regard to the mystery of the holes, and then remarked:

“[W]hat happened to their [the Auschwitz Museum’s] tests on the roof of Crema II mentioned in the attachment? Did they find the Zyklon B holes or not? Did they report those results to Lipstadt’s lawyers, and when? […]

As you can guess, despite my belief that you and the Revisionists are wrong, and despite spending half an hour examining the collapsed roof of the underground gas chamber of Crematorium II from different angles, I found no evidence of the four holes that the eyewitnesses say were there […]. Secondly several areas of the slabs are covered in small rubble from an outer layer of concrete which was fractured by the blast. Now I would have expected these fragments to have fallen through the holes, if they were there, into the void beneath. […]

I remain puzzled by the lack of physical evidence for these holes.”

The search for the introduction holes mentioned by Barford, which was conducted by the Auschwitz Museum during Irving’s libel suit against Lipstadt, comes as a surprise. Right after the war, the investigative judge Jan Sehn should have conducted a forensic examination about this, but that was evidently not done. During the decades since, the museum should also have conducted research on this issue. Nothing has ever been published about the results of the search conducted in 2000. That result evidently disappeared in some drawer. If we consider the unscrupulousness with which the museum manipulated material evidence in a completely undocumented fashion with regard to the crematorium at the Main Camp, any competent researcher will
be horrified about these apparently once-more-undocumented sledge-hammer methods used by this search of those holes in early 2000.

In addition to the deterioration of this physical evidence caused by the ravages of time, we are therefore dealing here also with the destruction of evidence by the museum authorities. What should have been done—meticulously putting together the fragments of this morgue’s roof like a big jigsaw puzzle while thoroughly documenting it, as is done with crashed airplanes—, evidently remained undone. Instead of doing it in a professional manner, that topic was left to be covered by amateurishly acting outsiders.

The first of them was a U.S.-American amateur researcher. In early 2000, the late Charles D. Provan distributed a paper claiming he had located the missing holes in the roof of Morgue #1 of Crematorium II (Provan 2000). What Provan did, however, was simply to declare those cracks as “holes,” which were caused by the concrete support pillars piercing through the collapsing roof and cracks caused by the roof bending over the longitudinal beam. All holes described by Provan are full of reinforcement bars, they lack regular shape, have no straight edges and corners (as is to be expected for regular, planned-in holes), no traces of plaster (as is to be expected if holes were chiseled in later), no traces of chimney extensions to lead these shafts through the soil, no traces of anchoring devices (dowels, hoop irons, dovetails…).

In his schematic drawing of the roof, Provan even possesses the boldness to display these cracks as holes with regular shapes (ibid., p. 36). Mattogno has pointed out in detail how unfounded and distorted Provan’s claims really are (Mattogno 2016b, pp. 283-341).

Four years later, Provan’s futile attempt to prove the existence of non-existing holes was carried to extremes by three other amateur researchers, whose 35-page article was even published by the prestigious periodical Holocaust and Genocide Studies (Keren/McCarthy/Mazal 2004). They, too, merely found irregular cracks and holes full of reinforcement bars, but they nevertheless declared victory, because otherwise they would have had to convert to revisionism, become social pariahs, and couldn’t have had their paper published in a mainstream journal.

I highly recommend that the reader peruse this paper, for it is a formidable lesson in how orthodox Holocaust historians are trying to make their readers believe that the naked emperor is actually wearing the finest clothes. Their wild-goose chase was expertly exposed by the indefatigable Carlo Mattogno in a fitting rebuttal (Mattogno 2016b, pp. 359-393).

That these legendary introduction openings with shafts installed inside them did in fact not exist results also from the final invoices by the Huta Corporation that built these crematories. These invoices are very detailed, yet
there is no trace in them about such holes or shafts, see Documents 1f. in the Appendix (starting on p. 393).

5.4.1.2.9. Wire-Mesh Push-in Device

**Fact 1:** There are witness testimonies claiming that the Morgues #1 of Crematoria II and III were equipped with devices made of wire mesh running from the floor through holes in the roof to the outside, protruding over the roof. Zyklon B is alleged to have been introduced into these columns for the purpose of mass killings.\(^{166}\)

**Fact 2:** There is a document mentioning “Drahtnetzeinschiebevorrichtungen” (wire-mesh push-in devices).

**Incorrect conclusion:** The witnesses are right.

**Correct conclusion:** The most frequently quoted “eyewitness” for these legendary “Zyklon-B-introduction columns” is Michał Kula. He gave detailed descriptions of these columns, so detailed, in fact, that he must have been involved in the columns’ manufacture, if they existed in the first place. Here is Kula’s statement from his deposition made prior to the trial against the former Auschwitz commandant Rudolf Höss:\(^{167}\)

> “Among other things, the fake showers intended for the gas chambers and the wire-mesh columns to pour the contents of the Zyklon cans into the gas chambers were manufactured in the metal workshop. This column was about 3 meters high, with a square section of about 70 cm [wide]. This column was composed of three mesh works inserted one inside the other. The outer screen was made from wire three millimeters thick, fastened to angle irons of 50 by 10 millimeters. Such corner posts were on each corner of the column and were connected at the top and the bottom by an angle iron of the same type. The openings of the wire mesh were 45 millimeters in square. The second screen was made in the same manner, and constructed within the first column [screen] at a distance of 150 millimeters from the first. The openings of this wire mesh were some 25 millimeters in square. In the corners these screens were connected to each other by iron struts. The third part of this column could be moved. It was an empty column of thin galvanized sheet metal with a square cross-section of about 150 mm, which ended in the upper part with a cone and below with a flat square base. At a distance of some 25 millimeters, thin sheet metal corners were soldered to the corners of this column supported

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\(^{166}\) There are, to my knowledge, eight witnesses claiming such columns: M. Kula, M. Nyiszli, C.S. Bendel, F. Müller and J. Erber (see Rudolf/Mattogno, pp. 285, 287-291f.), as well as W. Lutecki, W. Girsa and K. Gracz (see Setkiewicz 2011a, pp. 43-45). Müller’s and Erber’s descriptions stem from the late 1970/early 1980s, while Bendel’s, Nyiszli’s, Lutecki’s and Girsa’s description are very superficial. Gracz’s description is a little more detailed and resembles Kula’s first description (70 cm wide, sheet metal core with cone on top, green inner screen), although his version has only two layers and is merely 2.20 m high (ibid., p. 45). Kula is the one witness who described the columns early and in great detail, so I will focus on him here.

by sheet metal brackets. On these corners was mounted a thin mesh with openings of about one millimeter in square. This mesh ended at the bottom of the cone, and from there, extending the meshwork, ran a sheet-metal casing for the entire height up to the top of the cone. The content of a Zyklon can was poured from above in the distributor cone, which allowed for an equal distribution of the Zyklon to all four sides of the column. After the evaporation of the gas, the entire central column was extracted and the evaporated [depleted] silica [carrier] removed."

It doesn’t cast a favorable light on Kula’s credibility that the showers were actually real, as we have seen earlier (Subsection 5.4.1.2.2).

Kula was working in the inmate metalworking shop at Auschwitz, about whose activities a vast number of documents survived the war. No document about the creation of columns as described by Kula is among them, though. In fact, there is neither any material nor documentary evidence that these columns ever existed (see Mattogno 2015a, pp. 83-93). Kula himself must have anticipated this objection, because in the same testimony he claimed that work done for the crematoria were not registered presumably due to their alleged secret, criminal auspices. This, too, is untrue, as there is an abundance of work orders for items needed for the crematoria.168

To make matters worse, Kula also testified during the Höss Trial itself on the 5th day of the trial, where he stated the following:169

“On Höss’s order, the gassing columns that were used for the gassing were made by the metalworking shop. The columns were 2 meters and a half high, the inner space 150 square mm in diameter, the following [layer170] at a distance of 30 mm, the third 15 mm away. The wire mesh used was like those used for windows, green in color; between the mire mesh and the sheet metal there was a distance of 15 mm. All this was about 1 meter and a half tall. At the mouth of this network was a so-called distribution cone. 7 pieces of these columns were made. The columns were installed in the gas chamber right next to the opening through which the can of gas was thrown in. This column was installed beneath this opening, the gas was poured directly onto the distribution cone. The cone was to uniformly distribute the gas into these four slots of 15 mm between the sheet metal and the netting, since that increased the gas evaporation surface. That way the victims could be killed more rapidly. [Question:] What did such a gas chamber look like? [Answer:] In one crematorium, it was calculated for 2,500 men, in the other, smaller one [gas chamber] in the same crematorium for 1,500. The workers of the metalworking shop, inmates,

168 See for instance the many references to such work orders in Mattogno 2003c, 2015a, Mattogno/Deana 2015.
169 Höss Trial, APMO, Vol. 25, p. 498; see Document 10 in the Appendix.
170 “następna” is an adjective in the nominative feminine singular that could refer only to “średnicy” (diameter), the only feminine noun in the sentence, but that makes no sense. The witness obviously referred to the next wire-mesh layer of the column (“siatka” = netting; “warstwa” = layer; both feminine).
had built this chamber. The chamber was higher than 2 meters, at the top were closed rectangular channels; these were the air-extraction openings through which fans expelled the gas. Zyklon is lighter than air; hence it dissipates quickly after the gassing. Makeshift [fake] showers were made so that the whole thing looked like a bath. Lamps were lit, the concrete floor was always wet. After a homicidal gassing, inmates of the Sonderkommando cleaned the concrete [floor]. These were Jewish inmates who were assigned to doing that work. Every three months, the Sonderkommando was exterminated, gassed, yet not at Auschwitz, but somewhere in the vicinity of Gleiwitz instead. The leader of this unit was Hauptscharführer Moll, […]”

This passage is riddled with untrue statements.
1. The showers and thus the bathing facilities were real.
2. The claimed capacity of 2,500 men for the alleged homicidal gas chamber is physically impossible (see Paragraph 7.3.2.1.1. for details).
3. There were not two gas chambers of different sizes in that crematorium, but allegedly only one (Morgue #1).
4. The inmates of the metalworking shop had nothing to do with the construction of the crematoria, of which the gas chambers are said to have been integral parts. These inmates merely provided numerous iron fittings.
5. Even according to the orthodox narrative, nobody was ever gassed “in the vicinity of Gleiwitz.”

Since Kula was not a member of the Sonderkommando, one wonders what the source of his “knowledge” about the gas chambers and their operation is anyway. It probably is mere hearsay or rumor “knowledge,” which indicates that Kula’s testimony has been “cross-pollinated” by other witnesses.

Most important is, however, that he completely changed the dimension of the Zyklon-B-introduction columns. That should be the first-hand, reliable and thus immutable aspect of his testimony. According to his first, pre-trial deposition, the column was 3 meters high, which he changed to 2.50 meters during the trial. While the inner core measures 150 mm wide in both testimonies, the column described in his testimony during the trial was only (15+30+150+30+15=) 240 mm wide in total, compared to the 700 mm of his pre-trial statement. These are obviously two entirely different objects he is describing. While one can confuse 3 m with 2.5 m, confusing 70 cm with 24 cm is not likely. Hence Kula has adjusted his statement. I’ll get to the probable reason for this later.

To fully assess the reliability of Kula as a witness, it is worthwhile to also consider his last testimony, which he gave during the trial against the Auschwitz camp garrison a few months after the Höss Trial. During that testimony, he did not mention the columns at all. But among other things, he stated the following.\(^\text{171}\)

\(^{171}\text{AGK, NTN 162, p. 46; see Document 11 in the Appendix.}\)
“Then they began to build gigantic crematoria. They were set up so that the victims could not understand where they were taken. Each crematorium had two gas chambers, one for 1,500 and one for 2,000 people. There was a special concrete ski-jump [skocznie, meaning chute] on which the people were thrown from the truck, [whose load bed] tipped automatically, and in this way the people were falling into the gas chambers.”

This is a unique testimony, indeed. Although I do have words to characterize it, I will refrain from using them here. Evidently, with each opportunity to tell his tales, Kula’s claims became increasingly eccentric.

Since his first description of the introduction column is more-detailed and was made earlier, orthodox scholars have relied on it. Pressac (1989, p. 487) and van Pelt (van Pelt 2002, pp. 194, 208) have prepared drawings of these columns based on Kula’s initial description. Neither of them is without flaws, though,172

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172 Pressac got the dimensions of the inner column wrong and changed its design, while van Pelt’s translation of Kula’s testimony is erroneous. Although the data supplied in Kula’s testimony is rather meager, van Pelt uses it to make five different, very detailed drawings – some of it necessarily based on van Pelt’s conjecture, and the rest based on Kula’s narrative. Similar McCarthy/van Alstine.
hence I created my own, see Figures 95f. I have added only those features in them that Kula specifically mentioned. For instance, Kula did not say anything about any cross-bracing of the column, which would have been indispensable to make the device sturdy enough to withstand a panicking crowd.

Van Pelt recognized this deficiency, hence the model created based upon his drawing (van Pelt 2002, p. 208; see Figure 97) shows tacit “corrections” to Kula’s claims: van Pelt’s column has cross braces dividing the column into three sections of roughly equal height. To reinforce the device further, van Pelt’s model also has much thicker wires on the outer layer – some 8 mm rather than the meager 3 mm claimed by Kula. In addition, van Pelt has reduced the width of the center column from the 40 cm claimed by Kula to some 30 cm. In fact, he should have reduced it even further than that, for the innermost, removable column with a claimed width of 20 cm needed a guide so it would not get accidentally stuck with one of its corners in the wire mesh of the middle column when accidentally lowered slightly tilted. The angle irons forming the corners of the middle column actually could have had no other purpose than to function as guide rails for the inner column when moving in and out. The middle column’s wire mesh was utterly superfluous and a waste. However, Kula claimed that the middle column was 40 cm wide, while the innermost was 20 cm wide. Hence it was a total mismatch. The situation is different for Kula’s second description, which has an equal clearance between each layer of just 15 mm.

Van Pelt also reduced the height of the outer column to considerably less than 3 meters as initially claimed by Kula. The reason for that is probably because there are no holes in the roof of the morgue in question measuring 70 cm × 70 cm into which Kula’s columns could have fit. The largest hole in that roof (Figure 82) was only 50 cm wide in 1991. Hence van Pelt simply let the
outer layer of his column end at the morgue’s ceiling and let only the smaller middle column protrude through the roof. This lack of holes of the required size proves categorically that Kula’s initially described columns cannot have been installed. That may also be the reason why Kula reduced the height down to 2.50 m in his testimony during the Höss Trial (although the ceiling in that room was only 2.40 m high).

Figure 98 illustrates the issues involved. The green rectangle depicts Kula’s column, first design, with a huge, gaping hole needed to install it. The red, tilted rectangle shows a column of 2.40 m in height and 70 cm wide, as posited by van Pelt. Since it would have been impossible to carry it in one piece into that room and install it, it would have been necessary to assemble it from its components right on the spot. The yellow rectangle depicts Kula’s middle column, 40 cm wide, which could have been inserted through a hole of that size.

At 3 m high, these columns were therefore either too tall or not tall enough, because the combined height of the room, the roof’s thickness and the layer of soil on top of this roof was 3.10 m. Hence, in order to let an introduction column protrude noticeably from the soil, it had to be considerably longer than that (3.50 m and more).

In other words: Kula’s columns, first design, would have been way too long to fit into the room, too short to stick out of the soil, and too wide to fit through any hole in that roof. Someone must have figured that out, because when testifying in court several months later, Kula’s column

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173 The thickness of the concrete roof and the layer of soil are shown in various blue prints; cf. Mattogno 2016b, p. 364; 2015a, pp. 89-91.
had shrunk to almost a fitting height and to a slender width of almost only a third of Kula’s first design.

I pointed out earlier that these columns had to be securely anchored into the concrete of the ceiling and floor with a hoop iron. This can be illustrated for the hole shown in Figure 82. Van Pelt (2002) and Keren et al. (2004) posit that this was the northern-most introduction hole into which Kula’s columns were mounted. In his version of Kula’s column, van Pelt even added the bolts with which the outer part of the column would have been anchored into the ceiling, see Figure 99. Figure 100 shows a top view of this hole. Its maximum width is indicated by the red arrows (50 cm). Kula’s column, first design, is said to have had a square side length of 70 cm (yellow arrows). The semi-transparent yellow rectangles indicate the area where van Pelt’s bolts required to anchor the columns in the ceiling would have been located. It should therefore be possible to find remnants of some of these anchoring points in the concrete still today, but as I said before, there is no trace of them.

On top of that, I also posit that Kula’s column could not have worked as he claimed. Kula initially stated that the Zyklon B gypsum granules were poured into the narrow space of 2.5 cm between the inner column’s sheet metal core and its outer screen. Already pouring the pellets into that narrow space could have led to clogging anywhere along the height of the column. Even if that did not happen, it is safe to say that the gypsum pellets would have gotten very

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**Figure 98:** Cross section through Morgue #1 of Crematories II and III (Pressac 1989, p. 329). Green: column according to Kula – theoretically installable from the top only, but too short and too wide; yellow: middle column according to van Pelt – installable from the top, but also too short; red: outer column according to van Pelt, which had to be assembled on the spot from its components.

**Figure 99:** Anchoring bolts in Kula’s column according to van Pelt. Section enlargement of Figure 97.
wet. There are two reasons for this.

First because the room it was inserted into is said to have been filled with people. They would have produced an atmosphere saturated with water. This humidity would have condensed on anything colder than the air those people exhaled. In addition to this, in the case under investigation here, hydrogen cyanide would have evaporated vigorously from the carrier, withdrawing considerable amounts of energy from it, hence cooling it down. This would have led to the condensation of large quantities of air humidity onto the pellets.

Wet gypsum tends to stick and clump together. Getting this wet gypsum, which would have stuck to the screen while still releasing poisonous hydrogen cyanide, out of the inner column would have been rather difficult. Pounding the screen to get the pellets out would quickly have ruined that flimsy inner column. In brief, it would have been a mess.

The situation gets even worse when we consider Kula’s second description, where this space has shrunk to a mere 15 mm. It wouldn’t even have been possible to get the Zyklon-B granules to fall down such a narrow gap without...
getting stuck and clogging the whole thing, let alone clean it out afterwards with moist, clumped-together gypsum sticking to the screen.

There is one document which orthodox scholars claim proves the existence of Kula’s columns. It is a handwritten entry in an inventory list for Crematorium II saying “4 Drahtnetzeinschiebevorrichtungen” (Pressac 1989, p. 430), which, literally translated means something like “wire-mesh push-in device.” I have reproduced this handwritten entry in Figure 101. The following points deserve to be emphasized:

– It is unknown by whom and when this handwritten entry was made.
– This entry is made for Morgue #2, the alleged undressing cellar, not(!) for Morgue #1, the alleged “gas chamber.”
– If Kula’s introduction columns had been included in this inventory list, they would appear with an appropriate name describing the whole thing, not just a “push-in device,” which could only be the inner, movable part of Kula’s device.
– In German, _schieben_ describes horizontal (pushing) movements, whereas for vertically lowering an object, the word _lass_ is used, _i.e._, _Einlassvorrichtung_ instead of _Einschiebevorrichtung_.

There is, in fact, a very mundane explanation for this entry. In furnace technology, devices used to push objects into hot furnaces are generally referred to as “Einschiebevorrichtungen” (push-in devices) in the German language. Alexander Zimmermann writes, for instance, about baking ovens (2006, p. 303):

“For the loading and unloading [of the oven], baking plates are hitched and unhitched from the support chains by a slider for unloading and loading [Aus- und Einschiebvorrichtung], which operates without jolting, and are automatically inserted into and then removed from the oven.”

In a German patent for an automatic pizza oven, this term is mentioned several times. In the context of devices for pushing coffins into cremation muffles, the term shows up as well (cf. Driessen 2011), but more often the closely related term “Einschubvorrichtung” (Schlickenrieder 2010; Romanowski 2011). On March 7, 2003, the voluntary fire fighters of the German city of Hof had to respond to a call from the local crematorium, because a “deficient [corpse] Einschubvorrichtung” had caused a fire of the furnace system. It is in fact easy to find many more contexts in which the term is being used, but I will leave it at those few examples of interest in the present context.

The crematories of Auschwitz, by the way, indubitably had one opening each to throw in items: that of the waste incinerator in the chimney wing of

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174 _E.g._, a cabinet’s drawer is a _Schublade_ (the German verb _schieben_ (to push) is irregular: _schieben, schob, geschoben_; noun: _Schub_ = thrust).
176 www.fw-hof.de/index.php/einsaetze?monat=3&submit=OK
177 On this see also Vincent Reynouard’s documentary “Oven loaders at Auschwitz—a mystery solved?,” https://vid.me/qrp6.
Crematories II and III, which was called “Einwurfblende,”\textsuperscript{178} and the opening to fill in coke into the coke-storage space of Crematories IV and V, called “Kohleneinwurffenster.”\textsuperscript{179} “Einwurf” means throw-in, and as such any Zyklon-B-throw-in column should have been called as well: “Einwurfvorrichtung” – “throw-in device.”

Whatever this handwritten entry in the inventory of Morgue #2(!) really referred to, one thing is clear: it does not support Kula’s claim of the existence of complex Zyklon-B-introduction devices in Morgue #1(!) of Crematoria II and III (whose inventory has no such entry).

But let us assume for a moment that the SS faced the problem of introducing HCN into Morgues #1 of Crematoria II and III after their roofs had already been finished. I offer two options to solve the problem, and every reader might pick the solution that seems more likely:

a) Pierce (2×4=) eight holes through the reinforced concrete roofs – a laborious and expensive task, leading to massive, irreparable damage to the roofs’ layer of tar and upper cement layer; add (2×4=) eight brick or concrete shafts of at least 1 m height to lead the holes through the layer of soil on top of the roofs, and attempt to repair the damage done to the roof by the violent hole-piercing process – another laborious, material consuming, and expensive task; design and construct (2×4) eight wire-mesh columns 3 m high, consisting of three parts: a panic-proof, outer column made of massive steel (which does not correspond to Kula’s claims, though), a middle wire-mesh column (with no purpose at all but to hinder the HCN from spreading out), and a removable inner wire-mesh column, another laborious, material- as well as time-consuming, and expensive task; find a way to anchor these eight devices panic-proof in the concrete floor, ceiling and maybe even in the pillars, another laborious and expensive task; all these works had to be planned, approved, tested, and material had to be allocated, leaving a thick and long “paper trail” of documents (which, by the way, doesn’t exist); but finally, all one would possess at the end would be a

\textsuperscript{178} Files of the Höss Trial, APMO, Vol. 11, p. 84 (list of orders from the Central Construction Office to the metalworking shop regarding the crematoria as compiled by Jan Sehn).

\textsuperscript{179} Daily labor reports of the company Riedel & Sohn of March 11 + 12, 1943; \textit{APMO}, BW 30/4/28, pp. 36f.
primitive device allowing for the simple introduction of Zyklon B into the inner column; one had to sit and wait for a long time until a lethal amount of HCN had evaporated from the Zyklon-B carrier and had spread throughout the morgue, or alternatively, one had to apply an excessive amount of Zyklon B to ensure high evaporation rates for quick execution success, and remove and destroy the Zyklon B after the gassing, though only a fraction of the HCN contained on the carrier had been released by then.¹⁸⁰

But there was a second, much simpler option:

b) Installing a simple basket – to hold Zyklon B – in the air intake ventilation shaft of Morgue #1 right after the easily accessible intake fan, which then would blow the HCN vapors right into the “gas chamber,” similar to the Degesch circulation procedure. This would have reduced the gassing time and the amount of Zyklon B required to a fraction compared to any scenario where Zyklon B is simply kept closely together in heaps without any moving air.¹⁸¹ Since the intake and exhaust ducts were close together, one could have connected both with a duct, so that with the help of a few dampers in the ducts it would have been possible to switch the system to circulation, thus circulating the air filled with poison gas during the gassing procedure.

I assume the point I am making is clear: there were all sorts of cheaper, way-better and less-complicated solutions available than suggested by Michał Kula. His solution is simply impracticable and is an insult to every engineer’s and architect’s intelligence – naturally bearing in mind the fact that the ruins of Crematorium II clearly prove that no such columns were ever installed anyway, if they ever existed in the first place.

In summary, the arguments relating to the introduction columns may be listed as follows:

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<thead>
<tr>
<th>ALLEGATION</th>
<th>FACT</th>
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<tr>
<td>Zyklon-B-introduction shafts are visible on Morgue #1 (“gas chamber”) Crematoria II and III on air photos.</td>
<td>An analysis of this air photo shows that the spots visible have no spatial height, have an irregular shape, an incorrect size (much too long and wide), and irregular directions different from the ambient shadows; these spots can therefore neither be shadows of any objects, nor can they be the legendary Zyklon-B-introduction shafts.</td>
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¹⁸⁰ For evaporation rates of Zyklon B, see Section 7.2 and Paragraph 7.3.1.3.
¹⁸¹ The brick air-intake duct was easily accessible from the attic, where the fans were installed, and from the ground floor; see Pressac 1989, pp. 276, 291, 329, 369.
The introduction shafts are visible in a ground photo of Crematorium II.

These three objects are only visible in one photograph; they are missing in others. They stand closely together, have different dimensions and irregular alignment and are not evenly distributed across the roof. Introduction shafts would have the same size, a regular alignment and would be evenly distributed over the roof. The objects do not accord with the holes actually found, either in location or in number.

For planned introduction holes, cleanly cast and reinforced holes with concrete/brick shafts protruding over the layer of soil lying on this roof would be required.

The only two holes deserving this name clearly show chisel marks; the concrete structure was destroyed at a later time; there are no smooth, cast concrete edges and surfaces, no shaft-like elevation to prevent the entry of rainwater and soil into the hole. All other cracks and openings are highly irregular, filled with reinforcement rods, and obviously caused by the collapsing roof being pierced by pillars and bent over the longitudinal beam.

For holes chiseled in, the reinforcement rods would have to be removed, the edges polished off, and a protruding shaft built. Such holes would be severely damaged by an explosion.

In all cases the reinforcement rods still project into the holes; in one case, these were only cut in one place and bent back. The edges of all holes and cracks were not plastered; the tar insulation is openly visible; there is no trace of any shafts added. The “best” of these holes is in an area relatively unaffected by the explosion that blew up this morgue, proving that this hole was chiseled in after the war.

The installation of introduction devices running from the ceiling to the floor requires panic-proof fixtures, such as bolts attached to hoop irons with dovetails.

No trace of such fixtures can be found anywhere, hence no such devices were ever installed. There is also no documentary or physical evidence that such devices ever existed. The most important witness for these devices contradicted himself and made demonstrably false statements rendering him untrustworthy.

5.4.1.2.10. Conclusions
The hypothesis about the criminal traces is based on the assumption that, starting in the fall of 1942, several changes were made to the design of Crematoria II and III in order to be able to repurpose them for the claimed mass extermination. The most-important changes necessary for this, however, were not implemented:

– The capacity of the ventilation system was not increased, but corresponded to that common for morgues.
– No heavy, gastight and escape-proof steel doors were ever installed.
– No device was ever planned to introduce the poison gas into the claimed “gas chamber” (the never-existing holes are seen to have been knocked through afterwards).
This not only refutes Pressac’s “criminal traces,” but in addition also all the “eyewitnesses,” who have been discredited without exception. The alleged homicidal gas chambers in the Crematoria I-III are therefore already now refuted upon the grounds of building engineering alone.

5.4.2. Crematoria IV and V

Figure 102 shows the ground plan of Crematorium IV and mirror-symmetrically that of Crematorium V.\textsuperscript{182} Based on cost considerations, these buildings, planned and begun later, were constructed in a simpler manner than Crematoria II and III. Due to low-quality materials, the furnaces of both crematoria broke down shortly after they had been put into operation. Due to an apparent cremation over-capacity, Crematorium IV was taken out of service permanently, while Crematorium V was more often out of service due to repair than operational (cf. Mattogno 2003c, pp. 403-405). There are few documents as well as contradictory and, to some extent, incredible witness testimonies relating to these installations, which, according to Pressac, must be considered the least well-known.\textsuperscript{183}

These crematoria were planned starting in the summer of 1942 and built until early 1943. According to Pressac, in addition to the two western rooms,

\textbf{Figure 102:} North lateral view (above) and ground plan (below) of Crematorium IV and/or V (mirror image) in Auschwitz II/Birkenau Camp.\textsuperscript{182}


\textsuperscript{182} Blueprint received from R. Faurisson. The same blueprint is reproduced in Pressac 1989, p. 401, but with very poor quality.

\textsuperscript{183} Pressac 1989, pp. 379ff., chapter on Crematoria IV and V: “[…] the least known of the instruments of extermination […] a comparison of such testimonies reveals inconsistencies.”
which bear no designation in the plans, the vestibules are also supposed to have been used as homicidal “gas chambers.” All these rooms possessed allegedly gas-tight hatches with wooden shutters approximately 1.50 m from the floor and measuring 30×40 cm, in the exterior walls, for the introduction of Zyklon B, which are later supposed to have been widened to 40×50 cm (1989, p. 386).

Both rooms had heating furnaces that needed to be fired from the vestibule, which, according to Pressac, was allegedly also used as a “gas chamber.” A ventilation system was ordered only for Crematorium V, since Crematorium IV had been decommissioned. This system was delivered in early 1944 and evidently installed sometime during spring 1944, although it is unclear in which rooms, since the construction drawings attached to the cost estimate apparently are lost (Pressac 1993, pp. 88-90; Mattogno 2015a, pp. 173-176).

In 1982 Pressac posited that these “gas chambers” were not planned and built as such either, which he based, among other things, on the fact that the absence of a ventilation installation (for Crematorium V at least until early 1944) would have led to a need to evacuate the entire building for many hours during a gassing. It is in fact inconceivable for a gas chamber not to possess a ventilation system, regardless of the purpose for which it was designed.

In his second book, Pressac leaves these arguments unchanged (1993, pp. 67, 89). But since the mass extermination of the Jews was supposed to have been already fully underway – particularly in Bunkers I and II – when Crema-

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**Figure 103: Crematorium IV, summer 1943 (photo taken by SS Unterscharführer Dietrich Kamann)**

Germar Rudolf ∙ The Chemistry of Auschwitz

Victoria IV and V were being planned, it is of course absurd to believe that these installations could have been incorrectly designed and built. Hence Pressac intermittently assumed a “criminal planning” of the crematoria (1989, p. 447), although he had to admit that the hypothetical gassing procedure would have been “irrational and ridiculous” (ibid., p. 386). The claim of such criminality is allegedly supported by various documents mentioning the “installation of gas-tight windows,” “pouring concrete floor in gas chamber,” and repeated references to gas-tight doors in various connections (ibid., pp. 406, 442-455).

As already shown in the chapter on the disinfestation of personal effects, the German word “Gaskammer” (gas chamber) was the designation commonly used at that time for spaces used for the disinfestation of personal effects. The combination of crematoria and disinfestation installations in one and the same building was very common practice at that time. Hence, in the case of Crematoria IV and V, one may assume that the rooms in question here were temporarily intended for disinfestation purposes, but in the absence of any ventilation system, the respective rooms of Crematorium IV were certainly never used as such, and those of Crematorium V could have been used as such no earlier than early 1944, if the ventilation system installed even served these rooms to begin with.

For a prominent example, one need only consider Dachau Concentration Camp, the crematorium building of which contained a series of Degesch circulation delousing chambers, see p. 74.
Mattogno has shown that the term “gas chamber” is always used in the singular and that documentary evidence points to the installation of showers in one of the two rooms in question. Both rooms in question had waste-water drains. Construction activities, which are referred to as “water installations” or “sanitary installations” in the documents, lasted from March 15 to April 23, 1943, and comprised a total of 816 man hours, hence were rather large construction projects. Mattogno posits that the large stoves installed in these rooms, which had to be fired from the hallway, served to both heat the shower rooms and provide hot water for the showers. The moisture in those shower rooms would also explain why the lamps were placed in recesses. This supports the thesis that these rooms served as hygienic centers. Mattogno also concludes from the extant documents that the vestibule may have been considered to serve as a disinfestation gas chamber (Mattogno 2015a, pp. 177-179). A ventilation system would have been indispensable for this, however.

Pressac quotes a document by means of which “210 gas-door anchorings” were ordered in Auschwitz (1989, p. 451). This document indicates that the term gas-tight (“gasdicht”) does not necessarily constitute a reference to execution of disinfestation chambers, since it has never been claimed that there was a need for roughly one hundred doors for homicidal “gas chambers” at Auschwitz. It is entirely possible that all doors and windows were designated as “gastight,” if they were equipped with felt insulation and were therefore sealed off against air infiltration, a characteristic not at all common at that time in windows for inmate barracks in a concentration camp.

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186 Pressac 1989, pp. 399f.: “Kavernischen” / “Wand-Lampen versenckt [sic].” According to Pressac, the lamps were recessed to render them waterproof, ibid., p. 400.

187 At least the windows of those inmate barracks still accessible today in Birkenau have been
Pressac provides yet another item of proof that the term “gas chamber” has no criminal significance in Auschwitz documents. One document states: “1 key for gas chamber.” Since all “gastight” doors found at Auschwitz, as well as all surviving photographs of such doors, show that these doors had no locks, this document must refer to a door for another type of room, such as a room for the storage of Zyklon B, which truly required storage under lock and key (1989, p. 456).

The walls of Crematoria IV and V, which were built entirely above ground, were of simple brick masonry. After they were blown up, both buildings were demolished to their foundation walls and concrete foundations. The foundation wall of Crematorium V, which today is approximately 1 m high, is supposed to have been rebuilt (ibid., p. 390). The foundation wall of Crematorium IV, which is approximately 50 cm high, is also supposed to have been rebuilt out of other rubble at a later time (Markiewicz et al. 1991).

Even these reconstructions can still speak to us, even if, in this case, only the concrete foundations are authentic. Because another technical precondition for the use of the rooms alleged to have been homicidal “gas chambers” would be that it would have to have been rendered impossible for the victims on the inside to get anywhere near the introduction hatches, since otherwise they could have simply pushed the SS man off the ladder while he was throwing

installed in a very sloppy way, so that the wind blows intensely through the gaps. It is, however, questionable whether these barracks are authentic or were rebuilt after the war.
the Zyklon B into the chamber; they could then have attempted to escape. A U-shaped, solid steel grid construction anchored in the floor and in the masonry of the walls with steel hoop anchors spread out into dovetails would have been necessary to keep the victims on the inside at arm’s length from the hatches. The concrete floors of these rooms surviving today, however, make it clear that nothing of the sort was ever anchored in the floor.

Mattogno has discovered that the small openings in those rooms, which came in two sizes of only 15 cm × 25 cm or 20 cm × 30 cm when deducting the frames, had iron bars in front of them. This would have made it impossible to stick a can of Zyklon B through them, hence the introduction of the poison as attested to by witnesses was not possible (Mattogno 2015a, pp. 168ff.; see Documents 7f., pp. 406f.). These bars were even confirmed by the witness Henryk Tauber, whom Pressac considers to be 95% reliable (1989, p. 169; Tauber 1945, p. 6):

“For throwing in the ‘Zyklon,’ there were openings with bars in the walls at a height of two meters that could be closed hermetically by means of covers.”

5.4.3. Bunkers 1 and 2

According to witness accounts, there are supposed to have been two farm-houses (usually referred to as Bunkers 1 and 2, but sometimes also as Red House and White House), located west-northwest of the Birkenau Camp, which are said to have been converted into homicidal gas chambers. Pressac mentions contradictory witness reports in this regard (1989, pp. 161ff.). Relating to the testimony of Pery Broad, for example, he writes: “[…] not exploitable […], since it has been rewritten by and for the Poles […],” and: “It is impossible to make a synthesis of all these accounts.” Höß’s report relating to the characteristics and location of these buildings is only superficial (Bezwińska/Czech 1984, pp. 95, 111, 116, 123f.).

The claimed procedure has been described in some detail by the former SS man Richard Böck.\footnote{Interrogation of Böck during pre-trial investigations for the so-called Frankfurt Auschwitz Trial; ref. 4 Js 444/59, sheets 6881-6883; cf. Rudolf 2003b, pp. 470-472.}


There are, moreover, a number of other witnesses\footnote{Pressac 1989, pp. 161-182; Mattogno 2016j, pp. 64-159.} whose statements have been analyzed by others, to which I refer.\footnote{According to this, the homicidal mass gassings are supposed to have taken place in a manner similar to those in the chambers of Crematoria IV and V, as described above: These gassing facilities are said to have contained several small gas...}
chambers without any technical equipment (i.e., no ventilation, no circulation device, no device to release the poison). Zyklon B is said to have been thrown in through small openings in the wall. Ventilation allegedly occurred through the access door(s). The witnesses disagree about any other detail (number and size of the chambers, the doors, the openings etc.).

The location of Bunker 2 is today generally identified as being identical with the ruins of an old brick house west of the Zentralsauna.\(^{191}\) The details of this building as they can be inferred from the ruins, however, cannot be reconciled with the witness claims (Mattogno 2016j, pp. 190-192). There is no trace of Bunker 1. Although the Auschwitz Museum has erected a memorial near the museum’s tract on a spot where this bunker supposedly stood (see Figure 108),\(^ {192} \) no material evidence seems to exist in support of that claim. Although a German wartime map of the camp reveals that several buildings did indeed exist at the location where Bunker 1 is said to have been, these buildings were evidently demolished during the development of the Birkenau Camp’s Sector III in order to make room for the wastewater treatment facility (Mattogno 2106l, pp. 171f.).

Documents indicating that these buildings were ever used for anything by the camp administration don’t seem to exist. Although the Auschwitz Museum

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\(^{191}\) See *e.g.* the photos of the ruins in Pressac 1989, p. 176; Mattogno 2016j, pp. 242-244, 251f.

published two documents dating back to early 1944 which mention a “Bunker I, Birkenau” (Bartosik/Martyniak/Setkiewicz 2014, p. 101), it is unclear what building this could have been and where it was located. The orthodox narrative moreover claims that Bunker 1 had been dismantled in early 1943 and has never been rebuilt.

Fact is that in 1942 the SS converted an existing building at a location near where Bunker 1 is said to have been, into a disinfestation and sauna facility for the camp guards (at some distance from the area of the Birkenau Camp, which at that time was still rather small). But for now, it has to remain open whether this disinfestation facility for the SS guards was the seed crystal for rumors about the existence of an alleged homicidal gas chamber. It is at any rate not credible that the SS would have set up a disinfestation and sauna facility near a mass-murder facility with gigantic cremation pits, because the legendary Bunker 1 is said to have been in that area as well.193

5.4.4. The Drainage System in Birkenau
5.4.4.1. Background: Witness Accounts
J.-C. Pressac quotes various witnesses claiming that due to the limited capacity of the Auschwitz crematoria, a large portion of the bodies of the victims of

193 Cf. in this regard my discussion in the epilogue to Mattogno 2016j, pp. 203-212.
homicidal mass gassing were cremated in open-air pits. These pits were allegedly located north of Crematorium V as well as close to Bunkers 1 and 2. The size of these pits is described as roughly 20-60 m long, 3-7 m wide, and 1.5 to 3 m deep (Pressac 1989, pp. 162-164, 171, 177, 253; cf. Mattogno 2016g).

5.4.4.2. The Groundwater level in Birkenau

In his expert report, Fred Leuchter pointed out that due to the high groundwater level he found in Birkenau in 1988, it would have been impossible to dig deep pits and to light and maintain a fire in them (Leuchter/Faurisson/Rudolf 2015, p. 47). The reason for the high groundwater level is that the Birkenau Camp lies in the immediate vicinity of the confluence of the Sola River into the Vistula River. A few hundred meters away from the camp one finds swampy meadows even today.

Leuchter, however, did not investigate the important question of whether the groundwater level was similarly high in 1942-1944, when the events attested to by the witnesses took place. It has been pointed out that the Birkenau Camp had a sophisticated gridwork of drainage canals which lowered the groundwater level. This drainage system is still functioning fairly well to this day. Whereas the groundwater level around the camp is basically right at the surface, the drainage system in and around the camp must have lowered it to some degree. When I visited the camp in the midst of August 1991, the groundwater stood at some 60 to 70 cm beneath the surface near the so-called Zentralsauna. Figure 109, a photo taken on August 15, 1991, during a period with little precipitation, shows me dangling my leg into a construction trench in front of the Zentralsauna located in the western part of the camp.

Figure 109: Groundwater level in the Birkenau Camp in August 1991 – in a construction trench with the author (center) and Anita Philipp (left) in front of the Zentralsauna: approximately 70 cm.

But how effective was this drainage system in 1942-1944, and most important, how effective was it in the area north of Crematorium V and in the vicinity of the alleged bunkers, which were located outside the camp’s drainage system?

There are two pieces of circumstantial evidence indicating that the groundwater level was not much different than it is today. The first piece is the well-known small pond in the vicinity of Crematorium IV, which is supposed to have existed the same way during the war (see Figure 110). If the drainage system had lowered the groundwater level by several meters, the pond next to Crematorium IV would have dried up. This suggests a more-or-less unchanged groundwater level from then until now. The second piece is that the subterranean location of the morgues of the Crematoria II and III, as well as some of the building sections of the Zentralsauna, were possible only because they were constructed by sealing the buildings’ basements against intruding water with a waterproof layer of tar. This of course indicates that there was a need to protect against such water in the first place. Also, since the drainage ditches in the camp are only 1 to 1.5 meters deep, they could not have lowered the groundwater level by much more than one meter. This maximum value, though, can only be achieved in the immediate vicinity of the ditches.

Two complementary studies have demonstrated with a vast amount of contemporary German documents dealing with the camp authorities’ problems caused by the high groundwater level that between the end of 1941 and the middle of 1944, the groundwater level in Birkenau in general and outside the camp perimeter in particular was very high, coming close to or even reaching

\[ \text{Figure 110: Pond fed by groundwater west of the ruins of Crematorium IV in 1991. © Carlo Mattogno} \]
the surface and turning the entire area into a swamp. There are even German wartime documents showing that construction on buildings with basements was possible only by permanently pumping out groundwater. One document even expressively forbade the digging of pits for outhouse latrines, because this would have contaminated the drinking water of the entire Auschwitz region.

Both studies ignore the fact, however, that the groundwater level is never fixed. Especially in relatively flat river plains such as the area around the Birkenau Camp, the groundwater level not only depends on the amount of precipitation fallen prior to the observed period, but most of all also from the water level of the nearby rivers. During dry-weather periods, the groundwater level may have fallen, yet longer-lasting rainy weather within the upstream drainage basins of the rivers Vistula and Sola could swiftly turn this area into a swamp again.

5.4.4.3. Open-Air Incineration in Pits

In general, it is of course possible to burn corpses in open-air pits, though it certainly takes more time and fuel than any cremation in a crematorium, and it

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195 Gärtner/Rademacher 2003; Mattogno 2003a; both papers were reprinted in Part 3 of Mattogno 2016g.
196 RGVA, 502-1-83, pp. 111f.
also leaves many more traces due to incomplete combustion. In 1999, Dr. Myroslaw Dragan conducted an experimental incineration of an 80-lb. deer in a pit roughly 1 m deep, 70 cm wide, and 1.2 m long. This incineration with a relatively small amount of wood lasted some 4-5 hours and was almost completely successful. Dr. Dragan found that for open-air incinerations, small, narrow holes are advantageous over large, wide holes or, even worse, cremations on ground level, since the soil walls of a pit act like the walls of a cremation furnace, storing and reflecting a great deal of the heat produced by the fire – provided that the soil has a considerable amount of clay stabilizing the wall of the pit, and, of course, that no groundwater flows into the pit and extinguishes the fire.

The situation in Birkenau, however, was drastically different from that of Dragan’s experiment. Not only did the witnesses claim that those pits were very wide and long, but as Wallwey (Gärtner/Rademacher), and Carlo Matteogno have shown, the groundwater level in the areas around the alleged location of those cremation pits was so high that it would have been impossible to dig such deep pits, arrange hundreds of corpses and fuel in them, and maintain a fire for many hours without these pits quickly filling with water. These findings show clearly that the attested burning of corpses in pits many meters deep was impossible under such conditions, since these pits would have filled up with groundwater rather quickly.

It is known that in Birkenau the corpses which had accumulated during the typhus epidemic of the summer of 1942 were first buried in mass graves. Due to the danger of the contamination of the groundwater, however, they had to be exhumed shortly afterwards. Since the new cremation facilities were still under construction then, it is possible that at least a portion of these corpses were burned on funeral pyres. For this purpose, as a rule, one removes the turf and the upper layer of topsoil in order to preserve them from damage and to

197 Only small pieces of the skull were left over, which were located in a corner of the pit. Communications of Dr. M. Dragan, whom I helped to investigate the cremated carcass’s remains in June 1999.
absorb the ashes of the wood and the corpses. But holes many meters deep are not dug.

Indeed, one can unearth in excavations west of the Birkenau Camp ashes and bone splinters (whether from humans or cattle remains open) to the depth of several decimeters, extensively mixed with all kinds of refuse (glass and porcelain shards, slag, bits of iron, etc.). Apparently, this place served as a rubbish heap for the camp under German administration and/or after the war under Polish administration.

The decisive questions regarding open-air mass incinerations of corpses is: what should have been visible on air photos? Following the orthodox narrative, which is based on witness accounts, many hundreds if not as many as thousands of corpses are said to have been burned this way on certain days from the middle of May until the summer of 1944. As mentioned before, this allegedly occurred near the so-called Bunker 2 and also north of Crematorium V. (Since Bunker 1 is said to have been torn down in early 1943, it cannot be an object of our scrutiny of air photos taken in 1944.) However, neither the exact number of corpses cremated on those pyres can be determined nor on what exact days these fires would have burned. One could therefore posit that

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198 www.visitcumbria.com/foot-and-mouth-disease-in-cumbria. See also the video clip at https://youtu.be/q-gl4JM8Tg0.
exactly on those days when air photos were taken not one of these large fires was burning. Mattogno has demonstrated, however, that so many Hungarian Jews arrived at Auschwitz immediately prior to and on May 31, 1944 – most of whom are said to have been instantly killed and cremated – that the air photos taken on that day must perforce show huge outdoor fires – yet they don’t (Mattogno 2016g, pp. 57-59).

What should be visible on those air photos can be gleaned from data obtained in 2001 during a major outbreak of hoof-and-mouth disease among livestock mainly in Great Britain. In order to contain the epidemic, thousands of cattle, pigs and sheep had to be culled. Since the capacity of local incineration facilities for animal cadavers was absolutely insufficient for this huge amount of animal corpses, huge open-air incineration sites were set up all across Great Britain in order to simultaneously incinerate hundreds of animal cadavers.

Köchel has collected the data of this catastrophic epidemic and has analyzed it for the problem of interest here.199 The two results relevant in the present context are first that pyres comprising hundreds or thousands of corpses would not have burned for a few hours but rather for several days. Clearing out and subsequently reusing such a burned-down pyre could be done only many days after the pyre had been lit initially due to the enormous latent heat of the embers and ashes.

From this as well as from the collected data regarding the space requirements of such pyres, it can be deduced that the weekly outdoor incineration of thousands of corpses as claimed for Auschwitz would have required an area in the order of magnitude of a hectare (10,000 m², 2½ acres), if not a full square kilometer (0.4 square mile). Such an area would be clearly recognizable on air photos due to the destruction of the vegetation and the inevitably turned-up soil caused not only by the pyres themselves but also by the transportation of corpses, fuel and cremation remains in the surrounding areas. Such massive activities would be easily visible even if by chance none of these huge pyres was blanketing the area with thick smoke at the time the air photos were taken.

The huge amount of ashes and charcoaled fuel and corpse remains which inevitably would have been scattered over a large area, as well as the continually rising clouds of more-or-less dense smoke emanating from burning or smoldering pyres would have featured prominently in air photos, no matter whether or not fires had just been lit on the day photos were taken. Such pyres would have been clearly discernible from the air for weeks or even months.

None of this is even remotely visible in air photos taken between May and September 1944. Merely one tiny fire site of a few square meters in size north

199 Köchel 2015; reprinted in Part 3 of Mattogno 2016g.
of Crematorium V can be seen on some air photos (J. Ball 2015, pp. 97-101; Mattogno 2016g).

On the other hand, all of these air photos show four extended rectangular objects of some 10 m × 100 m in size north of Crematorium just outside the camp area. These could be flat, backfilled pits or mass graves. But there were evidently no activities around them, for the topsoil and the vegetation around them is undisturbed (J. Ball 2015, pp. 117-119; see Figure 112). These are probably older mass graves no longer in use – possibly for the victims of the catastrophic typhus epidemic that raged in Auschwitz since July 1942. Due to limited cremation capacities, not all of those victims could be cremated back then.

5.5. Construction Conclusions

Even the most-primitive temporary disinfestation installations – whether in the initial period of the Auschwitz Camp’s existence or elsewhere – were always equipped with ventilation and a heating system, the latter being, of course, useful but not absolutely necessary. But no room not possessing a ventilation system need be considered as a room for repeated application of poisonous gases, whether to kill vermin or human beings. Homicidal gas chambers must furthermore be panic-proof and have to be equipped, apart from the entry doors, with an opening for the introduction of the poison gas material from the outside. Although the latter is not absolutely necessary for disinfestation installations, it is nevertheless useful. It must be concluded, therefore, that no installation possessing either no option to introduce the poison from the outside, or no possibility of forced ventilation, or which could not be closed in a panic-proof manner, can seriously be considered to serve as a homicidal gas chamber. When summarizing the features of the rooms discussed above under these aspects, Table 2 ensues.

Not taken into consideration in the above, among other things, is the fact that the ventilation system of hypothetical homicidal “gas chambers” would have to be efficient enough for homicidal purposes, which, in view of the above, was not the case at Auschwitz, and that the evacuation of the poison gas into the environment after the gassing/execution required special measures in order to avoid people around the “gas chambers” – both inside the building as well as in its vicinity – getting hurt or even killed.

Although we have some information about the equipment of the rooms in Crematoria IV and V, the information is, to a certain extent, speculative due to the lack of documents and material evidence. This applies even more so to the bunkers, on which practically no documents exist.

Fortunately, it is precisely the one “gas chamber” in which the largest number of people was allegedly killed by poison gas during the Third Reich
that has remained intact to some degree: Morgue #1 of Crematorium II. Contrary to all witness testimony, this cellar, during the period of its operation, possessed no Zyklon-B-introduction holes in the roof, and none of its equipment (door, alleged introduction columns) was panic-proof. It is only logical and consequential to transfer these conclusions also to the mirror-symmetrically built, but otherwise-identical Crematorium III, even though we do not possess any physical evidence for this due to the almost complete destruction of the roof of its Morgue #1. If this is so, then those rooms cannot have been used for mass homicide using poison gas, as alleged by witnesses.

When one considers the technical circumstances prevailing in and around Auschwitz in the broadest sense, one becomes aware of the absurdity of the entire claim of homicidal mass gassings. The camp administration was fully aware of the methods and technical preconditions for Zyklon-B disinfestation, and was even informed as to the latest developments in the related technology. A document found in the files of the Central Construction Office even demonstrates that the Auschwitz camp authorities were always informed about the most-recent technical developments of gassing technologies, because on July 3, 1941, they received a copy of a special edition on the Degesch circulation device.200 But instead of using these methods, the currently reigning dogma has it that the camp administration allegedly took recourse, for homicidal mass-gassing purposes, to extremely crude methods, particularly where Bunkers 1 and 2 and later also Crematoria IV and V were concerned:

Allegedly, hundreds or thousands of people were killed with highly poisonous gas in rooms,
- which had walls and ceilings made of a material absorbing huge amounts of the poison gas and letting it penetrate;
- which did not have escape-proof doors and windows;
- which did not have panic-proof equipment;
- which did not have technically gastight doors and shutters;
- which had no provision to quickly release and distribute the poison gas;201

| Table 2: Equipment and suitability of actual or alleged “gas chambers” |
|------------------|-----------------|--------------|--------------|-----------------------------|-----------------------------|
| Building         | Equipment       | Poison gas introduction | Heating | Ventilation | panic proof | Suitable for disinfestation | Suitable for mass homicide |
| Disinfestation room | ○               | ●             | ●          | ○            | yes          | if panic-proof              |                            |
| Crematorium I    | ×               | ×             | ●          | ×            | perhaps      | no                          |                            |
| Crematoria II and III | ×               | ×             | ●          | ×            | perhaps      | no                          |                            |
| Crematoria IV and V | ×               | ●             | ×/●        | ×            | no/yes       | no                          |                            |
| Bunker 1 and 2   | ○               | ×             | ×          | ×            | no           | no                          |                            |

● = present or possible; ○ = possibly present; × = not present

200 Peters/Wüstinger 1940; RGVA 502-1-332, pp. 86/90; cf. Figure 31, p. 74.
201 Richard J. Green’s claim (2001, p. 31) that “there were in fact devices to distribute the gas over the room” is wrong. He refers to a paper dealing with M. Kula’s columns (McCar-
which had no effective device to ventilate or otherwise render ineffective the poison gas after the end of the execution.

At the same time, the most-modern disinfection installations were being built all over German-occupied Europe,

- which had walls and ceilings covered with gastight coatings;
- which were equipped with massive steel doors and had no windows;
- which had technically gastight doors;
- which had devices to quickly release and distribute the poison gas;
- which had effective devices to ventilate or otherwise render ineffective the poison gas after the end of the gassing procedure.

There were never any perceptible delivery problems for these installations. In the Auschwitz Main Camp, the latest technology for disinfection using HCN was even incorporated (cf. Paragraph 5.2.3.5), while the Zentralsauna at Birkenau was equipped with the most-modern hot-air disinfection technology! And to top it all off: the Germans even invented the microwave technology, which is so well-known today, to kill lice! They erected these installations, which were still very expensive at that time, exclusively in the Auschwitz Camp, to save inmate lives! And we are supposed to believe that the Germans were incapable of installing technical equipment at least adequate for Zyklon-B fumigations in their alleged homicidal “gas chambers”! Can anything be more insulting to the human mind?

So much for the claim that homicidal “gas chambers” existed at Auschwitz. We have also proven that the largest room, the one allegedly most-often used as a homicidal gas chamber, could not have been used for that purpose as stated by alleged witnesses. Together with the untruthful witnesses to a homicidal gas chamber in the Main Camp (see Section 5.3), and in view of the fact that there is no documentary indication of a criminal use of these rooms, we must conclude that there is no credible proof, and no “criminal trace,” in support of the claimed existence of homicidal gas chambers in Auschwitz.

Considering these facts, it cannot really be surprising that finally even mainstream historians and media are taking notice of them: In May 2002, Fritjof Meyer, a senior editor at Germany’s largest, left-wing weekly magazine Der Spiegel, stated in an article that documents and witness statements regarding the alleged gas chambers in the Crematoria II and III of Birkenau

“[...] rather indicate that attempts were made in March and April of 1943 to use the mortuary cellars for mass murder in the early summer of 1943. Apparently, the tests were not successful [...] The actually committed genocide

thy/van Alstine), but those would have impeded rather than facilitated the distribution of the gas (see page 150 and 237 of this present book).

Except maybe for Crematorium V starting in early 1944, when its ventilation system of unknown design was probably installed, and in case it could serve such a purpose.
probably took place mainly in the two converted farmhouses outside of the camp.”

In other words: there is a tendency to abandon those locations, which Prof. Dr. R. van Pelt called “the absolute center” in the “geography of atrocities” (see page 112), or even the Birkenau crematoria altogether, since, according to Meyer, the genocide is now supposed to have taken place mainly in those elusive bunkers, of which we possess no documentary evidence.

Following Meyer, the final destruction of the corpses of the alleged victims of mass murder is now supposed to have happened almost exclusively by means of open-air incinerations in deep pits. However, all claims made regarding the alleged open-air incineration of corpses in deep pits are obviously untrue, because no traces of such incinerations can be found in contemporary air photos, and because the high groundwater level in Birkenau would have prevented the maintenance of fires in deep pits.

Those readers who take no interest in the chemical problems relating to the alleged “gas chambers” in Auschwitz may skip the following Chapters 6 through 8. Prior to a solution to the problem of how the poisonous preparation was introduced into the presumed “gas chambers,” further speculation as to the manner and method of the murders, and their possible chemical traces, remains a mere academic exercise with no basis in reality. Our study of Auschwitz could, therefore, conclude here.

However, because the chemical questions involved attracted so much attention, caused the hottest controversies, and stirred the most-intensive debates, detailed remarks are nevertheless in order about the chemical questions first raised by Faurisson and Leuchter relating to the formation of residues (Iron Blue) which can be caused by chemical reactions of hydrogen cyanide with building materials.

5.6. Missing Documents

The lack of documents demonstrating the existence and use of homicidal gas chambers at Auschwitz goes beyond those dealing with architectural, engineering and administrative issues of certain buildings inside the camp.

Mattogno has pointed out that “among the thousands of tons of seized German [wartime] documents, which included numerous documents on experiments on human beings of various kinds, there was nothing on experiments with hydrogen cyanide” (Mattogno 2015c, Chapter V). Considering the widespread use of Zyklon B for disinfestation with the danger to all involved, German authorities should have had an interest in finding out exactly how dangerous hydrogen cyanide is to humans, and how best to protect people

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from it with protective garments and gas mask etc. This is even more true when claiming that they planned to use this chemical for vast mass-murder activities. Although German experiments with war gases are documented, none of them pertains to Zyklon B or hydrogen cyanide. Only in the mid-1970s did a researcher approach this question on behalf of the U.S. Army in the context of using this chemical as a war gas for mass killings (of soldiers). I will return to this in Subsection 7.1.2

In 1941, British Intelligence analysts cracked the German “Enigma” code. As a result, the British managed to intercept and decrypt radio communications sent between the German concentration-camp headquarters and the SS headquarters in Berlin between January 1942 and January 1943, right during the time period when the so-called final solution with the mass murder of Jews is said to have been at its peak. The information revealed by these radio messages, however, does not expose a program of mass murder and racial genocide. Quite the opposite, it reveals that the Germans were determined, desperate even, to reduce the death rate in their work camps, which had escalated due to catastrophic typhus epidemics. Hence, the UK’s intelligence decrypts prove that the German camp authorities were desperately trying to save their inmates’ lives, rather than to mass murder them (Kollerstrom 2015, esp. pp. 95-107).
6. Formation and Stability of Iron Blue

6.1. Introduction

Tens or even hundreds of thousands of people are claimed to have been killed in each of the alleged Auschwitz “gas chambers” by hydrogen cyanide in the form of the product Zyklon B®. The question which now arises is the following: could this poisonous gas leave chemical traces which could perhaps be detected in these alleged chemical slaughterhouses?

If hydrogen cyanide (HCN), the reactive compound in Zyklon B, were only bound to the walls by adsorption (adhesion), there would be no detectable residues left today, because hydrogen cyanide is highly volatile (boiling point: 25.7°C); all the hydrogen cyanide involved would long since have evaporated.

But if it turns out that, during a fumigation or gassing, hydrogen cyanide would combine with certain materials in the masonry to create other, considerably more-stable compounds, then one might anticipate the possible existence of chemical residues even today.

The reaction products of interest to us in this respect are the salts of hydrogen cyanide, called cyanides; of particular interest here are iron cyanides formed by the reaction of iron compounds with HCN. Iron occurs ubiquitously in nature. It is iron which gives bricks their red color, sand its ochre color, and clay its color ranging from yellowish to reddish-brown. More-precisely, we are speaking of iron oxide, popularly known as “rust.” Basically, all walls consist of at least 1% rust, as a result of the rust contents in the sand, gravel, clay and cement of which walls are constructed.

Iron cyanides have long been known for their extraordinary stability. One of them has achieved particular note as one of the most-commonly used blue pigments during the last three centuries: Iron Blue, also often referred to as Prussian Blue.

6.2. Instances of Disfigured Buildings

Section 1.3 already contained a discussion of two instances of disfigurement of churches which occurred in the 1970s in Bavaria, Germany. In the many

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204 Absorption and adsorption are not the same! Absorption is the incorporation (sometimes even consumption) of a matter into a medium (light is absorbed/consumed by a pigment, gas is absorbed/dissolves into a liquid), whereas adsorption is the adhesion of matter onto a – usually solid – surface (dust on furniture, fog on windscreens, vapors on any solid surface...);

Adsorption is further subdivided into chemisorption, in which the matter is bound to a surface by chemical bonds, and physisorption, in which the bonding is only a physical effect.

The transition between both is fluid.

205 For simplicity’s sake, “cyanide” is frequently understood to mean only the anionic part of the cyanide salts, the cyanide ion, CN⁻.
hundreds of thousands of fumigations which have been carried out since 1920, there cannot, as a rule, have been any complications. Otherwise the procedure would have been very rapidly abandoned. The cases in question were, therefore, exceptions. But what exactly was it that made these churches exceptions?

Change of scene. 1939-1945. In the camps of the Third Reich, hundreds of thousands of people – Jews, political prisoners, criminals, “anti-socials,” and prisoners of war – were crammed together. To stem the raging epidemics, attempts were made, not always with great success, to kill the carriers of disease, particularly body lice. This was done frequently with hydrogen cyanide, Zyklon B. This was done often in chambers professionally designed for such purposes, but sometimes ordinary rooms were equipped for such purposes in an auxiliary manner and temporarily used for disinfection.

Many of the camps in the Third Reich were leveled at the end of the war or afterwards. In other camps, the existing buildings were torn down and the building materials sometimes used to rebuild the destroyed cities. A few buildings, however, remain intact to this very day. The walls of these buildings look as in Figures 114 to 126, 142 to 152 and 154 to 166.

From the remarks of a Polish team of researchers who conducted investigations on behalf of the Auschwitz Museum, we also know that the disinfection chamber in the Auschwitz Main Camp is stained with a blotchy blue (Markiewicz et al. 1991, 1994). To my knowledge, only the Zyklon-B-disinfection chambers at the Buchenwald and Dachau camps (Degesch circula-

Figure 114: Northern external wall of the Zyklon-B-disinfection wing of BW 5b in the Birkenau Camp. (© Carlo Mattogno)
tion chambers) exhibit no blue pigmentation, probably because first of all the walls were professionally coated with a paint impermeable to gas and water, and facilities of this type were moreover operated with heated dry air. Warm, dry walls, however, don’t tend to absorb hydrogen cyanide and to accumulate them as cyanide salts, as we shall see further below.

It seems therefore that a blue pigmentation of masonry is no exception, but rather the rule, particularly where bare masonry is repeatedly exposed to hydrogen cyanide over long periods of time. The large-scale, long-term use of hydrogen cyanide for vermin control in disinfestation chambers only began, in practice, with the onset of the Second World War. And with the dissolution of the National Socialist camps, the confiscation of the corporation having manufactured and marketed Zyklon B (the I.G. Farbenindustrie AG), and the adoption of DDT toward the end of World War II, this large-scale use of hydrogen cyanide ended just as abruptly. No one cared about any “instances of disfigured buildings” having occurred in the former National Socialist disinfestation chambers in this period. The question never arose in the literature… until Frederick A. Leuchter came along.

The following is an attempt to find out how these blue pigments, referred to as Iron Blue, form in the masonry during fumigations with HCN, and the conditions favorable to their formation.

There have been many publications on this chemical compound since the

![Figure 115: Southern external wall of the Zyklon-B-disinfestation wing of BW 5b in the Birkenau Camp. (© Carlo Mattogno)](image)
end of World War II, which were perused and will be summarized in the following in relation to our topic. In so doing, attention was directed at:

1. the circumstances which lead to the formation of Iron Blue, and
2. the long-term stability of Iron Blue under the existing circumstances.

When writing the initial versions of this expert report intended to be presented in German courts of law, I was extremely anxious not to make any mistakes, because I knew that the topic was extremely controversial. As a consequence, I over-examined several chemical aspects involved, some of which can be understood only by chemical experts. Other aspects are not really necessary for an understanding of the core issue. In order to have a complete English version of my expert report, I nevertheless decided to include all the material I had accumulated over the years. Those sections, however, which are considered of marginal interest or of interest to experts only, I have given headings always starting with “Excursus.” For some readers, it might be advisable to skip these chapters. They will most likely not miss anything.

But first a short description of the starting substance, hydrogen cyanide.
6.3. Properties of Hydrogen Cyanide, HCN

Hydrogen cyanide, a colorless liquid, is similar to water in many of its physical properties. This similarity explains the limitless solubility of HCN in water and its strong tendency towards absorption (dissolution) in water. The equilibrium concentration of hydrogen cyanide in water is investigated in more detail in Subsection 6.5.4.

The opinion is often expressed that, because gaseous hydrogen cyanide is approximately 5% lighter than air (see Table 3), it must separate from air and rise. Hydrogen-cyanide gas is, however, only slightly lighter than air and does not separate because of the thermal movement of every gas particle. To illustrate this, let me explain it by considering the main components of air: 21 percent by volume (vol.-%) of our air is made up of oxygen, while 78 vol.-% is nitrogen. Oxygen, however, is some 14% heavier than nitrogen. If a separation took place between hydrogen-cyanide gas and air with a mass difference of only 5%, it would all the more occur between the two main components of air. This would have as a result that all the oxygen in a room would settle in the lower fifth of that room, hence we could breathe only in the lower one and a half feet of air in our rooms. Or in case of the earth’s atmosphere, this would result in all the oxygen settling in the lower fifth of the atmosphere. Pure oxygen atmospheres, however, are extremely conducive to fires. As a consequence, the entire surface of our planet would get oxidized, i.e., burn. Obviously, none of this happens, because the 14% mass difference between oxygen and nitrogen is not enough to cause a spontaneous separation of these two components of our air. Thus, a spontaneous separation of hydrogen-cyanide gas would never take place in air either.

However, the lower density of pure hydrogen-cyanide gas compared to air

<table>
<thead>
<tr>
<th>Table 3: Physical properties of HCN</th>
</tr>
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<tbody>
<tr>
<td>Molecular weight</td>
</tr>
<tr>
<td>Boiling point (1 atm.)</td>
</tr>
<tr>
<td>Melting point</td>
</tr>
<tr>
<td>Specific density of the gas at 31°C (air = 1)</td>
</tr>
<tr>
<td>Explosivity limits in air</td>
</tr>
</tbody>
</table>

206 High polarity, low molecular mass, possibility of formation of hydrogen bridge bonds.
207 Concentration is the number of parts per volume.
208 Roughly speaking, nitrogen, N₂, brings 2×14=28 nucleons to the table, while oxygen, O₂, brings 2×16=32. 32÷28=1.143
209 Braker/Mossman 1971, p. 301. I have left out some of the less-interesting dimensions in this connection: heat capacity (20.9°C): 2.625 J g⁻¹ K⁻¹ (Water=4.187 J g⁻¹ K⁻¹); dielectric constant (20°C; Weast 1986, E 40): 114 (Water=78.5); evaporation heat: 28 kJ mol⁻¹; evaporation entropy: 190 J mol⁻¹ K⁻¹; spontaneous combustion temperature: 538°C; flash point: -17.8°C. However, under normal conditions (1 atm, 25°C), hydrogen cyanide is not even a gas.
210 1 vol.% is 10,000 ppm (for HCN, roughly 12 g/m³)
(5% less, which corresponds to a density difference of air at 35°C as compared to air at 20°C) can very well lead to a density convection, if pure gaseous hydrogen cyanide is released in a location with the same temperature as the ambient air. The gas would then rise slowly, but gradually mix with the ambient air. But it would be incorrect to conclude from this that hydrogen cyanide vapors always rise. At 15°C, for example, on physicochemical grounds, no concentrations higher than 65% of hydrogen cyanide can occur in air (see Chart 2). The density of such a mixture lies only approximately 3% below that of air. Furthermore, a great deal of energy is withdrawn from the ambient air by the evaporating hydrogen cyanide. Consequently, the ambient temperature sinks until exactly as much energy is transported to the evaporating liquid HCN as is needed for the decelerated evaporation at the corresponding lower temperature. It is therefore theoretically possible for hydrogen-cyanide vapors containing little HCN, but which are cold, to be denser, that is heavier, than the ambient air.

Chart 2 shows the saturation or equilibrium percentage of hydrogen cyanide in air as a function of temperature. Even at 0°C, the percentage still lies at approximately 36% by volume. Condensation of HCN on surrounding objects would occur only if the percentage rose over the saturation point (the so-called dew point). Since in all cases here under consideration, a maximum concentration of 10% HCN in air would only be reached for a short period of time close to the source of HCN (the Zyklon-B carrier), no condensation of HCN on
walls can be expected. An exception is, however, the so-called capillary condensation, which can occur in finely porous materials such as cement mortar.\textsuperscript{211}

Hydrogen cyanide forms explosive mixtures with air in the range of 6 to 41\% by volume. With strong initial ignition, its explosive effects can be compared with nitro-glycerin, the usual explosive in dynamite (Foerst 1954, p. 629). In the applications under discussion here, a share of 6\% by volume and more can be reached in the immediate vicinity of the source, which suffices for local blow ups at the most.

Hence, only inappropriately high concentrations can lead to explosive mixtures, as shown by an accident that occurred in 1947.\textsuperscript{11} With correct application quantities and concentrations, the technical literature indicates that there is practically no danger of explosion (Schütz 1943, p. 201).

6.4. Composition of Iron Blue

6.4.1. Overview

The stoichiometric composition of an ideal Iron Blue crystal is:

$$\text{Fe}_4[\text{Fe}^{2+}(\text{CN})_6]_3$$

It is characteristic that the iron in this compound is present in two different oxidation states: Fe\textsuperscript{2+} (here in square brackets) and Fe\textsuperscript{3+} (here on the outer left). The interaction between these two different iron ions gives rise to the blue color of this compound (charge-transfer complex). The actual composition can be quite variable, depending on the stoichiometry on formation and the presence of impurities, hence the color can vary between dark blue and greenish-blue tones.

6.4.2. Excursus

It was with support of the Mösbauer spectroscopy\textsuperscript{212} that a long-lasting argument could be settled:\textsuperscript{213} Turnbull’s Blue, Fe\textsubscript{3}[Fe(CN)\textsubscript{6}]\textsubscript{2}, is actually the same as Berlin Blue, Fe\textsubscript{4}[Fe(CN)\textsubscript{6}]\textsubscript{3}, even if the formulas suggest they are different. As a matter of fact, the formula of Berlin Blue is closest to the reality. In the ideal Iron Blue crystal, up to 16 molecules of coordination water are included:

\textsuperscript{211} The lowered vapor pressure caused by adsorption effects in a narrow hollow space leads to early condensation.

\textsuperscript{212} Impulseless resonance absorption of \(\gamma\) quants (gamma radiation) from a radioactive isotope, here Cobalt: \(^{57}\text{Co} \rightarrow ^{57}\text{Fe} + \gamma\) (main quant: 122 keV; quant used for spectroscopy has a different energy).

\textsuperscript{213} Fluck et al. (1964); Duncan/Wigley 1963; Buser et al., 1977), pp. 2704-2710. Single crystals of Iron Blue of high purity and homogeneity were obtained by slow oxidation of a solution of Fe[Fe\textsuperscript{2+}(CN)\textsubscript{6}] in concentrated (!) HCl\textsubscript{aq} in air. Even in the presence of molar amounts of potassium, only some 2\% inclusions were observed.
It is known today that the “soluble” Iron Blue, a term frequently found in older literature, is mainly a substance with the following composition:

$$\text{MeFe}^{III}[\text{Fe}^{II}(\text{CN}_{6})] \cdot x \text{H}_{2}\text{O},$$

where Me is the counter ion to the opposite cyanoferrate, $[\text{Fe}(\text{CN})_{6}]^{3-/4-}$, mostly potassium ($\text{K}^+$) or ammonium ($\text{NH}_4^+$).

According to Buser et al., “soluble” Iron Blue is formed mainly during quick formation and precipitation of the pigment, leading to the inclusion of large amounts of water and potassium or ammonium ions in the extremely voluminous precipitate. The resulting crystal is therefore very faulty and more appropriately called a polymer.\(^{214}\) By filtration, drying and intensive grinding, this very inhomogeneous, polluted Iron Blue can be transformed into a pigment which is colloidally dispersible, although only with difficulty.\(^{215}\) This “soluble” Iron Blue is not soluble in the original sense of the word, but can more easily be collooidally dispersed than the “insoluble” Iron Blue, which is

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\(^{214}\) Originally, this term was used only in organic chemistry for chainlike connected, sometimes also branched attachments of equal segments.

\(^{215}\) *Dispersion* (Lat.: *dispersere*, to disperse, distribute) are distribution of two different phases within each other. They are called *colloids* (Gr.: glue-like) if the particles are between $10^{-8}$ and $10^{-7}$ m small. Such a mixture in liquids scatters the light (Tyndall effect), thus is not clear. But due to electrostatic repulsion (equally charged particles), colloids do not tend to coagulate and precipitate.

*Suspension*: (Lat.: to float) are coarsely dispersed system with particle sizes bigger than $10^{-6}$ m.
very important for its application as a pigment. However, these colloids are very unstable and precipitate easily when salts are added.

According to Buser, even in the presence of high concentrations of potassium ions, almost pure “insoluble” Iron Blue can be obtained, if the formation process proceeds slowly enough (Buser et al. 1977). This is supported by Meeussen’s findings that stoichiometrically pure Iron Blue forms in aqueous solutions even in the presence of considerable amounts of alkali ions (Me⁺), rather than MeFe(Fe(CN₆))(Meeussen 1992, p. 83).

In case of deeper interest in the structure, please consult the literature.

6.5. Formation of Iron Blue

6.5.1. Overview

In the present context, we are only concerned with how Iron Blue arises from hydrogen-cyanide and iron compounds in masonry materials. In masonry materials, the iron is generally present in trivalent form (Fe³⁺), in the form of “rust.”

For the formation of Iron Blue, therefore, a part of this iron must be reduced to the bivalent form (Fe²⁺). The subsequent combination of these different iron ions with CN⁻ to Iron Blue occurs spontaneously and completely (Krleza et al. 1977, pp. 7-13). The most probable mechanism is one in which the cyanide ion itself acts as a reducing agent. The starting point in so doing is an Fe³⁺ ion, largely surrounded (complexed) by CN⁻ ions:


219 Photolytic decomposition of the [FeIII(CN)₆]³⁻ by means of UV radiation is also conceivable as an alternative. Since the interior walls of the rooms in question are not exposed to any UV radiation, this mechanism is ignored here. Stochel/Stasicka 1985; Ozeki et al. 1984; Moggi et al. 1966.
\[ \text{Fe(CN)}_{4-6}^{(1-3)} \]. A slightly alkaline environment is favorable to the final reduction of the iron(III) ion to iron(II).\(^{220}\)

The pigment formation in the case under consideration proceeds in five steps:

\(^{220}\) pH value of 9-10 according to Alich et al. 1967: Spectroscopic studies of the reaction of hexacyanoferrate(III) in water and ethanol. \(3.3 \times 10^{-4} \text{ M} \text{Fe(NO}_3\text{)}_3\) were exposed with a cyanide excess of likewise \(3.3 \times 10^{-4} \text{ mol L}^{-1}\). With pH values of approximately 10, all the \(\text{Fe}_2[\text{Fe(CN)}_6]\) was converted into Iron Blue within 48 hours. Cyanate, the anticipated product of the oxidation of the \(\text{CN}^-\), could not, however, be proven. Perhaps this is converted to \(\text{CO}_2\) and \(\text{NH}_3\). If this mechanism is assumed, the result, purely stoichiometrically speaking, is that an alkaline environment must be favorable. This finding is supported by the known fact that hexacyanoferrate(III) is a strong oxidation agent in alkaline medium and is even able to oxidize trivalent to hexavalent chrome, hence \(\text{CN}^-\) ions must be oxidized very quickly: Bailar 1973, p. 1047. An overly alkaline environment would, however, disturb the complexing of the \(\text{Fe}^{3+}\) ion by cyanide, which is then displaced by \(\text{OH}^-\) (so that \(\text{Fe(OH)}_3\) precipitates) and/or the latter can hardly be displaced from the iron.

The driving force in the reduction of the \(\text{Fe}^{3+}\) is the considerably more favorable energetical situation of the hexacyanoferrate(II) as compared to hexacyanoferrate(III). Calorimetric measurements relating to the formation enthalpies of Iron Blue from the respective educts (in parentheses) were as follows (Izatt et al. 1970):

\[ \Delta H(\text{Fe}^{2+} + [\text{Fe(CN)}_6]^{3-}) = -66.128 \text{ kJ mol}^{-1}; \quad \Delta H(\text{Fe}^{3+} + [\text{Fe(CN)}_6]^{4+}) = 2.197 \text{ kJ mol}^{-1}. \]

Along the same line, Capone et al. (1986) report formation constants \(pK^0\) for several hexacyanoferrates(II) from \(\text{Fe}^{3+}\) and cyanide between 50 and 57.

For this reason, a direct reduction of uncomplexed \(\text{Fe}^{3+}\), i.e., not surrounded by cyanide, has an energy disadvantage and is therefore negligible here.
a. Ad-/absorption of hydrogen cyanide (HCN);\textsuperscript{204}
b. Ionic splitting (electrolytic dissociation)\textsuperscript{221} of hydrogen cyanide in water to the cyanide ion, which alone can form complexes with iron;
c. Complexing of trivalent iron (Fe\textsuperscript{3+}) to the complex iron(III) cyanide (hexacyanoferrate(III)), that is, the displacement of oxygen and/or OH\textsuperscript{−} ions in rust by cyanide ions;
d. Reduction of iron(III) cyanide to iron(II) cyanide;
e. Precipitation of iron(II) cyanide with trivalent iron as Iron Blue.

The velocity of formation of the pigment can be influenced by various factors, which will be considered:

1. Water content of the reaction medium;
2. Reactivity of the iron;
3. Temperature;
4. Acidity.

\textsuperscript{221} Dissociation: is the splitting of a compound, in this case into two oppositely charged ions (heterolytic) in aqueous medium (electrolytic):

\[\text{HCN} + \text{H}_2\text{O} \rightleftharpoons \text{CN}^- + \text{H}_3\text{O}^+\]
6.5.2. Water Content

6.5.2.1. Overview

The formation of cyanide through absorption and subsequent dissociation of hydrogen cyanide in water is the necessary precondition for a reaction with iron compounds, since hydrogen cyanide itself exhibits only a low reactivity. All reactions listed in Subsection 6.5.1 under a. through e. occur almost exclusively in water. Water furthermore ensures that the reaction partners – all salts capable of being dissolved in water – come together in the first place. Finally, the moisture contained in building materials also acts as a hydrogen-cyanide trap, since hydrogen cyanide dissolves eagerly in water. Or the other way around: the drier a solid material is, the easier hydrogen cyanide, which was ad-/absorbed before, will be released back into the gaseous phase. A relatively high water content in the masonry will therefore considerably increase the speed of reaction.
The reason for the low reactivity of HCN compared to the cyanide ion is because HCN is less nucleophilic than the ion. Aside from the dissociation of hydrogen cyanide in water, the process of chemisorption on solid surfaces deserves being mentioned, where the hydrogen cyanide releases its proton (H\(^+\)) to an alkaline oxide and is itself attached to a metal ion. Absorption and dissociation of the superbly soluble hydrogen cyanide (see Subsection 6.5.4) is clearly superior to chemisorption. Furthermore, the aqueous solution (as solvent) is indispensable for the complex formation and redox reactions of the cyanide with Fe\(^{3+}\). Additionally, the aqueous medium makes the reacting agents mobile, which do not always form at the same location.

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**6.5.2.2. Excursus**

The reason for the low reactivity of HCN compared to the cyanide ion is because HCN is less nucleophilic than the ion.\(^{222}\) Aside from the dissociation of hydrogen cyanide in water, the process of chemisorption\(^{204}\) on solid surfaces deserves being mentioned, where the hydrogen cyanide releases its proton (H\(^+\)) to an alkaline oxide and is itself attached to a metal ion.

Absorption and dissociation of the superbly soluble hydrogen cyanide (see Subsection 6.5.4) is clearly superior to chemisorption. Furthermore, the aqueous solution (as solvent) is indispensable for the complex formation and redox reactions of the cyanide with Fe\(^{3+}\). Additionally, the aqueous medium makes the reacting agents mobile, which do not always form at the same location.

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\(^{222}\) **nucleophilic** (Gr.: core/nucleus loving) is the tendency of a particle to react with positively charged particles. For this, at least a partial negative charge of the nucleophilic particle is required. In this case, cyanide is, due to its negative charge (CN\(^-\)), much more nucleophilic towards the positively charge iron (Fe\(^{3+}\)) than the formally uncharged (though polar) hydrogen cyanide.
Experiments I performed with reactions of hydrogen cyanide (some 4 g per m³ in air, 15°C, 75% rel. humidity) with mixtures of Fe(OH)₂·Fe(OH)₃ attached to wet paper strips showed no blue discoloration after 30 min at a pH value of 2 to 3, since at such low values almost no hydrogen cyanide dissociates to the reactive cyanide (see Subsection 6.5.5). At pH values of 7 to 9, a visible blue discoloration occurred after a few minutes of inserting the sample. At higher pH values, this time span grew again, because the initially absorbed hydrogen cyanide had to lower the pH value first, before it could form the pigment (see Subsection 6.6.1, pH Sensitivity).

These experiments show clearly that undissociated, gaseous HCN or HCN dissolved as gas shows little reactivity. An addition of small amounts of KCN to an aqueous sulfuric-acid solution of Fe²⁺/Fe³⁺, however, results in the immediate precipitation of the pigment. The cyanide obviously reacts faster with the iron salts than it is protonated by sulfuric acid, *i.e.*, converted into hydrogen cyanide.

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223 *pH* (*pondus hydrogenii* = weight of hydrogen) is a measure for the acid content of aqueous solutions (negative common logarithm of H₃O⁺ concentration: -log₁₀(c(H₃O⁺))); pH < 7: acidic; pH = 7: neutral; pH > 7: alkaline.
6.5.3. Reactivity of Trivalent Iron

6.5.3.1. Overview

The solubility of trivalent iron diminishes rapidly with increasing alkalinity (rising pH value). Even in a pH-neutral environment, almost all iron is bound as rust.²²⁴ The reaction between iron compounds and cyanide ion resulting in the formation of the intermediate product iron(III) cyanide, \([\text{Fe(CN)}_6]^{3-}\), is therefore largely a reaction on the solid-liquid interface, that is, between the iron adhering to the solid body and the cyanide ion in solution. Such reactions occur considerably more slowly than those in an aqueous solution. The fastest possible reaction requires a large surface area on the solid-liquid phase boundary, that is, a large interior, microscopically rough surface and a fine, highly porous solid body, since in such cases a lot of the iron compounds lie on the surface and are less firmly bound and can relatively quickly combine with cyanide.

In an increasingly alkaline environment, only decreasingly small amounts of “rust” can slowly be converted into iron(II) cyanide, but the latter cannot react with iron(III) ions to form Iron Blue.

²²⁴ \(\text{Fe}_2\text{O}_3\cdot x\text{H}_2\text{O}\)}
6.5.3.2. Excursus

Even in an alkaline environment, it must be expected that rust, in the presence of perceptible cyanide concentrations, will be quite slowly transformed into iron(III) cyanide and finally into iron(II) cyanide.\(^\text{225}\) The last step required for the formation of Iron Blue, however, the combination of iron(II) cyanide with iron(III), will not occur due to the lack of dissolved iron(III) ions. In a strongly alkaline environment, an increasing concentration of iron(II) cyanide, which is chemically stable, can slowly accumulate. It might be said to remain in a stand-by position, pending a drop in the pH value.

Iron salts generally tend to incorporate water, and Iron Blue is no exception to this. A higher water content in the solid body results in increased water accumulation in rust, too. The rust swells up, so to speak, which makes it easier for cyanide ions and other ligands\(^\text{226}\) to replace the OH\(^-\) ions around the iron ion. Freshly precipitated, extremely moist and non-homogenous iron hydroxide is very reactive, and together with hydrogen cyanide, as mentioned in Paragraph 6.5.2.2, they form the pigment in visible quantities in minutes.

\(^{225}\) Although the equilibrium of the reaction \(\text{Fe(OH)}_3 + 6 \text{CN}^- \rightleftharpoons [\text{Fe(CN)}_6]^{3-} + 3 \text{OH}^-\) under such conditions is strongly on the left-hand side, a minute quantity of iron(III) cyanide will still be formed, as is well known. The latter, however, is withdrawn from the equilibrium in alkaline medium in the presence of excess cyanide, by being reduced by the latter to iron(II) cyanide, which is considerably more stable in alkaline medium than iron(III) cyanide; for further details, see also Subsection 6.6.1.

\(^{226}\) In complex chemistry, the term *ligand* usually refers to negatively charged particles (anions) surrounding a positively charged central particle (cation, in general a metal ion). In this case, the central atom iron (Fe\(^{2+}/^{3+}\)) is surrounded by the ligand cyanide (CN\(^-\)).
For the formation of colloidally dispersible Iron Blue, the quick formation in aqueous solution with high concentrations of the agents is required (see Subsection 6.4.2), since this leads to heterogeneous crystallites (tiny crystals) with many inclusions (ions, solvent molecules) and a high degree of disorder. These crystallites have only a small tendency to coagulate.

The slow reaction at the liquid-solid interface with quite-low concentrations of the reacting agents will suppress the formation of colloidally dispersible Iron Blue. The process described here, occurring in walls exposed to hydrogen cyanide, strongly resembles the formation of monocrystals as described by Buser (1977), since in this case also, one reagent (Fe\textsuperscript{2+}) has to be formed through slow reduction by excess cyanide. Thus, except for the inhomogeneous material, the conditions here under consideration are suitable for a slow crystal growth of insoluble Iron Blue without large amounts of inclusions and with formation of few crystal defects.

6.5.4. Temperature

6.5.4.1. Overview

The environmental temperature has an influence on the following processes and features:

a. Accumulation of hydrogen cyanide in the moisture of the masonry;
b. Water content of the solid body;
c. Velocity of reactions.

**a:** Chart 3 shows the maximum solubility of HCN in water at various temperatures with a hydrogen-cyanide content of 1 mol\% in air\textsuperscript{227}, which corresponds

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\textsuperscript{227} mol is a standard number of particles: 1 mol = 6.023 \times 10^{23} particles, according to the definition, the number of atoms contained in 12 g of carbon.
to approximately 13 g hydrogen cyanide per m³ air (Landolt/Börnstein 1962, pp. 1-158). It increases, as with any gas, with decreasing temperature and lies between 0.065 mol per liter at 30°C and 0.2 mol per liter at 0°C.

These high concentrations demonstrate the extreme solubility of hydrogen cyanide in water. It decreases by approximately half every 20°C. It is therefore approximately 10,000 times more soluble in water than oxygen (O₂) and approximately 250 times more soluble than carbon dioxide (CO₂).

b: The moisture content of masonry is very strongly dependent on the relative humidity of the surrounding air and the temperature. With rising temperature, the tendency of water to evaporate (water-vapor pressure) increases, whereas, as a rule, the relative humidity of the air decreases. Both effects lead to a drop in the water content; they therefore have a cumulative effect in case of an increase in temperature. Drops in water content by a power of ten at temperature increases of 10°C have been proven in the temperature ranges of 10 to 30°C under consideration (see Section 6.7).

c: Only an acceleration in the slowest of the five steps described in Subsection 6.5.1 can be responsible for a change in the velocity of the entire reaction. In neutral or alkaline medium, this is the displacement of the oxygen or OH⁻ ion in rust by the cyanide ion (Point c). Although the iron(III) cyanide [Fe(CN)₆]³⁻ itself is stable in a moderately alkaline medium – that is, the iron(III) cyanide is more stable than the rust – the displacement of OH⁻ by cyanide ions is inhibited in rust, since the rust is not dissolved in water. An increase in temperature by 20°C usually doubles the velocity of a reaction, if the other parameters remain unchanged. But they are not unchanged here in quite an extreme manner, because the massively decreased water content at higher temperatures (see above) has a drastically negative influence on the overall reaction’s velocity: a lack of the reaction partner’s mobility, a decrease

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228 See www.engineeringtoolbox.com/gases-solubility-water-d_1148.html.
229 See also Bailar’s remarks on the massive reduction force of Fe(CN)₆]³⁻ in the alkaline environment (1973, p. 1047; see note 220).
in the reactivity of iron, and less available cyanide due to a lower solubility of HCN in the capillary water and due to an accelerated degassing of ad-/absorbed hydrogen cyanide (see Subsections 6.5.2. and 6.5.3.). A strong reduction in pigment formation must therefore be expected at increased temperatures.

A decisively higher water content of the solid material and the considerably better absorption and solubility properties of hydrogen cyanide in cold water are the reasons for the tendency of solid materials to accumulate more cyanides at lower temperatures. In addition, an increase in the reactivity of iron oxide (rust) in the solid body with relation to hydrogen cyanide must be anticipated with a higher water content of the solid material at lower temperatures, as well as with a general increase in the reactivity of all agents. Cooler, and thus moister, solid materials are therefore better suited to the formation of Iron Blue than warm, dry materials.²³⁰

6.5.4.2. Excursus

There are two more reaction steps which could, theoretically, have an influence on the reaction under consideration:

A. Adsorption on the solid material;
B. Dissociation of hydrogen cyanide.

A: The adsorption of hydrogen cyanide on solid surfaces decreases with rising temperature, according to Langmuir (see Chart 4; Oudar 1975, pp. 26ff.).

\[ \Theta = \frac{\frac{K}{\sqrt{T}} \cdot p \cdot e^{-\Delta H/RT}}{1 - \frac{K}{\sqrt{T}} \cdot p \cdot e^{-\Delta H/RT}} \]

Θ = Degree of adsorption
K = constant
ΔH = adsorption enthalpy (negative)
R = universal gas constant
e = Euler’s number (2.71828...)
T = temperature
p = gas pressure

The intensity of the decrease of the equilibrium degree of adsorption (coverage) with rising temperature as well as the point of approximate saturation, however, are unknown for the problem at hand. But since, as discussed before, all chemical reactions under consideration require aqueous solutions anyway, adsorptions on solid, i.e., dry, surfaces are of no importance to our investigation.

B: According to the literature, the dissociation behavior of acids as a function of temperature is not uniform (Weast 1986, p. D 163). Although a tendency of increasing protolysis²³¹ prevails with rising temperature, this tendency of increasing protolysis prevails with rising temperature, this tendency

²³⁰ Needless to say, in the immediate vicinity and below the freezing point of water, the reactivity drops precipitously.

²³¹ Protolysis is the splitting of acids (HAc) into their corresponding acid anion (base, Ac⁻) and proton (H⁺, or with water to H₃O⁺): HAc + H₂O ⇌ Ac⁻ + H₃O⁺.

here: HCN + H₂O ⇌ CN⁻ + H₃O⁺.
cy inverts at higher temperatures for some acids, others show generally falling values. Since the changes are generally in the range of low percentages only for the relevant range of temperatures, and because speed of protolysis is generally very high anyway, hence never a restricting factor, this can be neglected here.

6.5.5. Alkalinity

The pH value (acidity or alkalinity) influences the formation in various ways. In Subsection 6.5.1, reference was already made to the higher reduction power of cyanide and iron(III) cyanide in alkaline environment. The pH value also influences the reactivity of iron compounds in the solid body (Subsection 6.5.3).

[Chart 4: Degree of coverage of the surface of a solid material with an adsorbed gas as a function of temperature (schematic).

[Chart 5: Degree of dissociation of hydrogen cyanide as a function of the pH value at room temperature: $pK_a = 9.31$ (Weast 1986, p. D 163).]
As remarked above, dissolved hydrogen cyanide hardly exhibits reactivity. The formation of cyanide ions by absorption and dissociation of hydrogen cyanide only starts in sufficient degree at neutral pH values and above, see Chart 5.

When using the saturation concentration of HCN as a function of temperature (Chart 3, p. 195) in combination with the equation that led to Chart 5, we obtain the relationship between temperature, pH value (alkalinity), and CN⁻ saturation concentration as shown in Chart 6 at a concentration of 1 mol% HCN in air, which is approximately 1% by weight, the usual disinestation concentration.²³²

At neutral pH values, equilibrium concentrations of CN⁻ are within the range of $3 \times 10^{-4}$ to $1 \times 10^{-3}$ mol per liter, depending on the temperature. An increase in the pH value by one point results in a ten-fold increase in the cyanide equilibrium concentration. The actual cyanide concentration in masonry is determined, apart from the material’s alkalinity, by the actual concentration of HCN in the air, the velocity of absorption of the gas, adsorption effects within the solid material, and possible reactions of the cyanide.

6.5.6. Carbon Dioxide

Carbon dioxide (CO₂) is a natural trace gas, today making up some 0.04% of earth’s atmosphere. Since some four to five percent of our exhaled breath consists of carbon dioxide,²³³ enclosed spaces used by humans frequently contain considerably more carbon dioxide than fresh air air does, depending on how

²³² Valid for ideal solutions.
²³³ http://en.wikipedia.org/wiki/Breathing
well they are ventilated. In the (alleged) cases under consideration, no ventilation would have taken place at all for an extended period of time in a room packed full of people. Hence the CO$_2$ content could have risen to several percent relatively fast.\footnote{Paragraph 7.3.1.3.2., p. 250, contains an indirect indication of the CO$_2$ content, as it is basically the difference between the baseline O$_2$ concentration in the atmosphere (21%) and the actual O$_2$ concentration.}

As stated already earlier, CO$_2$ dissolves in water roughly 250 times less than HCN. In addition, it reacts only reluctantly with water to form carbonic acid (H$_2$CO$_3$). As a result, CO$_2$ has an effective acidity which is roughly 870 times stronger than HCN.\footnote{pK$_a$(HCN) = 9.31; pK$_a$(CO$_2$/H$_2$CO$_3$) = 2.77; pK$_{a3}$(H$_2$CO$_3$/HCO$_3^-$) = 6.3; pK$_{a4}$(CO$_2$/HCO$_3^-$) = (2.77+3.6) = 6.37; pK$_{a5}$(HCO$_3^-$/CO$_2^-$) = 10.25; see http://en.wikipedia.org/wiki/Carbonic_acid} At equilibrium concentrations, CO$_2$ is therefore effectively \((870 \div 250 =)\) 3.5 times “stronger” than HCN. This means that plain water saturated with both CO$_2$ and HCN would slow down the dissociation of HCN and hence the formation of cyanide salts.

The situation is different in the capillary water of mortar and concrete, though, as this is not plain water. Since calcium carbonate is a main (lime mortar) or at least a sizeable constituent (cement mortar \& concrete) of these materials, their capillary water is saturated with calcium and the various dissociation levels of carbonic acid, including CO$_2$, while the actual saturation concentrations depend on the material’s pH value (see Section 6.7 for details). Hence adding any CO$_2$ to the surrounding air can shift the existing equilibrium only marginally and slowly by CO$_2$ slowly diffusing into the wall’s capillaries. For saturated calcium-carbonate solutions, the diffusion of CO$_2$ and any other gaseous compound, HCN included, is hampered, however, by the precipitation of calcium carbonate at the air-water interface. This effect is stronger, the more alkaline the capillary water is, as this raises the equilibrium concentration of carbonate. This is the basis for the long-term stability of reinforced concrete, whose capillary water stays alkaline over long periods of time even in the presence of larger amounts of CO$_2$. This alkalinity provides an effective corrosion protection via passivation of the reinforcement iron bars, which would otherwise rust, expand, and burst the concrete cast around it (see Subsection 6.7.2 for more details).

In contrast to this, there is, thermodynamically speaking, nothing which prevents HCN added to the atmosphere from diffusing into the capillaries. However, the above-mentioned thin solid film of calcium carbonate at the air-water interface will slow down the diffusion of any compound through this layer. This barrier works both ways, though, as it slows down both the accumulation of HCN in the capillary water as well as later HCN losses due to degassing, when the surrounding air no longer contains HCN. Since CO$_2$ is naturally present to some degree in enclosed spaces frequented by humans
under any circumstances, its presence will continue to act as a diffusion barrier even after ventilation of the space. Hence the dominating effect of \( \text{CO}_2 \) in a space should be that it traps HCN in the capillaries, once it has managed to diffuse into them. This trapping effect should be stronger, the more alkaline the wall is, all the more so as an alkaline environment also supports the dissociation of HCN and thus the formation of cyanides.

High concentration of \( \text{CO}_2 \) will considerably accelerate the setting of fresh lime mortars and will decrease the \( \text{pH} \) value of their capillary water, until the equilibrium \( \text{pH} \) of ca. 7 of saturated calcium-carbonate solutions is reached, with the resulting effects of this lower \( \text{pH} \) value (see Subsection 6.5.5). This effect is much less-pronounced and much slower in cement mortars and concrete, which exhibit a different chemistry (see Subsection 6.7.2).

This issue is of importance because the opinion is sometimes expressed in the literature that the carbon-dioxide content of air can have a decisive negative influence on the formation of cyanide salts in wall material.\(^{236}\) This is done under the assumption that the capillary system contains pure water, which is not the case, though.

The only data available so far are contradictory and due to a flawed method of analysis not really of any value (see Subsection 8.4.2). Appropriate experiments are therefore required to settle this issue by quantifying the influence of \( \text{CO}_2 \) under realistic conditions.

### 6.5.7. Conclusion

The result of all factors which can currently be quantified is that slightly alkaline \( \text{pH} \) values are favorable to the formation of the pigment.

The individual parameters and their influence on the formation of Iron Blue are summarized in the following table:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water content</strong></td>
<td>Increase in water content results in the following: increased absorption of hydrogen cyanide; long-term retention of ad-/absorbed hydrogen cyanide; increased mobility of reaction partners; increased reactivity of iron oxide; water is the basic precondition for disassociation and redox reactions; generally positive influence with increasing water content. The water content is dependent above all upon the temperature.</td>
</tr>
<tr>
<td><strong>Reactivity of the iron</strong></td>
<td>Factor determining reaction velocity; it depends on the type of material and ( \text{pH} ) value (see below) and is positively influenced by increasing water content.</td>
</tr>
</tbody>
</table>

\(^{236}\) Markiewicz et al. 1994; Green 1998b; Green/McCarthy 1999.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>Increased ad-/absorption of hydrogen cyanide as well as – under otherwise identical conditions – decreased velocity of individual reactions with falling temperature; strong increase on water content, and therefore a strongly positive net influence upon all other factors with a falling temperature.</td>
</tr>
<tr>
<td>pH value</td>
<td>Increased iron reactivity with falling pH, as well as a massive reduction in cyanide accumulation and redox reactivity of iron(III) cyanide; compromise between iron reactivity and cyanide formation/Fe$^{3+}$ reduction: A weakly alkaline pH value is favorable to absorption of hydrogen cyanide and accumulation of cyanide as well as for the reduction in iron(III) cyanide, which determines the velocity of the reaction. Although more-strongly alkaline media can accumulate iron(II) cyanide over longer periods of time, no Iron Blue can form under such circumstances. An extremely high pH value fixes iron(III) as hydroxide and hence impedes the formation of any iron cyanides.</td>
</tr>
<tr>
<td>CO$_2$</td>
<td>CO$_2$ lowers the pH value and therefore inhibits the formation of cyanides. Especially in alkaline walls it leads to the formation of insoluble CaCO$_3$ films at the air-water interface, which slows the diffusion of HCN both into and out of the capillaries. Once in the capillaries, HCN and cyanides hence get trapped, which supports the formation of iron cyanides.</td>
</tr>
</tbody>
</table>

6.6. Stability of Iron Blue

6.6.1. pH Sensitivity

Iron Blue is an extremely acid-resistant, but base-decomposing pigment. Hydrogen cyanide is released from this pigment only by warm, diluted sulfuric acid, while cold hydrochloric acid, by contrast, has no effect. In a clearly alkaline environment, i.e., in the presence of high concentrations of OH$^-$ ions, these displace the cyanide ion from the iron(III) ion. Fe(OH)$_3$ is then precipitated (“rust sludge”), and the Iron Blue is destroyed.

The hexacyanoferrate acids are very strong acids. The findings of analyses of disassociation constants show, for hexacyanoferrate(III) (Jordan/Ewing 1962): $K_{III}^{III}>K_{III}^{II}>K_{III}^{I}>0.1$; hexacyanoferrate(II): $K_{II}^{II}>K_{II}^{I}>0.1$; $K_{II}^{II}=6×10^{-3}$; $K_{II}^{I}=6.7×10^{-5}$. Thus, hexacyanoferrate(III) is still almost completely disassociated at pH=1, hexacyanoferrate(II) doubly, from pH=3 triply, from pH=5 complete.

There is therefore no release of hydrogen cyanide; see also Buser et al. 1977; see also Section 8.2.; analytical method for total cyanide content according to DIN: the pigment is destroyed by boiling HCl$_{aq}$. Iron Blue suspensions (see note 215) have an acid pH value of approximately 4. At this slightly acid eigen pH, as is formed, for example, by acid rain in surface waters, Iron Blue is at its most stable (Ferch/Schäfer 1990). In technical applications, the alkaline resistance is increased by adding nickel (Kirk/Othmer 1979, pp. 765-771; Sistino 1974; Elsermann 1951; Beck 1952).

Iron(III)-hydroxide is even less soluble in this range than Iron Blue; on the solubility of Fe(OH)$_3$ see Subsection 6.6.2.; to be exact, Iron Blue is not totally destroyed at a high pH; rather, the Fe$^{3+}$ is, initially, merely withdrawn; the base-resistant [Fe(CN)$_6$]$^{3-}$ remains intact;
The literature contains authenticated cases of studies with Iron Blue at pH values of 9 and 10, in which it is still stable (Alich et al. 1967). The pH range around 10 to 11 can be considered the critical limit for the stability of this pigment. Based on the alkaline behavior of fresh mortar and concrete (in this regard, see also Subsection 6.7.2), Iron Blue is only used to paint these surfaces to a limited extent. In his classic work on the chemistry of paints, Church wrote about Iron Blue (1915, pp. 239f.):

“*Its colour is changed by lime and by the weakest alkalies, so that it cannot be employed in fresco or on newly-plastered walls. […]*

A mixture of Prussian blue and cobalt blue […] is, of course, not adapted for use in fresco, as the Prussian blue in it at once yields rust through the action of the lime of the intonaco.”

A handbook for artists’ pigments states (Berrie 1986, p. 200):

“*Prussian blue is very sensitive to alkali and cannot be used in fresco or alkaline media such as lime paints, […]* Hasluck (1916) warned against using Prussian blue in distemper for the walls of new buildings containing lime or whiting as the alkali will turn the blue into a ‘dirty-brown colour.’”

Along the same line, we read in a handbook of pigments (Able 1999, p. 155):

“*However, [Iron Blue] has poor alkali stability, making it unsuitable for colouring emulsion paints that are to be applied to plaster.*”

### 6.6.2. Solubility

#### 6.6.2.1. Overview

Iron Blue is considered one of the least-soluble cyanide compounds, which is the precondition for its widespread use as a pigment. The literature flatly refers to Iron Blue as “insoluble.”

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240 Sistino 1974; Beakes 1954. Mixtures of Iron Blue and phthalocyanine blue generally find application, since both, alone, lack sufficient long-term stability; Degussa describes the lime fastness of Iron Blue as “not good” (Ferch/Schäfer 1990); however, Degussa is referring to its fastness on still-uncarbonated, alkaline plasters and concretes: H. Winkler, Degussa AG, letter to this author, June 18, 1991. My own experiments with the dissolution of fresh Iron Blue precipitations resulted in a threshold value of pH 10–11 for the stability of Iron Blue.

241 *Intonaco* is an Italian term for the final, very thin layer of plaster on which a fresco is painted.

242 This property was used in Soviet industry, for example, for the passivation of steel pipes against aggressive waste waters, since CN– contained in waste waters coats the interior of pipes with an insoluble protective layer of Iron Blue: Chen 1974. But it should be noted that this borders on criminal negligence, since toxic cyanides simply do not belong in waste waters.

243 *DIN* Safety Data Sheet *VOSSEN-Blau*, in Degussa 1985; see also Ferch/Schäfer 1990. Last but not least, pigments, by definition, are coloring agents practically insoluble in solvents and binding agents (*DIN* 55 943 and 55 945).
Concrete, reliable values on the solubility of Iron Blue are not recorded in the scientific literature. However, based on comparative calculations between the known solubility of Fe(OH)$_3$ on the one hand, and the threshold value of the pH stability of Iron Blue on the other hand (pH 10), the approximate solubility of Iron Blue in water can be calculated (see Paragraph 6.6.2.2). It amounts to ca. $10^{-24}$ g Iron Blue per liter of water, this means that 0.0000000000000000000001 g Iron Blue dissolves in 1,000 g of water.

In addition to a compound’s solubility in water, its condition (large or small crystals, fresh or aged, superficially adherent or adsorbed by capillary effects) as well as, in particular, the quality and quantity of the water supplied are decisive in determining the actual velocity of dissolution of a substance. Iron Blue formed in masonry will be present in a fine crystalline form and adsorbed by capillary effects, in which case the former favors dissolution, while the latter is extremely detrimental to dissolution. Water almost or entirely saturated with iron(III) ions is no longer capable of dissolving further iron. Furthermore, water permeation through finely porous solid material like masonry is extremely low even at high groundwater levels, and the saturation concentration of iron ions is quickly reached, which, in addition, as remarked above, is generated by the slightly more-soluble iron oxides of the solid body rather than by the Iron Blue, once it has formed. It is furthermore very well known that mortar and concrete permeated with paints practically cannot be rendered colorless. It must, therefore, be anticipated that the Iron Blue content formed in walls cannot be perceptibly reduced by dissolution in water. Water running down the exterior surfaces is considerably more aggressive, although the effect caused is primarily erosive in nature, i.e., it damages the masonry as such.

6.6.2.2. Excursus

Tananaev and colleagues (1956) examined the solubility of metal hexacyanoferrate(II) and discovered a value of $3 \cdot 10^{-41}$ ($pK_S = 40.5$) for the solubility product\textsuperscript{245} of Iron Blue, without giving a unit.

Assuming they used the formula of Fe$_4$[Fe(CN)$_6$]$_3$ (unit being mol$^7$ L$^{-7}$), one may infer a solubility of 0.5 mg per liter water. Thus, it would be 14 times less-soluble than the difficulty soluble calcium carbonate (CaCO$_3$, 7.1 mg per liter water, $K_S = 4.95 \cdot 10^{-10}$ mol$^2$L$^{-2}$; Weast 1986, p. B222). Later publications

\textsuperscript{244} See also, in this regard, the remarks of a company dealing in colored cements and concretes: Kuenning 1993.

\textsuperscript{245} The solubility product of a compound is defined as the product of the entire ionic concentration of the totally dissociated compound: Fe$_4$[Fe(CN)$_6$]$_3$ = 4 Fe$^{3+} + 3$ [Fe(CN)$_6$]$^{4-}$;

$$K_L(Fe_4[Fe(CN)_6]_3) = c(Fe^{3+}) \cdot c(Fe^{3+}) \cdot c(Fe^{3+}) \cdot c([Fe(CN)_6]^{4-}) \cdot c([Fe(CN)_6]^{4-}) \cdot c([Fe(CN)_6]^{4-}) = c^4(Fe^{3+}) \cdot c^3([Fe(CN)_6]^{4-}).$$

The $pK_S$ value correlates to the negative common logarithm of the product of solubility.
support these findings (Krleza et al. 1977). Note, however, that deviations in the stoichiometry (composition) of Iron Blue with impurities can lead to an increased solubility.

Tananaev et al. precipitated the complex metal cyanoferrate from an appropriate metal-salt solution with Li₄[Fe(CN)₆], thus probably acquiring a high rate of inclusions (lithium, water). As a result and in spite of the four-hour-long sedimentation of the precipitate, the solution they obtained after filtering probably still contained some colloidally dispersed Iron Blue. Since they ultimately determined the amount of free Fe³⁺ in the filtrate by precipitating it with ammonia as Fe(OH)₃, they will undoubtedly also have precipitated the Fe³⁺ of the colloidally dispersed Iron Blue, as ammonia raises the pH value so much that Iron Blue is no longer stable (see Subsection 6.6.1).

Therefore, they probably did not determine the solubility of Iron Blue, but rather the mid-term stability of dispersions of the freshly precipitated pigment.

The solubility product of Pb₂[Fe(CN)₆] given by Krleza et al. is much lower than the one used by Tananaev et al., which the latter used as a reference to determine the solubility products. If Krleza’s value is applied to Tananaev’s calculations, this produces a solubility of Iron Blue of only 0.05 mg per liter. Krleza et al., however, find similar results for the solubility of most of the metal cyanides analyzed, including Iron Blue. Since conventional methods of analysis, such as gravimetry and titration, tend to be unreliable when dealing with minute traces, one must wonder about these similar results.

However, one can escape this dilemma by thoughtful reasoning.

It is safe to say that Iron Blue is stable at a pH value of 7, i.e., in a neutral aqueous medium, so we take this as a minimum value. As mentioned earlier, a pH value of about 10 can be considered the upper limit of stability for Iron Blue, so we take this as a maximum value for the following calculations. At pH=7, and even more so at pH=10, the free-iron concentration is extremely low, since Fe(OH)₃ is nearly insoluble (see Table 5).

At pH 7 and 10, respectively, a saturated Fe(OH)₃ solution has the following free-Fe³⁺ concentration:

<table>
<thead>
<tr>
<th>Compound</th>
<th>Constant</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kₛ(Fe₄[Fe(CN)₆]₃)</td>
<td>4.1×10⁻¹⁸⁷ mol⁷ L⁻⁷</td>
<td>calculated</td>
</tr>
<tr>
<td>Kₓ(Fe(CN)₆)</td>
<td>10⁻²⁴ mol L⁻¹</td>
<td>Wilson 1960, p. 162</td>
</tr>
<tr>
<td>Kₓ([Fe(CN)₆]³⁻)</td>
<td>10⁻³¹ mol L⁻¹</td>
<td></td>
</tr>
<tr>
<td>Kₛ(Fe(OH)₂)</td>
<td>4.79×10⁻¹⁷ mol³ L⁻³</td>
<td></td>
</tr>
<tr>
<td>Kₛ(Fe(OH)₃)</td>
<td>2.67×10⁻⁹ mol³ L⁻⁴</td>
<td>Weast 1986, p. B222</td>
</tr>
<tr>
<td>Kₛ(FeCO₃)</td>
<td>3.13×10⁻¹¹ mol² L⁻²</td>
<td></td>
</tr>
</tbody>
</table>
\[
c(\text{Fe}^{3+}) = \frac{K_S(\text{Fe(OH)}_3)}{c^4(\text{OH}^-)}
\]  
\[\text{pH}=7: \quad \frac{2.67 \times 10^{-39} \text{ mol}^4\text{l}^{-4}}{10^{-21} \text{ mol}^3\text{l}^{-3}} = 2.67 \times 10^{-18} \text{ mol L}^{-1}
\]
\[\text{pH}=10: \quad \frac{2.67 \times 10^{-39} \text{ mol}^4\text{l}^{-4}}{10^{-12} \text{ mol}^3\text{l}^{-3}} = 2.67 \times 10^{-27} \text{ mol L}^{-1}
\]

If the free-$\text{Fe}^{3+}$ concentration surpasses this value due to a better solubility of Iron Blue, then $\text{Fe}^{3+}$ would precipitate as hydroxide and would be increasingly removed from the pigment, thereby destroying it in the end. Since this does not happen at all at pH=7, and pH=10 can be considered the point where it just starts to happen, the concentration of the $\text{Fe}^{3+}$ ion in a saturated Iron Blue solution must lie well below $10^{-18}$ mol/liter, and more likely in the area of $10^{-27}$ mol/liter. Thus, the solubility of Iron Blue must also have a value around $10^{-27}$ mol per liter (actually: $\frac{1}{4}$ of the free-$\text{Fe}^{3+}$ concentration, $K_S$ less than $4.1 \times 10^{-187}$ mol$^7$ L$^{-7}$, pK$_S$ larger than 186.6) which, at a mol mass of 1,110 g mol$^{-1}$ ($(\text{Fe}_4[\text{Fe(CN)}_6]_3 \cdot 14 \text{ H}_2\text{O})$ would correlate to $10^{-24}$ g.

With this, the complex iron pigment does indeed deserve to be called insoluble, as only one part of dissolved Iron Blue can statistically be found in 100,000,000,000,000,000,000,000,000 parts of water ($10^{29}$). The actual solubility would therefore be lower by a factor of $10^{20}$ than determined by Tananaev et al., which is still much higher than the value of so-called “insoluble” compounds like mercury sulfide (HgS). However, one must consider that the chemistry of $\text{Fe}^{3+}$ in aqueous solutions doesn’t justify the terms “dissolved” or “precipitated,” since a multitude of complexes does exist in the broad pH-spectrum, partly as polymer-type hydroxo-aquo-complexes (see Subsection 6.5.3).

Chart 7 shows the correlation between the pH value of the free-$\text{Fe}^{3+}$ concentration in a hypothetical saturated solution of Iron Blue and the respectively resulting minimum and maximum pK$_S$ values possible for Iron Blue which it must possess, if it is stable at the given pH values. From Tananaev’s pK$_S$ value results that, if that value were correct, the pigment would remain stable only up to pH 3. Accordingly, it would destroy itself by its eigen pH value of 4 (see Subsection 6.6.1, note 238), which is formed in its own dispersions. Of course that does not happen.

Meeussen/Keizer/van Riemsdijk et al. (1992) determined the stability of fresh, dispersed precipitates of Iron Blue as a function of the pH value and redox potential prevailing in a number of aqueous solutions in the presence of four different chelating agents which remove $\text{Fe}^{3+}$ from Iron Blue above a pH value of around 3, depending on the chelating agent. Precipitation of $\text{Fe(OH)}_3$ started at around pH 6 in cases where the chelating agent was not strong
enough to keep the Fe\textsuperscript{3+} activity sufficiently low (citrate, EGTA\textsuperscript{246}). Their calculations and a number of measurements indicate that this Iron Blue becomes unstable at a pH value of 5, when its Fe\textsuperscript{3+} starts being removed by precipitation as Fe(OH)\textsubscript{3}. When corrected by the redox potentials considered, they conclude that their results are very similar to those of Tananaev et al. They state, however, that “The actual solubility product probably depends on the crystallinity of the precipitate, and therefore will change upon aging.” (Meeussen 1992, p. 86)

This is a crucial statement. As will be discussed in more detail later, Iron Blue obviously did form in large quantities in and on masonry at a number of locations after exposure to hydrogen cyanide. Since the acidity of carbonated masonry in equilibrium usually is around pH 7 but certainly cannot drop much lower than that, or else its carbonate component would simply dissolve and vanish, it is safe to say that Iron Blue which formed in masonry as a result of exposure to HCN by force must be stable at that pH value, probably because it is exactly not a dispersed precipitate formed in solution but an aged crystal formed during a slow solid-liquid interface reaction.

I will return to Meeussen’s work when discussing contaminated soils in Subsection 6.6.6.

In a later study, Ghosh et al. (1999a) have deepened the research into the stability of fresh Iron Blue precipitates, finding that they are unstable at higher

\textsuperscript{246} Triethylene glycol diamine tetraacetic acid.
pH values only if forming in the presence of co-precipitating iron(III) hydroxide, because the precipitate formed that way is a solid solution (mixed crystal) of the two components. Such a scenario does not apply in the case under consideration here, because the pore water in masonry does not contain any excess Fe(OH)$_3$ that could co-precipitate with any forming Iron Blue. For that scenario, the situation is entirely different. In that case, the pure Iron Blue precipitates are stable well into the alkaline regime. This is shown in Chart 8, where the areas of Iron Blue’s stability are shown in blue as a function of pH value and redox potential.

These reflections show that, in a pH-neutral medium, iron bound as hydroxides in solid materials tends to dissolve more readily than Iron Blue, since the former’s equilibrium concentration is higher than that of Iron Blue.

### 6.6.3. Excursus: Competing Ligands

As shown, OH$^-$ ions may, due to the low solubility of Fe(OH)$_3$, noticeably precipitate the Fe$^{3+}$ of Iron Blue in aqueous solutions with a pH value above 9 to 10. The residual hexacyanoferrate(II), on the other hand, would only de-

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247 The redox potential is a measure of the tendency of a chemical species or an environment to acquire electrons and thereby be reduced. It is usually given in millivolts with a standard hydrogen electrode being the zero point. However, it can also be given as a negative logarithm of the equivalent hypothetical free-electron activity: $pe = -\log(e^-)$, as is common in environmental chemistry (with 1 pE = 59.2 mV at 25°C). See Lindsay 1979, p. 449; Deutsch/Siegel, p. 35.
compose in strongly alkaline media, because Fe(OH)$_2$ is considerably more soluble (compare Table 5).$^{248}$

Tartrate$^{249}$ has, in contrast to oxalate, hardly any effects so that Fe$^{3+}$ can be quantitatively removed from sour wine with [Fe(CN)$_6$]$^{4-}$, a usual procedure to remove iron ions from wine (Lapp et al. 1985). Concentrated alkali carbonate solutions can precipitate even the Fe$^{2+}$ of Iron Blue as FeCO$_3$, so that they destroy the entire pigment by precipitating both the Fe$^{3+}$ as Fe(OH)$_3$ (due to alkalinity) and the Fe$^{2+}$ of the residual hexacyanoferrate(II) [Fe(CN)$_6$]$^{4-}$ (Müller 1986, p. 108). Calcium-carbonate solutions, however, would not be able to do this at all due to the marginal solubility of CaCO$_3$. I may mention in passing that Kohn (1949, 1951, 1954) has investigated the supportive effect of mostly organic ligands to disperse Iron Blue. See also Meeussen/Keizer/van Riemsdijk et al. 1992 for the study of Fe$^{3+}$-chelating ligands not found in nature.

Thus, apart from OH$^-$ (alkaline medium), there are no other ligands to be considered competing with CN$^-$ in the formation or dissolution of Iron Blue in the cases here under consideration.

6.6.4. Effects of Light

6.6.4.1. Overview

Iron Blue as such is generally considered a light-resistant pigment which is only slowly decomposed by the effects of UV radiation.$^{250}$ There are even patents utilizing Iron Blue as a UV-absorbing pigment, which is only meaningful with sufficient resistance to UV radiation (Tada et al. 1990). Since the walls of interest to us here are protected from UV radiation and because UV radiation can only exert a superficial effect on the walls, while the Iron Blue would form and remain within the walls, a possible process of decomposition by UV radiation can have no influence upon our investigation.

6.6.4.2. Excursus

Certain wavelengths of ultraviolet radiation may set free CN$^-$ from hexacyanoferrate(II) and (III), the preliminary stages of Iron Blue. As far as hexacyanoferrate(III) is concerned, this leads to the formation of Iron Blue.$^{219}$ As far as

$^{248}$ In absence of free cyanide ions, the pH-stability limit of hexacyanoferrate(II) (total dissociation) is at 11.8, but already very small amounts of free cyanide (10$^{-10}$ mol L$^{-1}$) push the limit up to pH=13.

$^{249}$ Tartrate, corresponding base of tartaric acid. The mixed potassium-sodium-salt is the famous tartrate (potassium bitartrate), which crystallizes on the corks of wine bottles (Seignette salt).

hexacyanoferrate(II) is concerned, quantum efficiencies\(^{251}\) of 0.1 to 0.4 are reported for wavelengths of 365 nm (Moggi \textit{et al.} 1966; Carassiti/Balzani 1960).

It has been discussed whether complex cyanides can be removed from industrial waste waters by ultraviolet radiation. Free cyanide ions would be oxidized and destroyed by hydroxyl radicals originating from the parallelly occurring photolysis of water.\(^{252}\) However, results are not unequivocal (Gurol/Woodman 1989; Zaidi/Carey 1984).

As for Iron Blue, one knows of the bleaching effect under strong, perpetual sun radiation and the ensuing re-darkening during the night.\(^{253}\) Here also, the liberation of CN\(^–\) is responsible, which reduces parts of the Fe\(^{3+}\) ions to Fe\(^{2+}\) ions. The latter process, however, will reverse during the night under the influence of oxygen and moisture. The Iron Blue concentration will eventually be reduced by the loss of the released cyanide, either by evaporation of hydrogen cyanide, by washing out as CN\(^–\), or by oxidation through Fe\(^{3+}\)/atmospheric oxygen or hydroxyl radicals from the natural photolysis of water. The latter process is minute and can therefore be neglected. At any rate, most of the cyanide released by photolysis will again be complex-bound to iron.

\section*{6.6.5. Long-Term Test}

The best long-term test available to us consists of the disinfestation buildings BW\textit{e} 5a and 5b in Birkenau, which have defied wind and weather of the strongly corrosive climate in the industrial region of Upper Silesia since the end of World War II, and which are still colored blue, both inside and out, exhibiting a high cyanide content. The same holds for the disinfestation buildings in the Majdanek and Stutthof camps (Graf/Mattogno 2004a&b; color photos). These findings are also supported by two other long-term tests.

The color durability of Iron Blue, in addition to other pigments, was tested during an environmental-resistance test lasting 21 years in the industrial town of Slough, west of London (Kape/Mills 1958, 1981). In so doing, pieces of aluminum sheet metal were alternately dipped in an iron(II) cyanide and then in an iron(III)-salt solution (K\(_3\)[Fe(CN)\(_6\)] or Fe(NO\(_3\))\(_3\)), by which the resulting pigment was adsorbed on the aluminum sheet metal. The test sheets were then exposed to the environment on the roof of a building in a vertical 45° angle facing southwest.

\(^{251}\) \textit{Quantum efficiency} is that part of the absorbed light quants that leads to photo reactions under scrutiny, here from 10 to 40%.

\(^{252}\) \textit{Photolysis} of water leads to the splitting of water into uncharged parts with unpaired electrons (formation of radicals through homolytic splitting (homolysis); see also dissociation, note 221):

\[
2 \text{H}_2\text{O} + \text{hv} \rightarrow \text{H}_3\text{O}^+ + \text{OH}^- \quad (\text{hv} = \text{photo quant})
\]

hydroxyl radical

During the 21-year-long test, in which eight Iron Blue samples were tested among other pigments, the Iron Blue, in particular, followed by iron ochre (Fe₂O₃, rust), exhibited only minimal alterations after this period of time. Only one sample each of Iron Blue and iron ochre was removed after 10 to 11 years.²⁵⁴ All other samples still exhibited an intense blue color. On the gray scale used in this context for the determination of color changes, half of the seven remaining Iron Blue samples received the value 4 out of a maximum of 5 points for the best retention of quality. Hence only minor alterations were detected.²⁵⁵

The exhibits were therefore exposed to the environmental conditions of a heavily industrialized area, with full effects of precipitation, direct sunshine, and wind erosion for more than 21 years. Under intense summer sunshine and in the absence of wind, the temperature of the dark-blue-colored aluminum metal sheets rose steeply (Iron Blue is only stable up to approximately 140°C).²⁵⁶ Snow, frost, hail, storms, and the finest, penetrating acidic drizzle had obviously just as little an effect on the pigment as the UV radiation of direct sunlight.

What is remarkable is that in determining the degree of destruction of the pigment no unexposed samples were used, since these had been lost over the 21-year period; rather, places on the surface of the exhibits which had been relatively well protected from direct environmental influences by the frames and by rubber rings on the screw joints were used as control samples. These exhibited almost no alterations.

In comparison to the environmental conditions which are of interest in our case, this long-term test involved considerably more-severe conditions, since in this case, the externally formed Iron Blue was only superficially adsorbed upon the aluminum sheets. The pigment nevertheless resisted extremely well.

6.6.6. Iron Blue in Contaminated Soils

Another event proves the extraordinary long-term stability of Iron Blue. From the end of the 19th to the early decades of the 20th century, Iron Blue was a by-product in the generation of city gas, because the hydrogen cyanide contained in coke gas had to be eliminated for safety reasons by washing it with iron hydroxide prior to introduction into the city gas network. Iron Blue is the

²⁵⁴ The literature does not, however, mention this Iron Blue sample as “Prussian Blue,” like the others, since it was, at that time, considered to be of another type, i.e., “Turnbull’s Blue” or “ferrous ferricyanide.”

²⁵⁵ A negative influence was observed when adding transition metal oxides to the dyeing process (vanadate, chromate, dichromate). An explanation could be that transition metal oxides such as molybdenum, chromium or vanadium have a decomposing effect on the pigment; there exists a research series about this using titanium (Müller-Föcken 1978). Since such transition metal oxides are irrelevant in the present context, it can be neglected here.

²⁵⁶ Ferch/Schäfer 1990; Barbezat 1952; Gratzfeld 1957; Herrmann 1958.
end product of this washing process. City gas utility companies frequently disposed of this product by scattering some of it over their factory terrain with the intention to kill weeds – in vain, though, since Iron Blue has no effect as an herbicide. Today, the grounds of former German city gas works still contain high quantities of Iron Blue, many decades after the facilities were put out of operation. It was neither decomposed, nor dissolved nor washed away to a major extent by rainwater and other environmental influences. But because it was considered physiologically harmless due to its stability, terrain with a high Iron Blue content was not considered polluted (Maier et al. 1989).

A Dutch study disagreed with that assessment, though. In a series of studies which were later combined into a PhD thesis, the previously mentioned Johannes Meeussen set out in the late 1980s and early 1990s to determine exactly how stable Iron Blue deposits in the soil are (Meeussen 1993). Not all factors considered by Meeussen are of relevance here, but his study is so far the most-thorough investigation into the stability of Iron Blue, hence I will discuss his findings in more detail in addition to what I already stated in Subsection 6.6.2.

Meeussen’s first paper discussed a new analytic method for determining different kinds of cyanides (Meeussen/Temminghoff et al. 1989; Meeussen 1992, p. 21). In the context of the present study, we are only interested in his discussion of various substances interfering with the analysis. I will return to this in Section 8.2.

Meeussen’s next paper of interest concerned the chemical stability of iron-cyanide complexes in solutions (Meeussen/Keizer/de Haan 1992). While we are dealing almost exclusively with iron-cyanide complexes in the solid state in the present study, I nevertheless want to reproduce here a chart from Meeussen’s paper that is of relevance to our topic, see Chart 9 (also in Meeussen 1992, p. 42). It shows the calculated values of the half-life (in years) of iron-cyanide complexes in aqueous solutions for various redox potentials and acidity levels as they are commonly found in soil. Since masonry not submerged in water contains basically no organic material and is exposed to atmospheric levels of oxygen at all times, it is a thoroughly oxidized and oxy-
genated material. The redox potential of its capillary water is therefore necessarily in a range located in the upper area of this chart. The acidity value of carbonated masonry is around pH 7. From this it results that iron cyanides in masonry have a chemical half-life of hundreds, if not thousands of years. Hence, they are chemically stable.

Meeussen next determined the solubility of Iron Blue, which I already discussed in Subsection 6.6.2. In yet another paper, he applied the solubility thusly determined to predict the mobility of Iron Blue in soils. However, the levels of dissolved cyanides actually detected in soils contaminated with Iron Blue were one order of magnitude and even more lower than what he predicted (Meeussen 1992, pp. 104-107). This disparity between calculated and measured values was observed by Meeussen earlier, when he wrote (Meeussen 1992, p. 34):

“From the observed ratio of total dissolved cyanide to dissolved iron it can be concluded that virtually all cyanide is complexed with iron. Clearly this disagrees completely with the calculated speciation of cyanide under the conditions measured.”

Worse still, when considering that according to Meeussen’s findings Iron Blue should be utterly unstable in a soil with a pH value of about 7, that therefore not much of it should be expected to still be present in the soil of former coking plants where it was dumped on the factory grounds a century or so ago, the astonishing find is that to this day these soils have Iron Blue contents of the same order of magnitude as acidic soils, staining the soil blue (some 1,000 mg of total cyanide per kg of soil sample in his example; ibid., pp. 106-108). He explains it with the “limited dissolution kinetics of Prussian blue” (ibid., p. 109), because, as we all know, if Nature does not conform with our theories, Nature must be wrong. As mentioned earlier, the later studies by Ghosh et al. (1999a) have shown that Meeussen’s assumptions were simply incorrect: Iron Blue, if not mixed with “rust,” is much more stable than he assumed.

Anyway, according to Meeussen, Iron Blue in soils is a dangerous contaminant. Kjeldsen (1999, p. 279), on the other hand, saw it more realistically:

“At gas works sites, where cyanide is mainly present as iron cyanide complexes, the risk for effects on humans from exposure to cyanide compounds seems to be of minor relevance.”

Fact is that after many decades or even a century and more of exposure to the most-unfavorable environmental, chemical and physical conditions, Iron Blue persists in large quantities in the ground of thousands of former coking and gas-work plants (for a similar U.S. study of contaminated soils see Ghosh et al. 1999b).
6.6.7. Summary

In summary, it may be stated that Iron Blue, having formed in the interior of a wall as a component of the wall itself, possesses a longevity comparable to the iron oxide from which it has formed. This means simply that Iron Blue possesses a degree of stability which is comparable to that of the masonry itself: The Iron Blue will remain contained in the wall for as long as the wall itself remains in existence.\(^\text{257}\)

Therefore, once perceptible quantities of cyanide have accumulated within a wall and if conditions have permitted the conversion of the cyanide into Iron Blue, no perceptible reduction in the Iron Blue content can be anticipated, even after seventy years or more.

A typical example of the manner in which the media deal with these facts is a press report issued by the German Press Agency (Deutsche Presse-Agentur, DPA) on March 29, 1994, and which was then published in many German newspapers and even broadcast on radio. The report sweepingly claimed that, according to unnamed experts,\(^\text{258}\)

\[\text{"Cyanide compounds decompose very quickly. In the ground, this occurs even after six to eight weeks; in masonry, these compounds could only be preserved under \textit{absolute conditions of conservation including complete exclusion of air and bacteria."}\]

Inquiries with the DPA press office in Stuttgart, which had published the report, revealed that the writer responsible for the report, Albert Meinecke, had simply invented this expert opinion.\(^\text{259}\) This obvious lie continues to be further disseminated, even by German government agencies such as, for example, the Bavarian Ministry of the Interior.\(^\text{260}\)

\(^{257}\) An interesting study has been conducted in this connection about the reduction of soluble components in concrete standing in water, providing support to the statements made here: not even the concentration of alkali ions, which are the most-soluble components of concrete, was massively reduced: El-Sayed et al. 1981.

\(^{258}\) Printed by German daily newspapers, for instance: Süddeutsche Zeitung, Stuttgarter Zeitung, Südwestpresse-Verbund (March 29, 1994), taz, Frankfurter Rundschau (March 30, 1994).

\(^{259}\) Rudolf 1994, 2016a, pp. 119-131; English see Rudolf 2016c, 2nd section of Chapter 6.

\(^{260}\) See Bayerisches… 1998, p. 64. A corresponding reference to the factual incorrectness of the remarks made in this regard by the Arbeitskreis Zeitgeschichte und Politik (in a letter by Hans-Jürgen Witzsch, dated Oct. 8, 1998, Fürth) was countered by the Ministry as follows: “Your efforts to deny and/or relativize the crimes of the National Socialists have been known to the security authorities for years. […] We see no occasion for a discussion of gas chambers.” Letter from Dr. Weber of the Bavarian Ministry of the Interior dated Oct. 13, 1998, ref. IF1-1335.31-1.
6.7. Influence of Various Building Materials

6.7.1. Brick

6.7.1.1. Overview

Bricks are well-known to acquire their hardness and stability during their firing process. This causes an intensive binding of the components in bricks (sintering). One result of this is that the reactivity of the iron oxide contained in bricks (2 to 4%) is strongly reduced, so that a perceptible inclination to form iron cyanide can hardly be anticipated. The immediate surface of bricks, which can be slightly eroded by atmospheric influences (weathering), is an exception to this rule, though. In that case, iron oxide present on the surface is available for conversion into Iron Blue.

6.7.1.2. Excursus

The chemical composition of bricks varies due to the different sorts of marl and loam used as initial material. The content of clay (included in this are 20 to 60% kaolinite, consisting roughly of 47% SiO₂, 40% Al₂O₃, 13% H₂O) may lie between 20 and 70%, the rest being carbonate, finest sand and iron oxides (Hähnle 1961, p. 384). According to my own analyses, the latter content may vary between 2 and 4%.

The porosity values of bricks lie between 20 and 30 vol.% (Landolt/Bönnstein 1972, pp. 433-452), according to other sources up to 50% (Röbert 1983, p. 120). According to my own mercury-penetration tests, the pore size of bricks lies heavily concentrated around 1 µm.²⁶¹

Due to the decreased specific surface (0.5 to 1 m² per g, BET,²⁶² own tests), the reactivity of the iron oxide is strongly reduced. However, activated iron at brick surfaces directly exposed to weathering can be set free for reactions to a larger degree.

The normal free, i.e., not chemically bound, water content of bricks in dry rooms (20°C) is in the area of one volume percent, but it can rise up to 4% at a relative humidity of over 90% (Wesche 1977, p. 37).

6.7.2. Cement Mortar and Concrete

6.7.2.1. Overview

The rust content (Fe₂O₃) of Portland cement, of particular interest to us here, the cement most-frequently used for concrete and cement mortars, is usually between 1 and 5% (Duda 1976, pp. 4ff., as well as my own analyses). The

²⁶¹ These mercury penetration tests as well as the BET tests mentioned later were performed at the research institute of the VARTA Batterie AG in Kelkheim, Germany, in late 1991.
²⁶² BET: Method to determine the specific surface with nitrogen adsorption following Brunauer, Emmet, Teller.
sand added to the mortar can also have a high iron content (up to 4%). As mentioned in Subsection 6.5.3, a large surface area of the solid-liquid interface (iron oxide–cyanide solution) is favorable to the formation of Iron Blue. This interface is potentially extraordinarily large in cement mortars and concrete due to their huge interior, microscopically rough surfaces of approximately 200 m² per gram (W. Czernin 1977, pp. 49f.).

Fresh concrete and cement mortars – which are identical from a chemical point of view – are relatively strongly alkaline (with a pH value of approximately 12.5). It later falls, however, due to the binding of carbon dioxide from the air. Due to the special chemistry of the cement mortar, this process of carbonation proceeds very slowly into the depth of the material. Depending on the composition of the cement mortar, this may last from a few months to many decades, until the pH value of such a mortar or concrete becomes neutral even in the deepest layers (Duda 1976, pp. 4ff.; W. Czernin 1977, pp. 49f.; Waubke 1966). This chemical behavior explains the stability of reinforced concrete, because the long-lasting alkaline medium prevents the embedded steel rods from rusting further.263

The water content of concrete and cement mortars depends on the temperature and relative humidity of the air and fluctuates between 1% and less at 20°C and 60% relative humidity up to 10% in air saturated with moisture (Wesche 1977, p. 37). In the case of permanently high humidity, penetrating wetness from outside, a major part of the pore system can be filled with water (Wesche 1981, pp. 51f.).

Poorly insulated rooms built underground always have cool and humid walls due to their great exchange-surface area with the ground. The high water content is due partly to the absorption of humidity from the ground and partly to the condensation of humidity from the air on the cool walls, when the temperature falls below the dew point. The water content of non-insulated cellar walls in unheated rooms therefore lies around 10%, i.e., a factor of approximately 10 or more above that of dry walls of heated rooms above ground.

6.7.2.2. Excursus

The chemical composition of Portland cement, the most-frequently used cement for concrete and water mortar, can be seen in Table 6.

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263 In the strongly alkaline environment, iron is passivated by a passive layer of Fe(OH)₃.

“Botched work” on building sites, i.e., rusting reinforcement rods and cracking concrete after only a few years or decades, due to overly low pH value in the vicinity of the embedded reinforcement rods, is caused by a) an incorrect composition of the concrete (too little cement – it’s cheaper that way – and/or too much or too little water – incompetence), or b) by installing the reinforcement rods too close to the surface of the concrete, where the pH value drops noticeably after a few years or decades; see Duda 1976, pp. 4ff.; W. Czernin 1977, pp. 49f.
The specific surface of the cement powder is in the order of 0.3 m$^2$ per g. Concrete and cement mortar get their stability by hydration of the cement compounds calcium oxide CaO (burnt lime), silicon dioxide SiO$_2$ (quartz), iron and aluminum oxide Fe$_2$O$_3$/Al$_2$O$_3$, to mixed, microfibrous calcium-alumosilicate hydrates with a chemically bound water content of some 25 mass % (Verein… 1972, pp. 19ff.). It then has a specific surface of up to 200 m$^2$ per g when measured with water adsorption, which is an extremely high value. Other methods (e.g. BET-measuring with nitrogen) yield a value of only a third of this or less (W. Czernin 1977, pp. 49f.).

The porosity of mortar and concrete heavily depends on the amount of water added during preparation and lies at a minimum of 27% according to the literature (Wesche 1981, pp. 51f.), in which case the volume of the microcapillary pores between the silicate fibers is included as well, which cannot be determined with mercury-penetration measurements.

Aside from the absolute porosity, the pore-size distribution is decisive for the reactivity towards gases. If the main pore volume is formed by microscopic pores, then the gas diffusion into the material is more inhibited than in a case where the main pore volume is formed by larger pores. Chart 10 shows the cumulative pore-size distribution of concrete and one wall mortar (exact composition unknown, since taken from an old wall, but according to its brittle consistency probably a lime mortar).

<table>
<thead>
<tr>
<th>Table 6: Composition of Portland cement (Duda 1976, pp. 4ff.)</th>
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<tbody>
<tr>
<td>Al$_2$O$_3$: 5 to 10 %</td>
</tr>
<tr>
<td>SiO$_2$: 20 %</td>
</tr>
<tr>
<td>CaO: 60 %</td>
</tr>
<tr>
<td>K$_2$O: 0.2 to 0.6 %</td>
</tr>
<tr>
<td>Na$_2$O: 0.5 to 3 %</td>
</tr>
<tr>
<td>Fe$_2$O$_3$: &lt; 5 %</td>
</tr>
</tbody>
</table>

![Chart 10: Cumulative pore-size distribution of concrete, according to “Forschungs- und Materialprüfungsanstalt, Abteilung 1: Baustoffe” (Research and Material Testing Agency, Department 1: Building Materials), Stuttgart, and of wall mortar, own analysis. In each case determined by Hg penetration.](image)
Having a similar total pore volume to the wall mortar (here only 14% due to the test method), the concrete’s largest portion of pore volume lies between a pore radius of 0.01 and 0.1 µm, whereas the wall mortar’s largest portion lies between 0.1 and 10 µm. Hence, if compared with the wall mortar, the gas diffusion into the concrete will be disadvantaged. In general, the average pore size of cement building materials changes to larger values with increasing content of sand and lime.

Fresh concrete is relatively strongly alkaline, caused by the high content of calcium hydroxide, which, however, gets bound as calcium aluminosilicates rather quickly. However, depending on the type of cement, a certain amount of it is released as time goes by. The pH value of non-carbonated concrete is around 12.5. It later falls, however, due to the binding of carbon dioxide from the air.

The speed of carbonation into the depth of the concrete depends strongly on the consistency and porosity of the material and follows a square-root relationship:  

\[ d = C \cdot \sqrt{t} \]

\[ d = \text{depth of carbonation} \]
\[ C = \text{constant} \]
\[ t = \text{time} \]

In hydraulic concretes, it takes many years for the carbonation front to advance only a few centimeters due to the inhibition of diffusion in this highly compact material.

In the area of carbonation, the pH value decreases to roughly 7, the equilibrium value of saturated calcium-carbonate solutions. But if the wall is wet, this results in a proton exchange and therefore no sharp pH border is formed. If a large portion of the air pores (size on the order of a tenth of a millimeter) is flooded with water poor in carbon dioxide, the carbonation advances more slowly, because compared to the gaseous phase, diffusion in the aqueous phase is much slower, by some orders of magnitude. In case of waters rich in carbon dioxide, however, this can accelerate the carbonation.

### 6.7.3. Lime Mortar

The iron content of lime mortars results primarily from the added sand (up to 4% Fe₂O₃). Lime mortar is manufactured using only burnt lime (CaO), sand and water, and acquires its solidity through the binding of slaked lime (Ca(OH)₂) with atmospheric carbon dioxide to lime (CaCO₃). This procedure takes only days or weeks (depending on the thickness of the layer and the CO₂ content of the surrounding air), due to the cruder porous system, which facili-

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264 W. Czernin 1977, pp. 49f.; Verein... 1972, pp. 19ff.; the actual equation was determined by Waubke 1966.
tates the diffusion of gas. For fresh lime mortar, high water contents can be damaging, as the carbon dioxide necessary for the binding process can no longer penetrate into the wall.

The final pH value of this material lies within the neutral range. Since this medium no longer provides sufficient protection for steel reinforcement rods and offers only slight environmental resistance, it is usually used for the plastering of interior walls and as mortar for interior brick walls only, in the latter case often mixed with cement (Wesche 1981, pp. 51f.). Due to the lack of formation of microcrystalline aluminosilicates, the specific surface of lime mortar lies considerably beneath that of cement mortar (up to one order of magnitude). The water content is similar to that of cement mortar.

6.7.4. Effects upon the Formation of Iron Blue

The first step in the formation of Iron Blue in masonry is the diffusion of gaseous HCN into the gas-filled pores of the masonry. The German industrial norm *DIN* 4108, Part 4, deals among other things with diffusion of steam into building materials. The most-important coefficient for building materials is the so-called coefficient of diffusion resistance. This is a dimensionless number indicating how much longer the diffusion of steam takes to penetrate a layer of certain materials compared to the time it takes to diffuse through the same layer of still air. This coefficient is valid not only for water vapor, but also for gaseous hydrogen cyanide as well as for any other gases. Table 7 shows a few values taken from that norm.

As an example, if a gas diffuses through a layer of still air with a speed of 1 cm per second, it takes 15 to 35 seconds to diffuse through a 1-cm-thick layer of lime or cement mortar and 5 to 10 seconds to diffuse just as deep into a brick wall. The variations for each material are due to variations in pore sizes and pore-size distribution depending on how the material was produced.

The second step in the process is the diffusion of HCN through the air-water interface into the capillary water of the masonry.

On the one hand, the capillary systems of cement mortars and concretes with their small pores will impede the diffusion of HCN more than the coarser capillaries of lime mortar. The potentially larger air-water interface of cement mortars and concretes, on the other hand, will facilitate the diffusion through this interface, as long as the microscopic capillary system isn’t flooded with

| Table 7: Diffusion resistance coefficient μ of gaseous water through masonry materials |
|-----------------------------------------------|----------------|---------------|-------------|
| Material                       | μ              | Material       | μ             |
| lime plaster                   | 10-35          | concrete       | 70-150       |
| gypsum plaster                 | 10             | brick wall     | 5-10         |
| cement mortar and screed       | 10-35          | mineral wool   | 1            |
water. In the case of an increased CO$_2$ content, however, the formation of a solid calcium-carbonate film at the air-water interface impedes the diffusion. Since the thickness of this film will increase proportionally with the pH value, the diffusion of HCN into the capillary water of alkaline cement mortars and concretes will be impeded by this effect. Which factor dominates in cement mortars and concretes – the conducive larger interface or the detrimental thicker CaCO$_3$ film – will depend largely on the water content of the wall and on the CO$_2$ content of the air and could be calibrated only by experiments.

The third step is the accumulation of gaseous hydrogen cyanide in the capillary water. A cool (10°C) wall in a basement room with atmospheric humidity near the saturation point, due to its higher water content (by a factor of at least 10), has an increased ability (by a factor of 10) to absorb hydrogen cyanide, compared to warm walls in a heated room built above ground with lower atmospheric humidity (20°C, 50% rel.).

The fourth step in the formation of Iron Blue is the ionic split (disassociation) of the hydrogen cyanide, that is, its conversion into simple cyanide, and its accumulation. This procedure is favored by an alkaline environment, which, in lime mortars, lasts only for a few days or weeks, but which is present for months or years in cement mortars and concretes.

Consequently, research on the diffusion of hydrogen cyanide through brick walls or plastered walls some 5 cm thick has shown that basically no hydrogen cyanide penetrates those materials, if they are only a little bit moist or alkaline, as all HCN was completely absorbed in them (Thilenius/Pohl 1925).

The next step is the formation of iron(II) cyanide, a process that hardly occurs in a strongly alkaline environment but which proceeds slowly in slightly alkaline environments. In the neutral range, this reaction comes to a standstill, because the cyanide converts back into non-reactive, volatile hydrogen cyanide by the humidity in the wall. The area around the carbonation front of concrete and mortar (which is slightly alkaline) can therefore be addressed as the area in which iron(III) cyanide can form easily. In more-alkaline areas of the masonry, the formation of iron(III) cyanide is strongly impeded, but an accumulation of iron(II) cyanide may occur over longer periods of time.

A large surface area, as found in cement mortars and concrete, is especially favorable to the solid-liquid interface reaction between the solid rust and the cyanide in solution (capillary moisture with dissolved cyanide). These materials moreover have the advantage of retaining an alkaline medium for longer periods of time, so that the cyanide accumulated in the masonry is not lost and has enough time to react with rust. High levels of water content are furthermore advantageous, as they broaden the range of moderately alkaline pH values.

265 In masonry, this largely corresponds to the neutralization of the hydrogen cyanide by calcium hydroxide Ca(OH)$_2$ into calcium cyanide Ca(CN)$_2$.

266 Very humid mortars and concretes, due to proton diffusion, exhibit no sharp carbonation
A moderately alkaline medium is furthermore conducive to the reduction of iron(III) cyanide to iron(II) cyanide, the next-to-last step in the formation of Iron Blue, but it occurs in the strongly alkaline range as well.

Three areas of different reactivity can be distinguished in masonry:

1. Large quantities of cyanide ions can accumulate in the non-carbonated portion, due to the alkaline medium, further favored by the increased absorption of hydrogen cyanide by the still-humid material. The cyanide is bound as iron(III) cyanide only to a slight extent. Due to its strong oxidation behavior in the alkaline medium, however, it is converted quite rapidly into the more-stable iron(II) cyanide. An accumulation of iron(II) cyanide will therefore take place over a longer time period.

2. In the zone of carbonation, the tendency to accumulate cyanide is reduced, since the disassociation equilibrium lies increasingly on the side of hydrogen cyanide. The oxidation strength of iron(III) cyanide is also diminished. On the other hand, the pigment itself now becomes stable, so that near the carbonation front increased quantities of iron(II) cyanide will combine with the somewhat-more-easily soluble iron(III) ion to form Iron Blue. It will be intimately mixed with the lime which is also forming in this area.\(^2\)

3. In the pH-neutral, carbonated part of the masonry, the formation is considerably dependent on the available cyanide concentration, which is extremely reduced there. Already-formed iron(II) cyanide is gradually converted into Iron Blue in the presence of humidity.

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\(^2\) From the CO\(_2\) in the air and the Ca(OH)\(_2\) in the mortar.
Table 8 shows the adsorption values of hydrogen cyanide in various building materials (Schwarz/Deckert 1927 & 1929). They confirm the assumption of considerably higher reactivity of cements compared to brick, as well as the greater tendency of fresh cement compared to older, and generally more-humid building materials toward accumulating hydrogen cyanide.

The hydrogen-cyanide accumulation in the concrete block, the age of which is unfortunately not indicated, is astonishingly high, if compared with the cement-mortar blocks. Because there is no considerable difference between the composition and hence the physical and chemical properties of cement mortar and concrete, it is not clear how the differing analytical results are to be interpreted.

It must be kept in mind that the method used by the authors actually measures only the amount of hydrogen cyanide released by the samples after their exposure to HCN. Hence this method cannot establish any possible long-term physical or chemical binding of hydrogen cyanide in the samples. The authors moreover gave no details about the composition of their samples, other than giving them the names as listed. These data are therefore not unassailable.

At least the tendency of humid masonry to absorb higher quantities of hydrogen cyanide is confirmed (compare lime sandstone: factor 8 at equal temperature and relative atmospheric humidity, but different prior history). W.A. Uglow showed in a detailed series of tests that concrete absorbs approximately four to six times as much hydrogen cyanide as lime mortar. He also found a tendency of humid building materials towards increased adsorption of hydrogen cyanide. He noted moreover a dark pigmentation running through the entire concrete sample and did not therefore exclude the possibility of a chemical reaction of the hydrogen cyanide with the material (Uglow 1928).

A very interesting set of data was gained by Schwarz and Deckert as published in 1929 (p. 203), which I list in Table 9. They had exposed different masonry materials to a nominal concentration of 22.5 g/m³ HCN for 24 hours,

<table>
<thead>
<tr>
<th>Material</th>
<th>0</th>
<th>1</th>
<th>3</th>
<th>4</th>
<th>22</th>
<th>30</th>
<th>66</th>
<th>72</th>
<th>90</th>
<th>104</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement Mortar, well-dried and set</td>
<td>200</td>
<td>170</td>
<td>160</td>
<td>150</td>
<td>80</td>
<td>70</td>
<td>61.4*</td>
<td>60</td>
<td>36.2*</td>
<td>30</td>
</tr>
<tr>
<td>Concrete, still somewhat fresh</td>
<td>5,198</td>
<td>2,209</td>
<td>1,835</td>
<td>1,926</td>
<td>26</td>
<td>27.6</td>
<td>30</td>
<td>53</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* interpolated value

All samples were exposed to a nominal concentration of 22.5 g/m³ HCN for 24 hours; the actual concentration was lower due to this very absorption.
and then measured the amount of HCN contained in their samples right after the gassing and again after several hours of ventilation. For one thing, the results show the durability of very high concentrations of hydrogen cyanide over longer periods of time even in dry, chemically bound cement (see Chart 11). Concentrations did not fall below \( \frac{1}{4} \) of the initial values even after three days. With daily fumigation lasting several hours, this would result, in this example, in an average HCN concentration in the wall swinging around approximately 100 to 200 mg hydrogen cyanide per m\(^2\) of masonry.

The second result we can obtain from this is that fresh concretes and cement mortars absorb much more HCN in comparison to samples that are chemically set (here by a factor 26), and that their HCN content doesn’t seem to drop anymore at all after some 3 days. It seems to have been chemically bound. In any case, the difference between the somewhat fresh sample and the set sample increases with time.

The measurement values in Chart 11 were approximated by a function consisting of two terms:

\[
c(t) = 100 \cdot e^{-t/0.3} + 100 \cdot e^{-t/4}
\]

(6)

The first term in the above equation can be interpreted as desorption from the surface material with a \( \tau \) of 0.3 days.\(^{268} \) The second term describes a slower

\(^{268} \tau \) is the time after which the value has fallen to the 1/e-multiple (0.368...) of the initial value.
desorption of hydrogen cyanide with a $\tau$ of four days, perhaps caused by the much-slower diffusion through the capillary water of the samples. Relating to the drop of concentration described here, larger errors will be made over longer periods of time, because the release of hydrogen cyanide is increasingly inhibited by physical and chemical effects (formation of stable compounds).

An analogous function is assumed for the absorption of hydrogen cyanide:

$$c(t) = 100 \cdot (2 - e^{-t/0.3} - e^{-t/4})$$

(7)

This is only a correct description of the process if the concentration of hydrogen cyanide in air in the room remains constant. The function then reaches its maximum saturation after approximately 20 days. In order to allow for such an approximation of a constant concentration, one must reduce the assumed gassing time with constant concentration in such a way that it correlates to realistic cases with variable concentrations. In the case of a series of consecutive gassings and airings of masonry, a quasi-constant concentration will be reached after 20 cycles as well.

A final example may illustrate the amount of hydrogen cyanide that is absorbed by walls of fumigation chambers whose walls have not been sealed with a gastight coating. Chart 12 shows the development of the concentration in fumigation chambers with and without such a coating. The nominal concentration amounted to 20 g HCN per m$^3$. The reduction of HCN concentration in the case of the sealed chamber was caused by a leaking door. I will get back to HCN losses due to absorption and adsorption in Paragraph 7.3.1.3.4.
7. Zyklon B for the Killing of Human Beings

7.1. Toxicological Effect of HCN
7.1.1. Physiology

The effect of hydrogen cyanide is based on the fact that it paralyzes the respiration of every individual cell in the body. Oxygen can no longer be transported from the blood through the cell walls into the cells.\textsuperscript{269} As the vital cell functions are thereby starved of oxygen, the animal or human being suffocates.

Insects and in particular insect eggs are considerably less sensitive to hydrogen cyanide than warm-blooded animals. On the one hand, this is due to their greater resistance (slower metabolism). On the other hand, this is due to the fact that lethal concentrations of the gas must penetrate every crack and fissure, no matter how tiny. Every hem and seam of the garments to be fumigated must be filled with the poison in order to kill, for example, every concealed louse. Warm-blooded animals, by contrast, are rapidly exposed to high concentrations of the gas, not only because of their size, but above all due to their continuous breathing through lungs.\textsuperscript{270}

Lethal doses of cyanide can be ingested orally, inhaled, or absorbed through the skin. Oral poisoning (for example with potassium cyanide KCN) is very painful due to muscular convulsions caused by cell suffocation. Even though victims of poisoning by inhalation of high concentrations of hydrogen cyanide become more-rapidly unconscious than with oral ingestion, painful convulsions caused by muscular suffocation appear in these cases as well. For this reason, execution by use of hydrogen-cyanide gas, as it was performed in some U.S. states, has been a topic of much controversy and was completely abandoned around the turn of the millennium; see Chapter 1. A dose of 1 mg cyanide per kg body weight is generally considered lethal. Non-lethal doses of cyanide are quickly decomposed and excreted by the body.\textsuperscript{271}

\textsuperscript{269} Reversible attachment of the cyanide onto the Fe\textsuperscript{3+} of the enzyme cytochrome oxidase, the terminal oxidase of the mitochondrial electron transport chain. Therefore, the cells are prevented from using oxygen, and the entire aerobic metabolic pathway collapses, leading to death in the long run (Petrikovics et al. 2015).

\textsuperscript{270} Insects can “hold their breaths” for a long time: “The respiratory organs of terrestrial insects consist of tracheal tubes with external spiracular valves that control gas exchange. Despite their relatively high metabolic rate, many insects have highly discontinuous patterns of gas exchange, including long periods when the spiracles are fully closed.” Hetz/Bradley 2005, p. 516.

\textsuperscript{271} With a decomposition rate of some 0.017 mg CN\textsuperscript{−} per kg of body mass and minute (McNamara 1976, p. 7). The most-important pathway is binding onto sulfur (conversion to rhodanide), but there are other pathways as well, see Petrikovics et al. 2015.
Absorption through the skin is especially likely when the skin has become moist, for example, as a result of sweating at work. It is generally advised to avoid sweating during the handling of hydrogen cyanide. In this regard, concentrations from 6,000 ppm\textsuperscript{272} (0.6% by volume) constitute a health hazard, while 10,000 ppm (1% by volume) can cause death in just a few minutes.\textsuperscript{273}

7.1.2. Appearance

Symptomatic of hydrogen-cyanide poisoning in fatal cases is the bright-red coloration of the blood and thus also of bruised spots and at times even of the entire skin. This is caused by the over-saturation of the blood with oxygen, resulting in almost all hemoglobin carrying oxygen, forming the so-called oxyhemoglobin, because the blood can no longer give off its oxygen to the cells (see Figure 127).\textsuperscript{274}

This discoloration is similar to, but not quite as intense as, the discoloration caused by carbon-monoxide poisonings (see Figure 128), where the blood’s hemoglobin is almost completely depleted of oxygen and instead loaded with carbon monoxide. The resulting carboxy-hemoglobin is even more intensely red than oxyhemoglobin. In contrast to that, oxygen-depleted blood not loaded with carbon monoxide is dark-red, even almost black. Victims of suffocation due to a mere lack of oxygen therefore have a darkened skin with a bluish or greenish hue.

Interestingly, almost none of the witnesses claiming to have seen victims of gassings with hydrogen cyanide ever mention to have seen any pinkish-reddish discolorations of the victims’ skin. Quite to the contrary. Whenever witnesses made statements about the appearance of the victims’ skin, they usually claimed that it looked dark, bluish or greenish. This agrees with the widespread misconception that victims gassed to death were suffocated, hence look like suffocated people look in the imagination of the general populace.

\textsuperscript{272} ppm stands for “parts per million”; here, 1 ppm HCN corresponds to 1 ml HCN per m\textsuperscript{3} (1,000,000 ml) of air, which converts as 1 ppm HCN = 1.205 mg HCN m\textsuperscript{-3}.

\textsuperscript{273} Flury/Zernik 1931, p. 405; see also Daunderer 1987, pp. 4ff.; see Subsection 7.1.3. on the problematic nature of lethal concentrations given in the literature.

Here are a few examples of such false testimonies. I start with Michał Kula:275

“The cart [transporting the gassing victims] broke down below the window of the practice, the corpses fell on the ground, and I then saw that they had a greenish color.”

Filip Müller, who claims to have carried gassing victims out of a homicidal gas chamber, wrote (Müller 1979, p. 186):

“Many [gassing victims] had their mouths wide open; on the lips of most of them, a trace of white dried-up saliva could be seen. Some had turned blue, and many faces were disfigured beyond all recognition due to beatings.”

Milton Buki, who also claims to have dragged victims out of a gas chamber, stated (Pressac 1989, p. 163):

“The bodies were all naked and some had blue stains on them.”

Former SS man Pery Broad declared (Bezwińska/Czech 1984, p. 174):

“As they lay in the yard, they looked strangely bloated and had a bluish tinge, though they were relatively fresh.”

Walter Petzold, a German deportee to Auschwitz, wrote the following about the appearance of gassing victims he claimed to have seen:276

“The nature of the corpses, on account of the terrible effect of the poison gas, was such that one could see only blue-black, bloated, and mushy flesh that had once belonged to human beings.”

Auschwitz detainee Jan Wolny testified (Kłodziński 1972, p. 89):

“The sockets of their [the gassing victims’] eyes were swollen, their fingers, toes, and bellies all blue.”

In the same vein, three more Auschwitz witnesses whose statements were also documented by Kłodziński stated “independently” from each other that the corpses of the victims were “bluish” (ibid., p. 91): Józef Weber, Aleksander Germanski and Tadeusz Kurant.

The inmate paramedic Wiesław Kielar, who claims to have been forced to clear out the victims of a gassing, stated (Kielar 1979, p. 193):

“Their faces were blue, almost purple-black.”

276 Staatsanwaltschaft beim LG Frankfurt (Main), Strafsache beim Schwurgericht Frankfurt (Main) gegen Baer und Andere wegen Mordes, ref. 4 Js 444/59, Vol. 31, p. 5313.
Former Auschwitz inmate Ludwik Banach declared after the war:\textsuperscript{277}

“The corpses were bluish, one could see traces of blood around their mouths and noses.”

In 1978, while serving his life sentence from the first Frankfurt Auschwitz Trial, Josef Klehr, from March 1943 the head of the disinfestation unit at Auschwitz for one year, stated (Demant 1999, 38 min., 20 sec.):

“Well, when I saw this, when the corpses came out, they were green and blue, they were.”

The only exception of my knowledge is the “95%-reliable” witness Henryk Tauber, who has it both ways (Pressac 1989, p. 489):

“We found heaps of naked bodies, doubled up [in the gas chamber]. They were pinkish, and in places red. Some were covered with greenish marks and saliva ran from their mouths. Others were bleeding from the nose.”

Since a pinkish-red discoloration of the skin is not what people expect to see when confronted with victims of suffocation – be it by means of poison gas or simple oxygen deprivation – the sight of such pinkish-red corpses should have left a distinct impression in the memory of basically all those who claim to have witnessed it. Yet the rule is that almost all witnesses making statements about this followed the beaten path of a false cliché.

\subsection{7.1.3. Lethal Concentration}

Table 10 shows the effects of various concentrations of hydrogen cyanide as claimed by one of the world’s biggest producers of HCN (DuPont 1983, pp. 5f.).

Before we can delve more deeply into the matter, we have to first introduce and explain a few toxicological terms. The term of the lethal (deadly) dose (LD) is of central importance, usually given in mg of the poison per kg of body mass. Each poison has a specific lethal dose, and each human being also reacts a little differently to a certain poison. There is therefore no fixed lethal dose for any poison. There are mere statistical data. For instance, the LD\textsubscript{1} value of a given poison is the amount leading on average to the death of 1\% of all individuals of the species under consideration. LD\textsubscript{50} is the median value where half of the individuals die, while LD\textsubscript{99} is the value at which almost all individuals succumb. Parallel to this, one finds values giving the lethal concentration LC (in mg/L, mg/m\textsuperscript{3} or ppm) for toxins in solutions or noxious gases.

LD\textsubscript{1} values as well as other threshold limit values such as maximum permissible concentrations at the workplace are at times kept intentionally low in the literature in order to also “protect sensitive individuals” (Talmage/Rodgers

\footnote{Deposition of Ludwik Banach, July 18, 1947. APMO, sygn. Drp.ZOd/55, Trial of the Auschwitz Camp Garrison, Vol. 55, p. 102.}
2002, p. 215). LD$_{99}$ values, on the other hand, are of interest in particular to the military regarding ABC warfare or civil defense. Hypothetical (mass) murderers, which we are dealing with in the present study, belong into the same category.

Especially Fritz Haber has conducted research on the effects of poison gases on the battlefields of World War I. In this context, he created the so-called Haber Rule, according to which the product of a poison’s concentration ($c$) and its exposure time ($t$) results in a constant biological effect: $c \cdot t = k$ (Haber 1924; cf. Sartori 1939, pp. 3f.). If, for instance, it takes a certain concentration of a toxic gas to kill a creature within 10 minutes, twice this concentration is required to kill it in half the time, or half the concentration to kill in twice the time. Hence, when dealing with war gases, the lethal dose is frequently given as the product of exposure time and concentration: $LC_t$ (usually mg $\cdot$ m$^{-3}$ $\cdot$ min)

This rule is applicable only, however, if the victim does not secrete or detoxify the toxin to a noticeable degree. As mentioned, however, this is exactly the case for hydrogen cyanide, so that the $LC_t$ values of hydrogen cyanide are not constant, but rather increase with reduced concentration or increased exposure time.

In a thorough study conducted for the infamous Edgewood Arsenal$^{279}$ of the U.S. Army, McNamara demonstrated that the lethal concentrations of hydrogen cyanide as listed in the above Table 10 as well as in various toxicological works are based on experiments with rabbits which cannot be transferred to humans.$^{280}$

The experiment of simultaneously exposing a dog and a man to hydrogen-cyanide gas resulted in the following (Barcroft 1931):

“One human being and one dog (about 12 kg) were exposed simultaneously, without protection, to an atmosphere containing a nominal concentration of

278 HCN has a very faint smell which is not perceptible to everyone. The literature frequently mentions a smell like “bitter almonds,” even though this is misleading, as bitter almonds have a very strong nutty scent, which HCN does not have. The HCN content of bitter almonds is too low to be perceptible next to the strong scent of nuts.


280 McNamara (1976); he has traced back the values of the following works to a research series conducted by Karl Lehmann prior to World War One (mentioned in Lehmann 1919): Korb- ert 1912; Henderson/Haggard 1927; Flury/Zernik 1931; Dudley $et$ $al.$ 1942; Fassett 1963.
1/1600 hydrocyanic acid, the actual concentration being probably between that and 1/2000. \([2^{81}]\) This procedure was followed up to the point at which the dog became unconscious."

The dog was unconscious after a minute and 15 seconds, and its respiration ceased after 1 minute and 33 seconds (it recovered later). Up to this point, the man had felt no symptoms at all! Only a few minutes after the experiment’s termination did he briefly feel nauseated, and some ten minutes later he exhibited slight signs of difficulties to focus. Barcroft obtained similar results during the simultaneous gassing of two monkeys and two dogs: when the dogs died, the monkeys were only beginning to show signs of unsteadiness.

McNamara therefore recommended using threshold values for humans that are close to those of similarly sized mammals (monkeys, goats). Table 11 gives McNamara’s estimated values for human beings. They are set at four times the average values as established in experiments with mice, which is close to the experimental values for goats.

The first part of the table gives the values of the Haber product (concentration times minutes of exposure time). It shows that the values in each column are anything but constant. The second part of the table gives the actual concentrations.

I will not discuss the details of this table, which is based on the statistical evaluation of many experiments primarily with mice. I may point out, howev-

\[^{281}1/1600 = 625 \text{ ppm, ca. } 688 \text{ mg/m}^3; 1/2000 = 500 \text{ ppm, ca. } 550 \text{ mg/m}^3.\]
er, that the lethal concentration for an exposure time of 30 minutes cannot possibly be higher than the one for 10 minutes. This is obviously a statistical anomaly.

Talmage and Rodgers suggested that human beings are roughly only half as sensitive as monkeys to hydrogen-cyanide-gas exposure due to our slower breathing (smaller breathing volume per body mass; Talmage/Rodgers 2002, p. 214). The above concentrations could therefore be doubled. The LC₉₉ value for a murder within 10 minutes would thus be roughly 2,200 mg/m³. For a murder within 3 minutes, this value would even be as high as some 5,000 mg/m³.

We always have to keep in mind that these data are not the result of experiments with human beings, which are of course out of the question, but of extrapolations.

An example may illustrate how even among humans the same concentration of toxic gas can cause completely different times before the onset of death occurs. I subsequently assume that the median lethal dose (LD₅₀) of HCN for humans is roughly 1.1 mg/kg (intravenous application),²⁸² and that humans incorporate 70% of the hydrogen cyanide inhaled with each breath, while exhaling again the remaining 30%.²⁸³ The time required to inspire lethal amounts is calculated as follows (rearranged from Moore/Gates 1946, p. 12):

<table>
<thead>
<tr>
<th>Exposure time [min]</th>
<th>Lethal concentration LC₉₉ (Haber product) [mg ∙ m⁻³ ∙ min]</th>
<th>LC₉₉ₜ₀ Mouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>1,177 1,606 1,791 2,032* 2,552 3,480 508</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1,930 2,632 2,937 3,404* 4,183 5,705 851</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2,546 3,473 3,874 4,400* 5,519 7,526 1,100</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>3,888 5,312 5,916 6,072* 8,426 11,491 1,518</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>11,992 16,355 18,247 20,632* 25,991 35,443 5,158</td>
<td></td>
</tr>
</tbody>
</table>

* Man LC₉₉ₜ₀ = mouse LC₉₉ₜ₀ × 4 at various exposure times.

<table>
<thead>
<tr>
<th>Exposure time [min]</th>
<th>Lethal concentration LC₉₉ [mg ∙ m⁻³]</th>
<th>Mouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>2,354 3,212 3,582 4,064 5,104 6,960 1,016</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1,930 2,632 2,937 3,404 4,183 5,705 851</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>849 1,158 1,291 1,467 1,840 2,509 367</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>389 531 592 607 843 1,149 152</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>400 545 608 688 866 1,181 172</td>
<td></td>
</tr>
</tbody>
</table>

²⁸² This value given by Moore/Gates 1946, p. 12, is based on animal experiments (lethal doses and decomposition rates) as well as proven cyanide amounts in suicide victims. I ignore the fact that McNamara’s research indicates a higher value.

²⁸³ Measured in dogs according to McNamara 1976, p. 7.
\[ t = \frac{1.1 \text{ mg kg}^{-1}}{V \cdot \alpha \cdot C - D} \]  

\[ V = \text{breathing volume in L min}^{-1} \]
\[ \alpha = \text{fraction of absorbed HCN} = 0.7 \]
\[ C = \text{concentration in mg l}^{-1} \]
\[ D = \text{decomposition rate in mg kg}^{-1} \text{ min}^{-1} \]
\[ m = \text{body mass in kg} \]

At a concentration of 1 mg HCN per liter (some 830 ppm), this results in the following values for humans with different body masses and breathing rates:

<table>
<thead>
<tr>
<th>Table 12: Required exposure time before inspiration of the nominal lethal dose of HCN as a function of breathing rate and body mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>brething rate [L min(^{-1})]</td>
</tr>
<tr>
<td>----------------------------------</td>
</tr>
<tr>
<td>body mass [kg]</td>
</tr>
<tr>
<td>50</td>
</tr>
<tr>
<td>100</td>
</tr>
<tr>
<td>150</td>
</tr>
</tbody>
</table>

A small person with a body mass of 50 kg who panics and hyperventilates (80 L/min breathing rate) may, according to the above example, incorporates a lethal amount of hydrogen cyanide already after one minute, while a large or overweight person who keeps calm would have incorporated the lethal dose only after more than half an hour.

The lethal concentrations given in the literature are therefore not only too low because they have been extrapolated inadmissibly from values valid only for small mammals, but in order to “protect sensitive individuals,” they also refer to the above-mentioned small person who may even be ailing. A mass murderer, however, who intends to murder many hundreds or even thousand and more victims at once, faces the challenge of also murdering all perfectly healthy, massive victims who stay absolutely calm. I call this the lethal dose for 100% of the victims (LD\(_{100}\) or LC\(_{100}\)).

Although evidently no data exists in the literature regarding differences in sensitivity toward hydrogen cyanide among individuals (Talmage/Rodgers 2002, pp. 213-215), it may be assumed that ailing individuals will die already when administered considerably lower doses than 1.1 mg/kg, just as there are healthy individuals who must incorporate higher doses to make them succumb. That can again double the required exposure times listed above.\(^{284}\) If we apply this factor of two to the estimated value of the lethal concentration for a murder of 99% of all victims within ten minutes (LC\(_{99}\), p. 231), the value of 2,200 mg/m\(^3\) turns into 4,400 mg/m\(^3\).

\(^{284}\) Cf. for instance the different individual sensitivities toward carbon monoxide in Simpson 1965, pp. 366f.: some, mainly older, individuals died already at a CO/O\(_2\) ratio of 40:60 in their blood (\(^2/3\)), while other, mostly younger individuals succumbed only at a ratio of 80:20 (4). This is a more than four-fold difference in sensitivity.
How do we find out how realistic this estimated value of 4,400 mg/m$^3$ is for an LC$_{100}$ within 10 minutes? The only data available to us are those gathered during executions with hydrogen cyanide carried out exclusively in the United States. In his thoroughly researched book on homicidal gassings in the U.S., Christianson has collected a wealth of data showing execution times ranging from a mere 30 seconds up to 18 minutes.\textsuperscript{285} An analysis of 113 HCN executions performed at the San Quentin Penitentiary in California showed an average time of loss of consciousness of 5 minutes, and an average time of 9.3 minutes until death (Christianson 2010, p. 220). Another investigation showed that on average brain activity (consciousness) continues for 2 to 5 minutes after the start of the execution, while the heart keeps beating for 5 to 7 minutes and longer, whereas actual death occurs after 10 to 12 minutes and more (\textit{ibid.}, p. 209).

These values were achieved with hydrogen-cyanide concentrations that, according to various sources, amounted to 3,200 or 3,600 ppm.\textsuperscript{286} Now we have to convert the concentrations given above in mg/m$^3$ into ppm. For this we need the molar mass of both air (ca. 29 g/mol) and HCN (27 g/mol) as well as the density of air as a function of temperature and humidity using conversion calculators available online.\textsuperscript{287} If the values for the concentrations given for U.S. executions relate to a temperature of 20°C, 50% rel. humidity and a standard-sea-level pressure, the conversion factor is 1.118 mg · m$^{-3}$/ppm, which means that 3,200 and 3,600 ppm convert to some 3,600 and 4,000 mg/m$^3$, which is pretty close to what we just established.

I also calculated the conversion factors from mass concentration to particle concentration at standard pressure for various temperatures and a relative hu-

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|}
\hline
air temperature [°C] & air density [kg/m$^3$] (100% rel. hum.) & [mol/m$^3$] (29g/mol) & conversion factor [mg/ppm] \\
\hline
10 & 1.2408 & 42.79 & 1.155 \\
15 & 1.2171 & 41.97 & 1.133 \\
20 & 1.1935 & 41.16 & 1.111 \\
25 & 1.1698 & 40.34 & 1.089 \\
30 & 1.1458 & 39.52 & 1.067 \\
35 & 1.1213 & 38.67 & 1.044 \\
\hline
\end{tabular}
\caption{Conversion of mg HCN per m$^3$ to ppm}
\end{table}


\textsuperscript{286} Leuchter \textit{et al}. 2015, pp. 33f.: 3,200 ppm; van Pelt 2002, p. 387: 3,600 ppm.

\textsuperscript{287} www.gribble.org/cycling/air_density.html for the density as a function of temperature, pressure and dew point, with a pressure of 1013.25 hPa (mbar); http://andrew.rsmas.miami.edu/bmcnoldy/Humidity.html for converting rel. humidity to the dew point.
midity of 100%, which is what we would have to expect inside a room packed with human beings, see Table 13.

It must be stressed that the times of death quoted above apply to the point when the executee is actually declared dead by a physician, which requires that the heart must have stopped beating for some period. Unconsciousness, immobility, respiratory arrest and cardiac arrest will have set in before that. Lethal amounts incorporated already before death occurs would lead to the victim’s demise, even if the exposure to HCN were to end before cardiac arrest – unless immediate and drastic medical help is provided. This slow death can drag on for up to an hour for incorporated amounts of HCN bordering on the lethal dose.288

In relation to the quantities used, the U.S. execution gas chamber in Raleigh (North Carolina), for example, is said to use 454 g KCN in half-concentrated sulfuric acid, leading to instant formation of hydrogen cyanide vapor, which is even visible for a short period to the witnesses in the witness room and which reaches the victim in seconds.1 As a matter of pure calculation, this generates approximately 180 g of hydrogen cyanide, corresponding to 150 liters of gas. However, since a considerable part of it remains dissolved in the half-concentrated sulfuric acid (approximately 50%, see Paragraph 8.3.3.4), I assume in the following that approximately 90 g or 75 liters of hydrogen cyanide are released as gas. In North Carolina, this gas rises immediately from beneath the execution chair, so that the victim must be exposed, immediately after the beginning of the execution process, to a concentration which probably exceeds 10% by volume for a short period of time, but then falls steadily as a result of dissipation of the hydrogen cyanide throughout the chamber.289

At a normal respiration volume of approximately 15 to 20 liters per minute, and assuming an average concentration of HCN in the inhaled air during the entire execution of only 0.75% by volume, approximately 1.35 to 1.8 grams of HCN will be ingested in 10 minutes (150-200 liters of inhaled air), which corresponds to ten to twenty times the fatal dose. I will return to the issue of overdose later.

7.2. Evaporation Characteristics of Zyklon B

Zyklon B does not release its poison gas instantaneously, but rather over an extended period of time. Since this fact can be decisive for the evaluation both


289 Assuming a volume of 10 m³ in the chamber, 75 liters HCN corresponds to 0.75% by volume, i.e., somewhat more than double the end values taken by Leuchter. Christianson (2010, pp. 117) refers to 32½ oz (921.4 g) of KCN used in the gas chamber in Wyoming, whose volume is unknown to me, though.
of witness accounts as well as of chemical analyses, it will be investigated more thoroughly in this section.

Richard Irmscher of the Degesch company reported in a paper written in 1942 that, at that time, the use of cardboard discs and gypsum (Erco) were the most commonly used carrier materials. The gypsum version was used – even according to witness testimony – in the concentration camps. An analysis of Zyklon-B granules found at the Auschwitz Camp at war’s end using a scanning electron microscope confirmed that the product used there was the Erco version, whose carrier material was based on gypsum.

The evaporation characteristics of this product at various temperatures, *low relative humidity* of the air, and a *fine distribution* of the carrier material are reproduced in Chart 13 as given by Irmscher.

The evaporation is “seriously delayed” at high atmospheric humidity, because the evaporating hydrogen cyanide withdraws considerable quantities of energy from the liquid HCN, the carrier material and the ambient air. As a consequence, the temperature of the product and the ambient air drops. If the temperature of the air reaches the dew point, atmospheric humidity condenses

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290 Irmscher 1942; Peters/Rasch 1941b; on the history of the development of Zyklon B see Lambrecht 1997; Leipprand 2008.

291 Mazal; this contradicts Leipprand’s thesis (2008, pp. 13-22) that the carrier material used consisted of a mixture of gypsum and diatomaceous earth.
out onto the carrier material, which binds hydrogen cyanide and slows down the evaporation process.

I have used a magnified version of Chart 13 in order to obtain the smoothed values in 5-minute increments as listed in Table 14. Unfortunately, Irmscher’s chart does not contain data for higher temperatures, but when considering the difference between the graphs for 0°C and 15°C, we can make a rough extrapolation of a few values for 30°C.

For later references, we want to keep in mind that, at 15°C and in the presence of low relative humidity, approximately 10% of the hydrogen cyanide used at Auschwitz has left the carrier material during the first five minutes, and approximately 45% after half an hour. At a temperature of 30°C, it can be expected that 15% would have been released within the first five minutes, and up to 60% after half an hour. In areas with a relative humidity of approximately 100%, however, the evaporation times would have been “seriously delayed.”

The question of how Zyklon B would have behaved if dumped in a heap on the floor – hence not finely spread out – in a room filled with human beings, is somewhat more difficult. The radiant heat of the bodies would have accelerated the evaporation by increasing the temperature in the vicinity of the floor. Further acceleration of evaporation may have occurred due to a possible reduction in size of the carrier granules as a result of being trampled upon or crushed by falling human bodies, as well as direct bodily contact.

On the other hand, the relative atmospheric humidity in the cellars of Crematoria II and III, which certainly would have approached 100% when

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292 Irmscher (1942) gives in his Table 2 only values for full hours (75% for one hour, erroneously reported as 57%, and 96.4% for two hours).

293 We have one point of reference from “Erco” Zykon B evaporation experiments carried out by the Soviets after they occupied the Majdanek Camp in August 1944. They left the Zyklon B in the cans (bulk distribution) and found that, at a temperature of 28 °C and presumed low humidity, the cans had lost some 90% to 94% of their HCN contents, which is a little less than the evaporation rate recorded by Irmscher for finely distributed Zyklon B at 15 °C after two hours (96.4%); see Graf/Mattogno 2004a, p. 127).
packed full of people, would have “seriously delayed” evaporation,\textsuperscript{294} as well as the possible fluid secretions on the floor caused by panicking victims, which could very well have occurred as soon as the door was closed, that is, prior to release of the Zyklon B. If considering witness claims that the chamber floor was rinsed out with water hoses after each gassing,\textsuperscript{295} then the floor would indeed have been wet already before the entry of any victim. Under such conditions, a serious delay in the discharge of the hydrogen cyanide from the considerably wet carrier material would have to be anticipated.

If assuming – against the actual situation as supported by material evidence – that Zyklon-B-introduction devices were installed in some of the Auschwitz “gas chambers” as attested to by Michał Kula and others,\textsuperscript{296} such a device would have had the following effects:

a. The Zyklon-B granules would not have been spread out, but rather would have been kept together by the inner wire mesh – or, even worse, within a

\textsuperscript{294} Unheated cellar rooms by their very nature, have very high relative atmospheric humidity.

As a result of the large numbers of human beings crammed into the cellar, the atmospheric humidity would certainly approach 100\%, resulting in the condensation of water on cold objects.

\textsuperscript{295} For instance H. Tauber, in: Pressac 1989, p. 484.

\textsuperscript{296} See Paragraph 5.4.1.2.9., p. 150, for this.
tin or a can, as claimed by Henryk Tauber and Josef Erber (McCarthy/van Alstine), reducing the evaporation rate drastically.

b. The three layers of wire mesh claimed by Kula, in particular the inner-most fly screen, would have drastically reduced any air convection within them, reducing both evaporation rate as well as the speed with which the gas could spread out into the chamber.

c. Due to high humidity in the air and the lack of air convection, moisture would have condensed intensively on the Zyklon-B carrier, reducing the evaporation rate of HCN “seriously.”

The present study regarding homicidal mass gassings will be based on the assumption that the Zyklon B would at best have behaved in the manner described by Irmscher at 15°C (see above), which is assumed to be similar to a temperature inside the chamber of 30°C, a relative humidity near 100%, and a carrier wetted by a wet floor and/or not finely distributed, depending on the scenario considered.297

7.3. The Gassing of Human Beings
7.3.1. Eyewitness Testimonies
7.3.1.1. Boundary Conditions

This subsection will examine a few related witness testimonies for a determination of the chemical, physical and technical boundary conditions of the alleged homicidal gassings. A complete and detailed analysis of the many witness testimonies in the individual trials and in the literature would be too voluminous to include here.298 The following survey is therefore neither complete nor necessarily representative.

In two separate studies, I have analyzed the coercive and manipulating conditions under which many witness statements were made, to which I refer the interested reader (Köhler 2003; Rudolf 2011, pp. 292-359). It suffices to say that those conditions, many of which prevail to this very day in western societies, undermine the trustworthiness of most witnesses and the credibility of their claims. These statements should therefore never be accepted at face value, but subjected to careful, skeptical scrutiny.

297 How clueless even the most-knowledgeable of the German experts on Zyklon B were about its lethality is demonstrated by the 1948 testimony of Dr. Herbert Rauscher, foreign representative of the Zyklon-B-distribution company Heli and close co-worker of Germany’s foremost expert on pest control, Dr. Gerhard Peters. We read there: “[A 500-g can of Zyklon B] “... would be absolutely sufficient to kill all present within 2 minutes, if one opens and empties it out here. [...] In order that death occurs, say, within one minute, a gas concentration of some 5 grams per cubic meter needs to be present.” (Walendy 1981, p. 186). He didn’t know any better, precisely because they had no experiences with killing of humans using Zyklon B.

298 On critical analyses of witness statements about “gas-chamber” murders at Auschwitz see, among others, Graf 1994; Mattogno 2015a, 2016e.g.j.k.
7.3.1.2. Claimed Procedures

The following is a closer examination of three of the more frequently quoted witnesses: Rudolf Höss, former commandant of the Auschwitz Camp, Richard Böck, a camp SS man of subordinate rank, as well as Henryk Tauber, former inmate and member of the “Sonderkommando” in Crematorium II in Birkenau.

The Höss statements may be consulted in their German original (Broszat 1981; Bełżewska/Czech 1973) or in a published English translation as follows (Bełżewska/Czech 1984):

“Then the fires in the pits had to be stoked, the surplus fat drained off, and the mountain of burning corpses constantly turned over so that the draught might fan the flames. [...] While they dragged the corpses about, they ate or they smoked. [...]” (p. 102)

“In the early days oil refuse was poured on the bodies, but later methanol was used. [...] He [Paul Blobel] had also attempted to dispose of the bodies with explosives, [...]” (pp. 116f.)

“The door [of the gas chamber in Crematorium II or III] The door would now be quickly screwed up and the gas immediately discharged by the waiting disinfectors through vents in the ceilings of the gas-chambers, down a shaft that led to the floor. This ensured the rapid distribution of the gas. It could be observed through the peep-hole in the door that those who were standing nearest to the induction vents were killed at once. It can be said that about one-third died straight away. The remainder staggered about and began to scream and struggle for air. The screaming, however, soon changed to the death rattle and in a few minutes they were all on the floor. The time required for the gas to have effect [was between five and ten minutes and varied according to the weather, [...] on the quality of the gas, [...] and on the composition of the transports [...]. The victims became unconscious after a few minutes, according to their distance from the intake shaft. [...] After twenty minutes at the latest no movement could be discerned. The door was opened half an hour after

299 For a more thorough analysis of Höss’s and Tauber’s statements with further references see Mattogno 2015a, pp. 367-431.

300 Liberal translation; the original says here “das Herumstochn in den brennenden Leichenbergen, um Luft zu führen,” which translates to “poking around in the burning heaps of corpses to bring in air” (Bełżewska/Czech 1973, p. 101).

301 Paul Blobel was the commander of Unit 4a of Einsatzgruppe C, one of the German military units in Russia charged, among other things, with fighting partisans behind the Russian front. Mainstream historiography has it that in summer 1942 he was charged with the destruction of evidence of German mass murders in Eastern Europe (cf. http://en.wikipedia.org/wiki/Paul_Blobel). In the context of this task he allegedly made the most grotesque attempts at destroying corpses as stated by Höss. I will not dwell on this topic in this book.

302 This phrase was left out of the English translation; see Bełżewska/Czech 1973, p. 133: “dauerte die Wirkung des Gases fünf bis zehn Minuten.”
the induction of the gas, and the ventilation switched on. Work was immediately begun on removing the corpses. [...]” (pp. 134f.)

During an interrogation on April 2, 1946, Höss stated (Friedlander 1982, p. 113):

“Q But was not it [sic] quite dangerous work for these inmates to go into these chambers and work among the bodies and among the gas fumes?
A No.
Q Did they carry gas masks?
A They had some, but they did not need them, as nothing ever happened.”

Anyone who has ever grilled meat knows that fat cannot be scooped up from burning flesh. Fat ignites at approximately 184°C (Perry 1949, p. 1584). It is therefore the first thing that burns on a corpse located in a fire. Hence, it is impossible to collect the easily combustible fat during the incineration of a corpse. After all, the bodies were burnt – not grilled.

The incineration of corpses in the open air with combustible fluids doesn’t work because fluids have the property of flowing down or away and/or evaporating. When corpses, which consist of more than 60% water, are burnt, this must take place with the expenditure of quite large quantities of fuel and great heat. In particular, oil or methane combustion in the open would be insufficient.

Large pyres generate enormous heat, making it impossible to be close to them without fireproof suits, let alone constantly turning over the corpses (or poking around in the fire, as the original states here).

The alleged attempt to destroy bodies by means of explosives requires no further comment.

The door to Morgue #1 of Crematorium II and III were two meters high. The upper end of the peephole included in some of the “gastight” wooden

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doors manufactured by the Deutsche Ausrüstungswerke workshop for the camp was at a height of 1.60 m (see Figure 130). If a room is filled with people who are on average 170 cm tall, it is not possible to observe what is going on several meters away from that peephole, especially since it has to be expected that panicking people crowd around the door.

I will discuss the claimed speed of the gassing procedure later. Suffice it here to say that the speed attested to by Höss (a third died instantly, the rest was on the floor within a few minutes) is not possible with hydrogen-cyanide gas or Zyklon B.

Entering the “gas chamber” without a protective filter, eating and smoking in the “gas chamber,” as well as the commencement of the corpse-dragging operation immediately after the opening of the doors would only be conceivable if there were no longer any dangerous quantity of gas in the chamber. The question of whether this was possible will be the subject of Paragraph 7.3.2.2.

Höss also wrote the following, which also sounds rather incredible (Bezwińska/Czech 1984, p. 136.):

“Although they were well fed and given many additional allowances, they [the Jewish Sonderkommandos] could often be seen shifting corpses with one hand while they gnawed at something they held in the other. Even when they were engaged in the most gruesome work of digging out and burning the corpses buried in the mass graves, they never stopped eating.

Even the cremation of their near relations failed to shake them.”

This is really a bit hard to digest.

Höss was repeatedly tortured and abused by his captors. This may explain the absurdities he put down on paper – or was forced to sign. At any rate, it renders his statements inadmissible in any court of law – and should also render them unfit in the scientific community to serve as evidence for anything not independently confirmed by documents or material evidence.

Another commonly quoted witness is Henryk Tauber. Tauber was, according to his own testimony, a member of the inmate Sonderkommando of Crematorium II during the war. J.-C. Pressac writes that this witness testimony is
the best in relation to the crematoria, which he considers to be 95% reliable. This testimony contains the following:305

“During the incineration of such [not emaciated] corpses, we used the coke only to light the fire of the furnace initially, for fatty corpses burned of their own accord thanks to the combustion of the body fat. On occasion, when coke was in short supply, we would put some straw and wood in the ash bins under the muffles, and once the fat of the corpse began to burn the other corpses would catch light themselves. [...] Later on, as cremations succeeded one another, the furnaces burned thanks to the embers produced by the combustion of the corpses. So, during the incineration of fat bodies, the fires were generally extinguished. [...] Another time, the SS chased a prisoner who was not working fast enough into a pit near the crematorium that was full of boiling human fat. At that time [summer 1944], the corpses were incinerated in open-air pits, from which the fat flowed into a separate reservoir, dug in the ground. This fat was poured over the corpses to accelerate their combustion. [...]”

Tauber’s claims as to self-igniting, self-combustible corpses are completely absurd and in contradiction to all the laws of physics and engineering (Mattogno/Deana 2015). He also confuses grilling with burning with relation to the allegedly boiling fat from the corpses. What is more, fat cannot boil at all. It simply begins to ignite at temperatures of approximately 180-190°C.306

Tauber’s statements are untrue also in the technical details related by him. He claims, for instance, that the Sonderkommandos shoved extraordinarily many corpses into each muffle (up to eight) when they heard Allied planes approaching. Tauber claims that, by their so doing, huge flames would have come out of the crematorium’s chimney, which they hoped would make the Allied bomber pilots aware of them. But as is common knowledge and has been pointed out many times, no flames ever come out of crematorium chimneys (Mattogno 2004d, Mattogno/Deana 2015, pp. 375-379). It is also impossible to push eight corpses into a cremation muffle whose door was just two feet wide and high.307 And apart from that, before Tauber and his co-inmates would have been able to push eight corpses into each muffle and get a huge blaze going, any plane they claim to have heard approaching would have long since flown far, far away. Such testimonies are, to use Pressac’s words, nothing but downright lies and pure invention (1989, pp. 469ff., on several claims made by the witnesses C.S. Bendel, M. Nyiszli, and H. Tauber – the five percent of Tauber’s testimony which according to Pressac are unreliable).


307 For a more-thorough critique of Tauber’s testimony see Mattogno 2015a, pp. 367-416.
Now to the testimony of the witness Richard Böck as quoted during the Frankfurt tribunal.188

“One day, it was during the winter of 1942/43, H. asked me whether I wanted to drive with him to a gassing action. [...] The transport train, which had already arrived, stood on the free stretch of track. [...] They were all loaded, and driven to a former farmhouse. [...] After the entire transport – there must have been approximately 1,000 people – was in the building, the gate was closed. Then an SS man came, I believe it was a Rottenführer, to our ambulance and got out a gas canister. He then went to a ladder with this gas canister. [...] At the same time, I noticed that he had a gas mask on while climbing the ladder. [...] he shook [...] the contents of the canister into the opening. [...] When he had closed the little door again, an indescribable crying began in the chamber. [...] That lasted approximately 8-10 minutes, and then all was silent. A short time afterwards, the gate was opened by inmates, and one could see a bluish cloud floating over a gigantic pile of corpses. [...] At any rate, I was surprised that the inmate commando who was assigned to remove the bodies entered the chamber without gas masks, although this blue vapor floated over the corpses, from which I assumed that it was a gas. [...]”

In winter of 1942/1943, none of the crematoria under construction in Birkenau was operable (the first became operable in March 1943). For this reason, the alleged victims of homicidal mass gassings in a farmhouse (one of the so-called bunkers) as attested to by Böck are supposed to have been cremated in open-air pits close to the farmhouse.

In view of our previous study of the subject, we can establish:

– According to professional air-photo analyses of the decisive locations, there were no large cremation ditches, no fuel stockpile, no development of smoke or flames.308 Accordingly, the scenario of destruction is obviously false in this regard.

– One thousand people occupy a surface area of at least 200 m². According to witness testimonies, the so-called bunkers had only half this much surface area, at the most.309

– Section 7.1: Hydrogen cyanide is a colorless, invisible gas. Therefore, no “blue vapor floating over the corpses” could be seen. This passage is a sign of pure fantasy, obviously suggested by the German name of HCN, “Blausäure” (blue acid), which only relates, however, to the formation of the pigment Iron Blue. A similar claim was made by Jaacov Gabai, an inmate who claims to have worked in a homicidal gas chamber (Greif 1995, p. 141).

– Section 7.2: Since the events described are alleged to have taken place in

308 See J. Ball 2015, pp. 97-102, 103-105; Mattogno 2016g.

winter, the rapidity of the procedure is incredible, since Zyklon B only releases gas slowly at freezing temperatures.

– The described entry into chambers with a high concentration of toxic gas without a protective filter is impossible; obviously, such a procedure would sooner or later be fatal.

German public prosecutor Willy Dreßen had the following to say about Böck’s testimony: 310

“Dear Mr. […],
I enclose a copy of the witness testimonies of former members of the SS on the gassing of inmates at Auschwitz […] for your information. They are only a selection – there are numerous other such testimonies. In contrast to you, I am of the opinion that, as far as the fact of the occurrence of homicidal gassings is concerned, these eyewitness testimonies are entirely suitable to refute the denial of this fact.

Faithfully, (Dreßen), Public Prosecutor”

And yet again:

“Dear Mr. […],
 […] Furthermore, the testimony of Böck is only one of numerous similar statements […]

Faithfully, (Dreßen), Public Prosecutor”

Böck’s testimony was one of the few which the Frankfurt tribunal considered credible after careful examination, that is, the inconsistencies would not be so easily recognized by the layman, in contrast to many other testimonies which the court rejected. And yet it is entirely incredible.

In his first book, Pressac himself makes quite a few critical remarks about the reliability and credibility of witness testimonies; 311 yet it is upon these witness testimonies that all the descriptions of the “gas chamber” killings are based. He lists the untruths, impossibilities, and exaggerations of the witnesses and tries to explain how they presumably materialized. Finally, in an interview, he said: 312

“No, no. One cannot write serious history based only upon witness testimonies.”

At the same time, however, he bases all of his remarks on the alleged existence of homicidal “gas chambers” exclusively on these witness testimonies! And elsewhere, he states, with a naiveté which can hardly be surpassed: 313

312 In the German weekly newsmagazine Focus no. 17/1994, pp. 118, 120.
“Witnesses never lie, but they can be mistaken.”

Pressac seems to have been the only person of the establishment who took notice of the progress of revisionist research. He knew that traditional historiography of the Holocaust is reduced to absurdity by the facts revealed by this research. Consequently, he kept changing his attitude when making public statements. The most vehement attack of the (once) media darling Pressac on the dominating historiography occurred during an interview published as an appendix to a PhD thesis analyzing the history of Holocaust revisionism in France. In it, Pressac described the established historiography of the Holocaust as “rotten” and stated (Igounet 2000, p. 652):

“Can we alter the course? It is too late. A general correction is factually and humanely impossible [...]. New documents will unavoidably turn up and will overturn the official certainties more and more. The current view of the world of the [National Socialist] camps, though triumphant, is doomed. What of it can be salvaged? Only little.”

In his first and most-comprehensive book, Pressac was compelled to correct the statements of witnesses in many cases in order to eliminate errors and, in his opinion, technical impossibilities. But when so doing, he never revealed the basis upon which he undertook these corrections. In actual fact, he merely replaced the capriciousness of “witnesses” with his own. Thus, the numbers of victims per gassing procedure, as estimated by Pressac, for example, are considerably lower than those estimated in the witness statements, which often speak of several thousand victims per gassing operation per day for Crematoria II and III. One thousand people could only have been made to enter a cellar with a surface area of 210 m² under the maintenance of extraordinary discipline accompanied by a readiness to cooperate(!) on the part of the victims (see Paragraph 7.3.2.1.1). The numbers of people reported in places by witnesses, on the other hand (2,000 and more314), could not have been contained by Morgue #1. To arrive at the number of victims of Auschwitz-Birkenau as spread by sensationalist media and superficial literature until the late 1980s – four million – one is in fact forced to resort to technically impossible figures of “gas-chamber” occupancy, as some witnesses did – which indicates that they were not reporting true events but were aiming at supporting a propaganda myth.

At the moment, the official estimates range from approximately 1 to 1½ million victims,315 though in his second book, Pressac downgraded the “gas-chamber” victims to 630,000 (1993, p. 147) and later even further down to 470,000-550,000 (1994, p. 202). In an article published in a small German

314 2,000 according to R. Höss (IMT, Vol. 33, p. 277), as well as C.S. Bendel; 3,000 according to M. Nyiszli (Pressac 1989, pp. 471, 473, respectively); 2,500 acc. to Kula (see quote on p. 148).

315 On the death-toll change of the early 1990s see Rademacher 1999; on the origin of the 4-million propaganda figure see Mattogno 2003d.
periodical in early 2002, a German mainstream journalist even attempted to reduce the death toll of the Auschwitz “gas chambers” down to as little as 356,000.\textsuperscript{316} But as long as this revolutionary development has not been accepted by orthodox scholars, I will continue to address the claimed number of roughly one million “gas-chamber” victims for all further considerations.

The following is a description of the homicidal gassing procedures for the individual installations, as they were posited by Pressac (1989) with the assumption that one million human beings were actually gassed:

Crematorium I: The crematorium environs are cordoned off for third parties; 500-700 victims undress outdoors (what a spectacle for all other inmates!); they enter into the “gas chamber” (morgue) through the furnace room; on their way there, they march past piles of corpses of earlier victims or “non-genocidally” deceased inmates; Zyklon B is introduced through (non-existent) roof vents while using gas masks after closing the doors; the ventilation system is turned on, and doors are opened after the victims’ demise (approximately five min.); inmates remove the corpses from the “gas chamber” without gas masks or protective garments; the victims are cremated (p. 125). According to Pressac, only a few gassings occurred, with a total of only 10,000 victims (pp. 131f.).

Crematoria II/III: 800 to 1,200 victims enter via the western entrance stairway into Morgue #2, where they undress; they walk through the hallway into Morgue #1 (“gas chamber”); Zyklon B is introduced through (non-existent) roof openings either onto the floor or into (non-existent) wire-mesh pillars while using gas masks; after the victims’ death (approximately five min.), the ventilation system is turned on; the door is opened after some 20 min.; the corpses, soiled with blood, vomit and excrement, are hosed down; inmates remove them with or without using gas masks, but without protective garments; the victims’ hair is cut, and any gold teeth are removed while the bodies are still in the basement; a lift (payload 300 kg\textsuperscript{317}) hoists them to the ground floor; there they are dragged through a water-filled channel to the furnaces for cremation (p. 253). Some 400,000 victims are claimed for Crematorium II, and 350,000 for Crematorium III (p. 187).

Crematorium IV/V: During good weather a few hundred victims undress outdoors (again: what a spectacle for all other inmates!), otherwise in the morgue, some of them next to corpses of the last gassing victims (or “non-genocidally” deceased inmates) awaiting cremation; they enter into the “gas chambers” past the coal room and doctor’s office; the entire

\textsuperscript{316} Meyer 2002. For an overview of the wide range and development of claims about the Auschwitz death toll, see Faurisson 2003.

\textsuperscript{317} Crematory II only received a makeshift elevator, see C. Mattogno 2015a, p. 53.
building needs to be evacuated; Zyklon B is introduced through wall openings from a ladder after the doors have been closed (despite iron bars in front of those openings); the doors are opened after 15 to 20 minutes to ventilate the chamber by natural draft (since early 1944, Crematorium V might have had a powered system); inmates – some of them wearing gas masks, some not – remove the corpses to the morgue or to cremation ditches behind Crematorium V. According to Pressac, the number of victims can only be estimated with difficulty, probably some 100,000 each (pp. 384-390). A similar scenario applies to the Bunkers 1 and 2 (see Subsection 5.4.3).

7.3.1.3. Quantities of Poison Gas

7.3.1.3.1. Claims about Amounts of Zyklon B Used

How much Zyklon B is claimed to have been used in the homicidal gas chambers at Auschwitz?

There are two ways of answering this question. The first and direct one is by determining what amount witnesses claimed was applied. The second way is by drawing conclusions about the applied concentrations from the time it took to kill the victims.

Unfortunately, there seems to be only one witness who has made statements about the actual amount of Zyklon B used: Rudolf Höss.318 In his affidavit of May 20, 1946, written under coercion while in British custody, he wrote:319

“5 to 7 cans of Zyklon B with 1 kg each were needed for gassing 1,500 people; the number of cans varied depending on the size of the gas chamber, and the weather conditions, which is to say, during cold weather 2 or 3 additional cans were needed.”

A few days earlier, on May 14, Höss had allegedly stated during an interrogation that the gassing of 1,500 to 1,600 required the following amounts of Zyklon B:320

“in the crematories, in the large crematories 7, in the other rooms 5 cans. But it depended on the weather. If it was very cold and wet, 2–3 more cans had to be used.”

It is quite unclear what the expression “other rooms” refers to, as that would include the rooms of the alleged bunkers and all those rooms of the Crematoria I, IV and V which are claimed to have been used as homicidal gas chambers. Some of them have well-defined sizes, while others are subject to specu-

318 Figures given in works of secondary literature either give Höss as a source or no source at all; see Buszko 1985, p. 118: 6 to 12 kg; Poliakov 1971, p. 205: 5 to 7 kg; Pressac 1989, p. 253: 4 to 6 kg.
320 Nuremberg Document NI-036.
lation. Since that renders the problem pretty much unsolvable, I will focus on the claimed gas chambers in the “large crematories” mentioned by Höss, which are the Morgues #1 of Crematoria II and III.

These rooms were 7 m wide, 30 m long and 2.40 m high (see Figure 58 on page 107), resulting in a volume of 504 m$^3$.\textsuperscript{321} Estimating the victims’ average body weight to be 60 kg,\textsuperscript{322} and their density at roughly 1 kg L$^{-1}$, the volume of 1,500 of them would have been 90 m$^3$. A more-realistic maximum number of victims per gassing – 1,000 – would result in 60 m$^3$. The free volume to be filled with the toxic gas would therefore have been 414 m$^3$ or 444 m$^3$, respectively.

If seven cans of Zyklon B with 1 kg HCN each have released all of their poison into that free air space, the concentration would amount to 1.6 or 1.7 g per m$^3$, respectively, or 13,000 and 14,000 ppm respectively.

As stated in Section 7.2, we may assume that under realistic conditions Zyklon B will have given off only some 10% of its nominal amount of HCN within the first five minutes after applying it. This would amount to some 1,300 to 1,400 ppm at the end of those five minutes.

Assuming that the victims are panicking and thus moving the air in the chamber vigorously, we may also assume that it takes not more than another minute for the gas to have been more-or-less evenly distributed throughout the room. This is to say that at this point in time even the persons standing farthest away from the source – in the room’s corners – will be exposed to that concentration.

Assuming a constant increase from zero to the final concentration after six minutes (a permissible assumption during the first 20 to 30 minutes), the average concentration experienced over time by the remotest person would have been half of that value, hence 650 to 700 ppm. Since the release of HCN from the carrier slows down with time, the average concentration over time after (10+1=) 11 minutes cannot have been more than twice this amount. An average concentration over time of some 3,200 ppm or even 3,600 ppm, as it was once instantly applied in U.S. execution chambers, would be reached only after some 30 minutes, at which point some 50% of the HCN has left the carrier.

Another way of approaching the issue of how much Zyklon B was used at Auschwitz for homicidal gassing is to look at the amount of Zyklon B delivered to the camp. These supply figures can be found in the protocols of the Allied postwar tribunal against the Degesch officials as already mentioned in

\begin{footnotesize}
\textsuperscript{321} From this we should deduct the volume of the room’s seven concrete pillars and the concrete beam on top of them running through the entire length of the room, but we also should add a part of the ventilation ducts’ volume, into which some of the poison would dissipate. For simplicity’s sake and because the possible errors are minute, I assume that both cancel each other out.

\textsuperscript{322} Since they were a mix of children and adults; Pressac 1989, p. 475; van Pelt 2002, pp. 470ff.
\end{footnotesize}
Subsection 5.2.4. In total, these deliveries reached some 19,500 kg during the years 1942 and 1943. The total supplied amount to the camp during the entire period when mass executions with Zyklon B are said to have happened (early 1942 to late 1944) will hardly have exceeded 30 tons. Pressac assumes that 95 to 98% of all the Zyklon B delivered to the camp was used for the original purpose, i.e., for delousing clothes and rooms (1989, pp. 15, 188). This was also claimed by the defense during the trial against the individuals responsible for the activities of the company Tesch & Stabenow, which supplied Zyklon B to the Auschwitz Camp:

“The amount of Zyklon B sufficient to kill half a million or even a million people was so negligibly small compared to the amount needed for pest control that one could not have been noticed it.”

If we follow this line of argument that not more than 2-5% of the total deliveries were used for killings, then some 600 to 1,500 kg were used for extermination of humans.

When dividing up this amount of Zyklon B for one million people allegedly killed with it, however, inconsistencies appear. With an assumed 1,000 victims per gassing – the “gas chambers” (Morgues #1) of Crematorium II and III could hardly hold 1,000 persons per execution – only roughly 0.6 to 1.5 kg HCN would have been available for each gassing, much less than claimed by Höss. This amount would have resulted in a theoretical end concentration of only 1.4 to 3.4 g per m³, which means that the average concentration during the first five or ten minutes would have been much lower (5 to 10% of that), which isn’t even lethal.

If, on the other hand, one million victims were killed according to Höss’s statements, i.e., with 7 kg used during a gassing in Crematoria II and III (with 1,000 assumed victims for each event), this would have amounted to 1,000 · 7 kg = 7 tons of Zyklon B, or some 23% of the estimate entire Zyklon-B delivery to the camp. Whatever the truth, the actual Zyklon-B deliveries obviously would have sufficed for both disinfestations and homicidal gassings under the circumstances considered here. We can conclude from this is that it would not have been possible to use much more than 7 kg per 1,000 inmates, as claimed by Höss, as that would have excessively depleted the camp’s badly needed supplies for disinfestations.

7,478.6 kg. in 1942 and 12,174.09 kg in 1943; cf. Lindsey 1983, p. 283; Ebbinghaus 1999, p. 70.

See in this regard also Mattogno 2015c.

Document No. NI-12 207, in: Walendy 1981, p. 83; Ebbinghaus 1999, pp. 59f. Trial against Bruno Tesch, Joachim Drosihn and Karl Weinbacher. Drosihn was acquitted, while Tesch and Weinbacher were sentenced to death and hanged. In contrast to that, no staff member of the former Zyklon-B producers Degesch was ever convicted, because no evidence was found linking them to a crime: Degussa 1993, pp. 148f.

By the end of 1943, the buildings in the various Auschwitz camps (Main Camp, Birkenau, Monowitz) had a total volume of almost 500,000 m³. One single fumigation of all these
7.3.1.3.2. HCN Quantities Deduced from Execution Times

The second, indirect way of estimating the amount of Zyklon B used is based on the execution times reported by witnesses, which in turn permit a rough estimate of the concentrations used. Over the years, I have collected quite a few sources citing witness statements about the execution times.\textsuperscript{327} To summarize this long list of sources, let me simply list the times claimed so that we may have an overview:

<table>
<thead>
<tr>
<th>Time Description</th>
<th>Time Ranges</th>
</tr>
</thead>
<tbody>
<tr>
<td>instantly (2×)</td>
<td>7 min.</td>
</tr>
<tr>
<td>sudden silence</td>
<td>3 min. (3×) 8 to 10 min.</td>
</tr>
<tr>
<td>a few seconds</td>
<td>3 to 4 min. up to 10 min. (2×)</td>
</tr>
<tr>
<td>a few moments</td>
<td>2 to 5 min. 10 min. (2×)</td>
</tr>
<tr>
<td>½ to 1 min.</td>
<td>3 to 15 min. at least 10 min.</td>
</tr>
<tr>
<td>1 min. (2×)</td>
<td>4 min. (2×) 20 min. (4×)</td>
</tr>
<tr>
<td>2 min.</td>
<td>5 min. (2×)</td>
</tr>
<tr>
<td>a few min. (4×)</td>
<td>5 to 7 min. (2×)</td>
</tr>
</tbody>
</table>

building using a concentration of 8 g/m\textsuperscript{3} would have required 4 metric tons of HCN. See Mattogno 2015c, pp. 77-79.

\textsuperscript{327} With relation to the killing times, see in, for example: Jury Court Hagen, verdict of July 24, 1970, ref. 11 Ks 1/70, p. 97 (5 min.); Buszko 1985, pp. 114, 118 (a few min.); Adler \textit{et al.}, 1984, pp. 66, 80, 200 (a few min., up to 10 min.); Hamburger Institut… 1987, pp. 261ff., 294 (instantly, up to 10 min.); C. Vaillant-Couturier, IMT, Vol. 6, p. 216 (5 to 7 min.); M. Nyiszli in: Schoenberner 1981, p. 250 (5 min.); C.S. Bendel in: Langbein 1987, p. 221/NI-11953 (end of screaming of victims after 2 min.; doors open after 5 min.); Public Appeal of former Auschwitz detainees; IMT. Vol. 7, p. 174 (4 min.); P. Broad in: B. Naumann 1968, p. 217 (4 min.), opening of doors after 10-15 min.; Rückerl 1984, pp. 58f.; K. Hößlberger in: Fritz Bauer…, p. 11647 (1 min.); R. Böck, ibid., p. 14148 (screaming victims for 10 min); F. Müller, \textit{ibid.}, p. 20599 (8-10 min.); E. Pyš, \textit{ibid.}, p. 10791 (ventilators switched on after only a few min.); K. Lill, \textit{ibid.}, p. 18323 (a scream a few seconds after the introduction of Zyklon B, pall of thick smoke exiting the chimney a few min. later); H. Fischer, appendix to the transcript of the expert testimony of Prof. Dr. G. Jagschitz, 3rd-5th hearing days of criminal proceedings against G. Honsik, April 4., April 30, May 4, 1992, ref. 20e Vr 14184 and Hv 5720/90, District Court Vienna, pp. 443f. (respiratory arrest after 5 to 7 min.; opening of doors after 20 min. for the bunker), p. 472 (unconsciousness after seconds, 2 min. all in all for Crematorium II); F. Entress (5 min.), NO-2368, p. 5; J.P. Kremer (few minutes), Bezwinski/Czech 1984, p. 214; R. Höss, Doc. 3868-PS, IMT, Vol. 33, p. 277 (3 to 15 min.); R. Höss, in: Broszat 1981, p. 166 (20 min. until no one moved; see quote here p. 239); Hans Münch, in Rudolf 1997b, pp. 139-190 (2 to 5 min. in winter); S. Lewenthal, Staatliches Museum… 1972, p. 155 (sudden silence); D. Paisikovic, in: Léon Poliakov 1964, pp. 159ff. (3-4 min.); R. Vrba alias Walter Rosenberg, A. Wetzler, in: Wyman 1990, p. 20 (everyone in the room was dead after 3 min.); J. Tabeau, in: Aynat 1990 (10 min.); H. Stark on Crematorium I, in: Mattogno 2016c, p. 68 (a few min.); H. Aumeier, British National Archives, file WO.208/4661, www.fpp.co.uk/Auschwitz/Aumeier/, p. 32 of 43-page manuscript of 1945; p. 6 of 17-page manuscript of July 25, 1945 (½-1 min.) McGinley 2017); M. Buki, in: Pressac 1989, p. 163 (20 min. until door of Bunker was opened); A. Lettich, in: \textit{idem}. (1946 a few moments). J. Weiss, in: Hackett 1997, p. 394 (3 min.); A. Pilo, in: Setkiewicz 2011, pp. 47f. (3 min.); H. Mandelbaum, Deposition, AGK, NTN, 162, p. 167 (7 min.); J. Klehr, in: Demant 1978, 38:40 (at least 10 min.). If longer killing times appear in the witness testimonies, they usually refer not to Crematoria II and III but rather to Crematoria IV/V, Bunkers 1-2, or Crematorium I in the Main Camp. The killings in Crematoria II and III are therefore alleged to have been committed very swiftly.
As we can see, pretty much every time between instantly and 20 minutes is present. The longest reported time was reported by Höss, but he also stated that after 30 minutes the inmates of the Sonderkommando entered the “gas chamber” without any gas masks, hence ventilation must have been included in that time, although Höss stated that it was turned on only at the time of entry – an impossible claim, as this would have killed the inmates also – plus potentially any supervising/guarding SS men.

Höss’s testimony is, of course, encumbered with a history of coercion and with provably false claims. In addition, it is hard to see how the commandant of the camp could even have had intimate knowledge about the details of mass executions going on in his camp.

It would be a big mistake to list all the claims that can be found in the sources and to form an unweighted average from them, because not all statements are of the same value. A proper analysis would require to analyze how trustworthy each of the witnesses is and how credible their respective statements are. Such a task is beyond the scope of this study. We can, however, focus on those claims which seem more credible than others. If the gassings took place in the first place, the question to ask is: which group of individuals could have been in the position to know a) when a mass gassing started and b) when exactly the victims in the “gas chamber” were considered dead?

Although the start of an execution could potentially be observed by many, for instance because they saw SS men pouring Zyklon B into some room presumably filled with victims, knowing when a gassing was completed required that the observer not only had a watch or some other time-tracking device (which few inmates will have had, if any), but also and more important that he was able to see what was going on inside the “gas chamber” during the execution. There are only two groups of individuals who could possibly know such details: first and foremost the perpetrators, and second, but less likely, the detainees charged with cleaning out the “gas chambers”.

It is unlikely, however, that the SS would have allowed the inmates charged with the horrific work of cleaning out the “gas chamber” afterwards to linger near the chamber doors during a gassing, right next to the few SS men and doctors also present, and to look through the doors’ peep holes in

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328 See Mattogno 2015a, pp. 417-428 for some pertinent remarks about Höss’s claims.
order to see what transpired inside. As a matter of fact, Tauber stated that he was locked up during the gassing and could come out only once everything was over, and that would make perfect sense (Pressac 1989, p. 494). As a result of this, Tauber, Pressac’s 95-%-reliable witness, does not make any statement about the duration of the procedure.

Inmate physician Dr. Charles Bendel, on the other hand, who said he worked for one day at Crematorium V in order to observe what transpired there, claimed right after the war that all went silent after just 2 minutes, and that 5 minutes later the doors were opened (Langbein 1987, p. 221; NI-11953; Pressac 1989, pp. 470f.).

Miklos Nyiszli, another inmate physician, claimed shortly after the war to have been an assistant of the infamous Dr. Mengele, working closely with him and the inmates charged with clearing out the “gas chamber” of Crematorium II. Nyiszli stated that, once the Zyklon B had been dumped on the floor, the gas filled the room “within a few seconds” and that “within five minutes everyone was dead.” (Schoenberner 1981, p. 250; Pressac 1989, p. 473)

An appeal by former Auschwitz inmates, published shortly before the end of the war and primarily drafted by former inmate physicians, stated in the same vein (IMT, Vol. 7, p. 174; Dirks 2006, pp. 191f.):

“Then the door of the underground gas-chamber was closed, and the people were gassed. Death occurred approximately 4 minutes later. After 8 minutes the gas chamber was opened...”

Filip Müller, who right after the war claimed to have cleared out and cremated gassing victims in Crematorium I of the Main Camp only, claimed 8 to 10 minutes for this gassing procedure (probably also until the door was opened; Langbein 1965, p. 463; Fritz Bauer...., p. 20599). Müller, however, is a problematic witness, because in his later book (1979) he claimed to also have worked at the Birkenau crematoria, although he never mentioned anything to that effect in his earlier testimonies. As Mattogno has shown, Müller actually plagiarized his tales about Birkenau from Nyiszli’s writings (Mattogno 1990; 2015a, pp. 590-592), which are, of course, themselves characterized by hyperbole, as Pressac has correctly noted.329

This is probably the best information we can get from statements by inmates who claim to have been forced to clear out the “gas chambers.”

Among the perpetrators, the medics or “disinfectors” who allegedly performed the murders, and the SS physicians who supervised them, are probably most competent to testify in this regard. It is doubtful, though, whether the medics or disinfectors, charged with pouring in the Zyklon B, could have had any first-hand knowledge about what was going on inside the chamber and how long it took for all to die.

329 For critical remarks on Bendel’s and Nyiszli’s exaggerations and inventions see Pressac 1989, pp. 470, 474f.; Mattogno 2015a, pp. 585-590.
Josef Klehr, one of the defendants during the first Frankfurt Auschwitz Trial, denied ever having poured Zyklon B into a “gas chamber” and denied just as steadily that he gave the orders to his subordinates for the claimed gassings. However, he did give four last names of individuals who are said to have committed the gas murders during his time at Auschwitz: the SS Unterscharführer Hans Koch and Adolf Theuer, as well as the SS Rottenführer Georg Wosnitzka and Schmunitza.

Hans Koch was among the defendants of the Polish-Stalinist show trial in Krakow in 1947 against the Auschwitz camp staff, where he was sentenced to life imprisonment. He died in a Danzig prison in 1955. Adolf Theuer was sentenced to death during a communist show trial in Czechoslovakia in front of the People’s High Court in Prague and was hanged on April 23, 1947 (Piper et al. 1996, p. 311; Fritz Bauer…, p. 46414). Nothing seems to be known about Georg Wosnitzka other than what several witnesses claimed about him (see Fritz Bauer…, p. 46752), and it seems that Schmunitzer was invented by Klehr. Nothing is known also about two more SS men mentioned in passing by other witnesses.

The files of the Krakow Trial against the Auschwitz camp staff are extant, from which could be gleaned whether Hans Koch made any statements about the claimed extermination procedure. I do not know, however, whether the files of the trial against Adolf Theuer, which revolved around other claimed crimes, still exist in Prague. It is beyond my current means to get access to these files, or to locate them to begin with. Considering, however, that the disinfectors’ knowledge necessarily had to be limited to the beginning of a gassing, I will not delve deeper into this here.

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332 SS man Berthold Riegenhagen was mentioned by Witness Ignacy Golik (Fritz Bauer…, p. 10019); an unspecified SS Unterscharführer Franke by Witness Edward Pyš (ibid., p. 10866).
Hans Stark, who was also a defendant during the first Frankfurt Auschwitz Trial and who had worked in the Auschwitz inmate registry of the Political Department, claimed to have once poured Zyklon B into the “gas chamber” of Crematorium I at the Main Camp, and he stated that, after having poured in the poison:

“A few minutes later, it was quiet. After some time, perhaps 10–15 minutes, the gassing room was opened.”

How he managed to know this is unclear. In any case, these 10 to 15 minutes must have included time to ventilate the room at least to some degree. I have analyzed Stark’s testimony elsewhere, showing that it is rather implausible (Rudolf 2004b, pp. 94–97).

The SS physicians’ competence to answer the pending question should be unparalleled. The former camp commander Rudolf Höss stated in this regard (Dirks 2006, p. 90, similar p. 108):

“During the extermination procedure at the gas chambers, they [the SS camp physicians] had to be present and had to supervise the regulated use of the toxic gas Cyklon B by the disinfectors SDGs [Sanitätsdienstgrade, medical corpsmen]. Furthermore, after opening the gas chambers, they had to convince themselves that the extermination was complete.”

Dr. Hans Münch, who served as an SS physician at Auschwitz, confirmed this (Rudolf 1997b, p. 154):

“Supervising the g[assing]… That was, that really wasn’t the task. I only had to determine whether they were really dead, right? But that, that was no problem either.”

Dr. Horst Fischer, however, who was promoted to deputy garrison physician of Auschwitz toward the end of 1943 (Dirks 2006, p. 120), contradicted in an interrogation of Oct. 19, 1965, p. 2.333

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333 See here in the Appendix p. 386; similar in one of his personal writings of Sept 25, 1965 (Dirks 2006, p. 109).
“I cannot remember that I, as an SS physician, had the task to determine the inmates’ death in the gas chamber.”

I have found statements by four SS physicians which are of interest in the present context. The first is by the just-mentioned Dr. Hans Münch in an interview with me (Rudolf 1997b, p. 162):

“A safety coefficient of some 5 Minutes was made [for the gassing time], and during my time, at my time back then, that is in summer, after three minutes everything was over.”

In a letter exchange with a former inmate, Dr. Münch had written two years earlier:

“The effects of the gas were observed through a peephole by an assigned doctor of the SS officer on duty. After three to

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334 I haven’t found anything from other Auschwitz physicians, but further research might change this. According to https://de.wikipedia.org/wiki/Personal_im_KZ_Auschwitz, these include:
- Fritz Klein: sentenced to death by a British Military Tribunal and executed on Dec. 12, 1945.
- Bruno Kitt: sentenced to death by a British Military Tribunal and executed on Oct. 8, 1946.
- Erwin von Helmersen: sentenced to death by the District Court Krakow and executed on April 12, 1949.
- Werner Rohde: sentenced to death by a British Military Tribunal and executed on Oct. 11, 1946.
- Horst Schumann: denied charges and managed to have his case stayed due to permanent illness on April 14, 1971.
- Carl Clauberg: sentenced to 25 years’ imprisonment by a Soviet court; released in October 1955, arrested again by German authorities a month later, died in August 1957 after a stroke.
- Franz Lucas: denied participating in gassings and was acquitted on Oct. 8, 1970.
- Alfred Trzebinski: sentenced to death by a British Military Tribunal and executed on Oct. 8, 1946.
- Oskar Dienstbach (garrison physician): died on Oct. 18, 1945 as a PoW.
- Siegfried Schwela (garrison physician): died of typhus on May 10, 1942.
- Kurt Uhlenbroock (garrison physician): denied participating in selections or gassings; penal case dismissed due to lack of evidence.
- Eduard Wirths (garrison physician): committed suicide on Sept. 20, 1945 while incarcerated.

335 www.jewishvirtuallibrary.org/hans-m-uuml-nch.
five minutes, death could be certified, and the doors were opened as a sign that the corpses were cleared to be burned.”

I demonstrated in my long interview with him that his testimonies from the 1990s are heavily contaminated by what he learned after the war.

The second physician is Dr. Friedrich Entress, who was active as an SS physician at Auschwitz from late 1941 until October 1943. During that time, he was First Camp Physician of the Auschwitz Main Camp until February 1943, and for the rest of his stay at Auschwitz First Camp Physician of the Auschwitz III/Monowitz Camp. Entress faced charges in 1946 in front of a U.S.-American War Crimes Trial at Dachau, where he was sentenced to death and executed on May 28, 1947 in the prison for war criminals at Landsberg, Germany. A month after having been sentenced, he wrote an affidavit where we read, among other things, the following statements about gassings in the “two old farmhouses,” that is the Bunkers (Nuremberg Document NO-2368, p. 5):

“A camp physician had to be present at every gassing, because this presence was required by the army regulations in order to protect the SS personnel. The initially loud screams and the moaning was over after 5 minutes. After another 25 minutes, the doors were opened, and an inmate unit wearing gas masks brought the corpses outside.”

This suggests a time span of five minutes until respiratory arrest. The U.S.-American trials at Dachau, however, have become infamous for the widespread use of torture on the defendants and “forced witnesses,” which puts Entress’s affidavit in a bad light (cf. Rudolf 2011, pp. 335-338).

Dr. Johann Paul Kremer is our third Auschwitz physician. During an interrogation for the Krakow show trial against the Auschwitz camp staff, during which Kremer was sentenced to death, he testified as follows in Aug. 18, 1947 about the gassings in one of the bunkers he allegedly experienced (Bezwińska/Czech 1984, p. 214, fn 50):

“After driving all of them into the gas-chamber the door was closed and an SS man in a gas-mask threw the contents of a Cyclon tin through an opening in the side wall. Shouting and screaming of the victims could be heard through that opening and it was clear that they fought for their lives (Lebenskampf). These shouts were heard for a very short time. I should say for some minutes but I am unable to give the exact span of time.”

Kremer’s sentence was later commuted to a life term in prison, but he was released early in 1958, yet once in Germany, he was instantly prosecuted again and sentenced to 10 years, which were considered served due to his prior imprisonment in Poland. For an overview of the problematic nature of Kremer’s testimony see Faurisson 1981b.

The fourth physician is the already-mentioned Dr. Horst Fischer. He stated that the gassings in the bunker (which he called “old sauna”) took 5 to 7 minutes until respiratory arrest – measured with his stopwatch, he claimed. The doors were usually opened after 20 minutes. After another 10 to 15 minutes of passive ventilation, inmates started dragging out the corpses. About gassings in Crematorium II he stated:

“Just as in the old sauna in Birkenau, the procedure of the annihilation lasted here some 2 minutes as well. Unconsciousness occurred already after a few seconds, though, only the breathing, moaning and wheezing could be heard for some 2 minutes.”

Which means that respiratory arrest occurred after about two minutes. However, that is not “just as in the old sauna,” but quite different.

In a personal writing of Sept. 25, 1965, Fischer stated (Dirks 2006, p. 109):

“[…] after 4-7 seconds, merely a deep, stertorous breathing could still be heard, which faded away completely after some 3-5 minutes […]”

The trial against Fischer, during which he made his depositions, were conducted in former communist East Germany. In his dissertation about this trial, Dirks documented the show-trial character of the proceeding, during which Fischer did not defend himself, readily agreed to all charges, and even incriminated himself (Dirks 2006).

During his pretrial detention in East Berlin, Fischer was also interrogated by West German officials on the occasion of the so-called second Frankfurt Auschwitz Trial. His statement made on that occasion was given particular weight by the Frankfurt District Court (Dirks 2006, pp. 242):

“In case of any doubt, the probative value of Fischer’s statements was always given preference over other witness testimony, because the court assumed that Fischer had ‘the better knowledge about the measures taken in the context of the extermination program’.”

Hence, whatever we might make of the statements by these physicians, they are probably as good as it will ever get.

This all indicates that death in these crematoria occurred after only a few minutes, five at the most. The procedure might have taken somewhat longer in the so-called bunkers. Before we can examine (in Subsection 7.3.2) how this

337 According to the interrogation protocol as reproduced in the Appendix, pp. 388f.
338 Personal writing Dr. Horst Fischer of Sept. 11, 1965; see Appendix p. 392.
jibes with Höss’s claims about the amount of Zyklon B used, we have to examine another issue.

In his testimony, Henryk Tauber wrote the following about the air in the “gas chamber” of Crematorium II, after the doors had been opened after a gassing (Pressac 1989, p. 489):

“It was very hot in the gas chamber and so suffocating as to be unbearable. Later on, we became convinced that many people died of suffocation, due to lack of air, just before gassing.”

This indicates that we possibly are dealing with a combined effect of oxygen deprivation and poison gas, which would accelerate the procedure compared to gas-chamber executions as they used to be carried out in well-ventilated gassing cells in the U.S.

In addition, because witness statements about the amount of Zyklon B applied are rare, and since humans are more sensitive to HCN than insects (see Section 7.1), some scholars opine that only small amounts of Zyklon B were used for the alleged mass murders in Auschwitz, for example Bailer (1991), Wegner (1990) and Wellers (1991), who all assume an applied concentration of 1 g per m$^3$ (0.083 vol.%) or less.

Green argues that an amount was applied which would have corresponded to some 4,500 to 18,100 ppm after the complete release of all HCN from the carrier. He argues that this would have sufficed to kill everybody inside within 5 to 15 minutes, as a lethal concentration of 450 ppm to 1,810 ppm would have been reached by then. At the time the ventilation was switched on (some 30 min later), a concentration of about 900 to 7,200 ppm would have been reached (Green/McCarthy 1999).

None of this is in accordance with either what we know from gas executions in the U.S. or what the most-reliable witnesses have claimed, who spoke
of large amounts of HCN applied and of brief execution times – unless, of course, these execution times were achieved partly by suffocating the inmates prior to applying the poison. Let us take a closer look into this.

First of all, all the witness statements that I have encountered and which relate procedural details in this regard, mention that the victims were crowded into the “gas chamber,” that the door(s) was (were) swiftly closed, and that the poison was introduced right afterwards. No one ever claimed that the SS waited for an extended period of time after closing the doors before applying the poison, which would have led to oxygen depletion.

However, if we look at Morgues #1 of Crematoria II and III, the worst-case scenario in this regard, these basement rooms had no windows, only one door, were rather large, and it certainly took a long time to fill them with the prospected victims. If, for the sake of argument, we assume that one person per second walked through its entrance door, and if the room was to be filled with 1,000 of them, it took some 17 minutes to fill the room – and such a steady, docile cooperativeness is probably too optimistic (I’ll get back to that later). Under these circumstances, oxygen depletion could have set in already well before the door was closed, at least in the rear of the room. Unless, of course, the ventilation system was running.

I posit that this was actually the case for a number of reasons:

1. The ventilation system was designed for a morgue in constant, uninterrupted use, hence was designed and was also meant to be used to run constantly and uninterruptedly.

2. The morgues of all crematoria in Auschwitz, in particular those whose furnaces were used throughout their existence to cremate deceased inmates (in Crematoria II, III and V), were constantly and uninterruptedly used to store corpses which resulted from “non-genocidal” deaths. Such deaths occurred at high rates more or less throughout the entire history of the Birkenau Camp.

3. Original German wartime documents clearly indicate that inmates who had died on a certain day had to be removed within 12 hours at the latest, and had to be stored in the crematorium morgues until they could be cremated (see Mattogno 2004b, pp. 280f.).

4. It is inconceivable that a basement morgue which is continually used to store many corpses and which has a ventilation system would not be ventilated. It goes without saying that these facts also have repercussions on claims that these morgues could have been used at any given time for something else than storing corpses, but let’s generously ignore that for now.

5. Getting the inmates to fill up a room over an extended period of time required that those entering first and lining up at the end of the room opposite the door don’t change their minds due to the air become stale or even
putrid before the door is closed. Such a change of mind would have resulted in them trying to get back out while others were still streaming in, upsetting the entire procedure.

Considering all this, it would have made perfect sense to keep the ventilation system running, since it was always running anyway, and to turn it off only during the brief period of time when the execution was carried out in the way claimed by the witnesses (by throwing the poison through holes in the roof).

I will initially assume that the air in the “gas chamber” had a normal consistency at the beginning of the gassing. When the fans were turned off and the gas was added, the concentrations of three components of the air started changing: hydrogen cyanide and carbon dioxide, which increased, and oxygen, which decreased. I will not consider the increase in carbon dioxide here, as it is the 1:1 complement to the decrease in oxygen, and because carbon dioxide has no adverse health effects at the concentrations under consideration. I will subsequently also consider cases of reduced oxygen in the air.

Per capita, the uptake of HCN until death occurs is the higher, the higher the applied concentration is. The reason for this is that, although the victim incorporates lethal amounts of hydrogen cyanide in short periods of time in case of high concentrations, their organism’s reaction is delayed. During this delay, the victim incorporates more overdoses of hydrogen cyanide.

Chart 15 shows the schematic behavior of the breathing volume per minute of persons dying of suffocation or poisoning (biochemical suffocation). Starting with a basically normal breathing rate, the victim starts to hyperventilate with increased anxiety and lack of oxygen. It reaches a maximum when the victim starts to succumb and thus lacks both the ability to keep up the increased breathing rate until breathing finally stops. In our schematic example, respiratory arrest occurs at the end of this period of time at 5. Death occurs only several minutes after respiratory arrest. If one assumes a time period of 5 minutes until respiratory arrest, the assumed breathing volume during each single minute is: 1st: 20 liters; 2nd: 30 liters; 3rd: 50 liters; 4th: 80 liters; 5th: 30 liters (based on Schmidt 1979, p. 124). In total, this yields a breathing volume of ca. 210 liters. Furthermore, we assume that the function is independent
of the length of time until respiratory arrest. This means that double the amount of air is inhaled if the time period is doubled.

As mentioned before, we have the following data regarding Morgue #1 ("gas chamber") of Crematorium II: Volume: 504 m\(^3\); volume of 1,000 persons: ca. 60 m\(^3\); resulting free air volume: ca. 444 m\(^3\).

First, the oxygen content in the room may be studied. In Table 15, the total inhaled volume of 1,000 victims is given in m\(^3\) and multiples of the free air volume as a function of time. The average oxygen content is reduced by 20-30% per inhalation. Hyperventilation should tend to decrease that value. In the present case, moreover, this reduction decreases with time, as the victim’s blood steadily saturates with oxygen and hence can absorb increasingly less from the air. I will therefore subsequently use the lower value of 20%.

From this results the remaining oxygen content in the chamber as given in the last two columns. Oxygen contents below 6% are lethal even if no other toxins are present (Henderson/Haggard, pp. 144f.; Haldane/Priestley, pp. 223f.). So, even without adding any toxic gas, we have to reckon with most of the victims being suffocated in an airtight chamber already after some 45-60 minutes.

Let’s turn now to the hydrogen cyanide. We assume a maximum execution time of five minutes as established in Paragraph 7.3.1.4. For the sake of argument, let us assume that this means that after five minutes the victims were lifeless, that is to say, they were motionless, and respiratory arrest has set in. That does not necessarily mean that they were dead, clinically speaking, but that death would be imminent and inevitable under the circumstances considered.

At the end of those five minutes, oxygen within the chamber will have been depleted by at most 16%, or for the entire time span of five minutes on average 8% (assuming a roughly linear decrease). A reduced oxygen content accelerates the effect of the poison by a factor \(F_E\) which is a function of the ratio of normal to actual oxygen content. However, since 6% oxygen content is a lethal limit already, I will consider this as the lower base value. The dif-

<table>
<thead>
<tr>
<th>Time until respiratory arrest [min]</th>
<th>Inhaled volume of 1,000 victims [m(^3)]</th>
<th>In free volumes of the room (444 m(^3))</th>
<th>Reduction of O(_2) content (30% per inhalation)*</th>
<th>Reduction of O(_2) content (20% per inhalation)*</th>
</tr>
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<td>420</td>
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<td>20</td>
<td>840</td>
<td>1.9</td>
<td>10.7</td>
<td>13.7</td>
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<tr>
<td>30</td>
<td>1,260</td>
<td>2.8</td>
<td>7.7</td>
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<td>1,890</td>
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<td>4.5</td>
<td>8.0</td>
</tr>
<tr>
<td>60</td>
<td>2,520</td>
<td>5.7</td>
<td>(lethal)</td>
<td>5.9</td>
</tr>
<tr>
<td>120</td>
<td>5,040</td>
<td>11.4</td>
<td>(lethal)</td>
<td></td>
</tr>
</tbody>
</table>

* \(= 21 \cdot (0.7 \text{ or } 0.8)\) (free-air volumes inhaled)
ference between the normal and the lethal oxygen content in air is therefore \((21\% - 6\% =) 15 \text{ vol}%.\) Assuming again a linear decrease, we therefore receive for the effective average (=half) poison concentration \(C_{\text{eff}}\):

\[
C_{\text{eff}} = C \cdot F_E = C \cdot \frac{7.5}{7.5 - \frac{C_{O,N} - C_{O,R}}{2}}
\]

where \(C_{O,N}\) is 21% and \(C_{O,R}\) is the actual, lowered \(O_2\)-content at any given moment. If the difference between the two reaches 15%, the actual \(C_{O,R}\) is down to a lethal level of 6%. Half the difference is 7.5. This way, as we approach the lethal limit of oxygen, the effective concentration of the poison goes to infinity, indicating that death occurs anyway, with or without the poison, so that an increasingly small amount of it suffices to cause final death.

A nominal maximum execution time (until respiratory arrest) of five minutes also includes a minute during which the gas spreads out and reaches even the remote corners of the chamber. For instance, in case of an execution time of five minutes, we are actually really dealing with a net four minutes during which the gas acts on those farthest away from the source.

I have calculated this in detail in Table 16, with each column defined as follows:

<table>
<thead>
<tr>
<th>Col.</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(t_0 = \text{Time from start to end of the execution.})</td>
</tr>
<tr>
<td>2</td>
<td>(t_m = \text{Minimum exposure time; effective time during which a person farthest from the source has been exposed to the poison.})</td>
</tr>
<tr>
<td>3</td>
<td>(V_i = \text{Inhaled volume, a linear interpolation on the assumption that the volume is 210 liters within 5 minutes. I have assumed here that on average for all victims, respiratory arrest occurs after } \frac{2}{3} \text{ of this time, since those close to the source succumb early and drop out as oxygen consumers, while the last victims must have dropped out after 5 minutes. So I deduct } \frac{1}{3} \text{ of the inhaled volume.})</td>
</tr>
<tr>
<td>4</td>
<td>(N_{VT} = \text{Number of total free-air volumes in the chamber inhaled (based on 444 m}^3\text{ for 1,000 persons with a volume of 60 liters each in Morgue #1 of Crematorium II).})</td>
</tr>
<tr>
<td>5</td>
<td>(C_{A0_2} = \text{Average depleted O}_2\text{-content in the chamber during the observed time span, based on 20% conversion of O}_2\text{ to CO}_2\text{ on average with each breath, and assuming a linear decrease; hence half the depletion as calculated for that point in time.})</td>
</tr>
<tr>
<td>6</td>
<td>(F_E = \text{Average efficacy factor following Equation 9.})</td>
</tr>
</tbody>
</table>
| 7    | \(C_A = \text{HCN end concentration in fresh air needed to achieve effect as in U.S. execution chambers, following Haber’s Rule as an approximation: 3,200 ppm on average (half the end concentration, which is thus 3,200 \cdot 2 = 6,400) for death within 9.3 min: 6,400 ppm \cdot 9.3 \text{ min} \div t_m.\) Note that 9.3 min. is the average time before clinical death occurred during U.S. executions, while the time to respiratory arrest was somewhat shorter than this, but longer than the five minutes it took to reach unconsciousness. In addition, the maximum time until death was twice as long (18 min.), so the concentration I use here is a little
higher than \( \text{LC}_{50} \), but considerably lower than \( \text{LC}_{100} \).

8  \( \text{C}_{\text{eff}} = \) as before, but corrected by the efficacy factor \( \text{F}_E \) (Column 6).

as before, in mg/m\(^3\), based on the assumption that the air in the chamber is 30°C, 100% relative humidity and has normal pressure (see Table 13 on page 233).

10  \( \text{F}_Z = \) Fraction of HCN evaporated from the carrier at the observed time, assuming 15°C, low humidity, fine distribution, or 30°C, 100% humidity, bulk distribution (see Table 14, page 236; intermediate values interpolated linearly).

11  \( Z = \) Mass of Zyklon B required to reach the value in Column 10 (equal the number of 1-kg cans of Zyklon B).

### Table 16: Zyklon-B quantities required for a given execution time

<table>
<thead>
<tr>
<th>( t_0 ) [min]</th>
<th>( t_{\text{m}} ) [min]</th>
<th>( V_i ) [m(^3)]</th>
<th>( N_{\text{VR}} )</th>
<th>( \text{C}_{\text{AO}_2} ) [%]</th>
<th>( \text{F}_E )</th>
<th>( \text{C}_A ) [ppm]</th>
<th>( \text{C}_{\text{eff}} ) [ppm]</th>
<th>( \text{C}_{\text{eff}} ) [g/m(^3)]</th>
<th>( \text{F}_Z ) [%]</th>
<th>( Z ) [kg]</th>
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<tr>
<td>1</td>
<td>0</td>
<td>28.0</td>
<td>0.06</td>
<td>20.71</td>
<td>1.02</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
<td>2.0</td>
<td>∞</td>
</tr>
<tr>
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<td>18320</td>
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<td>843</td>
<td>0.90</td>
<td>49.4</td>
<td>0.81</td>
</tr>
<tr>
<td>35</td>
<td>34</td>
<td>980.0</td>
<td>2.21</td>
<td>12.83</td>
<td>2.20</td>
<td>1751</td>
<td>797</td>
<td>0.85</td>
<td>50.5</td>
<td>0.75</td>
</tr>
<tr>
<td>36</td>
<td>35</td>
<td>1008.0</td>
<td>2.27</td>
<td>12.65</td>
<td>2.25</td>
<td>1701</td>
<td>754</td>
<td>0.80</td>
<td>51.7</td>
<td>0.69</td>
</tr>
<tr>
<td>37</td>
<td>36</td>
<td>1036.0</td>
<td>2.33</td>
<td>12.48</td>
<td>2.32</td>
<td>1653</td>
<td>714</td>
<td>0.76</td>
<td>52.8</td>
<td>0.64</td>
</tr>
<tr>
<td>38</td>
<td>37</td>
<td>1064.0</td>
<td>2.40</td>
<td>12.30</td>
<td>2.38</td>
<td>1609</td>
<td>676</td>
<td>0.72</td>
<td>53.9</td>
<td>0.59</td>
</tr>
</tbody>
</table>
I have highlighted the rows for execution times (time until respiratory arrest) of 5, 10, and 15 minutes, respectively. Only the latter results in an amount of Zyklon B that is within what Rudolf Höss has claimed and what mainstream scholars assume to be correct. Execution times of 5 minutes, as claimed by the “credible” witnesses mentioned above, would require exorbitant amounts of Zyklon B: 63.8 kg in the above example, or some 64 cans. If that were used for 1,000 gassing operations, the total required would amount to about twice the amount of Zyklon B delivered to the camp in the first place.

Under these circumstances, it becomes quite obvious that execution times of five minutes or even less are simply inconceivable. For instance, to achieve two minutes, the amount of Zyklon B would have to be increased to more than half a metric ton, while ignoring that Haber’s Rule would not apply anymore in that range, and also that such huge amounts of Zyklon B located in a few spots would result in a reduced evaporation rate due to condensation effects, among other things. We won’t discuss in detail claims about execution times like “instantly” or “suddenly” and so on, as such lightning-speed killings would require the use of infinite amounts of Zyklon B. We’re here clearly in the range of the ludicrous.

To get anywhere near to what could be realistic regarding the amount of Zyklon B used, we are forced to extend the execution time (respiratory arrest) to at least ten minutes, with clinical death occurring after some fifteen to twenty minutes. At that point, we’re in the same range as the maximum execution
times in the U.S. For the above example, however, we would still need roughly twice the amount claimed by Höss. This would have consumed about 50% of all the estimated total Zyklon-B deliveries if assuming a million victims. This is at least possible.

The amount of Zyklon B needed could be reduced if it had been thrown among the detainees who might have ground it down and heated it up with their feet. Throwing the pellets among the victims is claimed for Crematoria I, IV and V as well as for the bunkers, although Filip Müller stated about Crematorium I that the victims moved away from the Zyklon-B pellets, which would thus have been unaffected.  

The wire-mesh introduction device claimed by Kula, Tauber and Erber for Crematoria II and III, on the other hand, would have led to an even slower evaporation rate, rendering the claimed execution times technically impossible (see Paragraph 5.4.1.2.8).

The claims about very small amounts of Zyklon B applied – just 1 g per m\(^3\) (end concentration some 830 ppm) or less are untenable if considering the execution times claimed by witnesses. In fact, with that approach a lethal concentration (some 400 ppm) is reached only after the pellets have released half of their poison, which takes half an hour or more. The average experienced concentration during that period of time would be only half that, which by itself would not even be lethal. At that point in time, however, oxygen depletion in the chamber is considerable and can have increased the effectiveness of the poison during those 30 minutes on average by almost by 50%, which means that death would occur for most victims within that time by a combination of poisoning and suffocation. Though possible, it is nowhere near to what the witnesses state.

Even Green’s claim about a concentration of 1,810 ppm reached after five minutes is utterly insufficient, because for a person in a remote corner, this amounts only to an exposure to an average concentration of some 900 ppm for four minutes. Yet according to the above table, an average successful execution within five minutes requires almost 13,500 ppm to have been reached after that time, more than 7 times the amount of Zyklon B as claimed by Green.

Let us now consider a scenario where the victims are locked into an airtight space for a certain period of time before the poison is added, hence into an oxygen-depleted atmosphere. We use the values of the previous table, except that we apply the efficacy factors of later times as indicated, see Table 17.

A room not hermetically sealed but with window(s) and/or door(s) open would result in a slower depletion of oxygen, like Morgue #1 of Crematorium II and III while slowly filling with people as mentioned before. The values

---

339 Fritz Bauer…, p. 20471: “There were these green crystals down there. And a meter [away] from it there were no people.”
listed above for certain delay times would, therefore, apply to correspondingly longer delay times for such a scenario.

To make this easier to digest, I have assembled some important data points in Table 18.

Hence, no matter which way we turn it, a scenario with execution times lower than 10 minutes after adding Zyklon B need not be considered seriously.

A few remarks are due here. There are a number of uncertainties included in the above calculations. For once, the behavior of Zyklon B at 30°C and 100% humidity, when applied in bulk rather than thinly spread out, has to remain speculative. My assumption that its behavior would have been similar to thinly-spread-out Zyklon B at 15°C and low humidity is reasonable but can be erroneous either way. In addition, in some of the claimed gassing facilities, the Zyklon B is said to have been dumped among the victims, who might have crushed it, thus increasing the evaporation rate. Next, when talking about the duration of gassings, no witness states clearly what point during an execution they refer to: respiratory arrest, immobility, unconsciousness, or actual death.

<table>
<thead>
<tr>
<th>t₀ (min)</th>
<th>5 min. delay</th>
<th>10 min. delay</th>
<th>15 min. delay</th>
</tr>
</thead>
<tbody>
<tr>
<td>C&lt;sub&gt;Aeff&lt;/sub&gt; (g/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>Z (kg)</td>
<td>C&lt;sub&gt;Aeff&lt;/sub&gt; (g/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>Z (kg)</td>
</tr>
<tr>
<td>6</td>
<td>∞</td>
<td>∞</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>55.2</td>
<td>612.4</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>27.0</td>
<td>200.0</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>17.6</td>
<td>97.9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>13.0</td>
<td>57.5</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>10.2</td>
<td>38.9</td>
<td>∞</td>
</tr>
<tr>
<td>12</td>
<td>8.3</td>
<td>27.9</td>
<td>49.7</td>
</tr>
<tr>
<td>13</td>
<td>6.9</td>
<td>20.8</td>
<td>24.3</td>
</tr>
<tr>
<td>14</td>
<td>6.0</td>
<td>16.1</td>
<td>15.9</td>
</tr>
<tr>
<td>15</td>
<td>5.2</td>
<td>12.8</td>
<td>11.6</td>
</tr>
<tr>
<td>16</td>
<td>4.6</td>
<td>10.4</td>
<td>9.1</td>
</tr>
<tr>
<td>17</td>
<td>4.1</td>
<td>8.6</td>
<td>7.4</td>
</tr>
<tr>
<td>18</td>
<td>3.6</td>
<td>7.2</td>
<td>6.2</td>
</tr>
<tr>
<td>19</td>
<td>3.3</td>
<td>6.1</td>
<td>5.3</td>
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<tr>
<td>20</td>
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<td>5.2</td>
<td>4.6</td>
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<td>2.7</td>
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<tr>
<td>22</td>
<td>2.2</td>
<td>3.9</td>
<td>3.6</td>
</tr>
<tr>
<td>23</td>
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<td>3.4</td>
<td>3.2</td>
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<td>24</td>
<td>2.1</td>
<td>3.0</td>
<td>2.9</td>
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<tr>
<td>25</td>
<td>2.0</td>
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<td>2.7</td>
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<tr>
<td>26</td>
<td>1.8</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>27</td>
<td>1.7</td>
<td>2.1</td>
<td>2.2</td>
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<tr>
<td>28</td>
<td>1.6</td>
<td>1.9</td>
<td>2.0</td>
</tr>
<tr>
<td>29</td>
<td>1.5</td>
<td>1.7</td>
<td>1.9</td>
</tr>
<tr>
<td>30</td>
<td>1.4</td>
<td>1.6</td>
<td>1.7</td>
</tr>
</tbody>
</table>
Only the doctors who claim to have observed the process could make a competent statement about this anyway, which is why I consider the statements by Dr. Münch and Dr. Fischer superior to others. Considering their profession, they should have referred to a point in time when respiratory arrest and immobility had set in for a while. That can still be a few minutes away from actual death, though.

Considering all this, I thought it prudent to use here the LC$_{50}$ values as established during U.S. executions as the starting point for the above calculations rather than the LC$_{100}$ values necessary for the certain murder of all victims. That value would be considerably higher, probably close to a factor of two, but even that is not certain.

### 7.3.1.3.3. Incorporation of HCN

As stated before, with each breath the human lung is assumed to remove 70% of hydrogen cyanide contained in it (McNamara 1976, p. 7). We can use this to calculate how much of the hydrogen cyanide released into the chamber has been absorbed by the victims until respiratory arrest occurred after any given time, and accordingly how much is still left in the air. Starting out with the values of Table 16, we have:

<table>
<thead>
<tr>
<th>Col.</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$t_0$ = Time from start until end of execution (respiratory arrest).</td>
</tr>
<tr>
<td>2</td>
<td>$N_{VT}$ = Number of total free air volumes in the chamber inhaled (as Column 4 in Table 16).</td>
</tr>
<tr>
<td>3</td>
<td>$M_{HCN}$ = mass of HCN released (product of values in Columns 10 and 11 of Table 16).</td>
</tr>
<tr>
<td>4</td>
<td>$C_M$ = average HCN concentration in time span observed (half of value of Column 7 in Table 16).</td>
</tr>
<tr>
<td>5</td>
<td>$C_R$ = average HCN concentration in time span observed, reduced by amount absorbed by victims, with $C_R = C_M \cdot e^{0.7 \cdot N_{VT}}$; see Equation 15 (p. 276), with a correction factor 0.7 in the exponent for only 70% of all inhaled HCN being absorbed.</td>
</tr>
<tr>
<td>6</td>
<td>$M_{a1000}/M_{a1}$ = mass of HCN absorbed by all victims (1,000) in g, or by one of them in mg (assuming a free volume of 444 m$^3$).</td>
</tr>
<tr>
<td>7</td>
<td>$O$ = Overdose factor, assuming a lethal dose of 1.1 mg/kg body mass, and an average body mass of 60 kg, hence 66 mg per person.</td>
</tr>
<tr>
<td>8</td>
<td>$R$ = ratio of HCN released (Column 3) and absorbed (Column 6).</td>
</tr>
</tbody>
</table>
We see from this that extremely short execution times would require an extreme overdose, while the dose required drops as expected with extended execution times (see Chart 16). In this model, death occurs due to oxygen deprivation for most victims at around an hour, at which point HCN is needed only in sub-lethal doses to accelerate the already-impending death.

Note also that the overdose applied in U.S. execution gas chambers, as estimated at the end of Subsection 7.1.2., is within the range of overdoses calculated here for very short execution times until respiratory arrest, which is a nice confirmation for our approach.

The approximation made (that Zyklon B gives off a steady stream of HCN) leads to the amount of HCN absorbed by the victims approaching asymptotically 50% of the released amount. That approximation becomes increasingly inaccurate at longer time periods, particularly beyond 30 min. But since such long execution times are not reported, I have not corrected it here. It is clear, however, that during short execution times, the HCN absorbed by the victims is necessarily small compared to the total released.
In addition, since a fast execution requires the concentration to be as high as calculated without any losses, those actual losses would have to be compensated by additional HCN being released. Hence, the percentage given here is actually the percentage by which one had to increase the amount of Zyklon B applied to keep the required poison-gas concentration stable at the level as listed in the last column of Table 16, which is roughly 10% for 5 minutes, 18% for 10 minutes and 24% for 15 minutes. I abstain from creating yet another table for that corrected required amount of Zyklon B which compensates for losses due to inhalation by the victims, because we have more factors to consider.

Foremost among them is the loss of HCN due to absorption in the masonry, on and through the victims’ skin, and onto any effluents discharged onto the floor. Those factors can only be estimated, but what is safe to say is that it would increase even more the amount of Zyklon B needed to achieve the claimed execution times.

7.3.1.3.4. HCN Loss Due to Adsorption
It is worth taking a look into HCN losses caused during disinfestations due to adsorption on walls and clothes, as well as due to leaks. Puntigam et al. (1943) describe the hydrogen-cyanide-concentration behavior at different locations of a delousing chamber with and without air circulation (Kreislaufverfahren). Puntigam neither gives dimensions and loading of the chamber, nor the type of carrier material and its distribution, nor the temperature. Since the different measuring points show different concentration peaks, this indicates an uneven distribution of the materials in the chamber. For the sake of clarity, only the concentration behavior in the center of the room is reproduced in Chart 17.
The loss of hydrogen cyanide as a function of temperature in a disinfestation chamber can be seen in Chart 18. The higher losses at lower temperatures is caused by a higher moisture content in the gassed material and in the walls of the observed room (Peters 1942b).

According to the already-quoted publication by Schwarz/Deckert (1929), their measurements were made in the range of room temperature. Although the interesting part of Chart 19 is only poorly resolved, it is nevertheless clear that under these circumstances the maximum concentration is reached as late as 4 to 5 hours after the start. In those years, circulating-air systems did not yet exist, so that only the natural air convection was responsible for distributing
the gas. Remarkable is the strong concentration reduction due to adsorption on the load, here lifeless material to be deloused. Due to the slow increase towards the maximum concentration, it must be assumed that Puntigam’s values without circulating-air system (Chart 17, lower curve) were achieved at similar temperatures.

In the case of hypothetical homicidal gassings, the sweat produced by the frightened, crowded people and their HCN absorption through their skin would cause similar losses, and in the case of the underground morgues of Crematorium II and III, additional losses will occur due to the cold and moist walls.

As mentioned before, in order to kill all victims quickly, as attested to by the “witnesses,” such losses would have to be compensated by introducing even more HCN than calculated before (Paragraph 7.3.1.3.3.) in order to quickly reach and maintain high HCN concentrations everywhere in the “gas chamber.”

The human skin has an average surface of 1.84 m². Factoring in children, an average value may be assumed to be around 1.5 m² (U.S. EPA 2008, p. 7-4). For 1,000 persons, the total skin surface amounts to some 1,500 m². In comparison with this, the masonry of Morgue #1 of Crematorium II (floor, ceiling, walls, pillars and beam) has a surface of some 650 m², or some 43% of the human skin surface.340 Both surfaces would have been moist, but whereas the masonry would have been cold (good for absorption) and with a huge but lifeless microscopic inner surface, the human skin would have been very warm (bad for absorption) but biologically active (breathing, sweating, chemically and physically processing HCN diffusing into the body). Without

340 30 m · 7m · 2 for ceiling and floor; 30 m · 2.4 m · 2 for the long walls; 7 m · 2.4 m · 2 for the short walls (compensating for the door by assuming some absorption in the ventilation ducts); 2.4 m · 0.4 m · 4 · 7 for the four sides each of the seven pillars; and 30 m · 0.4 m · 2 for the vertical sections of the support beam = 648.4 m².

**Chart 19: Hydrogen-cyanide-concentration behavior in a disinfestation chamber with and without clothes at room temperature (Schwarz/Deckert 1929, p. 206).**
empirical data, it is not possible to decide which of the two types of surfaces would absorb more HCN per unit of time, if otherwise exposed to the same conditions. It is safe to say, however, that the cumulative effect of both would most likely be only a fraction of the amount of HCN absorbed through inhalation.

Fact is, moreover, that both effects would have withdrawn even more HCN from the air, which would have necessitated further increasing the amount of Zyklon B applied in order to compensate for these losses as well.\(^{341}\)

7.3.2. Critique of Eyewitness Descriptions

7.3.2.1. Introductory Remarks

First, a few critical remarks on three topics of witness statements relating to homicidal mass gassings should be made at this point:

1. The victims’ necessity to cooperate with their murderers.
2. The necessity to separate the sexes.
3. The claim that towels and soap were given to the victims to fool them.

7.3.2.1.1. Necessity of Cooperation

Imagine the following scene: 1,000 people of both sexes plus children enter the undressing room with a surface area of 390 m\(^2\) (4,200 ft\(^2\), Morgue #2 of Crematoria II & III). Each one would therefore have an area of only some 60 cm \(\times\) 60 cm (2\(\times\)2 ft.) in which to undress. Experience shows that people do not pack themselves tightly to the very edge of an enclosed area, not even if they are willing in general to do so.\(^{342}\) In order to get people to do this, the procedure must be rehearsed; they must be taught about what is happening and what steps they must follow – and they must be willing to cooperate.

Alternatively, of course, the intended victims could be made to undress in batches, but this requires that those already undressed go ahead and walk into the “gas chamber” and wait there patiently for the next arrival of naked inmates. Once inside the “gas chamber,” however, the same problem arises again. Here each individual has only an area of 45 cm \(\times\) 45 cm (1.5\(\times\)1.5 ft.) in which to stand. Hence the people must press themselves tightly together; the first people entering the room must proceed to the end of the room in a disciplined manner and line up against the wall. The next lot will form the line directly in front, and so on, until the entire chamber is full, which would take approximately half an hour, even with perfect choreography. Without perfection, we quickly reach an hour or more.

\(^{341}\) Although hydrogen cyanide absorbed through the skin also contributes to poisoning the victim, this process is much slower than poisoning through inhalation.

\(^{342}\) Just think of streetcars or buses, where everyone remains near the door, even though there is plenty of room at the rear.
A simple graphic suffices to illustrate the absurdity of some of the testimonies about the victims’ packing density in the alleged homicidal gas chamber (2,000, 2,500 or even 3,000 victims at a time, see note 314). The Morgues #1 of Crematoria II & III, allegedly misused as chemical slaughterhouses, were 7 m wide and 30 m long, as mentioned before. Assuming that the average person was some 50 cm wide from shoulder to shoulder (not quite 20 in), and some 25 cm deep from chest to back (see the top-view sketch of an average person in the graphic to the right), exactly 14 persons would have fit side by side in one row across the room, and 120 such rows would have filled the entire length of the basement room. (I ignore the seven concrete pillars and the claimed four Zyklon-B-introduction columns.) That amounts to 1,680 persons packed densely like sardines in a can, see Figure 138:

![Figure 138: Schematic drawing of Morgue #1 of Crematorium II & III filled with 120 rows of 14 persons each, hence altogether 1,680 persons.](image)

Hence Bendel, Höss, Kula and Nyiszli were pushing the envelope over the edge with their numbers. But even if we take only 1,000 victims, say 10 people in a row with 100 rows in total, the room would still look like in Figure 139:

![Figure 139: Schematic drawing of Morgue #1 of Crematorium II & III filled with 100 rows of 10 persons each, hence altogether 1,000 persons.](image)

How did they get these 1,000 people to pack themselves so tightly together, as one might expect of soldiers who have practiced this for weeks on a parade ground? The only solution is here as well that this must be practiced just as intensively and regularly as soldiers do it (cf. Rudolf 2000d). And of course, at some point in this alleged scenario, people would have had to real-
ize that they were not gathering for a shower, for there would have been no way of explaining to these people that such a lineup was for the sake of taking a shower, as nobody can take a shower when tightly squeezed together. Moreover, there weren’t even any showers anyway. The 14 claimed fake showerheads, which probably were real showers, would have been either located only in one small area of the room or scattered out to such a degree that they would have been virtually invisible on a ceiling of 210 m\(^2\). Thus, sooner or later a panic and lack of orderly cooperation with their murderers’ procedures would have resulted.

Finally, let us assume that those “gas chambers” were hermetically sealed. While it was filling up with people over an hour with the door at one end standing open, how would the air quality have developed in that tightly packed room, if the ventilation system had been turned off? When the “gas chamber” was half-way filled with victims, the people standing at the rear wall must have had the first mild symptoms of suffocation due to oxygen depletion. How do you get people who run out of air to stay where they are for another half an hour until everybody is ready? That’s why I posit that the SS had to keep the ventilation system running until everybody was in and the doors were locked…

7.3.2.1.2. Failure to Separate the Sexes

All witness accounts known to the author are unanimous in claiming that the victims were not separated by sex before being sent into the “gas chambers.” The witness accounts of the failure to separate the sexes are incredible for the following four reasons:

1. This procedure is in contradiction to the procedures followed during disinfection, where, according to the same witnesses, the sexes were carefully separated.\(^\text{343}\)

2. Since there were always two alleged “gas chambers” of each type available in Birkenau (in Crematorium II and III, or IV and V, or Bunker 1 and 2), there is no apparent reason why the victims could not have been separated by sex.

3. The claims were repeatedly made that the victims were made to believe that they were going to shower or undergo disinfection. These procedures would have necessarily separated the populace on the basis of sex, if only because of the need for deception.

4. It is safe to assume that in the 1940s, large numbers of people could only have been made to disrobe completely under the watchful eyes of strangers of the opposite sex, if they had been threatened with force and violence. But this would have nullified all other measures of concealment.

\(^\text{343}\) See, for example, the pictures taken by the SS before and after delousing new arriving inmates, neatly separated by sex, as published in Klarsfeld 1980.
7.3.2.1.3. Towel and Soap
According to some witnesses, the victims were handed towels and bars of soap to make them believe that they were going to take a shower (although there was no shower to begin with…).\(^{344}\) Who, by the way, would go with a towel under a shower? This statement is rather incredible, given the resulting chaos in the “gas chamber”: 1,000 corpses, 1,000 towels, and 1,000 bars of soap, plus vomit, urine, and blood from 1,000 victims! How was it possible to recycle those 1,000 bars of soap? How did they clean 1,000 towels? Or did they waste 1,000 towels and 1,000 soap bars for every gassing? It can therefore be concluded that such accounts are untrue, and witnesses testifying about it are not trustworthy.\(^{345}\)

7.3.2.1.4. Testing for Gas Residues
For the safety of everyone involved, it was prescribed by German law that a room used to expose objects to hydrogen cyanide needs to be tested for gas residues after ventilation before it could be accessed by any personnel charged with clearing the objects from the room (see Mattogno 2004c). This cannot have been any different for the claimed homicidal gas chambers, if alone because the supervising SS men certainly did not want to jeopardize their own health, but also because having the members of the so-called Sonderkommando charged with removing the corpses repeatedly succumb to various stages of HCN poisoning symptoms would have severely impeded the entire procedure. Yet when reading the many testimonies about the claimed gassings, it is striking that not a single one of those witnesses ever mentions the obligatory residual-gas test at the end of the ventilation period. If we assume that no such test was ever performed, accidents with people getting poisoned would have abounded, leaving a thick paper trail in the records. Yet the extensive Auschwitz camp records contain only two documents dealing with such accidents, both of which happened after fumigations to kill vermin (see the quotes on page 75).

7.3.2.2. Speed of Ventilation of the “Gas Chambers”
7.3.2.2.1. Introduction
An imaginary experiment may perhaps assist in clarifying a somewhat-complicated mathematical relationship: you have a bucket filled to the brim


\(^{345}\) See also, in this regard, the detailed analysis of the testimony of SS physician Dr. Hans W. Münch: Rudolf 1997b.
with seawater in front of you. You now take a second bucket filled with fresh water and pour it very carefully into the first bucket, allowing the excess to flow over the edge. Now the question: when you have emptied the second bucket of fresh water into the first, containing sea water, what is the composition of the water in the first bucket? Pure fresh water? Of course not. It will be a mixture of salt and fresh water.

7.3.2.2.2. Excursus
In mathematics, the equation related to this problem is called a linear, homogeneous differential equation.

In general, the following time behavior applies for the concentration change of a substance i with time, \( dc_i/dt \), in case of air exchange, provided that the newly added gas (free of i) is ideally mixed with the old gas:

\[
\frac{dc_i}{dt} = -a \cdot c_i(t) \tag{10}
\]

i.e., that the concentration change of substance i is proportional to the concentration \( c_i(t) \) at time t. Rearranging the equation yields:

\[
\int \frac{1}{c_i(t)} \, dc_i = \int -a \cdot dt \tag{11}
\]

After integration over dc and dt, this yields, resp.:

\[
\ln(c_i(t)) = a' - a \cdot t \tag{12}
\]

or

\[
c_i(t) = a'' \cdot e^{-at}. \tag{13}
\]

For \( t = 0 \), \( e^{-at} = 1 \) and thus

\[
a'' = c_i(t=0) = c_o \tag{14}
\]

with \( c_o \) as initial concentration (when the ventilation is started). This leads to:

\[
c_i(t) = c_o \cdot e^{-at}. \tag{15}
\]

From equation (10) results the initial concentration change \( dc_i(t=0)/dt \):

\[
\frac{dc_i(t=0)}{dt} = -a \cdot c_o \tag{16}
\]

Hence, we get for the constant a:

\[
a = \frac{dc_i(t=0)}{(dt \cdot c_o)} \tag{17}
\]

In the case of a sufficiently low exchange volume \( dv \) per time interval \( dt \), the ratio of total volume V to the exchange volume \( dv \) can be introduced as initial concentration change (in the case of infinitesimal transition (\( dt \to 0 \)) this is mathematically correct). For example, if the air exchange per time unit is \( \frac{1}{1,000} \)
of the total, the concentration change per time unit is \( \frac{1}{1,000} \), too. This turns (17) into

\[
-a = \frac{dv}{(dt \cdot dV)}
\]

(18)

After the time \( t = \frac{V \cdot dt}{dv} \), the complete volume is exchanged one time.

Therefore, \( a \) is the reciprocal of the air-exchange time:

\[
a = \frac{1}{\text{exchange time}}
\]

(19)

After a single air exchange, the concentration is:

\[
c_i(t=1) = c_o \cdot e^{-a} \approx 0.37 \cdot c_o
\]

(20)

For the \( \frac{1}{x} \)-value period (time period in which the concentration drops to \( \frac{1}{x} \)) the following applies accordingly:

\[
t_{1/x} = \frac{\ln(1/x)}{-a}
\]

(21)

Example: If it is required to lower the value down to 1% of the initial value (12 g per m\(^3\), 1 vol.\%, down to 120 mg hydrogen cyanide per m\(^3\), 0.01 vol.\%), i.e., down to 1/100 of the initial value, this results in:

\[
t_{1/100} = \frac{\ln(1/100)}{-a} \approx 4.6 \times \text{air-exchange time}.
\]

(22)

The half-value period is:

\[
t_{1/2} \approx \frac{0.693}{-a}
\]

(23)

Therefore, the concentration has dropped down to half after roughly \( \frac{2}{3} \) of a complete air exchange. This is true if the fresh and the old air are mixed perfectly. However, this is not necessarily the case, as there are two other possible scenarios:

1. Exchange of old gas only (linear, laminar flow along the entire cross-section of the room): air-exchange time roughly identical with ventilation time: Technically not given in the facilities under consideration.

2. Exchange of mainly fresh gas (exhaust close to intake), areas of old gas partly not involved: ventilation time is a multiple of what is described above. In our case, this is certainly given for the areas between the corpses, since here almost no mixing of the gases takes place. Additionally, the unfavorable location of the air intakes to the exhausts leads to a partial exchange of fresh gas (air short circuit). This increases the ventilation time by a factor of two to four or more.

The following paragraph will determine which scenario applied to the alleged “gas chambers.”
7.3.2.2.3. Ventilation of the Morgues of Crematoria II and III

As shown above, when fresh air and stale air mix together, the concentration of the latter falls to only approximately 37% of the initial value after one complete air exchange, and to approximately 14% after a second exchange.

Data are only available on the ventilation installations in Crematoria II and III, so that at this point we have to ignore all other “gas chambers” in this regard. In Paragraph 5.4.1.2.4, the ventilation capacity of Morgues #1 of Crematoria II and III was shown to have been 4,800 m$^3$ per hour. With a volume of free air in Morgue #1 of 440 m$^3$, the volume of the room would be exchanged once in approximately 5-6 minutes.

For Morgues #1 of Crematoria II and III under consideration at this point, however, a further problem arises. In particular, the ventilation intake was installed only approximately 2 m away from the ventilation outlet in the same(!) wall. The distance to the ventilation outlet on the opposite wall, however, is 7.3 m, i.e., 3.5 times as far. The result, in these cellars, is a “ventilation short circuit,” especially if we assume that the victims of the alleged mass extermination were all piled up together, especially in the middle of the room, which would further lengthen the fresh-air pathway from one side of the cellar to the other. The air blown into the ventilation intake openings would therefore, for the most part, be immediately sucked out through the ventilation outlet openings located nearby. Therefore, it must be expected that the actual ventilation time would be considerably increased in comparison to a perfect mixing of fresh air and stale air as a result of this poor design.

In addition, if we assume that no wire-mesh introduction columns existed, as has to be assumed on the one hand based on all extant material evidence, and on the other hand because the claimed execution times could not have been achieved with it, the following problem would also arise: the Zyklon-B granules, which in the meantime would certainly have become moist, would lie trapped underneath the bodies in at least some places. To understand how this would affect the ventilation, I have carried out a simulation calculation based on the following assumptions:

1. The moist Zyklon B releases hydrogen cyanide in the way determined by R. Irmscher for a dry environment at 15°C (see Section 7.2). Although the air in the “gas chambers” would have been warmer than 15°C due to the victims’ body heat, it also would have had a relative humidity of 100%, plus the Zyklon B would have been lying in heaps on a wet floor instead of thinly spread out. Both factors would have “seriously delayed” the release of HCN. Hence, as before, I will subsequently use the data for dry, finely dispersed Zyklon B at 15°C. But because I need a steady function for many

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346 A reasonable design would have been to install the ventilation inlets on one side of the room, and the outlets on the other side.
hours, I approximate the release of HCN with an exponential function with a τ of 47 minutes (the HCN content in the carrier is down to $\frac{1}{e}$).

2. To achieve an execution time of 10 minutes, we will use the amount of Zyklon B as calculated in Table 16 for that time: 14.2 kg.

3. The ventilation is turned on after 10 minutes, reducing the concentration of hydrogen cyanide according to the known equation (see Paragraph 7.3.2.2.2).

The results may be taken from the Chart 20 for four types of air exchanges differing in efficiency: one air exchange every 6, 12, 24 and 36 minutes. A few average values are listed in Table 20, taken from the individual scenarios.

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**Chart 20:** Simulation of the concentration of hydrogen cyanide with time in a hypothetical homicidal gas chamber of the type of Morgue #1 of Crematorium II in Auschwitz-Birkenau; see text.

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For those who wish to verify it:

a. Equation for release of HCN from the carrier material (in fractions):

$$A(t) = e^{-t/a}$$

   - in which $t = $ time after the initial release of HCN in minutes
   - in which $a = 47/\text{minutes}$ (so as to attain the velocity and low atmospheric humidity at 15°C alleged by Irmscher; see the red graph in Chart 14)

b. Equation for the reduction of the HCN content through ventilation:

$$B(t) = e^{-t/b}$$

   - in which $b = $ necessary time for a single air exchange of the room in question.

c. Equation for the actual HCN content:

i. For the first 10 minutes (no ventilation, only release of HCN):

$$C_1(t) = (1 - A(t)) \cdot D$$

   - in which $D = e/f$

   - in which $e =$ mass of Zyklon B introduced (in grams). For an execution time of ten minutes according to Table 16: 14.2 kg.
The value for 5g/m$^3$ indicates when the HCN concentration has fallen below a value at which it is possible to enter the chamber with a gas mask, but without protective garments and without performing physical work.

The value for 2g/m$^3$ should lie in the vicinity of a value permitting intense physical labor with a gas mask, but without protective garments. 0.4 g/m$^3$ can be considered a threshold value for potentially lethal concentrations.

The value for 0.1g/m$^3$ indicates when the HCN concentration has fallen below a concentration permitting entry of the chamber without a gas mask and without any health hazard. The column with the heading “$\int c(t) \, dt/10g/m^3$” finally corresponds to a tenth of the surface area under the particular curve.

The value corresponds to the duration of a hypothetical gassing of a chamber with a constant 10g/m$^3$ HCN, when the hydrogen cyanide suddenly rises at the beginning of this period of time and then suddenly disappears at the end of this period. These values can be used for simulation calculations; see next section.

The 6 min/air exchange applies in the absence of a short circuit of the air in the chamber. The 12 min/air exchange corresponds to this necessary correction. Both cases assume an empty chamber. In fact, the ventilation of the intermediate area between the hundreds of bodies allegedly lying around on the floor, and the Zyklon B trapped underneath, will further slow the procedure to a considerable extent, so that, in relation to a hazard-free entry of the chamber, the truth will rather lie somewhere between cases two and four or beyond them.

It may be considered established that under no circumstances could these basement rooms be entered without a gas mask in less than two to three hours after the beginning of the gassing. Intense physical labor with gas masks, but

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Table 20: Some values of the ventilation efficiency of a hypothetical homicidal “gas chamber,” with Zyklon B remaining in the chamber, see text. Data in minutes.

<table>
<thead>
<tr>
<th>Air-exchange duration</th>
<th>t (5g/m$^3$)</th>
<th>t (2g/m$^3$)</th>
<th>t (0.4g/m$^3$)</th>
<th>t (0.1g/m$^3$)</th>
<th>$\int c(t) , dt/10g/m^3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>14</td>
<td>45</td>
<td>120</td>
<td>186</td>
<td>24</td>
</tr>
<tr>
<td>12</td>
<td>37</td>
<td>83</td>
<td>158</td>
<td>224</td>
<td>43</td>
</tr>
<tr>
<td>24</td>
<td>82</td>
<td>131</td>
<td>209</td>
<td>275</td>
<td>82</td>
</tr>
<tr>
<td>36</td>
<td>114</td>
<td>169</td>
<td>253</td>
<td>322</td>
<td>121</td>
</tr>
</tbody>
</table>

---

- in which $f = \text{volume of the chambers} = 440 \text{ m}^3$ (net volume, without the volume taken up by the victims)
- $e$ has been selected so as to attain a concentration of approximately 10g/m$^3$ after 10 minutes. For the sake of simplicity, I have used 20 kg = 20,000 g.
- Differential equation for the actual HCN content for times after 10 minutes, i.e., with ventilation, solved iteratively in one-minute steps:
  - $C_2(t+1) = C_2(t) \cdot e^{-t/b} + (A(t) - A(t+1)) \cdot D$
  - in which $(A(t)-A(t+1)) \cdot D$ is the quantity of HCN evaporating from the carrier with each new minute.
without protective clothes, *i.e.*, the alleged removal of the bodies, would not have been possible in less than $1^{1/2}$ to 2 hours.

If assuming – against the evidentiary situation – the existence of Zykron-B-introduction devices which allowed the removal of Zykron B after the end of the gassing, the resulting data do, of course, look dramatically different, see Table 21. Under such circumstances, it might have been possible to enter the “gas chamber” with a gas mask for hard labor already after 30 to 45 minutes, and without a gas mask after one to two hours. This would then lie at least within the range of some less-extreme witness accounts. That explains also why Pressac, van Pelt and Green insist on the existence of these introduction columns, contrary to all physical evidence and despite the lack of any documentary proof and reliable witness testimony. Without those introduction columns, the scenarios described by witnesses regarding a swift removal of the corpses from the “gas chamber” after the gassing are simply impossible. The Zykron B inside the chamber, which would have kept releasing its poison for quite some time, simply would have prevented a fast, successful ventilation. Yet the claimed swift executions, at times claimed by the same witnesses, are technically impossible *with* those introduction columns, because the hydrogen cyanide would not have evaporated and dissipated fast enough.

These are, of course, only calculated estimates; if one were to ask me whether I would rely upon these values and enter such a “gas chamber” without a gas mask, I would reply that I preferred to insist upon the performance of a traditional chemical test beforehand. The simple reason for this is that all reliable calculation is rendered impossible by the Zykron B trapped beneath the bodies, as well as by the wet bodies soaked with hydrogen cyanide.

The rooms which purportedly served as “gas chambers” in Crematoria IV and V (for the latter at least until early 1944), like Bunkers I and II, allegedly had no ventilation installation at all and only slight ventilation possibilities by means of a few doors. The use of a room *without* efficient ventilation installations for mass murder at a time and in a place where even dissecting rooms, wash rooms, and laying-out rooms were equipped with ventilation installations, and where many ventilation fans were supplying lots of fresh air in dis-infestation rooms right next door, is so absurd that any rational human being ought to refuse to take such stories seriously.

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**Table 21:** Some values of the ventilation efficiency of a hypothetical homicidal “gas chamber,” with Zykron B removed from chamber, see text. Data in minutes.

<table>
<thead>
<tr>
<th>Air-exchange duration</th>
<th>$t$ (5g/m$^3$)</th>
<th>$t$ (2g/m$^3$)</th>
<th>$t$ (0.4g/m$^3$)</th>
<th>$t$ (0.1g/m$^3$)</th>
<th>$\int c(t) , dt/10g/m^3$</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>12</td>
<td>17</td>
<td>27</td>
<td>35</td>
<td>7</td>
</tr>
<tr>
<td>12</td>
<td>13</td>
<td>24</td>
<td>43</td>
<td>60</td>
<td>11</td>
</tr>
<tr>
<td>24</td>
<td>16</td>
<td>38</td>
<td>76</td>
<td>109</td>
<td>18</td>
</tr>
<tr>
<td>36</td>
<td>18</td>
<td>51</td>
<td>109</td>
<td>159</td>
<td>25</td>
</tr>
</tbody>
</table>
But be that as it may: There was no way of removing the Zyklon-B granules, which kept on releasing their gas for hours to come, from underneath the corpses in those rooms. Hence, according to the data given for room fumigations in the literature, in technical guidelines and in product information sheets of the manufacturer, ventilation times from one day up to several days in case of calm and cold weather must be expected (see the literature quoted in Subsection 5.2.2).

Under these conditions and during these periods of ventilation, nobody could have been safely present in the other rooms of the Crematories IV & V (physician’s room, cremation).

7.3.2.3. Simulation Calculations

The following are the results of a series of simulation calculations for the determination of the relative saturation of the masonry with hydrogen cyanide based on the assumption that similar concentrations of hydrogen cyanide were used in all cases. We distinguish two cases:

1. Disinfestation chamber. The constant concentration assumed for the calculation amounts to 10 g/m$^3$. However, particularly for the disinfection installations $BWe$ 5a and 5b existing in Birkenau, a constant concentration cannot be assumed, since great quantities of hydrogen cyanide would escape through the non-airtight roof on the one hand, and since both the masonry and the clothing would have absorbed considerable quantities of hydrogen cyanide over time (see Paragraph 7.3.1.3.3). We therefore assume two models, as follows: a) one gassing daily with a constant concentration over 6 hours, and b) one gassing daily with 12 hours of constant concentration. This would mean that the chamber was used around the clock, i.e., more or less 24 hours a day, seven days a week, which must be viewed as the extreme upper value.

2. Homicidal gas chamber. Here as well, our calculation assumes a constant concentration of 10 g/m$^3$. I have selected two different gassing times here: $1/20$ day (72 min) and $1/100$ of a day (14.4 min). The first value corresponds to the average constant exposure time of “gas chamber” walls to HCN if assuming no Zyklon-B-introduction columns and a fairly good ventilation after the gassing (see Column 6 in Table 20), the second value corresponds to the same scenario, but this time with Zyklon-B columns and a close-to-perfect ventilation after the gassing (see 5th column in Table 21).

In order to keep the HCN concentration in those make-shift delousing chambers of $BW$ 5a and $BW$ 5b constant over 12 hours, this would have required the application of an initial concentration at least twice or thrice as high as 10 g/m$^3$, but this would have been impossible due to lack of sufficient Zyklon B. The quantities of Zyklon B necessary for such use would have corresponded to 24 to 30 kg per day, or approximately 9 to 11 tons per year, which is roughly the total quantity delivered to the camp, leaving no HCN for homicidal gassings. Hence, this scenario is unrealistic for our purposes, because our scenario requires homicidal gassings; see also Paragraph 7.3.1.3.
In former editions of this expert report, I have used the equations determined in Subsection 6.7.4 to calculate the relative saturation of masonry cyclically exposed to hydrogen cyanide. However, after using several approaches on exactly how to do it, which lead to sometimes quite different results, I decided to refer to this equation only in order to establish the time it takes for masonry to reach its maximum saturation or a quasi-constant concentration (20 days or 20 gassing cycles, respectively). In this edition, the quasi-stationary concentrations in masonry were calculated iteratively using Fick’s law of diffusion.

One wall model used was considered to be insulated at one end that corresponds to the situation as given in Morgues #1 of Crematoria II and III, which were built of two layers of brick wall with an insulating layer of tar in between. The other wall model had no such insulation, i.e., it lost HCN on its “outside,” leading to an average concentration within the entire wall which is roughly half as high as in the insulated case. This was the situation as it existed in the Zyklon-B-disinfestation rooms of BWe 5a and BW 5b.

Table 22 shows the results of these calculations. Whereas the average concentration profile of the insulated-wall model is constant, it is linearly decreasing in the non-insulated walls from the inside out. The maximum average values close to the inner, HCN-exposed surface are quite comparable to the respective constant average concentrations in the insulated cases.

I have emphasized the values of particular interest: In the case of homicidal gassings in Morgues #1 of Crematoria II and III (without Zyklon-B-introduction columns), the insulated walls will reach a quasi-stationary concentration of almost 8% of their saturation concentration (72 min of total exposure time). In the case of disinfestation chambers, the value given for 6 hours of exposure is 56.1% in the insulated wall and 29.8% in the non-insulated wall.

<table>
<thead>
<tr>
<th>time</th>
<th>insulated</th>
<th>not insulated, average</th>
<th>not insulated, on inner surface</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.4 min</td>
<td>1.6%</td>
<td>0.8%</td>
<td>1.6%</td>
</tr>
<tr>
<td>72 min</td>
<td>7.9%</td>
<td>4.2%</td>
<td>7.8%</td>
</tr>
<tr>
<td>6 hrs</td>
<td>30.9%</td>
<td>16.2%</td>
<td>30.6%</td>
</tr>
<tr>
<td>12 hrs</td>
<td>56.1%</td>
<td>29.8%</td>
<td>56.2%</td>
</tr>
</tbody>
</table>

349 The equations determined in Subsection 6.7.4, consist of two terms, which can be handled individually or both together, and it is not at all clear which time value is to be used when switching over from gassing to airing, which all influences the result.

350 I am not going to explain basic statistical laws of diffusion here. They are so commonly known that anybody interested in it might look it up in any physics book. Maybe the iterative steps I used were a bit too big, so there is a potential larger error margin in my calculations, but if so, it affects all series, so it should not make a difference regarding my comparisons.

351 See Paragraph 5.4.1.1. and Pressac 1989, pp. 325, 327. Though tar is not gas-tight, it still prevents most of the water and HCN from penetrating it.
to a constant HCN concentration – corresponding to a round-the-clock operation – leads to ca. 16% for the average value of the entire uninsulated wall, and some 30% for the surface exposed to HCN.

The values under consideration here are percent values of the saturation concentration of a wall, *i.e.*, *relative* values. The cases of the disinfestation and homicidal gas chamber are only correctly comparable when one considers the *absolute* hydrogen-cyanide concentrations in the masonry. If, for example, one considers that in particular the interior walls of the disinfestation chambers were warm and dry, while the walls of the alleged homicidal gas chambers in Crematoria II and III were cool and very moist, then, with equal gassing concentrations, one must multiply the relative concentrations of the homicidal gas chamber by the factor of the increased capability of cool, moist walls to absorb hydrogen cyanide. If one assumes the factor of 8 as determined in this regard on page 221, then the absolute average hydrogen-cyanide content of the homicidal gas chamber would be a value lying around 64% of the saturation concentration of a warm, dry wall in a disinfestation chamber, *i.e.*, four times higher than the average hydrogen-cyanide content of the disinfestation chamber wall (ca. 16%), and more than twice as high as its maximum content at the surface (ca. 30%). Even when assuming the existence of Zyklon-B-introduction columns and a close to perfect success of the subsequent ventilation (14.4 min of total exposure time), the moist and cool homicidal gas chamber walls would still have accumulated HCN corresponding to 13% of the average saturation concentration of dry disinfestation walls, which is close to what would accumulate in those disinfestation walls (16%).

As a result of the high moisture content of these unheated underground morgues, one can see that even with such short gassing times, the walls of a homicidal gas chamber accumulate a hydrogen-cyanide content which would be quite comparable to that of a disinfestation chamber. Much less hydrogen cyanide in the quasi-stationary condition of the hypothetical homicidal “gas chambers” could only be expected, if one were to assume absurdly short and technically unfeasible gassing times, the application of very small amounts of Zyklon B, or only very few gassings at all.

7.3.2.4. Excursus: Capacity of Protective Filters

Filter devices to protect against hazardous and/or lethal gases and vapors are divided a) into types according to the kind of gas to be filtered and b) into classes according to their capacity. Filters of Class 3 with a large capacity are stored externally, usually in a container to be carried at one’s side, since they are too heavy to be carried on the mask. They are connected to the mask with

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352 These calculations were made without considering the elevated CO₂ content in the alleged “gas chambers,” the exact effect of which is not known. Hence, there is plenty of room for future research.
a hose. Filters of Class 2 are screwed into the mask and form the majority of all used filter types. Filters of Class 1 are snap-in filters.

The service life of gas filters depends on:

- Type and concentration of the hazardous compound;
- Air demand of the carrier, as a function of the intensity of work performed and personal constitution;
- Humidity and temperature of the air.

Needless to say, the German Institute for Standardization (Deutsche Institut für Normung, DIN) has determined the minimum values of break-through times of filters under standard testing conditions. These conditions are:

- 20°C;
- 70% relative humidity of air;
- 30 liters flow-through of air per minute.

The values of different filter types are given in Table 24 with their respective hazardous gas.

Hydrogen-cyanide filters used by the Allies during that time belonged to Class 3, with filters to be carried externally. The service life of such filters at hard physical labor and 0.05 vol.% of hydrogen cyanide is given as 3 to 5 hours. At a concentration of over 1 vol.%, the gas quickly breaks through even these devices (War Department 1932, 1941).

Queisner wrote a report about his experiences with German filter devices used during the Second World War for delousing procedures with hydrogen cyanide (Queisner 1943). The filter inserts “J” and “G” used at that time were especially developed for use in atmospheres containing hydrogen cyanide and had a service life of 30 min. with a peak load of 1 vol.%.

Since the mask user is only exposed to small amounts of hydrogen cyanide during delousing activities (during distribution of the product and at the end of the gassing, the hydrogen-cyanide concentration is rather low), experience showed that it is possible to use the mask for several hours.

According to Schmidt (1979, p. 124), relaxed humans inhale some 14 liters of air per minute. This can increase up to 50 to 60 liters per minute in the case of heavy physical work, in extreme cases even up to 100 to 120 liters.

### Table 23: Maximally admissible concentration of harmful compound for protection filters (Hauptverband… 1981)

<table>
<thead>
<tr>
<th>Gas-filter class</th>
<th>Maximally admissible concentration of harmful compound</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.1 vol.%; 1,000 ml m⁻³ (ppm)</td>
</tr>
<tr>
<td>2</td>
<td>0.5 vol.%; 5,000 ml m⁻³ (ppm)</td>
</tr>
<tr>
<td>3</td>
<td>1.0 vol.%; 10,000 ml m⁻³ (ppm)</td>
</tr>
</tbody>
</table>

Short-term excess up to twice of the table value is permissible.
If large amounts of Zyklon B were used during the gassings to achieve the swift execution times claimed, this would have resulted in very high concentrations of HCN in the atmosphere in those rooms that had neither a ventilation system nor any option to remove the Zyklon B after the end of the execution. In fact, it probably would have risen well beyond 1 Vol-%. Under these circumstances, the inmates of the special units (Sonderkommandos), who are said to have carried the corpses out of “gas chambers” without mechanical ventilation (the bunkers as well as the pertinent rooms of Crematorium IV, and until early 1944 also of Crematorium V), would have had to wear gas masks. Equipped with gas filters of Class 2 and doing heavy physical work, they would have been exposed to a high concentration of toxic gas. Since hydrogen cyanide is particularly well absorbed through sweat-wet skin, this would certainly have led to signs of poisoning.

The minimum break-through times of corresponding modern gas filters of Class 2, Type B (for hydrogen cyanide) lies at 25 min. for 0.5 vol.% at a flow-through of 30 liters per min. In the case of sufficiently hard physical labor, this time will be quickly cut to half or a quarter. Therefore, a modern filter of Class 2 can offer only several minutes of safety under the circumstances under consideration. Breathing would have been seriously hindered by these filters (max. 5.6 mbar pressure difference at 95 liters per min. according to the DIN norm quoted), hence the working speed would have to have been slow and the demand for resting times and forced pauses due to gas poisonings would have been huge. Since the German wartime filters were especially designed for hydrogen cyanide, they probably had a higher capacity, and consequently their durability might have been correspondingly higher, which, in turn, increased their service life.

Pressac (1989, p. 16) writes that a hydrogen-cyanide concentration of 1 vol.% is not tolerable even with a filter mask, and that an exposure time of up to one minute is granted only in emergency cases, and this without any heavy physical work!
Finally, a poisoning through the sweat-wet skin would have been avoidable under these circumstances only if the workers would have worked with protective garments in the “gas chamber,” which was not reported by any witness and which would have reduced the working performance even more. The accounts of some witnesses regarding the applied concentrations and the quick clearing of the chamber after the execution without protective garments and masks, on which even Pressac relies, exclude each other and thus can certainly not be correct.

It should also be kept in mind that hydrogen cyanide is a contact poison. Manually dragging corpses on whose skin huge, possibly lethal amounts of hydrogen cyanide are absorbed, would have required that the members of the special units dealing with these corpses for hours had to wear protective clothes. Finally, when considering the applied concentrations attested to, the guards, like the members of the special units, would have at least risked their health. This is true for all “gas chambers.”

7.3.3. Evaluation of Eyewitnesses

It was possible to provide a satisfactory answer to the problem of the Zyklon-B-introduction holes in the roofs of Morgue #1 (the “gas chambers”) of Crematoria II and III through the interpretation of air photos and structural consid-
erations. As a result, it must be concluded that the holes and cracks visible today were only put in during or after the destruction of the building during the winter of 1944-45. This means that the poison gas could not have been introduced into these alleged “gas chambers” in the manner described by the witnesses.

Under the existing technical circumstances, the rapidity of the executions as described by the witnesses cannot be attained at all in their extreme values (“a few moments,” “a few minutes,” “two minutes,” etc.) and only through the use of very large quantities of Zyklon B in the other cases (up to ten minutes).

Entering the “gas chambers” without protective measures, performing heavy physical work in them, sometimes with a naked upper body and while eating and smoking, along with testimony relating to large quantities of toxic gas used, proves that these witnesses made false statements.

Equally false are the statements relating to the duration of ventilation of Morgues #1 (the “gas chambers”) of Crematoria II and III, since the ventilation would have been greatly impeded by various factors (impeded circulation by corpses, short circuit in the ventilation pathway, persistent release of hydrogen cyanide by Zyklon B). In fact, safe entry into the “gas chamber” without protective measures would hardly have been possible in less than two to three hours after the end of the gassing. Finally, even when wearing gas masks, heavy physical work would only have been conceivable after at least one and a half hours of ventilation.

The witness testimonies relating to the alleged cremation of the bodies, finally, are riddled with rank fantasy: cremation in deep ditches; cremation with liquid fuels; entirely without – or with ridiculously little – fuel; the destruction of corpses with explosives; the collection of human fat. These have nothing in common with technically possible reality and are largely refuted by the Allied aerial photographic evidence: no huge ditches, no smoke, no fire, no fuel-storage areas.

The illogical and ridiculous gassing scenarios – thusly characterized already by Pressac – in the “gas chambers” of Crematoria IV and V as well as the comparable ones in Bunkers 1 and 2, would have been life-threatening most of all for the members of the Sonderkommandos (see Subsections 5.4.2 and 5.4.3). Yet these “gas chambers” must have been planned and built as instruments of mass murder, if mass gassings were already underway elsewhere in the camp during their period of construction, as Pressac posits (1989, p. 447). All of this must compel people accustomed to thinking in terms of technology and the natural sciences to conclude that the Germans must have decided to choose absolutely the most-expensive, laborious, most-dangerous and difficult way possible in which to kill people en masse.

353 There are, of course, witnesses who allege that gas masks were worn, e.g., C. Vaillant-Couturier, in: IMT, Vol. 6, p. 216. Protective garments, however, are never mentioned.
For Germany’s enemies, it would have been logical, for propaganda purposes, to have described the installations such as the disinfection chambers intended for personal effects located in Buildings 5a and 5b as homicidal “gas chambers.” But this was never attempted, nor are there any witness testimonies as to such a utilization of those premises. Furthermore, the doors drawn in the plans of the disinfection chambers of Building 5b – as well as the doors located there today – open inwards, which would have rendered it impossible to remove bodies lying behind the doors after a hypothetical mass gassing. These rooms were, therefore, certainly never used as homicidal “gas chambers.”

Brief mention should be made at this point of the widespread notion that the toxic gas streamed into the alleged homicidal gas chamber through shower heads, especially as there are even a few such witness statements. Zyklon B’s active ingredient, hydrogen cyanide, is adsorbed on a solid carrier material (gypsum) and is released only gradually. Since it was neither a liquid nor a gas under pressure, the hydrogen cyanide from this product could never have been ducted through narrow water pipes and shower heads. Possible showers, or fake shower heads, could therefore only have been used to deceive the victims; they could never have been used for the introduction of this poison gas. There is general unanimity as to this point, no matter what else might be in dispute.

<table>
<thead>
<tr>
<th>Table 25: Evaluation of witness statements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Witness Claim</strong></td>
</tr>
<tr>
<td>Death of all victims after 0 (instantaneously) to 15 minutes.</td>
</tr>
<tr>
<td>Opening of the doors to the “gas chamber” after the execution (and sometimes short ventilation times) and immediate start of corpse removal without gas masks and protective clothing.</td>
</tr>
<tr>
<td>Witness Claim</td>
</tr>
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<td>---------------</td>
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<tr>
<td>must be expected during heavy work, involving perspiration, and due to the high concentrations of hydrogen cyanide on the skin of the victims. At the same time, such concentrations are sufficient to put a stop to the workers’ ability to work (dizziness, nausea, etc.). Protective clothing would therefore have been indispensable.</td>
</tr>
<tr>
<td>Blue vapor over the victims.</td>
</tr>
<tr>
<td>Bluish/greenish coloration of the skin of the victims.</td>
</tr>
<tr>
<td>Attempted destruction of the bodies by means of explosives.</td>
</tr>
<tr>
<td>Cremation of bodies in cremation furnaces without fuel.</td>
</tr>
<tr>
<td>Commencement of body transport from the chamber of Crematoria II and III 20 minutes after commencement of ventilation, without gas masks.</td>
</tr>
<tr>
<td>Cremation of the corpses in pits 1.5 to 3 meters deep.</td>
</tr>
<tr>
<td>Cremation of the corpses with methanol and/or waste oil.</td>
</tr>
<tr>
<td>Pouring escaping human fat over the bodies.</td>
</tr>
<tr>
<td>Flames shooting out of heavily smoking crematorium chimneys.</td>
</tr>
</tbody>
</table>
7.3.4. An Expert on Cyanide Speaks Out

Gérard Roubeix
51 Av. de la Coquetterie
44000 Nantes

Nantes, the 2nd Nov. 1997
To M. Michel Adam
c/o ANEC
PO Box 21
44530 St. Gildas-des-Bois

Sir,

Having learned about the odious persecution of which you are a victim in the name of “freedom of expression,” let me express all of my sympathy and my total solidarity to you.

I have spent 20 years of my career as an engineer in the hydrogen-cyanide industry in the service of the Groups Pechiney-Ugine-Kuhlmann and Charbonnages de France. In particular, I have been the director of the St. Avold plant, which in 1970, with its production of 40 tons of cyanides per day, was the most-important plant worldwide; theoretically, this production would have allowed the lethal poisoning of 500 million human beings on a single day. This shows how I am aware of the problems regarding the handling of HCN. Well, I affirm that all the “testimonies” I have read or heard of concerning these gas chambers, in which 2 to 3,000 people were crammed, are nothing but total fantasy.

I congratulate you for your admirable battle against the hoax. The truth is on its way.

[signed Roubeix]

P.S: You may use this testimony, if necessary.”

Michel Adam was a teacher of history and geography in the west of France. At the beginning of July 1997, as a former female inmate of the concentration camp of Ravensbrück was giving a lecture at his school telling about her “memories,” he opposed the lady veteran several times using solid revisionist arguments. Michel Adam was immediately suspended and, after one year of troubles of all sorts, he was dismissed by French Minister for the Arts Claude Allègre on account of the three following official reasons:
– showing his revisionist views in front of his students;
– disturbing a meeting of his students with a camp veteran;
– showing doubts about the credibility of a veteran’s testimony.
Already in 1988 Gérard Roubeix wrote a similar letter which has been published elsewhere (Roubeix 1989). Roubeix passed away in 2001.

ANEC stands for Association Normande pour l’Éveil du Citoyen, (Normandy Association for the Awakening of the Citizens), which was an association created by the Normandy teacher Vincent Reynouard, who, just as Michel Adam before him, lost his job because of his revisionist views and was sentenced to fines and various prison terms (Reynouard 2000). ANEC published 36 issues of the revisionist periodical Nouvelle Vision. Reynouard’s current diverse revisionist activities can be followed on the Internet: www.sansconcessiontv.org
7.3.5. Why, Precisely, Zyklon B?

Of course, one might ask why the SS are supposed to have decided to use Zyklon B as an instrument of mass murder. After all, the Soviets killed countless millions of human beings either simply by shooting them in the back of the neck or allowing them to die in camps under miserable conditions. Surely it would have been simpler to leave the people deported to Auschwitz to their fate; they would have perished from hunger and epidemics within a very short time anyway. That is how the Americans murdered approximately one million disarmed former German soldiers after the end of the Second World War (Bacque 1989, 1996). Instead, the SS at Auschwitz spent almost one billion dollars, in today’s values, to bring the epidemics raging there under control, incurring huge expenditures on medical facilities, to cure the internees from the typhus epidemics, which were very often fatal.\footnote{Nowak/Rademacher 2003; Gerner et al. 2002; on medical care see Mattogno 2016a.} This alone speaks volumes about the credibility of the conventional wisdom.

The academic question, therefore, of whether or not some other poison gas would have been better suited for the mass murders instead of hydrogen cyanide in the form of Zyklon B cannot, in the last analysis, be answered, since there are no scientifically documented experimental data for mass murder by poison gas.

Theoretically, the Germans could, at that time, have chosen among nitrogen (N\textsubscript{2}), carbon dioxide (CO\textsubscript{2}), carbon monoxide (CO), phosgene (COCl\textsubscript{2}), chlorine (Cl\textsubscript{2}), hydrogen cyanide (HCN), nerve gases such as Tabun and Sarin, exhaust gases from diesel or gasoline engines, producer gas, coke or city gas, process gas and possibly still other, maybe even entirely different means of mass murder (shooting in the back of the neck, hunger, epidemics). But if one really wished to take the trouble to commit mass killings with poison gas, it is most probable that one would have used carbon monoxide, which is definitely lethal to human beings above 0.1 vol.% in air, for the following reasons:

1. The poison gas CO was available in almost unlimited quantities and in lethal concentrations at giveaway prices, substantially cheaper than Zyklon B, on almost every street corner in the Third Reich:
   a. Internal-combustion-engine exhausts easily attain a CO content of 7% by volume, so that they would have been suitable for mass murder. Nevertheless, only a very small minority of witnesses speak in a contradictory manner about the use of internal-combustion engines in only one German concentration camp (Sobibor; see Mattogno/Kues/Graf 2010).
   b. Producer-gas generators generate a gaseous mixture with a proportion of CO of up to 35% by volume, using only wood or coke, air and water. These generators were installed in hundreds of thousands of vehicles all
over German-occupied Europe during the Second World War, since it was necessary to convert to alternative fuels due to the Allied oil blockade. As F.P. Berg has shown, every member of the German Reich Government was familiar with these extraordinarily economical and easily operated installations with their quickly lethal toxic gas, especially the transport experts, whose duty it was to gradually convert all Diesel and gasoline engines to generator-gas-driven devices. These were, in some cases, exactly the same people who were entrusted with the deportation and allegedly with the killing of Jews – such as Adolf Eichmann, for example (see Berg 2003). But it has never been claimed that any such installation was used for purposes of homicide.

c. Toxic city gas with a CO proportion of up to 30% by volume was available in every major city for a ridiculously low price. Consideration would obviously have been given to committing murder with it, had there been any extermination program.

d. Process gas: The German corporate giant I.G. Farbenindustrie AG had already built a coal-gasification/-liquefaction plant only a few kilometers away from Auschwitz Concentration Camp in the early 1940s. Here, by means of various conversion processes, coal was converted into chemicals, from which oils, fats, fuels, and synthetic rubbers could be made. The first step in this procedure is the generation of process gas, which has a similar composition to coke gas or city gas. The I.G. Farbenindustrie AG factory had a concentration camp in its immediate vicinity by the name of Monowitz, which was connected to the extensive system of more than 40 different so-called satellite camps of the Auschwitz Main Camp in Upper Silesia and Western Poland. If the SS had looked for a simple way to kill millions of Jews, the center of extermination certainly would have been built in the vicinity of Monowitz, with a direct process-gas pipeline from the I.G. Farbenindustrie AG factory.355

2. It would not have been necessary to order and store CO and pay attention to the use-by date, as was necessary in the case of Zyklon B; carbon monoxide would have been available at all times, as soon as the cheap devices had been installed and/or connected.

3. The handling of CO would have been considerably simpler for the executioners. Almost the only thing to pay attention to would have been the opening and closing of the CO valve. The handling of Zyklon B, on the other hand, demanded a remarkable number of safety precautions on the part of the executioners. The wearing of gas masks, and, when possible, additional protective clothing (gloves), the careful opening of the cans with

355 Curiously enough, Dr. Konrad Morgen, an SS judge who investigated criminal activities of SS personnel in various camps, claimed after the war at the IMT that exterminations at Auschwitz had been carried out at the Monowitz camp close to the I.G. Farbenindustrie plant – in stark contrast to all other witnesses; IMT, Vol. 20, pp. 499, 503f.
a suitable tool, the careful introduction of the carrier through the openings, the careful disposal of the Zyklon-B residues.

4. CO can be introduced simply and quickly through pressure pipes or through a blower, while Zyklon B, on the other hand, releases its toxic fumes from the carrier only slowly.

5. In the case of CO, there would not have been as many problems with ventilating the air in the mass execution-areas as with hydrogen cyanide/Zyklon B, since the introduction of CO could be stopped simply by closing a valve, and because CO does not adhere to surfaces and is almost insoluble in water – in extreme contrast to hydrogen cyanide.

6. Since CO does not affect insects, it could not be used to combat lice and other carriers of disease. Zyklon B was therefore desperately needed for this purpose, but it was scarce and expensive, because it was used to combat epidemics not only by the SS, but also by German civilian companies, by civilian government agencies, by the German army as well as by German-allied armed forces. Hence any evitable squandering of it for other purposes would have been avoided – even, and especially, at Auschwitz, where typhus threatened not only the lives of the inmates, but also the guards and civilians entering the camp or who lived in the vicinity. In plain English, this means that the typhus epidemic in Auschwitz Concentration Camp threatened the extremely important production of the war industries located in Upper Silesia, the second-greatest industrial region in Germany after the Ruhr at that time. The struggle against epidemics, for which Zyklon B was undoubtedly needed, was therefore of the greatest importance and was needed in larger quantities than the manufacturer, Degesch, was able to deliver at that time.

Of course, CO would not necessarily have sped up the execution procedure in comparison to hydrogen cyanide, but it would have been safer, more easily available nearby, less complicated, and cheaper.

Certainly, “the bottleneck in the extermination process […would have been] the incineration of the bodies, not the gassing itself. [Appropriate equipment provided,]
A thousand people could be killed in a matter of minutes, or an hour or two at most, counting the entire operation from arrival at the camp to the final ventilation of the gas chamber.
Yet to burn the bodies of those thousand people […would have taken] quite a long while.”

356 Most insects do not have hemoglobin, the blood pigment which transports oxygen in mammals, but which is blocked by CO; see Baker/Wright 1977.
357 If for no other reason than because, according to the establishment literature, CO was also already used in connection with the euthanasia action.
358 According to a part of the answer from “Nizkor” (www.nizkor.org/features/qar/qar29.html) to Question No. 29: “Why did they use this instead of a gas more suitable for mass extermi-
As Mattogno and Deana have shown (1994; 2015), the cremation installations at Auschwitz would never have been able to cremate the bodies resulting from the claimed mass murders, in addition to those resulting from the various epidemics and other adverse conditions of the Auschwitz Camp. This is a further proof that there was never a program of mass homicide at Auschwitz.

“nation?” of a flyer distributed by the Institute for Historical Review: *66 Questions and Answers on the Holocaust.*
8. Evaluation of Chemical Analyses

8.1. Test Sample Taking and Description

As far as I am aware, test samples from buildings at Auschwitz have been analyzed by five persons or groups so far.

1. Fred A. Leuchter, Consulting Engineers, Boston, Mass., on behalf of the defense of E. Zündel, Toronto (Leuchter 1988; Leuchter et al. 2015). F.A. Leuchter marked the locations where he took samples from crematoria in maps of these buildings drawn by himself and reproduced in his expert report. Only Leuchter’s samples taken from Morgue #1 (“gas chamber”) of Crematorium II are reproduced in the sketch below (Figure 141). There is moreover a video film documenting Leuchter’s sampling. J.-C. Pressac has subjected the sample taking to criticism (1988). Leuchter failed to indicate a more exact specification of the sample material; the designation is “brick” in all cases. The sampling was done without regard for depth. From the traces left by Leuchter in the corresponding places in the masonry, one must calculate sampling depths of up to 3 cm and more.

2. Prof. Dr. Jan Markiewicz, Jan Sehn Institute for Forensic Research, Toxicology Department, Krakow, on behalf of the Auschwitz State Museum. J. Markiewicz provides more-exact data on the sampling locations, the type of material, and the depth taken in a sampling records for the samples he took in 1990. The control samples were taken from a disinfection chamber in the Auschwitz Main Camp, the interior walls of which, according to the report, were painted during the war, so that only a pale blue tint is visible in places. This is not, therefore, unaltered masonry material; thus, in case the samples were taken from the upper layer of the wall only, one has to expect lower results in comparison to an untreated wall (Markiewicz et al. 1991). In 1994 Markiewicz et al. did a second series of analysis of more than 60 samples taken from various buildings at Auschwitz and Birkenau, plus they performed a series of experimental gasings. The descriptions of sampling locations, material types and depth are scanty at best (Markiewicz et al. 1994).

3. Dipl.-Chem. Germar Rudolf, Stuttgart, Germany, on behalf of the defense of the late Major General O. E. Remer. The samples were taken in the presence of witnesses (Karl Philipp, helping with the sampling process and taking photographs, and his wife Anita, as well as Mark Dufour, video-taping) by hammer and chisel and immediately sealed in plastic bags. The subsequent numbering of the bags was recorded by hand, including the measured sampling location and type of sample. Table 31 shows buildings, sampling locations and depths, as well as a brief description of the wall material. The exact

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359 Sections of it are contained in Morris’s documentary on Leuchter.
locations are shown in the sketch of the corresponding buildings in Chapter 5 of
 this book.

4. John C. Ball, Ball Resource Services Ltd., Delta, BC, Canada. John C.
 Ball has not given any details about where exactly he took his samples, nor
 what kind of material it was. According to his own description, at least the
 samples from the delousing rooms of BW 5a and BW 5b consist of a mixture
 of material taken at various places of these rooms, both inside and outside.
 Hence, the same might be true for his other samples. For this reason, we will
 only briefly list Ball’s analysis results here without going into too many de-
 tails about how they are to be interpreted (J. Ball 2015, pp. 112-116).

5. Carlo Mattogno, Rome, Italy. Samples were taken at two locations each
 of Morgues #1 and #2 of Crematorium II. Mattogno mentioned the results
 briefly in a 2016 booklet without giving any more details as to the exact na-
 ture of the samples and the precise sampling locations (Mattogno 2011; 2016l,
 pp. 75-77). Since comparing cyanide readings in samples taken in the alleged
 undressing room with those in samples taken in the alleged “gas chamber” can
 be revealing, I will briefly discuss this here.

8.2. Analytical Methods

8.2.1. Methods Used

The analyses were performed in each case respectively by:

1. Prof. Dr. J. Roth, Alpha Analytic Laboratories, Ashland, Massachusetts.
 For the cyanide analysis, this laboratory used a procedure carried out analog-
 ously to the German standard (see 3.). Control analyses were prepared for
 some test samples near the detection limit of 1 mg cyanide per kg test materi-
 al. The results fluctuated up to 40%.

2. Jan Sehn Institute for Forensic Research, Toxicology Department, Krak-
 ow, Poland, under Jan Markiewicz. The Polish scientist used the micro-
 diffusion-chamber procedure, which does not permit the detection of iron-
 cyanide compounds like Iron Blue. The Poles claim that the detection limit
 for other cyanides lies at a concentration of 3-4 µg per kg sample material, yet
 the paper they cite clearly gives 0.2 mg/L (200 µg/kg) as a detection limit for
 aqueous solutions. The samples of the second series were analyzed three
 times. For the resulting differences see Table 30.

3. Fresenius Institute, Taunusstein, Hessen, Germany, with no knowl-
 edge of the origins of the samples. Proof of the presence of cyanide was produced
 in conformity with DIN 38 405, Section D 13. The detection limit lies nomi-

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360 The iron content was also determined by means of ICP spectrometer. The values lay between
6 and 7.5 g per kg.

361 Epstein 1947; in this procedure, the sample is added to semi-concentrated sulfuric acid for
24 hours. The gases released are only collected by means of diffusion in a KOH collector.
nally in the range from 0.5 to 0.1 mg per kg. All values below 0.5 mg per kg are uncertain and are commonly marked as “not detected (ND)” (see the reproduction of the analysis results on company stationery on pp. 310f.). Control analyses were performed by the Institut für Umweltanalytik Stuttgart, IUS (Institute for Environmental Analytics) using DIN 38 405, Section D 14, which differs from D 13 only by not adding cadmium salts (see the reproduction of the analysis results on company stationery on pp. 312f.). According to personal communication from the manager of the Institut für Umweltanalytik Stuttgart, the analytical method used is designed to detect cyanides in aqueous solutions. Since cyanides bound within solid samples are at times hard to dissolve, detection limits are expected to be considerably higher than the nominal detection limit of 0.5 mg per kg, but he did not know of any defined threshold value (on the document: NG = Nachweisgrenze, detection limit).

4. Unknown. However, the results indicate that the method used was similar to the one used by Leuchter/Roth and Rudolf/Fresenius.

5. Analysis of total cyanide content by Ecolab of Genoa (Jan. 15, 1993). The exact method is unknown. However, a sample submitted which had a known Iron Blue content of more than 1,000 mg cyanide per kg of sample material came back with a detected value of merely about 0.1% of its actual cyanide content. It may therefore be assumed that the method used was not able to detect complex iron cyanides of the Iron Blue type.

8.2.2. Interferences and Reproducibility

Before discussing the individual assays in detail, a few words are necessary to understand the problems involved, illustrating them already here with a few analytical results.

One major challenge when analyzing masonry samples is the presence of carbonate. Concrete, mortar and plaster samples that are several decades old are all carbonated to a high degree, hence contain major quantities of carbonates mainly in the form of calcium carbonate (CaCO₃). Meeussen/Temminghof et al. (1989) have determined the false positives caused by carbonate in liquid solutions of 0.1 mg of cyanide per liter of water as listed in Table 26.

Considering that masonry samples can easily contain several thousand milligrams of carbonate per liter – for instance, apart from its sand portion, lime plaster consists basically only of CaCO₃ – cyanide values in the range of 1 mg per kg sample material and lower may reflect to a considerable degree the samples’ carbonate rather than cyanide content. Since the photometric method

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Driving out the hydrogen cyanide by boiling the sample for one hour in aqueous HCl in a slightly reductive medium (SnCl₂), driving out in the continuous stream of air, collection in the aqueous KOH collector. Finally, photometric or titrimetric testing depending on the concentration in each case. Proof of iron was achieved here by the ICP spectrometer.

362 Driving out the hydrogen cyanide by boiling the sample for one hour in aqueous HCl in a slightly reductive medium (SnCl₂), driving out in the continuous stream of air, collection in the aqueous KOH collector. Finally, photometric or titrimetric testing depending on the concentration in each case. Proof of iron was achieved here by the ICP spectrometer.
used by Meeussen/Temminghof et al. is not necessarily identical to those used by the laboratories dealt with here, however, those values should be taken only as a caveat that large quantities of carbonate yield false positive near the detection limit, rendering them unreliable in addition to the problems involved in general when testing solid samples, as discussed above.

To prove this point, Leuchter’s laboratory re-analyzed two low-level samples and made a spike analysis for a third. I had four of my samples re-analyzed by a different laboratory. The results are given in Table 27.

Whereas all of Leuchter’s samples are described as “brick,” hence should have low contents of interfering carbonates (but that description may simply be due to Leuchter’s negligence when labelling them), my Samples 3, 8, and 11 were plaster samples rich in carbonates, whereas the only sample which could be reproduced with accuracy, #25, was a brick.

As can be seen from this, the reliability of analytic results even of samples with high levels of cyanide can be problematic. In the case of Sample R11, the first result, by Fresenius, was obtained not by photometric but by titrimetric analysis. The lab assistant working on this informed me that she had not expected to find such huge amounts of cyanides in any of the samples. Therefore, when the first sample with a large cyanide content was measured photometrically, it was too dark to yield any useful reading. Instead of simply diluting the sample 1:10 or 1:100 and measuring it then while correcting the reading with the proper factor, she resorted to titrimey. The second result was obtained by IUS Stuttgart after having been told the order of magnitude to

| Table 26: Carbonate as an interfering substance in water containing 100 µg cyanide per liter |
|-----------------|-----------------|
| CaCO₃ [mg L⁻¹] | Cyanide measured [µg L⁻¹] |
| 1               | 101             |
| 10              | 104             |
| 100             | 125             |
| 1,000           | 206             |

<table>
<thead>
<tr>
<th>Table 27: Reproducibility of total cyanide analysis of wall samples by Rudolf and Leuchter (in mg CN⁻ kg⁻¹; DL = detection limit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAMPLE*</td>
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<td>----------</td>
</tr>
<tr>
<td>L25</td>
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<td>L30</td>
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<td>L26</td>
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<td>R3</td>
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<td>R8</td>
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<tr>
<td>R11</td>
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<tr>
<td>R25</td>
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</tbody>
</table>

* L = Leuchter’s sample no.; R = Rudolf’s sample no.
** A spike recovery was performed in this case, with only the percentage given.
expect, so they diluted the sample before putting the cuvette into the photometer. I therefore consider the second result by IUS more reliable.

When being confronted with this unacceptable discrepancy, I wanted to have all samples retested, but as a student I did not have the financial means to do so, and no one else wanted to finance it either.

In the following, I will assume that there is a systematic difference between the two sets of analytic results, that Fresenius’s results are correct at least within one order of magnitude, and that differences between individual samples are correct at least regarding their respective ratios.

The reliability of analytic results of masonry samples rich in carbonate with cyanide levels close to the formal detection limit is approaching zero. To put this into perspective, a spike-recovery rate of up to ±10% is considered to signify a reliable analytic method. The acceptability limits are generally considered to be at ±25%. Here, however, we are dealing with limits between +40% and –100% near the detection limit.

8.3. Evaluation of Analytical Results
8.3.1. F.A. Leuchter/Alpha Analytic Laboratories
All of Leuchter’s positive findings from the alleged homicidal gas chamber lie in the vicinity of the “official” detection limit (1 mg per kg) and must be expected to exhibit rather high fluctuations. Control Sample #32 is from the disinfection wing of Building 5a (which Leuchter calls “Disinfection Chamber 1”). The foundations of Crematoria IV and V are alleged to have been rebuilt after the war from the rubble of undefined origin, which renders any analytic results questionable (see Subsection 5.4.2). Thus, the analyses of samples originating from these walls are nevertheless interesting, due to their positive findings in places.

That the analytical values of samples from areas protected from environmental influences are just as low as results from exposed locations, or not detectable at all, led Leuchter to conclude that environmental influences could not have considerably reduced the cyanide content of the exposed buildings, which would be in accordance with the findings in Section 6.6. Leuchter opines that low cyanide traces may have resulted from an isolated fumigation of the morgues for pest control, since interior disinfections were carried out in many camp buildings at that time.

The positive result (1.3 mg per kg) of Sample #28, which Leuchter took from the partition of the former washroom to the dissecting room of Crematorium I, is remarkable. This wall never formed part of the alleged “gas chamber,” and moreover was perhaps even reinforced during the conversion to an air-raid shelter. This result is approximately as high as the other positive sam-

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amples from the crematoria buildings, including those from the foundation walls of Crematorium IV and V, which were rebuilt after the war using material of unknown provenance. These values may be explained by any of the following reasons or a combination of them:

1. Cyanide traces of this minimal order of magnitude may be present anywhere.\(^{364}\)

2. This air-raid shelter, like all rooms in Auschwitz-Birkenau, was occasionally fumigated with Zyklon B for disinfection purposes.

3. Analytical values in this order of magnitude (near the detection limit) are not reproducible and therefore cannot be interpreted due to the limited efficacy of the method. They are equivalent to zero values. In view of the results discussed in Subsection 8.2.2., this reason appears the most probable.

According to Bailer, the high cyanide content of the control samples taken by Leuchter in the disinfection wing of Building 5a is to be attributed either to an artifact, an error in the sampling, or an analytical error. He understands an artifact to mean that the wall of the disinfection wing was painted with blue paint, precisely, an Iron Blue paint, at an earlier time. Bailer further expresses the opinion that no Iron Blue could form in the masonry material due to the alkaline environment. In addition, the high cyanide content of 1,050 mg per kg would mean that the walls consist 0.1% of pigment, which in his opinion could not possibly be true (Bailer 1991; similar 1995, pp. 112-118).

As shown in Section 6.5, the environment is only alkaline in the non-carbonated parts of the masonry. It has also been established that an alkaline environment even supports the accumulation of cyanide and certain other steps in the reaction towards the formation of Iron Blue (the reduction of iron(III) to iron(II)). If one assumes, as an extreme case, a complete conversion of all iron compounds contained in the masonry into pigment (1 to 2% iron content), the value found by Leuchter is in fact rather low. Whether the

\(^{364}\) According to a fact sheet of the U.S. Environmental Protection Agency, cyanides can indeed be present in traces just about anywhere, caused by car exhaust and a number of industries: U.S. EPA 2000.
walls of the disinfection wing were painted blue, *i.e.*, whether a high cyanide content can only be found on the upper, *i.e.*, the paint layer of the wall, will be discussed at a later time.

Pressac opines that the low cyanide traces in the masonry of the crematoria are the final proof of the existence of the “gas chambers,” since they are still detectable today after what was, in his opinion, a short exposure time, a low reactivity of hydrogen cyanide on cool masonry, and despite corrosion and erosion (1988; 1989, p. 133). He furthermore expresses the opinion that warm walls would be necessary for the formation of the pigment (1989, p. 53). It has already been demonstrated, however, that this opinion is really unrealistic: First of all, the pigment formed is durable (Section 6.6); second, cool and moist walls have a higher reactivity to pigment formation than dry and warm walls (Section 6.5); third, Leuchter’s Sample #28 proves that cyanide traces near the detection limit are not necessarily caused by homicidal gassings.

### Table 28: Cyanide concentrations in the masonry of “gas chambers”/disinfection chambers: Leuchter

<table>
<thead>
<tr>
<th>Sample #</th>
<th>Sampling Location</th>
<th>CN⁻[mg ⋅ kg⁻¹]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-7</td>
<td>Crematorium II, Morgue #1</td>
<td>0.0</td>
</tr>
<tr>
<td>8</td>
<td>Crematorium III, Morgue #1</td>
<td>1.9</td>
</tr>
<tr>
<td>9</td>
<td>Crematorium III, Morgue #1</td>
<td>6.7</td>
</tr>
<tr>
<td>10,11</td>
<td>Crematorium III, Morgue #1</td>
<td>0.0</td>
</tr>
<tr>
<td>12</td>
<td>Door sealing</td>
<td>0.0</td>
</tr>
<tr>
<td>13,14</td>
<td>Crematorium IV, morgue, chimney room</td>
<td>0.0</td>
</tr>
<tr>
<td>15</td>
<td>Crematorium IV, chimney room</td>
<td>2.3</td>
</tr>
<tr>
<td>16</td>
<td>Crematorium IV</td>
<td>1.4</td>
</tr>
<tr>
<td>17-19</td>
<td>Crematorium IV</td>
<td>0.0</td>
</tr>
<tr>
<td>20</td>
<td>Crematorium IV</td>
<td>1.4</td>
</tr>
<tr>
<td>21</td>
<td>Crematorium V</td>
<td>4.4</td>
</tr>
<tr>
<td>22</td>
<td>Crematorium V</td>
<td>1.7</td>
</tr>
<tr>
<td>23,24</td>
<td>Crematorium V</td>
<td>0.0</td>
</tr>
<tr>
<td>25</td>
<td>Crematorium I, morgue</td>
<td>3.8/1.9</td>
</tr>
<tr>
<td>26</td>
<td>Crematorium I, morgue</td>
<td>1.3*</td>
</tr>
<tr>
<td>27</td>
<td>Crematorium I, morgue</td>
<td>1.4</td>
</tr>
<tr>
<td>28</td>
<td>Crematorium I, wash room</td>
<td>1.3</td>
</tr>
<tr>
<td>29</td>
<td>Crematorium I, morgue</td>
<td>7.9</td>
</tr>
<tr>
<td>30</td>
<td>Crematorium I, morgue</td>
<td>1.1/ND</td>
</tr>
<tr>
<td>31</td>
<td>Crematorium I, morgue</td>
<td>0.0</td>
</tr>
<tr>
<td>32</td>
<td>Disinfection Chamber 1</td>
<td>1,050.0</td>
</tr>
</tbody>
</table>

The morgue of Crematorium I and Morgue #1 of Crematorium II are alleged to have been homicidal gas chambers.

* A spike-recovery measurement resulted in 140% of the initial value; ND = not detected.
The analytical values shown in Table 29, which were the result of a preliminary “screening analysis,” were never published by the Jan Sehn Institute. They became public knowledge only due to an act of indiscretion, when an anonymous employee sent a copy of these results to the Institute for Historical Review.

Note that in this and in the subsequent table I have added a column to the right in italics listing the cyanide concentration as it should have been rendered, since the method used warrants a reliable detection only down to 0.2 mg/kg at best.

The results appear to suggest that the alleged “gas chambers” exhibit either no cyanide residues at all or values which are clearly lower than those found in samples taken from the disinestation chambers.

In his first report dated September 24, 1990 (published in 1991), the scientist responsible, Prof. Markiewicz, writes about the chemistry involved:

“Hydrogen cyanide is a weak acid, which has the result that its salts decompose slightly in the presence of stronger acids. One of these stronger acids is carbonic acid, which arises from the reaction between carbon dioxide and water. [Even] stronger acids, such as, for example, sulfuric acid, decompose cyanide even more easily. Complex compounds with cyanide ions with heavy metals are

<table>
<thead>
<tr>
<th>#</th>
<th>Building</th>
<th>Sampling location and depth</th>
<th>Material</th>
<th>CN(^-)</th>
<th>CN(*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Disinfestation Block 3</td>
<td>Room 4, around the ventilator opening, 2 mm</td>
<td>Plaster</td>
<td>0.068</td>
<td>ND</td>
</tr>
<tr>
<td>2</td>
<td>Disinfestation Block 3</td>
<td>Room 4, next to doors to Room 3, 2 mm</td>
<td>Plaster</td>
<td>0.036</td>
<td>ND</td>
</tr>
<tr>
<td>7</td>
<td>Disinfestation Block 3</td>
<td>Room 3, below window, opposite, 2 mm</td>
<td>Plaster</td>
<td>0.076</td>
<td>ND</td>
</tr>
<tr>
<td>8</td>
<td>Disinfestation Block 3</td>
<td>Door opening between Room 2 and 1, 2 mm upper left</td>
<td>Plaster</td>
<td>0.140</td>
<td>ND</td>
</tr>
<tr>
<td>9</td>
<td>Disinfestation Block 3</td>
<td>Like No. 8, lower left</td>
<td>Plaster</td>
<td>0.404</td>
<td>0.4</td>
</tr>
<tr>
<td>10</td>
<td>Disinfestation Block 3</td>
<td>Room 1, Ventilator opening, 2 mm</td>
<td>Plaster</td>
<td>0.528</td>
<td>0.5</td>
</tr>
<tr>
<td>11</td>
<td>Disinfestation Block 3</td>
<td>Like 10, light blue</td>
<td>Plaster</td>
<td>0.588</td>
<td>0.6</td>
</tr>
<tr>
<td>15</td>
<td>Crematorium II, Morgue #1</td>
<td>Concrete support columns</td>
<td>Plaster (?)</td>
<td>0.024</td>
<td>ND</td>
</tr>
</tbody>
</table>

* Values as they should have been rendered if abiding by the proven detection limit of the method; ND = not detected; 4 additional samples from Crematorium II, 1 from Crematorium I, 1 from Crematorium V, in each case an alleged “gas chamber,” and 2 control samples contained no detectable traces of CN\(^-\).
more durable. Among such compounds is the already mentioned ‘Prussian Blue’ [=Iron Blue], but even this decomposes slowly in an acid environment.

One could hardly expect, therefore, that building materials (plaster, brick) exposed to environmental influences (precipitation, acid oxides, especially sulfuric and nitric monoxide) would contain derivative compounds of cyanides after a period of 45 years."

This contradicts the facts established above, and so to repeat:

a. Carbon dioxide is only slightly soluble in water and hardly forms carbonic acid in water at all (see Subsection 6.5.6); actually, the water alone is primarily responsible for the decomposition.

b. Iron Blue (Prussian Blue) is extraordinarily stable in acids and is not destroyed by the influences of weathering, even over decades (Section 6.6).

### Table 30: Cyanide concentrations in the masonry of “gas chambers”/disinfestation chambers: Krakow II

<table>
<thead>
<tr>
<th>No.</th>
<th>Building</th>
<th>$CN^-$</th>
<th>$CN^+$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2</td>
<td>Auschwitz, Block no. 1, dwelling quarters</td>
<td>0.004</td>
<td>ND</td>
</tr>
<tr>
<td>3</td>
<td>Auschwitz, Block no. 1, as #1,2, iron hook</td>
<td>0</td>
<td>ND</td>
</tr>
<tr>
<td>4</td>
<td>Auschwitz, Block no. 1, as #1,2, wood from door</td>
<td>0</td>
<td>ND</td>
</tr>
<tr>
<td>5</td>
<td>Auschwitz, Block no. 1 (disinfestation facility)</td>
<td>0.84</td>
<td>0.9</td>
</tr>
<tr>
<td>7, 8</td>
<td></td>
<td>0.016</td>
<td>ND</td>
</tr>
<tr>
<td>9, 10</td>
<td>Auschwitz, dwelling quarters Block 3</td>
<td>0</td>
<td>ND</td>
</tr>
<tr>
<td>11, 12</td>
<td>Auschwitz, dwelling quarters Block 8</td>
<td>0</td>
<td>ND</td>
</tr>
<tr>
<td>13-15</td>
<td>Auschwitz, cellars of Block 11</td>
<td>0.028</td>
<td>ND</td>
</tr>
<tr>
<td>17-19,21,22</td>
<td>Crematorium I</td>
<td>0.08</td>
<td>ND</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>0.288</td>
<td>0.292</td>
</tr>
<tr>
<td>25</td>
<td>Crematorium II</td>
<td>0.592</td>
<td>0.64</td>
</tr>
<tr>
<td>26-30</td>
<td></td>
<td>0.168</td>
<td>ND</td>
</tr>
<tr>
<td>31</td>
<td>Crematorium III</td>
<td>0.288</td>
<td>0.296</td>
</tr>
<tr>
<td>32-38</td>
<td></td>
<td>0.008</td>
<td>0.068</td>
</tr>
<tr>
<td>39,40,42,43</td>
<td>Crematorium IV</td>
<td>0.044</td>
<td>ND</td>
</tr>
<tr>
<td>41</td>
<td></td>
<td>0.46</td>
<td>0.50</td>
</tr>
<tr>
<td>46</td>
<td>Crematorium V</td>
<td>0.232</td>
<td>0.248</td>
</tr>
<tr>
<td>47-52</td>
<td></td>
<td>0.248</td>
<td>ND</td>
</tr>
<tr>
<td>53, 54</td>
<td>Birkenau, Bathhouse, Camp Section B1-A, materials taken from the outer side of the building</td>
<td>0.036</td>
<td>ND</td>
</tr>
<tr>
<td>53a</td>
<td></td>
<td>0.224</td>
<td>0.248</td>
</tr>
<tr>
<td>55</td>
<td></td>
<td>0.64</td>
<td>0.74</td>
</tr>
<tr>
<td>56</td>
<td>Ditto, mortar from the outer side of the building wall</td>
<td>0.004</td>
<td>ND</td>
</tr>
<tr>
<td>57, 58</td>
<td>Ditto, plaster from dark-blue stains inside the building</td>
<td>0.324</td>
<td>0.84</td>
</tr>
<tr>
<td>59</td>
<td>Ditto, plaster from white walls inside the building</td>
<td>0.028</td>
<td>ND</td>
</tr>
<tr>
<td>60-63</td>
<td>Birkenau, dwelling quarters Block 3</td>
<td>0</td>
<td>ND</td>
</tr>
</tbody>
</table>

* Values as they should have been rendered if abiding by the proven detection limit of the method. ND = not detected
In a private exchange of correspondence with Werner Wegner, Prof. Markiewicz stated, among other things:365

“VIII. Water activates many chemical processes. The chambers were certainly moist. What kind of influence this exerts upon the binding of HCN by cement (wall plaster) – is unknown to us. […]

IX. The blue stains on the exterior walls of Building 5a are not easily explained. Above all, we must examine whether or not it is actual Berlin Blue [=Iron Blue…]”

Considering that Markiewicz, not being a chemist, obviously had many open questions about the issues at hand, it could be expected that he and his colleagues would look deeper into these issues before doing more research in this matter. Unfortunately, however, we were disappointed by them, because some 2½ years later these authors published additional analysis results of samples taken later, using the same analytic method, without having clarified whether Iron Blue is the cause of the blue-stained walls, and whether or not these pigments could have been the result of exposure to HCN fumes. In this regard, they simply declared (on p. 20 of their 1994 study):

“It is hard to imagine the chemical reactions and physicochemical processes that could have led to the formation of Prussian blue in that place. Brick, unlike other building materials, very feebly absorbs hydrogen cyanide, it sometimes does not even absorb it at all. Besides, iron occurring in it is at the third oxidation state, whereas bivalent iron ions are indispensable for the formation of the [Fe(Cn)₆]⁴⁻ ion, which is the precursor of Prussian blue. This ion is, besides, sensitive to the sunlight.”

The primary issue is, of course, the absorption of hydrogen cyanide not in bricks, but in concrete, mortar and plaster, which can be highly absorbent. The conversion of iron(III) to iron(II), declared enigmatic and even unimaginable by Markiewicz and his colleagues, is thoroughly explained in Section 6.5 of the present study. These arguments of mine, including the scientific sources upon which they are based, were published in 1993 in a book of mine (Gauss 1993b, pp. 163-170; 290-294) quoted by Markiewicz et al. (on their p. 18). So, they cannot possibly claim ignorance – unless they quote books they never read, of course. The fact that they paid no attention at all to my arguments laid out in front of their eyes indicates that they did not read the book indeed – or decided to ignore it anyway.

They continued the defense of their approach as follows (ibid.):

“J. Bailer [1991] writes in the collective work ‘Amoklauf gegen die Wirklichkeit’ that the formation of Prussian blue in bricks is simply improbable; however, he takes into consideration the possibility that the walls of the delousing

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365 Letter from the Prof. Dr. Jan Sehn Institute for Forensic Research, Department for Forensic Toxicology, Krakow, to Werner Wegner, undated (winter 91/92), (illegible signature) unpublished.
room were coated with this dye as a paint. It should be added that this blue coloration does not appear on the walls of all the delousing rooms.

We decided therefore to determine the cyanide ions using a method that does not induce the breakdown of the composed ferrum cyanide complex (this is the blue under discussion) and which fact we had tested before on an appropriate standard sample.”

In other words, they made no attempt at all to verify whether traces of any paint coating – blue or otherwise – could be detected on the disinfestation-chamber walls; they did nothing to find out whether a blue wall paint containing Iron Blue exists in the first place; and they did not research whether any plausible mechanism for the formation of Iron Blue due to exposure to HCN fumes could be perceived. I had even addressed and refuted Bailer’s arguments in the 1993 book of mine they quoted – to no avail, it appears.

An exchange of correspondence between me and Dr. Markiewicz in 1995 revealed his disconcerting indifference toward tackling any of the issues raised.33,34

If we blindly follow the analytic results of this Polish team’s second set of samples as listed in Table 30, the cyanide concentration of samples taken from walls in a disinfestation chamber and in alleged homicidal “gas chambers” were in the range of 0.0 to 0.9 and 0.0 to 0.6 mg/kg, respectively.

I will return to this in Subsection 8.4.2.

8.3.3. G. Rudolf/Fresenius Institute

Only a few samples were taken from the alleged homicidal “gas chambers.” Care was taken to ensure that samples were only taken from material not exposed to weathering. Only a few places in Morgue #1 (the alleged “gas chamber”) in Crematorium II at Birkenau are suitable for this, where a pillar supports the roof even today and has therefore visibly protected both the underside of the roof and parts of the wall from all influence of weathering, exemplified by the presence of spider webs many years old and the absence of any trace of lime precipitation on the concrete or mortar, which would be caused by rainwater.

Many samples have already been taken from the alleged “gas chambers” by the Krakow team and Leuchter, all with at least nearly negative results. Since it was above all a matter of clarifying the question of which circumstances favor the formation of pigment and since clearly positive findings were not to be expected according to the analyses performed in the alleged “gas chambers” thus far, the sample gathering took place chiefly in the disinfestation chambers of Buildings 5a and 5b in Construction Section Ia and/or Ib. It is known that their walls not only contain large quantities of pigment, but that their age also corresponds approximately to that of the crematoria on the
### Table 31: Cyanide concentrations in masonry of “gas chambers”/delousing chambers According to G. Rudolf/Institut Fresenius, Taunusstein, Hessen, Germany

<table>
<thead>
<tr>
<th>No</th>
<th>Building</th>
<th>Sampling location and depth</th>
<th>Material</th>
<th>c(CN⁻)</th>
<th>c(Fe)</th>
<th>%Fe</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Crematorium II</td>
<td>Morgue #1, ceiling, between 2nd and 3rd supporting pillar from the south, removal of material from a broad area, concrete drips incl. a small piece of deeper material, 0-3 mm.</td>
<td>Concrete</td>
<td>7.2</td>
<td>13,000</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Crematorium II</td>
<td>as 1, 1-5 mm.</td>
<td>Concrete</td>
<td>0.6</td>
<td>20,000</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Crematorium II</td>
<td>Inner side of western wall of Morgue #1.0-1.5 cm, see Figure 81 (page 136).</td>
<td>Plaster</td>
<td>6.7</td>
<td>10,000</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Crematorium II</td>
<td>Inner side of the northern wall of the chimney wing, garbage</td>
<td>Plaster</td>
<td>0.1</td>
<td>11,000</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>B1b Barrack 20</td>
<td>Wall separating berth, underneath the crossing beam of one bed in the large room, 2nd row of berths from the entrance, first berth to the right (separating wall), ca. 5 · 5 · 5 cm³ big.</td>
<td>Plaster</td>
<td>0.6</td>
<td>9,400</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>B1b Barrack 20</td>
<td>Separate room in the west, interior wall, mortar between bricks, 0-1 cm.</td>
<td>Mortar</td>
<td>&lt;0.1</td>
<td>4,400</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>B1b Barrack 20</td>
<td>as 6, at the entrance directly to the right, 0-1 cm.</td>
<td>Plaster</td>
<td>0.3</td>
<td>19,000</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>B1b Barrack 13</td>
<td>as 5, behind beam rest.</td>
<td>Plaster</td>
<td>2.7</td>
<td>11,000</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>B1a BW5a</td>
<td>Inside of external wall (West), 120 cm from northern wall, 155 cm from the floor, 0-2 mm, see Figure 40 (page 86).</td>
<td>Plaster</td>
<td>11,000.0</td>
<td>12,000</td>
<td>75</td>
</tr>
<tr>
<td>10</td>
<td>B1a BW5a</td>
<td>Internal wall (south), 240 cm from western wall, 170 cm from the floor, 0-2 mm.</td>
<td>Plaster</td>
<td>3.6</td>
<td>10,000</td>
<td>-</td>
</tr>
<tr>
<td>11</td>
<td>B1a BW5a</td>
<td>as 9, 1-10 mm.</td>
<td>Plaster</td>
<td>2,640.0</td>
<td>6,000</td>
<td>36</td>
</tr>
<tr>
<td>12</td>
<td>B1a BW5a</td>
<td>Eastern wall (inside), 170 cm from northern wall, 170 cm from floor, (eastern hot air chamber), 0-2 mm.</td>
<td>Plaster</td>
<td>2,900.0</td>
<td>8,500</td>
<td>28</td>
</tr>
<tr>
<td>13</td>
<td>B1a BW5a</td>
<td>as 12, 2-10 mm.</td>
<td>Plaster</td>
<td>3,000.0</td>
<td>9,000</td>
<td>27</td>
</tr>
<tr>
<td>14</td>
<td>B1a BW5a</td>
<td>Outside western wall, 40 cm from southern wall, 160 cm from the ground, 0-5 mm.</td>
<td>Brick</td>
<td>1,035.0</td>
<td>25,000</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Concentration values in mg per kg; %Fe: Portion of total iron content converted to Iron Blue, assuming that all detected cyanide was present as Iron Blue.
### Table 31 continued: Analyses results Rudolf/Fresenius

<table>
<thead>
<tr>
<th>No</th>
<th>Building</th>
<th>Sampling location and depth</th>
<th>Material</th>
<th>c[CN⁻]</th>
<th>c[Fe]</th>
<th>%Fe</th>
</tr>
</thead>
<tbody>
<tr>
<td>15a</td>
<td>B1a BW5a</td>
<td>Outside southern wall, 40 cm from western wall, 210 cm from the ground, 0-3 mm.</td>
<td>Mortar</td>
<td>1,560.0</td>
<td>10,000</td>
<td>13</td>
</tr>
<tr>
<td>15b</td>
<td>B1a BW5a</td>
<td>as a, &gt; 0-5 mm, with pigment layer removed.</td>
<td>Brick</td>
<td>56.0</td>
<td>n.d.</td>
<td>-</td>
</tr>
<tr>
<td>15c</td>
<td>B1a BW5a</td>
<td>as b, removed pigment layer, &lt; 1 mm.</td>
<td>Brick</td>
<td>2,400.0</td>
<td>n.d.</td>
<td>-</td>
</tr>
<tr>
<td>16</td>
<td>B1b BW5b</td>
<td>Outside southern wall, 2 m from entrance door, 1 m from the ground, 0-7 mm, see Figure 39 (page 85).</td>
<td>Brick</td>
<td>10,000.0</td>
<td>47,000</td>
<td>17</td>
</tr>
<tr>
<td>17</td>
<td>B1b BW5b</td>
<td>Inside southern wall, 130 cm from eastern wall, 130 cm from the floor, 4-10 mm.</td>
<td>Plaster</td>
<td>13,500.0</td>
<td>15,000</td>
<td>74</td>
</tr>
<tr>
<td>18</td>
<td>B1a BW5a</td>
<td>Floor area of door post of hot air delousing chamber, eastern chamber, pointing to the main wing, 0-5 mm.</td>
<td>Wood</td>
<td>7,150.0</td>
<td>n.d.</td>
<td>-</td>
</tr>
<tr>
<td>19a</td>
<td>B1b BW5b</td>
<td>Inside northern wall, 230 cm from eastern wall, 90 cm from the floor, 0-4 mm.</td>
<td>Plaster</td>
<td>1,860.0</td>
<td>4,300</td>
<td>35</td>
</tr>
<tr>
<td>19b</td>
<td>B1b BW5b</td>
<td>as 19a, 4-8 mm.</td>
<td>Plaster</td>
<td>3,880.0</td>
<td>9,500</td>
<td>33</td>
</tr>
<tr>
<td>20</td>
<td>B1a BW5a</td>
<td>Inside exterior wall (west), 40 cm from southern wall, 210 cm from the floor, 0-3 mm.</td>
<td>Plaster</td>
<td>7,850.0</td>
<td>11,000</td>
<td>59</td>
</tr>
<tr>
<td>21</td>
<td>B1a BW5a</td>
<td>Interior wall (east) from western wall, 30 cm from door, 190 cm from the floor, 10-50 mm.</td>
<td>Mortar</td>
<td>0.3</td>
<td>18,000</td>
<td>-</td>
</tr>
<tr>
<td>22</td>
<td>B1a BW5a</td>
<td>Inside of exterior wall (south), 40 cm from western wall 155 cm from the floor, 3-10 mm.</td>
<td>Plaster</td>
<td>4,530.0</td>
<td>11,000</td>
<td>34</td>
</tr>
<tr>
<td>23</td>
<td>B1a Barrack 3</td>
<td>Special room northwest, inside exterior wall (north), 0-5 mm.</td>
<td>Plaster</td>
<td>0.3</td>
<td>8,100</td>
<td>-</td>
</tr>
<tr>
<td>24</td>
<td>B1a Barrack 3</td>
<td>Main room inside exterior wall, (north), 0-5 mm.</td>
<td>Mortar</td>
<td>0.1</td>
<td>13,000</td>
<td>-</td>
</tr>
<tr>
<td>25</td>
<td>Experiment</td>
<td>Untreated brick, 0-5 mm.</td>
<td>Brick</td>
<td>9.6</td>
<td>35,000*</td>
<td>-</td>
</tr>
<tr>
<td>26</td>
<td>Experiment</td>
<td>16 h in 0.3 vol.% HCN, 0-5 mm, see text.</td>
<td>Brick</td>
<td>0.1</td>
<td>35,000*</td>
<td>-</td>
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<tr>
<td>27</td>
<td>Experiment</td>
<td>24¾ hours in 2 vol.% HCN, +1 g H₂O, 20 mm, 100 g.</td>
<td>Cement Mortar</td>
<td>109**</td>
<td>8,800*</td>
<td>1.0</td>
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<tr>
<td>28</td>
<td>Experiment</td>
<td>as 27, without added H₂O, 108 g.</td>
<td>Cement Mortar</td>
<td>94**</td>
<td>8,800*</td>
<td>0.9</td>
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<tr>
<td>29</td>
<td>Experiment</td>
<td>as 28, 94 g.</td>
<td>Lime Mortar</td>
<td>53**</td>
<td>4,500*</td>
<td>1.0</td>
</tr>
<tr>
<td>30</td>
<td>Experiment</td>
<td>as 28, + 2g H₂O, 96 g.</td>
<td>Lime Mortar</td>
<td>58**</td>
<td>4,500*</td>
<td>1.1</td>
</tr>
</tbody>
</table>

CN⁻ values between 0.1 and 0.5 mg/kg are considered uncertain (NN); n.d.=not determined; *=own analyses; **= Institut für Umweltanalytik, Stuttgart (IUS).
Dipl.-Chem. Germar Rudolf

Fr. Nr. 91TA065282-65310
Unsere Auftrags-Nr. 91/13946-00

09. September 1991
Herr H. Gorbatch/Wa
06128 / 744-337

Untersuchung von Baumaterial auf die Gehalte an Eisen und Cyaniden
Ihr Schreiben vom 22.08.91

Eingang der Proben: 23.08.91 (überbracht)

Untersuchungsergebnisse:

<table>
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<tr>
<th>Fr. Nr.</th>
<th>Probenbezeichnung</th>
<th>Eisen, gesamt (Fe)</th>
<th>Cyanide, gesamt (CN)</th>
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<tbody>
<tr>
<td>91TA065282</td>
<td>Probe Nr. 1</td>
<td>1,3</td>
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<td>91TA065283</td>
<td>Probe Nr. 2</td>
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<td>Probe Nr. 3</td>
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<td>91TA065285</td>
<td>Probe Nr. 4</td>
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<td>91TA065286</td>
<td>Probe Nr. 5</td>
<td>0,94</td>
<td>0,6</td>
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<td>91TA065287</td>
<td>Probe Nr. 6</td>
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<td>91TA065288</td>
<td>Probe Nr. 7</td>
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<td>91TA065289</td>
<td>Probe Nr. 8</td>
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<td>91TA065290</td>
<td>Probe Nr. 9</td>
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<td>91TA065291</td>
<td>Probe Nr. 10</td>
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<td>91TA065292</td>
<td>Probe Nr. 11</td>
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<td>Probe Nr. 13</td>
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<td>91TA065295</td>
<td>Probe Nr. 14</td>
<td>2,5</td>
<td>1.035</td>
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...
Blatt 2 zum Schreiben vom 09. September 1991
an:
Dipl.-Chem. Germar Rudolf
Pr.Nr. 91TA065282-65310

<table>
<thead>
<tr>
<th>Pr.Nr.</th>
<th>Probenbezeichnung</th>
<th>Eisen, gesamt (Fe)</th>
<th>Cyanide, gesamt (CN)</th>
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<td>Probe Nr. 15b</td>
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<td>Probe Nr. 15c</td>
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<td>91TA065299</td>
<td>Probe Nr. 16</td>
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<td>91TA065300</td>
<td>Probe Nr. 17</td>
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<td>91TA065301</td>
<td>Probe Nr. 18</td>
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<td>91TA065302</td>
<td>Probe Nr. 19a</td>
<td>0,43</td>
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<td>91TA065303</td>
<td>Probe Nr. 19b</td>
<td>0,95</td>
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<td>91TA065305</td>
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<td>Probe Nr. 22</td>
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<td>Probe Nr. 23</td>
<td>0,81</td>
<td>0,3</td>
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<td>91TA065308</td>
<td>Probe Nr. 24</td>
<td>1,3</td>
<td>0,1</td>
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<td>91TA065309</td>
<td>Probe Nr. 25</td>
<td>n.b.</td>
<td>9,6</td>
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<tr>
<td>91TA065310</td>
<td>Probe Nr. 26</td>
<td>n.b.</td>
<td>0,1</td>
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* = Werte für Cyanide (gesamt) zwischen 0,1 und 0,5 mg/kg unsicher
n.b. = nicht bestimmt

INSTITUT FRESENIUS GMBH
**PROBE** | **CN_{ges}** | **mg/kg**
--- | --- | ---
Rudolf Probe 1 | < NG | 
Rudolf Probe 2 | < NG | 
Rudolf Probe 3 | < NG | 
Rudolf Probe 4 | 1450 | 

**ABKÜRZUNG** | **WAGNKEILGEBIJEN** | **KOMPONENTEN**
--- | --- | ---
CN_{ges} | 6.59 mg/kg | Gesamt-Cyanid

STUTTGART, DEN 9. NOVEMBER 1991

DR. RER. NAT. GRAF
Laborleiter / GF
<table>
<thead>
<tr>
<th>PROBE</th>
<th>CN_{ges} mg/kg</th>
</tr>
</thead>
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<tr>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>94</td>
</tr>
<tr>
<td>3</td>
<td>63</td>
</tr>
<tr>
<td>4</td>
<td>58</td>
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<td>&lt; NG</td>
</tr>
<tr>
<td>6</td>
<td>&lt; NG</td>
</tr>
<tr>
<td>7</td>
<td>9,6</td>
</tr>
</tbody>
</table>

**ANALYSENBEFUND**

**Lb 37/92**

**Blatt 1**

**Auftraggeber:** Herr Dipl.-Chem. G. Rudolf  
**Projekt:** MPI  
**Probennahme:** 8/91, 11/91  
**Probennehmer:** Herr Rudolf  
**Entnahmepunkt:** MPI  
**Analysedatum:** 27./28.01.92  
**Betreff:** Gesamtcyanid in Gemüseproben angelehnt an DIN 38 405/D13

**STUTTGART, DEN 29. JANUAR 1992**

DR. RER. NAT. GRAF  
Laborleiter / GF

**ÄRZTE**

**Nachweisgrenze**

CN_{ges} 0,50 mg/kg  
Gesamtcyanid

**IUS INSTITUT FÜR UMWELTANALYTIK GMBH STUTTGART**

**Institut für Umweltanalytik**

GmbH Stuttgart  
Mitteler Pflod 4/1  
7000 Stuttgart 31  
Telefon 0711/88 45 69
same location, which cannot be said of the buildings in the Main Camp. The age could but does not necessarily have to have an influence on the chemistry of the wall materials. Furthermore, these buildings are not so much in the spotlight of the museum activity as those in the Main Camp, and therefore rather permit hope of an absence of postwar building alterations.

Finally, samples were taken from a few inmate barracks to examine Leuchter’s argument that low cyanide traces could also result from a few fumigations for pest control. The numbering of the barracks corresponds to those found on the barracks in 1991. See also Figure 25 in this regard.

8.3.3.1. Samples 1-4: Crematorium II, Morgue #1
On the taking of Samples 1 to 3, see Figure 58 (page 107). A higher concentration of cyanide on the surface of the material must generally be expected. To investigate this, Sample 1 contains, principally, concrete prongs from the ceiling/underside of the roof (caused by concrete seeping through two adjacent wooden planks during the pouring of the roof), that is, the most exposed part of the concrete, as well as material from the uppermost layer of concrete, 1 to 2 cm thick, including a piece up to a depth of approximately 3 mm.

---

366 Pressac 1989, p. 514, plan of Birkenau Camp with barracks numbering.
Sample 2 contains concrete to a depth of 5 mm, taken from the place at which the piece extending inward up to a depth of 3 mm was obtained in Sample 1. Separation between material from the topmost layer (Sample 1) and lower layers (Sample 2) was not entirely possible due to the extreme hardness of the concrete.

Sample 3 is a harder plaster, obviously rich in cement, extending to the first row of bricks.

Sample 4 originates from the plaster of the concrete beam in the chimney wing (rubbish incineration) of Crematorium II. It is only interesting as a control sample in addition to the others.

The results lie in the same order of magnitude as Leuchter’s positive findings from other alleged “gas chambers,” although Leuchter had no positive results in samples from Morgue #1 (“gas chamber”) of Crematorium II. The difference between Samples 1 and 2 may indicate that a depth profile is actually prevalent in the concrete. As mentioned in Subsection 8.2.2., the low cyanide value of Sample 3 of 6.7 mg/kg could not be reproduced when the material was analyzed by a different laboratory.
8.3.3.2. Samples 5 to 8 and 23, 24: Inmate Barracks

Samples 5 and 8 are from a large lump of plaster a few centimeters thick taken from the large room of the respective barracks (see Table 31, p. 308). A depth profile was not determined; the values must therefore be viewed as average values. Samples 6 and 7 are from the special room located at the west end of these barracks. Samples 23 and 24 are from the exterior wall of the large room of a third barrack.

Quantities of cyanide on the order of magnitude of those found by Leuchter in the alleged “gas chambers” can apparently also be found in the wall material of the inmate barracks. This is indicated by the results of Sample 8. All others are also positive, but notably lower. In this case as well, the control analysis (Table 27, p. 300) failed to yield reproducible results.

8.3.3.3. Samples 9 to 22: Disinfestation Buildings

With regard to the sampling locations of the individual samples, see Figures 39f. Judging from the consistency, the material used to build the brick walls of Buildings 5a and 5b is a mortar rich in sand but extremely poor in cement (extremely friable), covered with a lime plaster.

Building 5a: What is remarkable about the outside of the exterior walls of the disinfection chamber of BW 5a is that, in places, it exhibits blue bricks and mortar joints (see Figures 142, 157-152, 164-166). Sample 14 is a loose
fragment of brick which is clearly dark blue at all points facing outwards and therefore exposed to weathering. Sample 15a is mortar from the south wall, only the topmost layer of which was blue to a depth of approximately 1 mm. The cyanide value at this point must have been above the average value of the first approximately 3 mm. Sample 15b is a fragment of brick, the blue layer of which was separated with a spatula (Sample 15c). The mass of the remaining fragment amounted to approximately twenty times the layer scratched off; only slight cyanide concentrations are detectable here. The average concentration here must have been around 120 mg/kg. On the brick as well, the pigment has only formed in perceptible quantities on the outermost side, that which is exposed to weathering. The same phenomenon can also be seen on the exterior walls of the disinfection chamber in Stutthof (Figures 122-126) and Majdanek (Figure 121).

Very important is the confirmation of the fact that the pigment actually possesses an enormous environmental resistance, since samples 14 to 15c were exposed to intensive sunshine, wind, rain, etc. for more than 40 years. But how did the pigment arise in such high concentrations at this precise location, although the outside of the exterior walls was not exposed to any direct fumigation? The low quantities of cyanide which diffused through the masonry are apparently sufficient to enable the formation of pigment on the surface.
of the outside wall, which was moist, especially during rainy weather, and whose iron compounds were certainly activated by environmental influences.

The inside of the exterior walls of the disinfection wing of Building 5a exhibits an intense patchy-blue staining throughout, which at points is even dark blue (see Figures 143f., 150-154, 155-157). Interestingly, the pattern of the brick structure located below the plaster has made an imprint on the intensity of Iron Blue formation in the upper layer of the plaster in places (especially figures 143f. and 152f.). Such a phenomenon is similar to, e.g., the well-known condensation of excessive atmospheric humidity on cool walls (for example, in large groups of sweating human beings, such as at rock concerts, in discotheques, or, generally, in poorly heated rooms), which also leads to the formation of patterns exhibiting the underlying brick structure of such walls. The mortar as well as differently-baked bricks have a different tendency towards accumulation through condensation due to their differing heat conductivity. Differing reactivity to the formation of cyanides due to differing moisture contents and temperatures may therefore be the cause of this effect, but also differing transport capacities for migrating cyanide salts due to differing moisture contents and capillary features.

Underneath the first layer of wall plaster, only approximately 1 mm thick, the material appears, by contrast, pale blue, much like the entire east wall of the wing, which is an interior wall of the original disinfection chamber and whose discoloration is much less intensive (Samples 12 and 13; see Figures 155f.).

The interior walls of the same room, which were incorporated at a later time, i.e., those belonging to the hot-air-disinfection chamber (see Figure 40), exhibit, as expected, no trace of blue.

The results of Samples 9 and 11, and 20 and 22, respectively, confirm the first impression. The topmost layer of plaster on the inside of the exterior walls has a very high cyanide concentration; underneath, the concentration
Figures 147a&b: Interior of the disinfestation wing of Building BW 5b, western part of the southern wall. The plaster, rich in lime, is only slightly stained. It has fallen off in certain areas. The mortar underneath is much more stained, see the close-up photo below. (© C. Mattogno, July 1992)
decreases. As mentioned before, however, the high cyanide concentration of Sample 11 could not be exactly reproduced. The result of the control analysis lies at only 54% of the first value. The slightly different analytical procedure may be responsible for this (see Subsection 8.2.2. and Table 27).

In pure Iron Blue, there is approximately 0.82 gram of iron for each gram of cyanide. The iron analysis, assuming that the cyanide is present completely in the form of Iron Blue, shows that, in Sample 9, approximately ¾ of all iron was converted to pigment. If one considers that not all iron can be reached by the hydrogen cyanide, then one can speak of a near-saturation of the upper layer of material with the pigment. The drop in the concentration from the topmost layer to the lower layers is explained, for one thing, by the linear gradient of the HCN concentration which must be expected in non-isolated walls (see Paragraph 7.3.2.3). Furthermore, as with the blue pigmentation of the exterior of the walls, the effect of accumulation of cyanides on the surface through evaporation of water carrying soluble cyanide compounds must be considered, even though this effect was certainly smaller on inside walls than on outside walls due to lack of air exchange in these rooms after the war (high relative humidity of the air, no wind). That is particularly true for the room equipped with windows facing northwards only, see Figure 143 (Room 4 in Figure 40).
Samples 12 and 13 correspond to Samples 9 and 11, but taken from the interior wall, thus from the east wall near one of the hot-air chambers. The surface concentration is considerably lower than on the inside of the exterior walls; there is no recognizable concentration profile. The reason for this may be that the dry walls allow the hydrogen cyanide to diffuse more easily into the masonry, while the hydrogen cyanide more readily reacts superficially on the moist exterior walls. It is more probable, however, that no migration of soluble cyanide salts to the surface took place in the interior wall due to dryness. These samples are also interesting insofar as they prove that high quantities of long-term-stable cyanide compounds can form on warm and dry interior walls. Due to the high groundwater level in Birkenau, as well as due to the lack of any heat insulation, the exterior walls must be expected to have been quite cool and moist even when the interior was heated, particularly during the cold seasons.

The samples from the walls added during the conversion to hot-air disinfection should exhibit no cyanide residues. Accordingly, Sample 10 from the interior wall incorporated at a later time exhibits only a very low cyanide concentration near the detection limit. Sample 21 was taken from the mortar between the bricks of the wall installed later, at depths of 1 cm to 5 cm into the masonry. There is a crack in the masonry of the interior wall at this location. The analysis shows minimal but hardly interpretable traces of cyanide below the detection limit in this interior wall as well. This finding may indicate disinfection of these rooms after the conversion to hot disinfection, if the
slight quantities have not in any case lost all probative value, as the control
analyses of the other samples have shown.

Sample 18, finally, was taken from the door frame, which was only incor-
porated after the conversion to hot-air disinfection. Below the lower hinge,
the wood exhibits a visibly blue pigmentation (see Figure 145, p. 317). The
pigment was able to form here due to the moisture in the floor, in connection
with the rusting iron. This is assuming that the rooms were either charged with
hydrogen cyanide after the conversion of the installation or that the floor of
the installation continued to give off cyanide over longer periods of time. In
the first case, the cyanide traces in the walls added later (Samples 10 and 21)
could actually be explained by fumigation of the rooms. However, during the
conversion of this wing to a hot-air disinfection facility, this gas-tight door
may have been removed from the access way to this wing and re-used here, so
that the detected cyanide could result from earlier fumigations. The analytical
results should be considered as qualitative only to some degree, because or-
ganic material can be a disturbing factor during analysis. In any case, the high
reactivity of moist iron-oxide mixtures (rust) is confirmed.

Building 5b: The exterior walls of disinfection wing BW 5b are not only
blue in some places, as in the case of BW 5a, but rather stained across large
areas, even into the ground (see Figures 148f., 161-163). An exception here is
the eastern wall, which hardly exhibits any blue pigmentation (see Figure 42,
p. 88). The analysis of a fragment of brick from the south side (Sample 16)
therefore shows an extremely high value. Here, the pigment extends farther
into the masonry. Here as well, weathering has had no apparent or measurable effect on the pigment concentration. Approximately 17% of the iron in the fragment of brick has been transformed into pigment, despite the only-slight concentration in cyanides able to reach the exterior of the masonry wall here as well. The conspicuous difference between Building BW 5b and 5a, which is only blue in places, is explained by the longer period of use of the 5b wing as a Zyklon-B-disinfection chamber. The reason for the perceptibly lesser blue pigmentation of the east side of the exterior wall of this wing can be explained by the lesser influence of weathering on this side (east winds are mostly accompanied by dry weather in eastern Europe).

When examining the interior of this wing, one is surprised by the walls, which are mostly white, see Figures 146f. Pale green stains are visible only in a few places. The analysis of the green-colored mortar underneath the upper layer of 3-4 mm of plaster, Sample 17, however, shows the highest value found anywhere. And this despite the thick layer of plaster consisting of a compact, very hard material, 3 to 4 mm thick, which covers the underlying mortar (the upper layer has fallen off in some places, allowing access to the mortar below, see Figures 147a&b). With relation to the transformation of the iron, what was said of the upper layer of plaster in BW 5a only, is true here: near saturation. The color of the material, here only greenish, is apparently not directly meaningful with regard to the cyanide concentration. Because even in the presence of maximum values, the proportion of pigment in the plaster only

*Figure 151: Disinfection wing of Building 5a, with the southern external wall ahead and the western wall at the right (Room 3 in Figure 40). (© C. Mattogno 1992)*
amounts to 1.5 %, the intense blue color in places on the surface of the inside of exterior walls of BW 5a cannot moreover be explained in this manner. Rather, the dark-blue colors result from a still higher concentration of pigment in the uppermost layers in the micro-meter range of magnitude caused by the accumulation processes of migrating, soluble cyanide salts as described above.

That these accumulation processes did not occur on the surface of the inside of Building 5b may be explained by the different type of material and its preparation. The hard, iron-poor interior plaster of lime mortar adheres very poorly to the wall and is already falling off in some places. The contact between plaster and wall is so poor in places that, when one knocks on the wall, one hears that there is a hollow space beneath. Such weak contact between wall and plaster, however, prevents moisture in the wall from diffusing to the surface plaster and carrying soluble cyanide compounds (for example, iron(II) cyanide) with it.

Sample 19 was divided in two, since the upper layer of plaster in this room is visibly different from the layer lying beneath: The first 4 mm of plaster consists of a white, brittle, hard material (sand-poor lime plaster), while the layer underneath consists of an ochre-colored, sand-rich lime mortar. The separation was not completely successful; parts of the sand-rich mortar remain in Sample 19a. The analysis for iron, which might possibly have been even lower in the presence of complete separation, confirms the assumption that the upper layer is an iron-poor lime plaster. This explains the deficient formation of blue spots of pigment on the surface of the plaster in this room, since there
is too little iron available for the formation of pigment. Nevertheless, even the upper layer of plaster exhibits quite high cyanide values. This shows that the layer of plaster was not applied after termination of the disinfestation actions.

8.3.3.4. Samples 25-30: Tests

For an evaluation of the reactivity of hydrogen cyanide with various building materials, a series of tests was undertaken. During the first series, only brick was fumigated with hydrogen cyanide, generated from a defined quantity of KCN+H\textsubscript{2}SO\textsubscript{4} in a gas-tight container. Over the course of the tests, it became apparent by means of sensitive differential pressure measurements that only a part of the hydrogen cyanide added to 16% sulfuric acid was released as gas. Hydrogen cyanide is so easily soluble, even in this acid, that only a portion of it is actually released into the gas room. The actual quantity of gas in the reaction container therefore lay far below the mathematically calculated 3.7% by volume, while the pressure measurements indicated only 2% by volume.

Regarding the design of the reaction container consisting of a glass cylinder, sealed above and below by PVC plates with gas outlets and sealed with rubber O-rings, see Figure 153. 16% aqueous H\textsubscript{2}SO\textsubscript{4} was placed in a crucible; KCN was added by means of a magnetic lever mechanism with the container sealed. The mixing was performed by means of a magnetic stirrer.

The samples listed in Table 32 were analyzed. The following parameters were kept constant:
- air and sample temperature: 11°C;
- relative atmospheric humidity: 90%;
- Storage of the samples for approximately five weeks under these conditions prior to initiation of the tests;
- Sealing of the samples on all sides, except for one frontal surface, with paraffin 52/54\textsuperscript{367} (thus fumigation on one side only);
- Fumigation with 2% by volume hydrogen

\textsuperscript{367} Melting point between 52 and 54°C.
cyanide;
– 24.75 hours of fumigation time;
– Storage of the samples after fumigation at room temperature and low atmospheric humidity for 71 days.

Exceptions from these conditions are listed in the right column of Table 32. Following fumigation, the topmost layers of the sealed surfaces of Samples 27 to 30 were removed, and hence the sealing layer of paraffin. The additionally moistened Samples 27 and 30 were distinguished by an intense odor of hydrogen cyanide during storage at room temperature, in contrast to Samples 28 and 29 which were only moist by nature. The odor of hydrogen cyanide disappeared suddenly upon additional moistening. In the case of the cement-mortar sample, the odor was no longer perceptible after a week, while in the case of the lime-mortar sample, it was no longer perceptible after two weeks. Storage of the samples for more than two months at room temperature therefore perceptibly reduced the hydrogen-cyanide content, while the drying of the samples strongly hindered the conversion to iron cyanide.

The analytical results of the brick samples (Table 31, p. 308, Sample no. 25 and 26) are surprising, as their values appear paradoxical: the fumigated sample exhibited no traces of cyanide, while the unfumigated sample did. The value of the unfumigated sample could be exactly reproduced (Table 27). Further analyses of the fumigated brick likewise resulted in no demonstrable cyanide concentrations. These findings prove that cyanide values up to 10 mg per kg have only very limited probative value, since these can be attributed to traces which occur everywhere.\footnote{It is also conceivable that the unfumigated samples were contaminated during preparation for analysis, perhaps through an improperly cleaned ball mill, in which samples with a high cyanide content had previously been crushed. The reason for the good reproducibility may}
The analytical results of Samples 27 to 30 lead to the following observations:

- In total, 30 mg of cyanide were found in the samples during the analysis. Since 300 mg of cyanide were used during this test, 10% of this quantity was found durably bound to the samples.

- The cement-mortar samples, in contrast to the lime-mortar samples, exhibit a higher cyanide concentration by a factor of two. The higher iron content of the cement-mortar samples may be the reason for this, since the cyanide content increases proportionally to the iron content (see the last column of Table 31). In addition, hydrogen-cyanide adsorption was certainly favored by the higher inner surface area of the cement mortar as compared to lime mortar.

- The increased hydrogen-cyanide absorption caused by the addition of moisture was only slightly perceptible in the analytical results, since the samples were all very moist anyway, and because the material dried out during the final storage phase and therefore the hydrogen cyanide was only able to bind partially.

- Blue pigmentation of the samples was not to be expected, since even if all the bound cyanide were present in the form of Iron Blue, only 0.005-0.01% of the total material would consist of the blue pigment, which would cause hardly any coloration perceptible to the naked eye. An accumulation of cyanides on the surface of the sample, finally, could not occur due to the absence that there is hardly any carbonate in brick, since it acts as an interfering ion.
sence of diffusing water. In addition, the dry storage of the samples proba-
bly blocked the conversion process.

8.3.4. John C. Ball

John Ball took samples from various locations, but according to his published
data (see Table 33), he either had each group of samples taken at a specific
location analyzed together or else he calculated an average of each location
and published only the average. Hence his data is not suitable for a detailed
interpretation.

All samples taken from alleged homicidal “gas chambers” (Nos. 3-6) are
around or well under the detection limit and must therefore be considered
zero. From these samples, only Sample Group No. 3 (taken from Morgue #1
of Crematorium II) has a well-defined history. Ball’s results from samples
taken at the delousing wings of Buildings 5a and 5b come close to the average
of my own results from these locations and therefore confirm them.

<p>| Table 33: Cyanide concentrations in the masonry of “gas chambers”/disinfestation chambers according to John C. Ball (2015, pp. 113-116) |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Location</th>
<th>$c$(CN$^-$) [mg/kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Delousing Room B1b BW 5b, inside and outside</td>
<td>3,170.0</td>
</tr>
<tr>
<td>2</td>
<td>Delousing Room B1b BW 5a, inside and outside</td>
<td>2,780.0</td>
</tr>
<tr>
<td>3</td>
<td>Crematorium II, Morgue #1 (“gas chamber”)</td>
<td>0.4</td>
</tr>
<tr>
<td>4</td>
<td>Crematorium III, Morgue #1 (“gas chamber”)</td>
<td>1.2</td>
</tr>
<tr>
<td>5</td>
<td>White Farm House, remnants of foundation</td>
<td>0.07</td>
</tr>
<tr>
<td>6</td>
<td>Crematorium V, remnants of foundation wall</td>
<td>0.1</td>
</tr>
</tbody>
</table>

8.3.5. Carlo Mattogno/Ecolab

As is well-known, Morgues #1 of Crematoria II and III at Birkenau are said to
have been the infamous homicidal gas chambers, whereas the somewhat bigger,
not quite as well-ventilated Morgues #2 are said to have served as undressing rooms for the victims. It therefore stands to reason that the interior walls of Morgues #1 ought to contain cyanide concentrations which greatly exceed those that may be present in the Morgues #2. Mattogno’s results, how-

<p>| Table 34: Cyanide concentrations in mortar and concrete of the masonry of Morgues #1 and #2 of Crematorium II according to Mattogno 2011; 2016l, pp. 75-77 |</p>
<table>
<thead>
<tr>
<th>Sampling location</th>
<th>$c$(CN$^-$) [mg/kg]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morgue #1, ceiling</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Morgue #1, inside, western wall</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Morgue #2, inside, northern wall</td>
<td>1.15</td>
</tr>
<tr>
<td>Morgue #2, inside, western wall</td>
<td>1.32</td>
</tr>
</tbody>
</table>
ever, show the exact opposite – provided that analytical results of that order of magnitude, which are right at the nominal detection limit, have any meaning at all, and provided that the analytical method used is capable of detecting complex iron cyanides of the Iron Blue type to begin with, which seems dubitable (see Subsection 8.2.2.).

8.3.6. Summary

I will exclude from my final considerations the samples analyzed by Markiewicz, Mattogno and Ball. The former two for the admitted or evident incapacity of their methods to detect the bulk of cyanides present in the form of Iron Blue, and the latter because Ball neither specified where exactly he took his samples nor whether each reading consisted of just one sample or a mixture of several samplings from different locations of one building, lumped together for analysis.

My first observation concerns the fumigation chambers. A comparison between samples taken by me on the inside (n=11) with those taken on the outside of Buildings BW 5a and 5b (n=5) gives the following result:

- Delousing room, inside: \(5,431 \pm 3,962\) ppm (n=11),
- Delousing room, outside: \(3,010 \pm 3,999\) ppm (n=5).

The standard deviations given are not really of any use, as we are dealing here with samples taken at different locations with different exposures and histories. Strictly speaking, one should use standard deviations only for multiple analytical results of the same sample or from very similar samples, which is not here the case.

All of the walls here sampled (except for my Samples 19a&b) were stained blue to some degree. Clearly, the hydrogen cyanide used on a regular basis in these delousing chambers had penetrated right through the walls, being 45% lower on the outside than on the inside 45 years later.

Comparing both Leuchter and my fumigation-chamber samples versus all other samples of measurable cyanide level gives:

<table>
<thead>
<tr>
<th>Sampler</th>
<th>Delousing Chambers [ppm]</th>
<th>Other Locations [ppm]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leuchter</td>
<td>1,050 (n=1)</td>
<td>1.22 ± 1.94 (n=33)</td>
</tr>
<tr>
<td>Rudolf</td>
<td>4,674 ± 4,009 (n=16)</td>
<td>2.61 ± 3.6 (n=16)</td>
</tr>
<tr>
<td><strong>Overall mean value:</strong></td>
<td><strong>4,461 ± 3,980 (n=17)</strong></td>
<td><strong>1.68 ± 2.6 (n=49)</strong></td>
</tr>
</tbody>
</table>

A total of 32 samples were taken by Leuchter, three of which were measured twice by Alpha Laboratories. That gave altogether 35 assays performed, of

\[369\] This summary is largely based on Rudolf/Kollerstrom 2013.
which 16 gave measurable cyanide levels, while 19 had cyanide levels too low, if any, to give a reading. This includes all of Leuchter’s measured values, except the one consisting of sealing material taken from a hot-air-disinfestation furnace.

I had 32 analyses made, four of which were repeat analyses by a different laboratory. The Fresenius laboratory obtained measurable values from all of them, while the other laboratory (IUS) was unable to detect any residue in two of the four samples. In addition, I also took a sample from a collapsed Bavarian farmhouse as a null test. This sample was tested by both laboratories as well (R25).

The first judgement to be made here is whether the means and standard deviations are similar enough to justify pooling the two data sets. If all of Leuchter’s too-low-to-measure samples are assigned a value of 0.5 ppm (to choose the middle between nothing and the official detection limit of one ppm), then his “other locations” values would go up from 1.22 ± 1.94 to an overall mean of 1.4 ppm ± 1.8 for n=33. Thereby Leuchter’s data set and mine are seen not to differ significantly, and I therefore felt at liberty to pool the two data sets.

Comparing all values results in a two-thousandfold differential between the two groups. The data of cyanide measurements in masonry therefore falls into two very clearly separate groups with no overlap whatsoever.
Next I will consider test results of samples taken from claimed homicidal gas chambers. To do this, we need to first assume for the sake of argument that readings close to the detection limit accurately reflect the actual total cyanide content in the sample, which is increasingly less likely the closer a result is to the detection limit. Next, in this present context, when speaking of a “control” sample, I refer to one taken from a location that has not been recorded or alleged to have functioned as a gas chamber, neither for humans nor for...
clothes or beddings, *i.e.* it has been neither a disinfestation nor a homicidal gas chamber.

For ascertaining this subgroup among Leuchter’s samples, the careful work of Desjardins was used, who in 2007 published an analysis of his 1996 visit to Auschwitz-Birkenau, where he re-traced the sites sampled by Leuchter, commenting on the locations of each sample. Thus, three primary sources remain available for locating Leuchter’s sample sites: video footage taken during the Leuchter sampling, maps drawn up afterwards, and the reconstruction by Mr. Desjardins.\(^{370}\) Thereby it has been possible to group the data for example by outdoor/exposed versus indoor/unexposed specimens, but also and more importantly by homicidal gas chambers versus background or control levels.

Leuchter sampled from all five Auschwitz crematoria or their ruins. Taken from the walls of these locations, Leuchter’s sample numbers stemming from locations said to have been homicidal gas chambers were, Desjardins concluded: Crematorium II: 1-7; Crematorium III: 8-11; Crematorium IV: 20; Crematorium V: 24, and Crematorium I (Main Camp): 25-27 and 29-31, totaling 19 samples, three of which have been analyzed twice, hence 22 analytical results altogether. The “control” samples then become those taken from locations within those buildings which are not claimed to have been part of a homicidal gas chamber, *i.e.* Crematorium V: 13-19; Crematorium V: 21-23, and Crematorium I: 28, totaling 11 samples. These samples came from locations which had been a washroom, a chimney room and other unidentified rooms not associated with the use of toxic gases. Obtaining the mean values of the two groups gave:

- Homicidal gas chambers (n=22): \(1.6 \pm 2.0 \text{ ppm}\)
- Control samples (n=11): \(1.28 \pm 1.21 \text{ ppm}\)

The statistically insignificant 21\% difference between the means of these two groups fails to indicate a historical difference in terms of their exposure to cyanide gas.

Concerning wall exposure to the elements, Desjardins, after carefully re-tracing the steps of Leuchter on his 1996 visit to Auschwitz and watching the film that had been made of Leuchter’s sampling, commented:

“*Leuchter’s samples, numbered 25 through 31, extracted from Crematorium I... taken from a facility which was not destroyed and has remained intact since the end of the war, were not exposed to the elements. The same might be said for samples 4, 5 and 6 taken from Crematorium II. Leuchter removed these samples from a pillar, wall and ceiling which, though accessible, were nevertheless well protected against wind, rain and sun.*”

\(^{370}\) As Desjardins’s evaluation of Leuchter’s sampling locations disagrees with mine, I give Leuchter’s sample numbers for reference.
Proceeding likewise by obtaining the two means, using the same data as before, gave:

Sheltered rooms (n=13): \[1.77 \pm 2.1 \text{ ppm}\]
Exposed surfaces (n=20): \[1.32 \pm 1.6 \text{ ppm}\]

Here, too, the difference is statistically rather insignificant. If we consider it anyway, it is indeed remarkable that so-slight a decrease in iron-cyanide levels has taken place over more than four decades, a fact which accords with what is known about the insolubility and permanence of Iron Blue.

My three samples from a claimed homicidal gas chamber (Morgue #1 of Crematorium II) yielded four analysis values of 7.2, 0.6, 6.7 and 0 ppm. Within the “control” group, I have taken ten samples, seven of which were plaster with a mean of \[1.2 \pm 1.4 \text{ ppm} \] (n=7, Samples 4, 5, 7, 8(twice), 10, 23), and three consisted of mortar with a mean of \[0.2 \pm 0.1 \text{ ppm} \] (n=3, Samples 6, 21, 24). Thus, the mortar in between the bricks held a relatively lower level of iron cyanide than the plaster.

Table 36 lists the mean for all of Leuchter’s data, as before assigning values of 0.5 ppm to his samples that were too low to measure. The six Leuchter samples from Crematorium I are \{3.8, 1.3, 1.4, 7.9, 1.1, 0.5\}ppm, plus his seven samples from Crematorium II are \{0.5, 0.5, 0.5, 0.5, 0.5, 0.5, 0.5\}ppm. Also assigning 0.5 ppm to results below the detection limit, the four analysis results of mine from Crematorium II are \{7.2, 0.6, 6.7, 0.5\}ppm. I took my controls from two lots of inmate barracks (Samples 5-8 – where 8 was analyzed twice – and 23-24), from walls not part of an original delousing chamber (Samples 10 & 21) as well as from a collapsed Bavarian farm house (Sample 25, analyzed twice), giving 11 results altogether: \{0.6, 0.1, 0.3, 2.7/0.5, 0.3, 0.1, 3.6, 0.3, 9.6/9.6\}ppm. Combining these gives us:

| Table 36: Mean cyanide values of claimed homicidal gas chambers and control locations [ppm] |
|-----------------------------------------------|-----------------------------------------------|
| **SAMPLER** | **MEAN VALUES FOR HOMICIDAL GAS CHAMBER** | **MEAN VALUES OF CONTROL SAMPLES** |
| Rudolf | 3.8 ± 3.7 (n=4) | 2.5 ± 3.7 (n=11) |
| Leuchter | 1.6 ± 2.1 (n=22) | 1.3 ± 1.2 (n=11) |
| Combined | 1.9 ± 2.4 (n=26) | 1.9 ± 2.8 (n=22) |

Hence the statistical difference between the two groups of samples is nil.
8.4. Discussion of the Analysis Results

8.4.1. Josef Bailer

The hypothesis expressed by J. Bailer (1991, 1995) that blue paint could be responsible for the high cyanide values in the disinfestation chambers, does not correspond to the facts:

1. Iron Blue as such is not sold as wall paint at all, since it lacks sufficiently high lime fastness. It is offered only as a mixture with other blue pigments (see Subsection 6.6.1).\(^\text{371}\)

2. If this argument were correct, it would be remarkable that the SS, of all the rooms in the concentration camps of the Third Reich, would apply blue paint only to their disinfestation chambers where no one could admire it; and, strangely, always with the same blue: Auschwitz, Birkenau, Majdanek, Stutthof…. All other rooms were merely whitewashed at best.

3. The disinfestation chambers themselves already had a coat of lime paint. Why would they cover this coat of lime paint with another paint which, in addition, is not even lime-fast? They would therefore have had to wait until the lime paint and plaster had set before one could (re-)paint the walls. And then it would have been by no means certain that the paint would not furthermore have become stained as a result of chemical reactions.

4. A coat of paint on the interior of the room cannot explain the patchy pattern of the blue stains on the inside of the exterior walls of the disinfestation wing of Building 5a, unless the paint was not applied evenly but by some way of random splattering.

5. Neither would a coat of paint on the inside of the room explain the absence of blue coloration on the interior walls added to the disinfestation wing at a later time. It is striking that only such walls have blue stains as were exposed to hydrogen cyanide.

6. Bailer’s argument is refuted by the fact that none of the colored walls shows any pattern of brush marks and also no identifiable coat of paint, since wall paint consists not only of pigment, but also of a considerable proportion of binding agents to hold the pigment in place and other chemicals. The blue pigment is, however, simply one component of the lime paint and plaster.

\(^{371}\) I have tried to get information out of the world’s major wall-paint producers as to the kind of pigment they use, but they either say they don’t use any Iron Blue in their paint, or they refuse to give any information, claiming that the kind of pigments they use is a trade secret. I found three paint producers referring to Prussian Blue in the paint’s color name or when describing their paints, but I could get no information out of them regarding the pigments they use: www.anniesloan.com/annie-sloan-products/paints/chalk-paint/auubson-blue-chalk-paint.html; www.benjaminmoore.com/en-us/color-overview/find-your-color/color/cw-625/prussian-blue?color=CW-625; www.olympic.com/paint-colors/prussian-blue-ol7085. At any rate, this would have little bearing on the paint commercially available in the 1940s.
7. Bailer’s argument furthermore fails to explain how the artistic skills of the painters could have succeeded in imitating the brick structure lying beneath the plaster.

8. Bailer’s argument does not explain the only-pale-blue tint of the interior south walls of the original disinfestation wing of Building 5a.

9. Neither does Bailer’s argument explain the high cyanide concentration in the superficially white, iron-poor material of the walls of the disinfestation wing of Building 5b – unless one posits that these rooms were painted with an “iron white,” a wall paint that does not even exist.

10. Bailer’s argument furthermore fails to explain the even higher cyanide concentration of deeper, greenish-bluish layers of material in the walls of the disinfestation wing of Building 5b; or does he perhaps intend to argue that the SS even applied iron-blue paint to wall plaster and wall mortar where no one could ever admire it? It would also certainly have been decomposed there into its components due to the alkaline pH value of fresh mortar, and would have lost its color at least temporarily.
11. Finally, Bailer’s argument cannot explain why even the exterior walls of the disinfestation rooms, exposed to weathering, have a noticeable cyanide content and are discolored with blue stains. Or did the SS employ the pigment here also in randomness, paying particular attention to the structure of the brick, and without leaving any paint layers consisting mainly of binders, as is typical for wall paints? Or was the heat-sensitive Iron Blue applied to the bricks during manufacture, resisting the baking process of the brick in a magical fashion?

The Krakow scientists under the leadership of Jan Markiewicz, whom I will deal with next, adopted Bailer’s argument as indicated above, and therefore preferred simply not to prove the presence of Iron Blue at all. *Honi soit qui mal y pense...* (a rogue who thinks evil of it).

8.4.2. Jan Markiewicz and Colleagues

Many people, both experts and laymen, rely complacently upon the findings of the Jan Sehn Institute for Forensic Research in Krakow, *i.e.*, the study published in 1994 by Prof. Markiewicz and colleagues. These scientists, however, tested their samples with an analytical method that was unable to detect stable iron-cyanide compounds like Iron Blue. They did this because they claimed to
be unable to imagine how such stable iron-cyanide compounds could form, as already quoted (Markiewicz et al. 1994, p. 20):

“This dye [Iron Blue] occurs, especially in the form of stains, on the outer bricks of the walls of the former bath-delousing house [BW 5b?] in the area of the Birkenau camp. It is hard to imagine the chemical reactions and physico-chemical processes that could have led to the formation of Prussian blue in that place.”

This is a misrepresentation because, as shown with the multitude of photographs in this study, not just some of the bricks on the outside of that building are stained, but mortar and plaster as well, in particular on the inside of Building BW 5a.

It is, of course, no shame to fail to understand something initially. Anyone, however, who claims to work scientifically must at least attempt to investigate and understand before making statements upon the subject. But not so Prof. Markiewicz and his colleagues, for they subsequently stated (ibid.):

“J. Bailer writes in the collective work ‘Amoklauf gegen die Wirklichkeit’ that the formation of Prussian blue in bricks is simply improbable;”

Even this sentence is a distortion of what Bailer wrote, who in fact stated (1991, p. 50):

“Apart, it is moreover improbable that Iron Blue forms in walls, because in bricks and quicklime, the iron is present in the trivalent form, which is unfavorable for the reaction, and because the alkaline environment impedes the reaction.”

Bailer therefore referred to the entire wall, not just to the interior of bricks, where a formation of Iron Blue is indeed almost impossible – but not on the surface of corroded bricks. I explained in the previous subsection what I think about Bailer’s statement. Hence back to Markiewicz et al.:

“however, he [Bailer] takes into consideration the possibility that the walls of the delousing room were coated with this dye as a paint. It should be added that this blue coloration does not appear on the walls of all the delousing rooms.

We decided therefore to determine the cyanide ions using a method that does not induce the breakdown of the composed ferrum cyanide complex (this is the blue under discussion) and which fact we had tested before on an appropriate standard sample.”

Hence, they simply took Bailer’s utterly unsubstantiated claim at face value and decided without any further investigation to exclude from their analysis the only cyanide compound that could possibly have survived five decades of exposure to the elements.

It would only be permissible to exclude Iron Blue from the study, if it were possible to rule out with practical certainty that iron cyanide, and consequently Iron Blue, can be the result of hydrogen cyanide interacting with masonry,
and if there were at least some indication that these rooms had been painted with Iron Blue or that there could conceivably be any other reason for its presence. But Prof. Markiewicz and his colleagues completely neglected to do this. And even worse: they did not even attempt to refute my arguments on the formation of stable iron-cyanide compounds, which I had published in early 1993 (Gauss 1993b, pp. 163-170; 290-294). They were familiar with this publication, because they quoted it (Markiewicz et al. 1994, their Note 4, p. 27), yet they refrained from mentioning, let alone discussing any of my arguments.

This should suffice to show that the Polish actions were ideologically motivated to a high degree. Had they been neutral scientists, they would have applied the correct and interpretable method of analysis and would have discussed my publications in a scholarly manner.

Prof. Markiewicz and his colleagues did not even attempt to find any explanation for the high iron-cyanide concentration on and inside the walls of the disinfection chambers and their blotchy-blue surfaces. That was in spite of the fact that they had a simple opportunity to explore this issue, for they conducted a series of experiments during which they exposed masonry samples to defined concentrations of HCN. Doubtlessly, these samples had not been painted with Iron Blue paint prior to their tests. It made no sense at all to exclude iron cyanides of the Iron Blue type from the analysis here. It would have suggested itself to test at least some of these samples for total cyanide

Figure 159: Disinfestation wing of Building 5a, southern wall, detail of the previous figure. (© C. Mattogno 1992)
with the method used by Leuchter, Ball and me. That would have permitted a comparison between both methods and would also have permitted conclusions regarding the question, which fraction of total cyanides the micro-diffusion-chamber method used by the Krakow researchers is able to detect in the first place. This in turn could have revealed, whether, how fast and to what degree hydrogen cyanide absorbed in masonry material is converted into stable iron cyanides. But nothing of that sort was done. They stubbornly kept on using the unsuited diffusion method. Even my suggestions along this line during the ensuing correspondence between us were simply ignored (Rudolf/Mattogno 2016, pp. 59-69).

Although Markiewicz and his colleagues had picked an analytical method able to produce the results desired by them – similar, vanishingly small cyanide readings for both fumigation chambers and alleged homicidal gas chambers – the results of their first series of tests were obviously so disturbing that they decided to suppress them and never to published them. Prof. Markiewicz and his colleagues therefore rejected the undesired results of their first series of tests and took even more samples, until they finally produced the results that fitted in with their preconception (Markiewicz et al. 1994): this time, both the samples from the disinfection chamber and the alleged “gas chambers” showed cyanide readings on the same order of magnitude – although in most cases they were clearly below the detection limit of the method they had chosen, as given by the original author (Epstein 1947). So strictly speaking, most of their results should show “ND” = not detected, instead of giving values which are so low that they are beyond the reliability of their method.

It is true that Markiewicz et al. claim that their method was extremely sensitive and repeatedly yielded consistent readings down to the level of a few parts per billion (Markiewicz et al. 1994, p. 21):

"Under present circumstances we established the lower limit of determinability of cyanide ions at a level of 3-4 µg CN⁻ in 1 kg of the sample."

However, when considering that they determined the cyanide content using photometry, we need to keep in mind that Meeussen et al. had clearly established that major amounts of carbonate can consistently result in reproducible false positives (see Table 26 on p. 300). It is therefore not far-fetched to posit that the readings Markiewicz and his colleagues obtained from their masonry
samples did not reflect their cyanide content but to a major degree or maybe even exclusively their carbonate content.

In order to illustrate the order of magnitude with which Markiewicz and his colleagues rigged their results by choosing an unsuitable method, I have juxtaposed their analysis results with those of Fred Leuchter, John C. Ball, and mine in Table 37.

I will spare the reader any further discussion of these results, because analysis results obtained in a methodically incorrect manner cannot be corrected even by correct interpretation. Any attempt at interpretation is therefore a waste of time.

A few words, however, are due on the HCN-CO$_2$ mixture used by the Poles for their fumigation experiments. They claim that CO$_2$ has a negative influence on the adsorption of HCN in the masonry. Their own (actually worthless) test results, however, contradict this view, see Table 38.

First of all, the Poles unfortunately failed to define what they mean by “plaster,” “mortar,” “old,” “fresh,” “dry,” and “moist” (their answer to my inquiry wasn’t very elucidating either) so this experimental series, apart from having used the wrong method of analysis, is also completely irreproducible due to the lack of an appropriate definition of the materials used.

Next, the apparent absorption of cyanide by fresh plaster (dry and moist) and by dry mortar obviously increased in the presence of CO$_2$ (factors: 247 for dry, 27 for moist plaster, 3 for dry mortar) – yet the Poles had the nerve to categorically claim the opposite! Only in one case (moist mortar) did the ab-
Table 38: Influence of CO₂ on the Absorption of HCN
According to Markiewicz et al.

<table>
<thead>
<tr>
<th>Material:</th>
<th>Fresh Plaster</th>
<th>Fresh Mortar</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>dry</td>
<td>moist</td>
</tr>
<tr>
<td>no added CO₂</td>
<td>(0.024) ND</td>
<td>0.48</td>
</tr>
<tr>
<td>10% CO₂</td>
<td>5.92</td>
<td>12.8</td>
</tr>
<tr>
<td>Factor</td>
<td>247</td>
<td>27</td>
</tr>
</tbody>
</table>

If we take the values determined by Markiewicz and colleagues seriously in the first place, then they would confirm that moist cement mortar (as was present in the morgues of Crematoria II and III) absorbs at least ten times more hydrogen cyanide than dry lime mortar (as was present in the disinfection chambers), as I had assumed for my calculations in this work. But when considering that they may have detected primarily false carbonate positives, the increased readings after exposing their samples to carbon dioxide could simply have been the result of exactly that exposure.

Again, since their flawed analytical method renders any interpretation of these results futile, I will not do this here. The shortcomings revealed here show only that Markiewicz et al. obviously do not even get the basics of scientific experimenting and data interpretation straight.

The head of this “scientific” group, Dr. Jan Markiewicz, obtained a Master of Science degree in the field of chemistry in 1947 and a PhD in natural sciences in 1963. Between 1966 and 1991 he was Director of the Institute of Forensic Research in Krakow, and in 1983 he even became Assistant Professor of Natural Science. So how can it be that a man apparently so highly qualified can bungle this research so pitifully? Dr. Markiewicz died in 1997. The other two authors have kept silent all along.

I will come back to Markiewicz et al. once more when discussing R. Green in Subsection 8.4.4, who relies completely on the Krakow study.

It would be futile to speculate whether the unscientific capers of these Polish researchers are politically motivated by more than the usual antifascism which is so much en vogue nowadays. Such motives might explain their strange actions and ways of arguing, but they cannot justify them. Even the possible fact that the scientists assigned to the topic were not and are not chemists and that their laboratory was perhaps not equipped up to Western standards, cannot explain this, because analyzing samples for their total cyanide contents is neither complex in terms of the equipment needed nor is the chemistry involved in any way complicated.

The manner with which the Polish scientists approached the problem, however, gives rise to serious suspicion that this was an attempt at scientific fraud, a suspicion which is also supported by the fact that they were unable to justify their incorrect analytical method except through their incompetence and ignorance.

The conclusions to be drawn from the above are clear: upon closer examination, the only “scientific” attempt to refute Fred A. Leuchter’s thesis proves to be a scientific fraud.

How desperate must those be who believe it necessary to stoop to such methods?

8.4.3. James Roth

At the end of Subsection 6.6.5, I already referred to the bald-faced lies of Albert Meinecke from the German press agency DPA regarding the allegedly short life term of hydrogen cyanide in masonry. A statement made by Prof. James Roth from the Alpha Analytic Laboratories, Ashland, Massachusetts belongs into the same category of dishonesty. I discuss this incident here because Prof. Roth’s allegations were widely publicized by the international media in connection with the 2000 libel case of British historian David Irving against Deborah E. Lipstadt.\(^\text{373}\)

For his documentary movie Mr. Death on Fred A. Leuchter,\(^8\) Errol Morris also interviewed Prof. Dr. James Roth. In 1988, Roth’s laboratory had analyzed the masonry samples from the alleged “gas chambers” taken by Leuchter in Auschwitz for their cyanide content. During the trial against Ernst Zündel in Toronto that same year, for which the Leuchter report had been produced, Prof. Dr. Roth himself was interrogated as an expert witness. Some ten years later, Errol Morris interviewed Roth about this event. During this interview, Prof. Roth did all he possibly could to distance himself from the possible consequences of the analyses performed by his company. His interview gained importance only due to the fact that the Dutch architectural historian Prof. Robert van Pelt quoted Roth in his 1999 expert report prepared for the Irving trial. In it, van Pelt wrote about Roth’s statements in Morris’s movie (van Pelt 1999, p. 307):

“Roth explained that cyanide will react on the surface of brick or plaster, penetrating the material not more than 10 microns, or 0.01 mm, or one tenth the thickness of a human hair [...]. In other words, if one wants to analyze the cyanide concentration in a brick sample, one should take a representative sample of the surface, 10 microns thick, and no more.”

It can be shown that Prof. Dr. James Roth is wrong for the following reasons:

\(^{373}\) This claim played a role in the verdict, the importance of which should not be underestimated, cf. judgment Gray 2000, §13.79; cf. Rudolf 2000a-c.
1. It is a fact that the walls of the disinfestation chambers in Auschwitz, Birkenau, Stutthof, and Majdanek are saturated with cyanide compounds, and this not only superficially, but into the depth of the masonry, as I have demonstrated by taking samples from different depths of the wall. Compare in this regard my mortar and plaster Sample Pairs 9 & 11, 12 & 13, 19a & b from Table 31 (see Table 39), which were each taken at the same spot but at different depths, as well as Sample 17, taken from below the overlying lime plaster (which is thus similar to 19b).

These values prove that hydrogen cyanide can rather easily reach deep layers of plaster and mortar. But even the other samples taken from the surface prove that Prof. Roth’s allegation is wrong: Provided that most of the cyanide detectable today is present in the form of iron cyanide (Iron Blue and other cyanoferrates), as Prof. Roth assumes himself, his thesis would mean that 10% to 75% of the iron content of these samples are located in the upper 10 micrometers thin layer of the samples (0.010 mm), i.e., they are located in less than 1% of the entire sample mass. The rest of the samples, however, would have been massively deprived of iron. How this migration of a major portion of iron to a thin surface layer would have happened is inexplicable to me. Fact is that this simply could not happen.

2. Furthermore, expert literature is detailed in about the following:
   a. Hydrogen cyanide is an extremely mobile chemical compound with physical properties comparable to water (see Section 6.3., esp. note 209).
   b. Water vapor can easily penetrate masonry material, and thus also hydrogen cyanide (see Subsection 6.7.4.).
   c. Hydrogen cyanide can quite easily penetrate thick, porous layers like walls (Schwarz/Deckert 1929).

3. In addition, it is generally known that cement and lime mortar are highly porous materials, comparable for instance to sponges. In such materials,

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Table 39: Penetration depth of HCN into walls with resulting Iron Blue formation

<table>
<thead>
<tr>
<th>Sample</th>
<th>Surface Values</th>
<th>Deep-Layer Values</th>
<th>Outside Values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>0 – 2 mm: 11,000</td>
<td>1 – 10 mm: 2,640</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>13</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>0 – 2 mm: 2,900</td>
<td>2 – 10 mm: 3,000</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>4 – 8 mm: 13,500</td>
<td></td>
<td>0 – 7 mm: 10,000</td>
</tr>
<tr>
<td>19a</td>
<td>0 – 4 mm: 1,860</td>
<td>19b</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 – 8 mm: 3,880</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

374 In this regard, compare also the analysis about the porosity of masonry, Chart 10, p. 217.
there does not exist anything like a defined layer of 0.01 mm beyond which hydrogen cyanide could not diffuse, as there can also be no reason, why water could not penetrate a sponge deeper than a millimeter. Steam, for example, which behaves physically comparably to hydrogen cyanide, can very easily penetrate walls.

4. Finally, the massive discolorations of the outside of the walls of the disinfection chambers in Birkenau and Stutthof, as shown in this expert report, are clearly visible and conclusive evidence for the fact of how easily hydrogen cyanide and its soluble derivatives can and do penetrate such walls.

As a professor of analytical chemistry, Prof. Roth must know this, so one can only wonder why he spreads such outrageous nonsense. That Prof. Roth is indeed a competent chemist can be seen from what he said during his testimony under oath as an expert witness during the above mentioned Zündel trial (Kulaszka 1992, p. 363):

“In porous materials such as brick or mortar, the Prussian blue [recte: hydrogen cyanide] could go fairly deep as long as the surface stayed open, but as the Prussian blue formed, it was possible that it would seal the porous material and stop the penetration.”

Prof. Roth might have felt obligated to attack Leuchter in order to avoid becoming himself a target of certain interest groups who already managed to destroy Leuchter’s career. That would explain why the truth temporarily dropped into a hole in Prof. Roth’s memory while he was being interviewed by Errol Morris. It is also revealing that Prof. Roth mentioned during this interview that, had he known where Leuchter’s samples originated from, his analytical results would have been different.375 Does that mean that Prof. Roth

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375 This passage of the interview was excised from the commercial version of Morris’s movie; cf. the statement by D. Irving during his court case against D. Lipstadt; Queen’s Bench Divi-
manipulates his result according to whether or not he likes the origin of certain samples? Such an attitude is exactly the reason why one should never tell an “independent” laboratory about the origin of the samples to be analyzed, simply because “independence” is a very flexible term when it comes to controversial topics. What Prof. Dr. Roth has demonstrated here is only his lack of professional honesty.

8.4.4. Richard J. Green

Another strange reaction to my expert report is that of the U.S. American Richard Green, a self-professed Jew and PhD chemist with a similar educational background to mine (Green 1998a&b, Green/McCarthy 1999). The layman would expect two experts, with similar educational background, to come to similar conclusions in questions relating to their expert knowledge. But this is only partly the case here. The reason for this is that Dr. Green ignores many facts that are either supported by documentary evidence – like the performance of the ventilation installed in Crematoria II and III, or the speed of executions in U.S. execution chambers – or by expert literature – like the higher tendency of cold, moist walls to absorb HCN, and the longer-lasting alkalinity of cement mortar compared to lime mortar.

However, Dr. Green makes some concessions which are important to note:

a. He agrees that basically all witnesses attest to very short execution times, indicating a rather high concentration of HCN used.
b. He also agrees “that Rudolf is correct or nearly correct regarding the formation of blue staining in the delousing chambers” (Green/McCarthy 1999).

What he does challenge, though, is the possibility of formation of any noticeable quantities of Iron Blue in the homicidal “gas chambers.” One of the flawed and deficient arguments to support his thesis is that in his view no noticeable amounts of cyanide could have accumulated in the walls of the morgues (“gas chambers”). According to Dr. Green, one major factor for this is supposed to be the fact that masonry has a neutral pH value which does not allow the protolysis of hydrogen cyanide and thus the formation of cyanide salts. But if that were true, how come huge amounts of cyanides did accumulate in the walls of the disinestation chambers?

My argument in this regard is that particularly cement mortars and concretes, as used in Morgues #1 of Crematoria II and III, are noticeably alkaline for many weeks, months, or even years, which I documented thoroughly with


expert literature on the chemistry of building materials (see Subsection 6.7.2). Hence, I concluded that these walls would have been very much inclined to accumulate cyanide salts and to form Iron Blue, even more so than the lime plaster of the disinfestation chambers, which in turn provoked the following answer by Dr. Green:

“[In 1993] The IFRC [Institute for Forensic Research, Krakow], on the other hand measured the pH [of mortar samples from the alleged gas chambers] to be between 6 and 7 [i.e. neutral].”

Dr. Green obviously did not consult any literature on the chemistry of building materials, as he quotes none. He solely relies on the findings of the Krakow institute. In order to make the reader see how flawed Dr. Green’s way of arguing is, let me say it in a parable:

By referring to a couple of Italian expert pizza-baking instructions, I showed that a pizza, when taken out of the oven, is hot or warm for quite a while (one hour). Now, Dr. Green comes along claiming that I am wrong because a Polish friend of his has just now measured the temperature of a pizza which was baked a week ago, and which has been lying around since then. And the Polish scientist found out that this pizza is indeed cold right now.

Of course, samples taken from the surface of walls erected 50 years ago or more are now pH neutral! Even this I have documented by referring to a PhD thesis showing how the front of neutralization slowly migrates into concrete and mortar (Waubke 1966; see Paragraph 6.7.2.2.). So what exactly does the pH value of samples taken 50 years after the erection of these buildings prove regarding their pH value shortly after they were built? Dr. Green’s way of arguing is puerile to the highest degree.

377 Green/McCarthy 1999; repeated in Green 2001, p. 50, again without any attempt to address the issue raised by recourse to expert literature.
When it comes to intellectual honesty, Dr. Green reveals some other very dubious behavioral patterns, one of which I want to address here.

Dr. Green agrees with me that the Iron Blue found in delousing chambers is the result of gassings with hydrogen cyanide. Hence he disagrees with the opinion of Markiewicz and others that this Iron Blue might have its origin in residual paint. However, Green comes up with his own auxiliary hypothesis to shore up his ongoing defense of the Krakow frauds: He conceives a scenario during which items “soaked with aqueous solutions of HCN” were leaned against these walls, thus causing the formation of the blue stains (Green 2001, p. 18). To achieve this, the disinfestation personnel at Auschwitz had to throw Zyklon B into water and then using the solution thusly treated, at the peril of their lives, to soak lice-infested clothes or mattresses, which were then leaned against walls. Such a highly risky and impractical procedure is not mentioned anywhere in the literature, and to my knowledge there aren’t any witness claims to that effect either. But I have found one witness statement that comes pretty close. It is from Josef Klehr, who since March 1943 was head of the disinfection squad at Auschwitz for roughly a year and who was one of the defendants during the Frankfurt Auschwitz Trial. During an interrogation during the pre-trial investigations, he stated on May 25, 1961 (Fritz Bauer…, p. 4116):

“the inmates’ clothes were dipped into a diluted Zyklon-B solution and subsequently disinfected in a hot-air chamber.”

Which proves that one can find witness statements about anything, if only one looks long enough, even about alien abductions and flying spaghetti monsters. Klehr’s statement is clearly false and nonsensical, because such a procedure would have been highly dangerous in several regards. It may well be that clothes were soaked in a disinfectant before being treated in a hot-air chamber or an autoclave, like for instance Lysol, which was used in Auschwitz on a grand scale, but most certainly not in a diluted “Zyklon-B solution,” which in and of itself is even a nonsensical term. Apart from that, this could technologically apply only to the Birkenau Building 5a, whose disinfection wing was redesigned to serve as a hot-air disinfection facility, but neither to Building 5b nor to any of the other delousing facilities extant to this day (Auschwitz Main Camp, Stutthof, Majdanek), which all show the same phenomenon of blue discolorations of their walls. Not to mention the German churches whose walls turned patchy blue after just one gassing, as described in Section 1.3. Hence Green’s crutch-like hypothesis doesn’t help his case a bit.

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378 Cf. the statements by the former inmate pharmacist Taduesz Szewczyk (Fritz Bauer…, p. 15754) and the former inmate nurse Jan Farber (ibid…, pp. 20331, 20410). It is also possible that Klehr referred here to the procedure used for the microwave disinfection device installed in 1944 in the Main Camp. Clothes disinfested this way had to be made moist prior to being put onto a conveyor belt, which pulled them through the microwave chamber. But that moisturizing was effected by spraying, not dipping.
One major rule of science is that it is impermissible to immunize a theory against refutation, here in particular by inventing untenable auxiliary hypotheses to shore up an otherwise shaky thesis (Popper 1968, pp. 82-97). This is exactly what Dr. Green is doing: coming up with a ludicrous attempt at explaining a fact which does not fit into his theory. Yet instead of fixing his theory, he tries to bend reality.

Let me draw a historical parallel here. When Galileo Galilei discovered with his telescope that the moon was not a perfectly smooth sphere, which had been an accepted doctrine among astronomers ever since Aristotle, his opponents were outraged (Bethune 1832, pp. 105f.):

“[Galileo] reasoned to no purpose with the slaves of the ancient schools: nothing could console them for the destruction of their smooth, unalterable surface, and to such an absurd length was this hallucination carried, that one opponent of Galileo, Lodovico delle Colombe […] attempted to reconcile the old doctrine with the new observations, by asserting, that every part of the moon, which to the terrestrial observer appeared hollow and sunken, was in fact entirely and exactly filled up with a clear crystal substance, perfectly imperceptible by the senses, but which restored to the moon her accurately spherical and smooth surface. Galileo met the argument in the manner most fitting, according to Aristotle’s own maxims, that ‘it is foolish to refute absurd opinions with too much curiosity.’ ‘Truly,’ says he, ‘the idea is admirable, its only fault
is, that it is neither demonstrated nor demonstrable; but I am perfectly ready to believe it, provided that, with equal courtesy, I may be allowed to raise upon your smooth surface, crystal mountains (which nobody can perceive) ten times higher than those which I have actually seen and measured.’”

If Dr. Green were honest, he would reject the misleading approach of the Krakow team to exclude Iron Blue from the analysis, because this most likely excludes the major parts of the cyanide residues formed by gassings with HCN in general (not just in the case of delousing chambers).

Even if we agree to disagree on what happened at Auschwitz during the war, we surely can agree that Markiewicz et al. did not use cyanide-containing paint to color the samples they themselves prepared for their gassing experiments, and that they didn’t lean them against items “soaked with aqueous solutions of HCN” either. So why did the Krakow team not at least analyze the samples from their own experiments with the international standard method of detecting the total cyanide content? Or at least they should have used both methods side by side, which would have enabled us all to compare the results of both methods and thus evaluate what they are worth. This in turn could have shed some light on chemical processes as well, like: how fast is HCN absorbed in mortar converted into insoluble iron cyanides no longer detectable with the one, but readily detectable with the other method?

If we hold the results of my test gassings up against those conducted by the Poles, then we get the impression that most of the absorbed cyanide present in gassed mortar samples is turned into long-term stable iron cyanides rather quickly. But since the conditions of our experiments were very different, such a conclusion would be premature. The Poles had the chance to find out. I had asked them to redo their tests with the standard method, but they did not react to that suggestion.
Subsequently, if Dr. Green were honest, he should state that the Polish scientists neither tried to understand what they claimed not to have understood (the formation mechanism of Iron Blue), nor discussed the attempts to understand as made by others, which were known to them. No matter which results the Polish scientists produced and what their scientific opinion might have been: their behavior is extremely unscientific, as the most important task of a scientist is to try to understand what has not been understood so far, and to discuss the attempts of others to make it understandable. The Polish scientists did just the opposite: they decided to ignore and exclude what they did not understand.

Let me quote Prof. A.R. Butz in this connection, who stated another appropriate metaphor to emphasize the degree of intellectual dishonesty revealed by Markiewicz and his colleagues (Butz 2000, p. 15):

“The argument [of Markiewicz et al. for excluding Iron Blue from their analyses], to the extent that it was intelligible enough to be summarized at all, was that they did not understand how the iron-cyanide compounds got to be there, so they decided to ignore them in reaching their conclusions. I don’t understand how the moon got there, so I will ignore all effects associated with it, such as tides. I hope I don’t drown.”

And the amazing thing about Dr. Green is that he— and with him Prof. van Pelt, who relies on Green— not only defends Prof. Markiewicz’s behavior in every regard, but he attacks me for my critique of the Polish scientists, while omitting all the reasons I gave for making it. To top this, Dr. Green even defends the fact that Prof. Markiewicz never bothered to address any part of my critique, even though addressing critiques is paramount for scientists. Dr. Green argues (Green/McCarthy 1999):

“Rudolf complains that Markiewicz et al. have not responded to his queries. Why should they do so? What credibility does Rudolf have, that demands they answer his every objection no matter how ill-founded?”

First of all, Dr. Markiewicz did in fact respond (see Rudolf/Mattogno 2016, pp. 59-61, 65). However, he dodged the decisive issues, and his announcement that he would continue researching this topic apparently went nowhere, probably for one thing because he passed away two years later.

Since Dr. Green agrees with me that the Iron Blue detectable in disinfection walls is the result of gassings with hydrogen cyanide— whether evaporated from gypsum pellets or from clothes dipped in his fantastic Zyklon-B solution is utterly immaterial— he himself has indirectly admitted that all my objections against Markiewicz’s method of analysis are well-founded, i.e., just the opposite of “ill-founded.”

And why does Dr. Green think I possess no credibility demanding a discussion of any of my arguments? Not because I lack scientific qualifications.

No, he thinks I am an abomination because of my views (which he merely presumes), and because I have been subject to social persecution and political prosecution, leading to the total destruction of my social existence, my reputation, and finally my freedom (see Rudolf 2012a, 2016c). Dr. Green even resorts to calling me a “liar,” “obfuscator,” and “hater” because of my different well-founded opinions. And to top it all off: when I defend myself against his *ad hominem* attacks, he lambastes me for that as well (Green 2000). So, whereas he has a right to attack me, I don’t have even the right to defend myself and more important my assertions?

The scheme is as follows: first, people like Dr. Green attempt to do everything to destroy my reputation by name-calling, persecution, and prosecution, and when they succeed, they claim that there is no need to discuss anything with me anymore, since I do not have any reputation and credibility anyway. This way they can nicely ignore any argument refuting their flawed thesis. And they assert the divine right to call themselves righteous scientists and to call me a pseudo-scientific liar and obfuscator of the truth.

Dr. Green unconditionally defends the scientific fraud of the Krakow institute, and both get away with it, because in the eyes of much of the interested public, both have the “politically correct,” though scientifically wrong, opinion about Auschwitz. After all, birds of a feather flock together.

### 8.4.5. Wikipedia

Wikipedia is probably the world’s most frequently consulted encyclopedia. In its English-language entry about Germar Rudolf one can read (last accessed on Oct. 29, 2016; yes, my birthday…):
“Richard Green and Jamie McCarthy from The Holocaust History Project have criticized the report, saying that like Fred Leuchter in the Leuchter report, Rudolf did not discriminate against the formation of iron-based cyanide compounds, which are not a reliable indicator of the presence of cyanide, and that thus his experiment was seriously flawed.” [Emph. added]

Excuse me? Cyanide compounds do not indicate the presence of cyanide? Not even Green has ever made such a nonsensical statement. In fact, Green’s and, by extension, Markiewicz’s position is that iron-based cyanide compounds are not a reliable indicator of past homicidal gassings.

Any attempt to get this utterly nonsensical statement corrected or at least amended failed, as such changes were reverted only minutes later.380

But even if the correction were accepted, this wouldn’t change the fact that Wikipedia circulates here nothing more than the Krakow untruth, backed by Green et al., that iron-based cyanides have to be excluded from the analysis of wall samples. Wikipedia rubberstamps this, and so a lie becomes encyclopedic “truth.” It goes without saying that any attempt to get the facts about this swindle included in this Wikipedia entry is doomed to failure.

For years, any attempt to get even an innocuous reference to my expert report added failed, as it was deleted by the censors at Wikipedia almost instantly.381 Not even a bibliographic listing of an earlier edition of the present study was tolerated. The reason given for this censorship was that I and the places where my works are published have a bad reputation, whereas my slanderers have not. And disreputable sources are subject to deletion. It’s Wikipedia’s “quality” control policy. Never mind that this “disreputable source” – the present expert report – is the main reason for this very entry to begin with. You people out there are allowed to read about it (from its opponents), but you are not allowed to read the thing itself.

A brief reference which points to my first, 1998 paper addressing some of Green’s deliberations was added in July of 2012 and was tolerated for almost two years,382 but when someone added a note about my second response to Green, everything was deleted again on May 9, 2014.383

...&oldid=588796541

381 In the entry’s revision history, see the changes of Sept. 17, 2009 (10:51), reverted 91 minutes later, and of May 22, 2010 (17:08), undone 74 minutes later; similar in 2013: a link to my report was added by one user at 11:35am on 17 April 2013 and removed at 3pm that same day (...oldid=550791896). This dance was repeated over the next days: re-entry at 2:15am, deletion at 5:49am, re-entry at 9:21pm, deletion at 12:30pm the next day, re-entry at 4:26am the following day, deleted at 5:47am by some other editor. On Oct. 29, 2016, my report was listed with a link under External links!
...&oldid=607753420.

382 ...&oldid=503023941.
8.4.6. Anticipated Values

The only case of the formation of Iron Blue through fumigation with hydrogen cyanide, which is fairly well documented, is the case of damage to churches in Upper Franconia as cited earlier (G. Zimmermann 1981, pp. 120f.). Even today, buildings are fumigated with hydrogen cyanide, yet Iron Blue is rarely formed. The reason for this, however, is quite obvious. Fumigation with hydrogen cyanide is used to kill vermin, such as woodworm, meal moths, corn beetles, or lice. However, a massive case of vermin infestation requiring the use of hydrogen cyanide occurs, in practice, only in buildings which have already been in use for relatively long periods of time, i.e., many years. It is therefore to be expected that the interior plaster of such buildings has long since become thoroughly carbonated. Furthermore, the rooms to be fumigated are, as a rule, heated in order to enhance the effectiveness of the hydrogen cyanide (faster evaporation, slower adsorption losses, stimulated metabolism of vermin). Since it is not to be expected, according to the findings presented here, that a perceptible accumulation of cyanides, let alone the formation of Iron Blue, would occur after only one fumigation in warm, dry, and chemically set wall materials, one cannot be surprised that such building damage is the exception rather than the rule.
The disfiguration of the churches quoted (G. Zimmermann 1981, pp. 120f. as well as Note 16, p. 28) are typical exceptions, since these unheated churches, notorious for their humid walls, had been freshly plastered only a few weeks earlier with cement mortar, which is known to remain alkaline for many months. These are exactly the conditions which in this study have been demonstrated to be favorable to the formation of Iron Blue. With increasing setting of the cement plaster over the course of months, the pH of the masonry in the churches finally dropped, so that the final reaction led to the formation of long-term-stable Iron Blue. This final reaction of the adsorbed cyanide into Iron Blue was only completed after approximately two years. The prior stage of this reaction, the formation of considerably paler iron cyanides, could already have been completed or well progressed prior to this.\textsuperscript{384}

A comparison with the probable conditions of the disinfection chambers and alleged homicidal gas chambers of the Third Reich is quite informative (see Table 40). It can be rightfully assumed that both installations (assuming the existence of the homicidal gas chambers) were put into use more or less immediately after their construction, \textit{i.e.}, at a time when the concrete, mortar and plaster were still not entirely set. In addition, they were in near-constant use for one to two years.

That the entire plaster job on the walls of the churches referred to above turned blue even \textit{after only one fumigation} is explained by the especially (un)favorable circumstances. The alleged “gas chambers” of Crematoria II and III in Birkenau show a striking similarity to this case. These cool and moist cellar rooms were only completed shortly before they were put into service and are then said to have been exposed to hydrogen cyanide \textit{on a regular basis}, quite in contrast to the church mentioned above, which was only fumigated once.

The other major difference between the two cases is that only the normal atmospheric CO\textsubscript{2} level was present in the churches, whereas homicidal “gas chambers” would have had an elevated CO\textsubscript{2} level for the duration of the entire procedure (from the entrance of the victims to the ventilation of the chamber). The exact influence this would have had, if any, is not known. Testing this has always been beyond my own reach, as I could not afford the equipment to do experiments with added CO\textsubscript{2}. This is a task for future research.

Finally, the interesting question of which analytical values were really to be expected, if the reported mass gassings with Zyklon B really occurred in the “gas chambers” at Auschwitz, will now be examined within what is possible.

\textsuperscript{384} Incidentally, all the plaster in the church at Wiesenfeld had be to knocked off the walls and replaced, since there was no other way to get rid of the Iron Blue. Communication from Konrad Fischer, head architect during the renovation of the church at that time.
First, consideration will be limited to Morgues #1 of Crematoria II and III, because sufficient data are only available for these buildings and because it is only here that meaningful samples can be taken, since it is certain that the material is in its original condition.

As a comparative value, let us take two of the samples taken by myself from the interior wall of Building 5a: Samples 12 and 13, with total cyanide concentrations of 2,900 and 3,000 mg/kg, respectively.

The following is a list of individual properties which exert an influence upon the formation of Iron Blue.

1. Properties which were approximately the same in both installations:
   – The (alleged) operating time (approximately 1 year).\(^{385}\)
   – The (alleged) frequency of use (a few hundred times),\(^{386}\) even if a document quoted in Paragraph 5.2.3.5. states that shortly after the putting into operation of these hydrogen-cyanide-disinfestation chambers, a decision was made to stop using them, see p. 81. It may therefore well be that the cyanide residues to be found in these disinfestation chambers today result from considerably fewer fumigations.
   – The (necessary) application concentration (see Sections 7.1. and 7.3.1.3).
   – Both installations were (allegedly) put into operation more or less immediately after completion.\(^{387}\)

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\(^{385}\) With regard to the homicidal gas chambers, the period between March 1943 and the fall of 1944 is “attested to.” Building 5a was completed in the fall of 1942 (RGVA, 502-1-214; according to 502-1-22-19, it was already completed by June 20, 1942), but converted to operate with hot air in the summer of 1943 (Pressac 1989, pp. 55-58; acc. to RGVA, 502-1-24, equipment of BW 5a/b with hot-air disinfection facility started on Nov. 1, 1942).

\(^{386}\) For the homicidal “gas chambers,” this follows from the alleged victim totals of several hundred thousand victims per chamber; for the delousing installations, this follows from the maximum number of days available in ¾ of a year (approximately 270 days).

\(^{387}\) Crematorium II was completed in February/March 1943, after which the gassings are alleged

<table>
<thead>
<tr>
<th>Location</th>
<th>Plastering of Churches</th>
<th>Crematorium II/III Morgue #1</th>
<th>Disinfestation BW 5a/b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td>Plastering of Churches</td>
<td>Crematorium II/III Morgue #1</td>
<td>Disinfestation BW 5a/b</td>
</tr>
<tr>
<td>Iron Content</td>
<td>&gt; 1 Weight-%</td>
<td>1-2 Weight-%</td>
<td>0.5-5 Weight-%</td>
</tr>
<tr>
<td>Type of plaster</td>
<td>Lime + Cement</td>
<td>Cement (+lime?)</td>
<td>Lime</td>
</tr>
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<td>Medium-term high</td>
<td>Medium-to-long-term high</td>
<td>Short-term high</td>
</tr>
<tr>
<td>Moisture</td>
<td>Moderately high (hydrophobic plaster, cool, moist church)</td>
<td>High (unheated cellar below groundwater level, condensing sweat*)</td>
<td>Moderate (exterior wall) to low (interior room) (heated room)</td>
</tr>
<tr>
<td>Time elapsed between plastering and fumigation</td>
<td>A few weeks</td>
<td>Between a few weeks and three months*</td>
<td>(a few weeks?)</td>
</tr>
<tr>
<td>Number of fumigations</td>
<td>1</td>
<td>Allegedly ≥ 400*, in each case at least one hour</td>
<td>Probably &lt; 400, in each case many hours</td>
</tr>
<tr>
<td>CO₂ content</td>
<td>low</td>
<td>high*</td>
<td>low</td>
</tr>
<tr>
<td>Proof of cyanide</td>
<td>Clear</td>
<td>Negative</td>
<td>Clear (0.1-1 weight-%)</td>
</tr>
</tbody>
</table>

* = assuming the correctness of the alleged mass-gassing scenarios
2. Properties that were conducive to the formation of Iron Blue in the disinfestation chamber:
   – The durations of the fumigation times led, in the disinfestation chamber, to a concentration of cyanide in the masonry between 16% and 30% of saturation; in the case of the homicidal “gas chambers,” however, only values of between 1.6% and 8% were reached (factor: 2-19; see Paragraphs 7.3.2.2.f., particularly Table 22, p. 283).

3. Properties which were conducive to the formation of Iron Blue in the homicidal “gas chambers”:
   – The morgues possessed cool, moist walls, which have a higher tendency, higher by a factor of 8, to adsorb hydrogen cyanide than the warm, dry interior walls of the disinfestation chamber under consideration (factor: 8; see Subsections 6.5.1., 6.5.3., 6.7.2.f.).
   – Ceilings and walls of the morgue were made with cement mortar and/or concrete, which, due to their longer-lasting alkaline properties and due to their greater specific inner surface area, are able to adsorb and bind hydrogen cyanide for a longer time and more strongly than the cement-poor mortar and plaster of the disinfestation wing under consideration. Quantification in this regard is difficult, but a factor in excess of two may be assumed (factor: 2; see Subsections 6.5.2., 6.7.2.f.).

4. Property with an unknown influence:
   – CO₂ content: whereas the disinfestation chambers will have had a normal atmospheric concentration (0.33% at that time), the level will have been considerably above that in the morgues as soon as the victims assembled inside and until the room was ventilated. As discussed in Subsection 6.5.6, the effect of CO₂ on the formation of long-term stable cyanide compounds is not clear. Whereas a high CO₂ content does lead to a fast carbonation and thus neutralization of lime mortar, rendering it chemically less active, this is not the case for cement mortar, the material used in the underground morgue. This material is carbonated only very slowly, hence it retains its activity to bind HCN for a longer period of time.

According to these considerations, and leaving aside the yet-unknown influence of CO₂, the known factors indicate that rather more iron cyanide would have had to form in the homicidal “gas chambers” than on the interior walls of the disinfestation chamber in question:

\[
\frac{8 \cdot 2}{2 \text{ to } 19} \approx 0.8 \text{ to } 8
\]

(24)

to have begun in mid-March or the end of March. With relation to the delousing installations, we have no data, but one may assume that the building was used as soon as it was completed, even if it must be expected that the delousing chambers could not be used for a while, since, for delousing, it was necessary first to install all the equipment after completion of the building, i.e., undressing rooms, showers, saunas, heating, etc. The same applies, of course, to the crematoria/morgues.
In actual fact, however, the homicidal gas chambers contain such low cyanide concentrations that they are neither capable of reproducible detection nor of adequate interpretation: The actual detected values are in any case at least some 150 to 10,000 times lower than those detectable in the walls of the disinfection chambers, or, if using the values established in Subsection 8.3.6, there is a two-thousandfold differential between the two. It seems unlikely that CO₂ could be the reason for such drastic differences.

Or in plain English: When analyzing wall samples from the alleged “gas chambers” of Crematoria II and III, we ought to expect results which are in the same order of magnitude as the results of samples taken from the walls of the disinfection chambers of BWe 5a and 5b. What we do find in those “gas-chamber” samples, however, is practically nothing. Unless, of course, it turns out that CO₂ really has a dramatic effect in reducing the reactivity of cement mortar to bind cyanides irreversibly.

8.4.7. Limits of the Chemical Method

One tendency of orthodox historiography is to modify the boundary conditions for the claimed homicidal mass gassings, even if this stands in shattering contradiction to witness statements or the given technical conditions.

Whereas it used to be the rule for testimonies to allege daily, or even continuous, gassings, today it is occasionally assumed, as a result of the drastic reduction in the number of victims to a maximum of 630,000, (Pressac 1993, p. 147) 470,000 to 550,000 (Pressac 1994, p. 202), or even 356,000 gassing victims (Meyer 2002), that there were considerably fewer homicidal gassings per “gas chamber” than hitherto believed. Meyer has even posited that none of alleged homicidal gas chambers in Crematoria I through V were ever used as such, and that only the technically utterly unsuited bunkers were employed for gas murder (ibid.). In private conversations, he went even so far as to say that there were no gas chambers at Auschwitz at all (see Rudolf 2016a, p. 362). It goes without saying that under such circumstances any chemical or technical investigations of the crematoria ruins become moot.

There is furthermore a tendency towards a strong reduction in the quantity of hydrogen cyanide allegedly used in contrast to the quantities alleged or implied by the witnesses (Bailer 1991, Wegner 1990, Wellers 1991).

There is much unfounded fantasizing as to the existence of any ominous Zyklon-B-introduction devices, which would have permitted the toxic gas to be released through holes in the ceiling into the chamber – holes which, unfortunately, did not and do not exist – and to be removed again following conclusion of the gassings.389

388 According, for example to the testimony of M. Buki in the Frankfurt Auschwitz Trial; see Langbein 1965, p. 96.
389 Pressac (1989, 1993) and van Pelt (1999, 2002) are true masters in the composition of such
Furthermore, the opinion is occasionally expressed that the homicidal gas chamber was hosed down with water after every gassing. This assertion forgets that it would have taken many hours before the “gas chamber” could have been cleared of bodies (they had to be cremated, which is time-consuming and lasts many days, after all), that the hydrogen cyanide does not merely sit on the surface of the wall, but rather, due to its extremely high diffusion capacity, penetrates deeply into the wall within a few hours, and that a water hose would be of no assistance in this regard, quite apart from the fact that such an action would have had the effect of causing the consequently wet walls to adsorb even more hydrogen cyanide during the next hypothetical gassing. In addition, the samples taken from the ceiling, which was certainly not hosed down, likewise show no reproducible cyanide concentrations.

Yet there are also physical-chemical boundary conditions which could influence the analytical results. It is, for example, not inconceivable that, for whatever reason remaining unknown at the present time, the masonry of the alleged “gas chambers” was not, or was only slightly, inclined to the formation of Iron Blue, or that possible residues were destroyed for unknown reasons. CO₂ could be one such compound not factored in so far.

The assumptions made in relation to the boundary conditions relating to hypothetical homicidal gasings are naturally subject to particular reservations, since no empirical data are available in this regard. Thus, the question of how quickly the hydrogen cyanide contained in Zyklon B could spread out in hypothetical “gas chambers” and how quickly it could have caused the death of all victims cannot be answered with absolute certainty. The assumptions made here are, of course, generally well-founded, but are not infallible.

All of the above makes prediction with certainty of the quantities of cyanide which one might have expected to find in the masonry of the alleged “gas chambers” impossible. The anticipated cyanide values indicated above and the subsequently following, summarized conclusions are therefore only the well-founded conclusions of an expert; under no circumstances do they constitute confirmed truth. An extensive series of tests, for which neither the time, nor the equipment, nor the money are available to me, would have been necessary under the most-varied conditions for a better prediction of the expected values. In view of the importance of the topic, it would perhaps have been proper, after so many decades have passed since the end of World War II, for some renowned institute to begin with such investigations at long last.

Matters are different, however, when coming to conclusions based upon architectural and engineering questions. Because the structural framework of some of the buildings under discussion has remained in its original condition, and due to the extensive documentation available about them, we are able to...
arrive at concrete statements. This is especially true regarding the absence of alleged Zyklon-B-introduction holes in Crematoria I, II, and III, as well as regarding the fact that the wall openings in the annexes of Crematoria IV and V, which supposedly served for the introduction of Zyklon B, were occluded with iron bars.
9. Conclusions

9.1. Overview

Even according to the statements of pharmacist Jean-Claude Pressac, who, in the late 1980s and early 1990s, was promoted as the technical Auschwitz expert, witness testimonies relating to the design of the facilities and their capacity are, almost without exception, untenable. But even the corrections to the testimonies which Pressac considered necessary do not go far enough to make them credible. In particular, the testimonies relating to the durations of executions in the “gas chambers” (Morgue #1) of Crematoria II and III, as well as the ventilation times after the executions go completely awry. This is because of the over-estimation of the evaporation rate of hydrogen cyanide from the carrier of Zyklon B, false perceptions about the speed with which humans succumb to gaseous hydrogen cyanide, as well as incorrect concepts of how swiftly these rooms could be ventilated. If the direct and indirect witness testimonies relating to the quantities of Zyklon B used and at least approximately relating to the rapidity of the execution procedure are to be accepted, then they are frequently incompatible with testimonies, sometimes of the same witnesses, that the victims’ corpses were removed from the “gas chambers” immediately after the executions and without gas masks and protective garments. This is particularly true for those alleged “gas chambers” without ventilation installations (Crematoria IV and (until early 1944) V and Bunkers 1 and 2), since working in poorly ventilated “gas chambers” with high concentrations of poison gas is impossible without gas masks and protective garments. The extreme danger of corpses contaminated with HCN to the sweating workers of the Sonderkommando, who are supposed to have worked without protective garments, makes the witnesses even less trustworthy. The witness accounts are therefore completely contradictory, illogical, contrary to the laws of nature, and therefore incredible. The witnesses engage in particular contortions when it comes to cremations in furnaces or outdoors (amounts and kinds of fuel used, speed of cremation, development of flames and smoke), which furthermore fail to accord with the analyses of aerial photography.

Even in Pressac’s judgment, the alleged installations for the mass murder of human beings were not only impractical for their purpose, but designed in a nonsensical way to the point of being unsuitable as instruments of mass extermination. Considering the actual technical requirements, the impression remains of the total inadequacy of the installations in question – which were deficient to the point of uselessness – in gross contradiction to the technically advanced disinfection chambers in the immediate vicinity. The facts set forth here with relation to Zyklon-B-introduction shafts or pillars through the ceilings of the “gas chambers” (Morgue #1) of Crematoria I to III strengthen the
suspicion of subsequent manipulations almost to a certainty. The fact, finally, that the wall openings of Crematoria IV and V, through which the Zyklon B is said to have been dumped, makes the conclusion inescapable that none of these rooms of Crematoria I through V could ever have been used as a homicidal gas chamber: It was simply impossible to introduce any poison gas in the manner described by the witnesses.

Due to the well-documented long-term resistance of the Iron Blue pigment under the conditions prevailing in the present context, the slight cyanide traces in alleged homicidal “gas chambers,” which are detectable in places but are not reproducible, cannot be leftovers of a disintegration process, since even on the weathered exterior side of the disinfection wing large quantities of cyanide can be found even today. Towards the end of the operating period of the installations, therefore, the cyanide content must have been present in the same order of magnitude as it was when the samples were taken for the present study, as well as in the areas which were never exposed to weathering. But the cyanide-content values of protected areas in the alleged homicidal “gas chambers” are just as low as in places exposed to weathering. Weathering has, therefore, not actually diminished these slight traces to any considerable degree.

The low cyanide-content values cannot be explained by fumigation of the premises for vermin, as postulated by Leuchter, since such fumigation would probably have left greater quantities of cyanide in the moist basement rooms of Crematoria II and III.

The cyanide-content values of the alleged homicidal “gas chambers” lie in the same order of magnitude as the results, among others, of the samples taken by myself and others from other structures where no gassings are claimed to have happened (subsequently added partition walls of hot-air-disinfection Building 5a, inmate barracks, the washroom of Crematorium I, Morgue #2 of Crematorium II). These values, however, lie so near the detection limit that no clear significance can be attributed to them, most importantly due to their lack of reproducibility. It can moreover not be excluded that minute detected amounts are caused by natural occurrences or by air pollution (car exhaust gases, coal and steel industry in Upper Silesia). From the above, one can safely conclude that no cyanide residues capable of interpretation can be found in the walls of the alleged homicidal “gas chambers.”

It was further possible to show that, under the conditions of the mass gassings as reported by witnesses in the alleged “gas chambers” of Crematoria II to V, cyanide residues would have been found in similar quantities, coloring the walls blue, as they can be found in the disinfection wings of Buildings 5a/b. Since no significant quantities of cyanide were found in the alleged homicidal “gas chamber,” one must conclude that these installations were exposed to similar conditions to the above-mentioned other installations (hot-air disin-
festation, inmate barracks, washroom of Crematorium I), *i.e.*, that they most likely were never exposed to any hydrogen cyanide.

9.2. On Chemistry

The investigation of the formation and stability of cyanide traces in masonry of the indicated structures as well as interpretation of the analytic results of samples of building material from these structures in Auschwitz show:

1. Cyanide reacting in masonry to produce Iron Blue is stable over periods of many centuries. It disintegrates on the same time scale as the masonry itself. Therefore, traces of cyanide should be detectable today in almost undiminished concentrations, regardless of the effects of weather. The outer walls of the delousing chambers in *BWe 5a/b* in Birkenau, which are deep blue and contain high concentrations of cyanide, are evidence of this.
2. Under the physically possible conditions of the mass gassing of humans with hydrogen cyanide, traces of cyanide ought to be found in a similar order of magnitude in the rooms in question as they are found in the disinfestation facilities, and the resulting blue discoloration of the walls should likewise be present.
3. In the walls of the supposed “gas chambers” the concentrations of cyanide remnants are no higher than in any other building taken at random. Hence, the mass gassings with hydrogen cyanide (*Zyklon B*) in the supposed homicidal gas chambers of Auschwitz cannot have taken place as claimed by witnesses.

9.3. On Construction Technology

The investigation of the practical and technical procedures during the claimed mass gassings in the indicated rooms as claimed by witnesses and their chemical and physical analysis showed:

1. The extensive documentation on the Auschwitz Camp does not contain a single reference to execution “gas chambers”; rather it refutes such suspicions.
2. The supposed main gas chambers of Auschwitz, the morgue hall of the crematorium in the Main Camp, Morgues #1 (“gas chambers”) of Crematoria II and III, as well as the rooms in the annexes of Crematoria IV and V, did not have any means for the introduction of poison gas pellets in the manner attested to by the witnesses.
3. The release of lethal quantities of hydrogen cyanide from the *Zyklon-B* carrier requires many multiples of the asserted execution times.
4. Providing the necessary ventilation for the supposed “gas chambers” of Crematoria II and III would have taken many hours, contrary to all witness testimony.

5. It was not possible to effectively ventilate the supposed “gas chambers” of Crematoria IV or V (until early 1944) as well as of Bunkers 1 and 2. The corpses could not have been removed from the rooms and carried away by the *Sonderkommando* without protective garments and the use of gas masks with special filters.

Hence, the procedures of mass gassing as attested to by witnesses during their interrogation before various courts of law, as cited in judicial rulings, and as described in scientific and literary publications, in any building of Auschwitz whatsoever, are inconsistent with documentary evidence, technical imperatives, and natural scientific law.

Germar Rudolf, Certified Chemist, in exile, on February 4, 2017

Of course, I may be wrong. There are many loose ends to this inquiry, some of which I have addressed throughout this study. Let me, therefore, close this report with a list of issues needing to be addressed by independent scientists whose minds are open enough to let the die fall wherever it falls.
10. Research Desiderata

10.1. Point of Departure

The facts assembled and explained in the present work, and even more so the conclusions drawn in it, are highly controversial. They are presented by a single scholar whose research stands in opposition not only to a vast body of mainstream research, but also to the laws of many Western countries. If they are to be taken seriously and accepted as dispositive, they need to be critically analyzed by leading investigators in the fields of analytical and forensic chemistry, of civil engineering and architecture. They need to either verify and corroborate my results, or they need to show its shortcomings and flaws, or present an honest mixture of the two.

My research is not unassailable. No research is. Yet in order to make any progress in this matter, an open debate about it is necessary, and further research needs to be done. Threatening me and anyone else arguing along similar lines with prosecution will not avail the attainment of truth. It would merely show that those who are afraid to lose the debate have no other option left than to resort to government-enforced censorship and violence.

I, on the other hand, suggest that my research be only the entree to a concerted, international effort to explore the matter with the depth and thoroughness it deserves. I therefore present here a list of research desiderata as a starting point for the international community of scholars interested in determining the truth.

10.2. Forensic Archeology

If an airliner crashes, it is standard procedure to recover as many pieces of debris as possible and to reassemble the plane in an attempt to verify the cause of the crash. After all, this is about the life and safety of thousands of passengers traveling on similar planes.

Morgue #1 of Crematorium II, the location where as many as 400,000 people are said to have died, deserves at least the same attention. Already after the occupation of the Auschwitz Camp by Soviet forces, when witnesses told their liberators about the crimes allegedly committed against them, an international commission of forensic experts should have been formed with the task to subject the ruins of all Auschwitz crematoria, but in particular Morgue #1 of Crematorium II, to the scrutiny they deserved. The entire Morgue #1 should have been excavated. Each fragment of the roof should have been meticulously documented as to where, and in which condition and position it was found. The whole roof should have been put together like a big puzzle – in search of the claimed introduction holes and the anchor points of Kula’s Zyklon-B-
introduction columns. In addition, the floor of that room should have been completely exposed, freed from roof fragments, rubble and dirt, to determine whether it contained any anchor points of the legendary columns. The same should have been done with the floor of Morgue #1 of Crematorium III, whose collapsed and heavily fragmented roof is easier to remove than that of Crematorium II.

Ever since these buildings were blown up toward the end of the war, the ruins have been crumbling, and the evidence keeps deteriorating, quite aside from whatever covert tampering they may have been subject to. Time is running out. It becomes increasingly questionable whether much can still be learned from the condition of the roof today or in years and decades to come. Undocumented manipulations are not limited to the two holes chiseled through the roof after the war, apparently by the Polish research team preparing show trials against German defendants, but later activities also compromised the evidence. Pressac reports an excavation in the 1960s during which a trench was dug around the walls of Morgue #1 of Crematorium II. He shows some pictures of that event, which most certainly did not contribute to stabilizing the ruins (Pressac 1989, pp. 264f.). That activity seems to have remained undocumented as well. At the time of the 2000 London trial of Irving v. Lipstadt, a team of researchers backed by the Auschwitz Museum looked for the first time for the claimed Zyklon-B-introduction holes in the roof of Morgue #1 of Crematorium II, as Irving was informed informally at that time (see p. 145), but that activity seems to have remained undocumented as well. This, too, might have accelerated the deterioration of evidence, if it did not also include outright tampering with it.

Since the massive concrete floors of Morgues #1 of both Crematorium II and III are unlikely to deteriorate much (they are 40 cm thick; see Pressac 1989, p. 323), except for minor cracks and fractures, that research can probably be done for decades to come, so it can wait until a time when such research is politically acceptable.

10.3. Forensic Analytical Chemistry

Since carbonates are a main component of concrete, mortar and plaster samples, the influence of carbonates as a main component on analytic results of the methods used needs to be determined with accuracy and reliability, or else a method needs to be found which is insensitive to large amounts of carbonates.

The actual detection limit of the analytical method used for solid-state samples needs to be determined, because the limits given in the literature were determined for aqueous solutions.
A new set of core samples should be taken reaching all the way through the walls of the Zyklon-B-disinfection chambers of BWe 5a&b, as well as through the walls and the roof of Morgues #1 and #2 of Crematoria II & III. The same should be done with the hydrogen cyanide disinfection chambers at the Auschwitz Main Camp, the Majdanek and Stutthof Camps, some of which are claimed to also have been used for homicidal gassings. This would allow the determination of depth profiles, and would give answers as to the depth to which gaseous hydrogen cyanide penetrated the walls and was left as long-term-stable deposits. It also addresses claims as to the use of blue wall paint or other scenarios to explain Iron-Blue staining on and inside of walls.

When I took my samples in 1991, I neither had suitable tools to take core samples, nor would it have been ethical to undertake such major, invasive sampling without the permission of the relevant authorities. Such a permission would doubtlessly only be granted to scholars held in high regard by the Polish authorities, that is to say, to established mainstream scholars unsuspicous of iconoclastic views. I cordially invite these scholars to consider getting involved in such a research project, and I ask all those who would like to sponsor it to get in touch as well.

The detection of cyanides in future forensic samples and in samples from gas-exposure experiments should be split into two sets: one for non-complexed cyanides (using mildly acidic processing at pH 4), and one for acid-resistant complexed cyanides (using strongly acidic processing similar to current methods to determine total cyanide contents; see Meeussen/Temminghoff et al. 1989 for one way of doing it.). This allows for the determination of the speed with which complex iron cyanides develop (during experiments) and deteriorate (during experiments and in forensic samples).

Experiments determining the mechanism and speed of the formation of complex iron cyanides in various relevant masonry materials should be conducted. In particular, the influence of different partial pressures of CO₂ in the atmosphere (e.g. 0.04% to 10%) on the accumulation of cyanides (simple and complex) in masonry exposed to gaseous HCN should be determined.
11. Acknowledgements

Unfortunately, I cannot thank everyone who was directly or indirectly involved in creating this expert report or who expressed their support. However, I do wish to express my gratitude to the following institutions and individuals:

- The late Major General (retired) Otto Ernst Remer, whose forthright public statements were the reasons why this expert report became necessary in the first place.
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Zentralrat der Juden in Deutschland (Central Council of Jews in Germany), which, by its highly inappropriate intervention, encouraged my dismissal and assisted in preventing me from finishing my doctoral dissertation, foiling any prospect of pursuing a post-doctoral degree, and liberating me from the duties of a professional career, thus allowing me to dedicate 24 hours a day to revisionism.

The University of Stuttgart which successfully prevented me from wasting my life in the ivory towers of science by denying my final PhD exam.

The Stuttgart District Court, the Tübingen County Court, the Böblingen County Court, the Weinheim County Court, the Berlin-Tiergarten County Court, the Munich County Court, the District Court Mannheim, as well as the Bundesprüfstelle für jugendarmbgefährdende Medien (German Federal Review Office for Youth-Endangering Media) for trying to drown me in uncounted criminal prosecutions for my revisionist publications, which had the consequence of allowing me to pursue my revisionist publishing activities in exile, undisturbed by the terror of the German authorities.

Lastly, I wish to acknowledge the German and British media for their innumerable inflammatory articles and newscasts, forcing me into seclusion and a more focused devotion to revisionism, even while raising public awareness of my campaign.
Biographical Notes on the Author

Germar Rudolf, a certified chemist, was born on October 29, 1964, in Limburg/Lahn, Germany. Elite High School Diploma (Gymnasium Abitur) in 1983 in Remscheid, followed by study for a certified chemist’s degree (Diplom-Chemiker) at the University of Bonn, graduation summa cum laude in September 1989. Completion of compulsory military service with the German Luftwaffe (Air Force). Between October 1990 and June 1993, Mr. Rudolf worked on the preparation of his PhD thesis at the Max Planck Institute for Solid State Research in Stuttgart. Despite the highest recommendations, he was forced to withdraw his dissertation, because the University of Stuttgart threatened to reject it on political grounds (due to the legal repercussions of his involvement in revisionism).

Since early 1993, he has been repeatedly subjected to prosecution for publishing an increasing number of publications dealing critically with the Holocaust. One of the cases – for the present study – resulted in a 14-months’ prison sentence. Shortly after the appeal for this case had been rejected in March 1996, but before an arrest warrant had been issued for him, he decided to leave his native Germany and to go into exile, first very briefly to Spain, then to England, and in late 1999 the United States, where he applied for political asylum in late 2000.

In late 1996, Mr. Rudolf established the publishing house Castle Hill Publishers in the UK and, simultaneously, a quarterly historical periodical in the German language, with the aim of addressing critical aspects of contemporary history currently suppressed in all German-speaking countries. In 2000, he started publishing English-language books on revisionist topics under the imprint of Theses & Dissertations Press, an imprint originally established by Robert H. Countess and purchased by Rudolf in the summer of 2002. Between 2003 and 2005, he also published a quarterly historical
journal in the English language, which focused on the same topics as his German periodical.

In late summer 2004, Rudolf married a U.S. citizen. Due to this, he applied for permanent residence in the U.S. while his asylum case was still pending. As a result, he and his wife were called to appear for an interview with the U.S. Immigration Services on October 19, 2005. Their marriage was subsequently certified as valid and genuine, but right after the couple obtained their certificate, Rudolf was arrested and four weeks later deported to Germany, with the reason given that Rudolf, as a rejected asylum seeker, has no right to apply for permanent residence.

In Germany, he was arrested at the airport and incarcerated. In the years 2006/2007 he was tried for numerous items he had published while residing in the USA. Although perfectly legal there, Germany nevertheless applies German law to those cases, if such publications are accessible in Germany via the internet or are being imported to Germany. Rudolf was sentenced to an additional 30 months of imprisonment. Together with his old verdict of 14 months, he subsequently spent 44 months in various German prisons.

After his release from prison on July 5, 2009, he left Germany again, first to England, and later, after his application for legal permanent residence in the U.S. was finally granted in July 2011, to the U.S., where he rejoined his wife and daughter.

Germar has five children: two from his first marriage, one from his second, and two adopted children.

He can be reached via his web site: www.GermarRudolf.com.
12. Appendices

12.1. Lists

12.1.1. Tables

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12.1.4. Abbreviations

AGK Archiwum Głównej Komisji Badania Zbrodni Przeciwko Narodowi Polskiemu Instytutu Pamięci Narodowej (Archives of the Central Commission for the Investigation of the Crimes against the Polish People – National Memorial), Warsaw

APMO Archiwum Panstwowego Muzeum w Oświecimiu (Archives of the State Museum of Oswiecim)

DIN Deutsches Institut für Normung (German Institute for Standardization)

DPA Deutsche Presse-Agentur (German Press Agency)

GARF Gosudarstvenny Archiv Rossiskoy Federatsii Nationalarchive der Russischen Föderation (National Archive of the Russian Federation, Moscow)

IMT International Military Tribunal

RGVA Rossiiiskii Gosudarstvennii Vojennii Archiv (Russian National War Archives)

12.2. Excerpts from Statements by Horst Fischer

The documents reproduced below originate from an attachment to the protocol of the expert testimony given by the Viennese professor for contemporary history Dr. Gerhard Jagschitz during the 3rd to 5th sessions of the penal trial against Gerd Honsik (April 29, April 3 and May 4, 1992, ref. 20e Vr 14184 and Hv 5720/90, District Court Vienna, Austria). Honsik’s defense lawyer Dr. Herbert Schaller had the courtesy to give me a photocopy of the protocol. Jagschitz did not reveal where he found these documents, but in his dissertation about the show trial against Fischer, Dirks cites several other interrogation protocols and personal statements by Fischer from the same period. We may therefore assume that the documents reproduced here are located in the same or closely related archival files (Dirks, passim, cites the German Bundesarchiv Berlin, DP3 IA – 3/66; and the Bundesbeauftragten für die Unterlagen des Staatssicherheitsdienstes der ehemaligen DDR, ZUV 84, HA Vols. 5, 7f.; GA Vols. 1f., 6, 8).

Fischer’s statements contain a number of peculiarities which are worth a closer look and a few remarks. First of all, he evidently knew only about one farmhouse used as a gas chamber, although during the time period mentioned
by Fischer (late 1942/early 1943), two of them are said to have existed (Bunkers 1 and 2). Furthermore, his use of the term “Sauna” to describe the building at issue deviates from the usual witness statements. Interestingly, close to the location at Birkenau where Bunker 1 is said to have been, a disinfection facility and sauna for the guard detail was installed in late 1942 in an existing building (maybe even a farmhouse; see Mattogno 2016j, pp. 204f.).

His claims about the amount of Zyklon B used – each time only one can of 2 kg – as well as his claim that there was only one gas chamber in that farmhouse (he always uses the singular) contradicts the orthodox version based on witness testimony, according to which both bunkers had several gas chambers which were used simultaneously, which would have required the introduction of Zyklon B into each room, so that one can would not have been enough.

Just as erroneous is Fischer’s claim that the inmates could have started dragging out the corpses after only 15 minutes of natural ventilation.

Finally, his flawed description of the alleged homicidal gas chamber in Crematorium II, which he calls Crematorium I (as was common practice during the war) – 10 m · 10 m with two opposite doors rather than 7 m · 30 m with only one door – may simply be attributed to his flawed recollections. His claim, however, that the victims became unconscious in the gas chamber within seconds after Zyklon B had be thrown in is absolutely impossible, just like his claim that after only a few seconds the victims had a hard time breathing (Dirks 2006, p. 109). However, such erroneous views about the speed with which Zyklon B operates reminds us of Nyiszli’s claims that the poison gas filled the room “within a few seconds.”

In a similar vein is a statement made by Fischer during an interrogation on Dec. 1, 1965. According to this, the SS garrison physician Dr. Eduard Wirths allegedly explained to him the chemical properties of the gas which “instantly changes into the gaseous state as soon as it gets in contact with oxygen” (Dirks 2006, p. 101). Wirths would never have stated such nonsense.

All of this suggests that Fischer’s statements are a convoluted mixture of what he experienced himself but remembers improperly, and of what he heard and read elsewhere. Some of it might even be completely made up out of thin air in order to satisfy the merciless expectations of his prosecutors and future executioners, for at the end Fischer was sentenced to death and decapitated.
Vernichtungsprotokoll

des Beschuldigten

Dr. FISCHER, Horst
geb. am 31. 12. 1912 in Dresden
Beruf: Arzt in eigener Praxis
wohnt: Spreehagen, Lutzwall 183

Frage: Wie oft haben Sie an Vernichtungen von Häften in der als "Sauna" getarnten Gaskammer in Birkenau teilgenommen?


Frage: Aus welchen Gründen und wie lange hatten Sie sich als diensthabender SS-Arzt während des Vernichtungsvorganges am Tatort aufzuhalten?

Antwort: Als diensthabender SS-Arzt hatte ich die Aufgabe, die SS-Desinfektoren bei der Einschließung des Gases "Zyklon B" in die Gaskammer zu beaufsichtigen. Ich stand in


_Frage:_ Bestand Ihre Aufgabe als SS-Arzt auch darin den Tod der Häftlinge festzustellen?

_Antwort:_ Mir ist nicht erinnerlich, daß ich als SS-Arzt die Aufgabe hatte, den Tod der Häftlinge in der Gaskammer festzustellen.

_Frage:_ Schildern Sie, auf welche Weise die als "arbeitsunfähig" ausgesonderten Häftlinge in die "Sauna" gebracht und vernichtet wurden?

_Antwort:_ Wie ich bereits in früheren Vernehmungen ausgesagt habe, waren die an der "alten Ramp", der Steuerlager 1 als "arbeitsunfähig" ausgesonderten deportierten mit Lastkraftwagen zum Gelände der "Sauna" nach Birkenau transportiert und vor der dort befindlichen Auskleidebaracke abgeladen worden. In der Zeit von Ende 1942 bis Ende Mai 1943 betrug die Zahl der mit Bahntransporten eingelieferten Menschen durchschnittlich pro Transport bis zu 1500 deportierte, wovon nach meiner Schätzung zwischen 300 und 900 als "arbeitsunfähig" für die Gaskammer ausgewählt wurden. Die Zahl war abhängig von der Stärke des Transportes.


**Frage:** An welche SS-Angehörigen, die an diesen Vorgängen beteiligt waren, erinnern Sie sich noch?

**Antwort:** Ich erinnere mich an die SS-Hauptsturmführer AMBER und SCHWARZ sowie den SS-Untersturmführer SCHWARZ HUBER - die waren Lagerführer im KZ Auschwitz - und andere mir namentlich nicht bekannte SS-Untersturmführer, die abwechselnd als diensthabende Lagerführer an den Vernichtungsaaktionen teilnahmen. An Tätigkeiten war meiner Erinnerung nach die SS-Führer nicht beteiligt, haben diese aber auch nicht verhindert. Sie haben die mir namentlich nicht bekannten SS-Unterführer und Blockführer dazu ermuntert, indem sie diese durch Zutritte ermutigten. Ich weiß noch, daß ich wie alle anderen beteiligt

[Signature]
Er stieg nun die Leiter hinunter und nahm die Gasmaske ab. Die Holzkiste wurde wieder verschlossen. Ich glaube, daß die leere Büchse mit in die Holzkiste gelegt wurde. Wir warteten nun den Tod der Häftlinge ab.

*Frage:* Welche Menge an "Zyklon B" wurde für die Vernichtung der Menschen in der Gaskammer eingesetzt?


*Frage:* Wie wurde der Tod der Häftlinge in der Gaskammer festgestellt?


Nach Schließen der Klappe waren vereinzelte Schreie und schwaches Klopfen an der Tür und nach 1 bis 2 Minuten ein tiefes räumelndes Atmen zu hören, das ganz allmählich schwächer und leiser wurde und schließlich verstummte. Damit war auch der Tod eingetreten.

**Frage:** Haben Sie während des Vergasungsvorganges Einblick in die Gaskammer genommen?


**Frage:** Wann und unter welchen Umständen wurde mit der Räumung der Gaskammer begonnen?

**Antwort:** Soweit ich mich erinnere, wurde die Gaskammer nach etwa 20 Minuten geöffnet, wenn anschließend eine weitere Vernichtungsaktion durchgeführt wurde. Sonst verblieben die Leichen in der Gaskammer und wurden später geräumt, worüber ich keine Kenntnis habe, da ich dann nicht zugegen war.

Germar Rudolf – The Chemistry of Auschwitz

Persönliche Befreiung

an der Blindseite.

Am 4. Mai 1945

Die Begebenheiten usw. usw. usw. usw.
391

Germar Rudolf: The Chemistry of Auschwitz

[Handwritten text in German]

Die in der Nähe der Leichenbunker hier gegründeten alte Türen für die Anfaßgier...

12.3. Documents

<table>
<thead>
<tr>
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<td>Bemerkung:</td>
<td>Die in Rechnung gestellten Massen sind nur abgerundet angegeben und werden in der Schlussrechnung berücksichtigt.</td>
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<tr>
<td>1.</td>
<td>Bodenaushub der Angrube bis 2,00 m Tiefe</td>
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<td>2.</td>
<td>Bodenhinterfüllung</td>
<td>600 cbm 2,70 1.620,--</td>
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<td>3.</td>
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<td>680 cbm 4,48 3.046,40</td>
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<td>Kiessuffallung</td>
<td>1160 cbm 1,45 2.682,--</td>
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<td>6.</td>
<td>dgl. der Kellerwände</td>
<td>500 cbm 20,40 10.200,--</td>
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<td>7.</td>
<td>dgl. der Kontrollschächte</td>
<td>11 cbm 22,50 247,50</td>
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<td>Öffnungen angelegt</td>
<td>19 cbm 10,40 197,60</td>
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<td>12 cm starke Ziegelwand</td>
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<td>10.</td>
<td>Ziegelsauerwerk des Erdgeschosses</td>
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<td>Öffnungen angelegt</td>
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<td>12 cm starke Kellerwände</td>
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<td>Öffnungen angelegt</td>
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<td>14.</td>
<td>Ziegelsauerwerk der Siebel</td>
<td>17 cbm 21,40 363,80</td>
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</table>

**Übertrag:**

Dresdner Bank Kottowitz

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*Document 1, continued*
| 15. 15 | Hauptgasfalle | lfdm | 170,- | 2,75 | 457,50  |
| 16. 16 | Sperrerausmauerung |  | 170,- | 1,30 | 221,--  |
| 17. 17 | Trennwinde 6 cm stark | qm | 22,- | 3,50 | 64,--  |
| 18. 18 | Fensterrüpel 25/38 cm st. lfdm | 175,- | 3,30 | 115,50  |
| 19. 19 | Entlüftungsleit |  | 175,- | 3,50 | 126,--  |
| 20. 20 | Entlüftungsschacht 30/40 cm 1 lfdm |  | 5,- | 25,80 | 129,--  |
| 21. 21 | Eingangspodest 4,50/1,0 m | stk. | 1 | 87,00 | 87,--  |
| 22. 22 | Eingangspodest 3,20/1,0 m |  | 1 | 55,-- | 55,--  |
| 23. 23 | Schleppkanke |  | 56,- | 2,20 | 123,20  |
| 24. 24 | Fenster 1,10/1,68 m grob | stk. | 47 | 6,00 | 282,--  |
| 25. 25 | dezgl. 0,60/0,90 |  | 4 | 2,70 | 11,90  |
| 26. 26 | Rundfenster eingesetzt |  | 2 | 7,70 | 51,00  |
| 27. 27 | Türrahmen 1,80/2,20 m groß |  | 2 | 11,-- | 22,--  |
| 28. 28 | dezgl. 2,35/2,20 m groß |  | 2 | 12,40 | 24,80  |
| 29. 29 | Eingangsleit 0,20/1,0 m groß eingesetzt |  | 2 | 5,40 | 17,60  |
| 30. 30 | dezgl. 1,40/2,10 m groß |  | 1 | 5,50 | 5,50  |
| 31. 31 | dezgl. 1,00/2,10 m groß |  | 6 | 4,10 | 24,60  |
| 32. 32 | dezgl. 0,80/2,10 m groß |  | 4 | 4,00 | 16,00  |
| 33. 33 | dezgl. 0,60/2,10 m groß |  | 3 | 6,90 | 20,40  |
| 34. 34 | dezgl. 0,20/2,00 m groß |  | 4 | 4,40 | 17,60  |
| 35. 35 | Grundmauerputz cm 226,-- | 1,20 | 277,20  |
| 36. 36 | Wandputz im Keller qm 222,-- | 1,70 | 479,40  |
| 37. 37 | dezgl. im Erdgeschoß cm 1050,- | 1,70 | 1705,-  |
| 38. 38 | dezgl. des Daches cm 179,- | 2,55 | 266,50  |
| 39. 39 | Zementscheiben cm 490,- | 2,70 | 1329,--  |
| 40. 40 | Rabitskanale qm 50,- | 12,40 | 74,40  |
| 41. 41 | Deckenputz im Keller qm 120,- | 1,75 | 210,--  |
| 42. 42 | dezgl. im Erdgeschoß cm 670,-- | 1,85 | 1299,50  |
| 43. 43 | Wand- u. Deckenflächen 3760 qm 7760 qm 350,-- |  |  |  |

**II. a. Putzarbeiten.**

| 44. 44 | Wand- u. Deckenflächen unterhalten 3760 qm 7760 qm | 350,-- |  |  |

**II. b. Betriebsbarbeiten.**

| 45. 45 | Zementstreif im Keller cm 730,- | 2,30 | 2034,--  |
| 46. 46 | dezgl. im Erdgeschoß cm 520,- | 2,30 | 1436,--  |
| 47. 47 | Stufen 18/25 en Steigung m 16,- | 1,75 | 31,30  |
| 48. 48 | dezgl. 17/30 cm 29,- | 1,50 | 46,40  |

**Übertrag: 52.527,80**
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<td>22,5 m Stufen 18/26 cm viertelgewandelt</td>
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<td>50</td>
<td>820 m glatter Zementestrich</td>
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<td>51</td>
<td>6,8 m Rand der Treppe</td>
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**Übertrag:**

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<td>2350 m Isolierung der Wände lt. Nachtragzusatz vom 10.12.42</td>
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<td>53</td>
<td>820 m Isolierung d. Kellerdecke</td>
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<td>54</td>
<td>180 m kleinerer Fundament</td>
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<td>654 m äußere Isolierungsanstrich</td>
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**IV. Beton- u. Eisenbetonarbeiten:**

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<td>500 m Stempfsteine des Kellerbodens</td>
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<td>57</td>
<td>563 m Stampfbeton 10 cm stark</td>
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<td>58</td>
<td>520 m Stampfbeton</td>
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<td>59</td>
<td>157 m Betonfundamente 1:7</td>
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<td>60</td>
<td>28 Stück Blocksteine der Kellertrappe</td>
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<td>61</td>
<td>15 Stück desgl. 1,00 m breit</td>
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<td>62</td>
<td>820 m Hohlsteindecken u. d. Keller</td>
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<td>63</td>
<td>788 m desgl. d. d. Erdgeschoß</td>
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<td>64</td>
<td>240 m Eisenbetonunterlegszenie</td>
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<td>65</td>
<td>94 m Eisenbetonstürzen</td>
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<td>66</td>
<td>4,5 m Massivdecken</td>
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<td>67</td>
<td>7,5 m Eisenbetontrappe</td>
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<td>6,0 m Eisenbetonstürzen</td>
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<td>69</td>
<td>19 Stück Stützenfundamente</td>
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<td>70</td>
<td>12,5 m Fenster u. Türtüre 52 mm st.</td>
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<td>71</td>
<td>11,3 m desgl. 38 cm st.</td>
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<td>72</td>
<td>100,6 m desgl. 25 cm st.</td>
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<td>73</td>
<td>14,4 m desgl. 12 cm st.</td>
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<tr>
<td>74</td>
<td>120 m Feldbahngleis einbetoniert</td>
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#### Text of Document 2:

HUTA
Hoch- und Tiefbaugewerbeunternehmen
Niederlassung Kattowitz

An die
Zentrallaufgebung der Waffen-SS und Polizei,
Auschwitz,

Datum: 10. Mai 1943

---

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<th>Steinmänner</th>
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Rechnung Nr. 2

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Hoch- und Tiefbaugewerbeunternehmen
Niederlassung Kattowitz

An die
Zentrallaufgebung der Waffen-SS und Polizei,
Auschwitz,

Datum: 10. Mai 1943

---

<table>
<thead>
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<th>Nr. der Kontrolle</th>
<th>Gegenstand</th>
<th>Menge</th>
<th>Preis je Stück</th>
<th>Betrag</th>
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<td>1,646,4</td>
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<td>Lieferung von 38,8 kg</td>
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<td>1,45</td>
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<td>Ablage der Kontrollschächte</td>
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<td>135,20</td>
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<td>9</td>
<td>12 cm starke Ziegelwände</td>
<td>40 cm</td>
<td>3,50</td>
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<td>Öffnungen angelegt</td>
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<td>Ziegelmauerwerk d. Siegel</td>
<td>21 cm</td>
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Dresden Bank Kattowitz

Datum: 10. Mai 1943

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Betreff: Gutachten des Bauamtes über den Bau der Crematorium II.

Datum: 10. Mai 1943

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Betreff: Gutachten des Bauamtes über den Bau der Crematorium II.

Datum: 10. Mai 1943

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Betreff: Gutachten des Bauamtes über den Bau der Crematorium II.

Datum: 10. Mai 1943
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<td>Schüttkante</td>
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<td>Fenster 1,10/1,68 gr. eingesetzt Stk.</td>
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<td>desgl. 0,60/0,90 &quot; &quot; Stk.</td>
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<td>desgl. Rundfenster 0,70 gr. &quot; &quot;</td>
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<td>28. 36</td>
<td>desgl. 2,05/1,10 groβ Stk.</td>
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<tr>
<td>32. 40</td>
<td>desgl. 0,90/2,10 m groβ &quot; &quot;</td>
<td>4</td>
<td>15,00</td>
<td>60,00</td>
</tr>
<tr>
<td>33. 41</td>
<td>desgl. 0,80/2,10 m groβ &quot; &quot;</td>
<td>4</td>
<td>14,40</td>
<td>57,60</td>
</tr>
<tr>
<td>34. 42</td>
<td>desgl. 2,00/1,90 m groβ &quot; &quot;</td>
<td>3</td>
<td>20,40</td>
<td>61,20</td>
</tr>
<tr>
<td>35. 43</td>
<td>desgl. 1,00/2,00 m groβ &quot; &quot;</td>
<td>4</td>
<td>17,60</td>
<td>70,40</td>
</tr>
<tr>
<td>36. 52</td>
<td>dacheck Grundmauerputz qm</td>
<td>226,30</td>
<td>226,30</td>
<td>226,30</td>
</tr>
<tr>
<td>37. 53</td>
<td>Wandputz im Keller qm</td>
<td>282,40</td>
<td>282,40</td>
<td>282,40</td>
</tr>
<tr>
<td>38. 54</td>
<td>desgl. im Erdgeschoß qm</td>
<td>1050,00</td>
<td>1,70</td>
<td>1,700,00</td>
</tr>
<tr>
<td>39. 55</td>
<td>desgl. des Giebels qm</td>
<td>1370,00</td>
<td>2,05</td>
<td>2,755,50</td>
</tr>
<tr>
<td>40. 56</td>
<td>Zementsockelputz qm</td>
<td>490,00</td>
<td>3,70</td>
<td>1,743,00</td>
</tr>
<tr>
<td>41. 58</td>
<td>Rauchkanal qm</td>
<td>60,00</td>
<td>12,40</td>
<td>148,80</td>
</tr>
<tr>
<td>42. 59</td>
<td>Deckenputz im Keller qm</td>
<td>120,00</td>
<td>1,75</td>
<td>210,00</td>
</tr>
<tr>
<td>43. 60</td>
<td>desgl. im Erdgeschoß qm</td>
<td>570,00</td>
<td>1,85</td>
<td>1,063,50</td>
</tr>
<tr>
<td>44. 64</td>
<td>Wand u. Deckenflächen unterhalten qm</td>
<td>760,00</td>
<td>350,00</td>
<td>350,00</td>
</tr>
</tbody>
</table>

IIb. Estricharbeiten.

45. 65 | Zementestrich im Keller qm | 730,00 | 2,30 | 1,641,00     |
| 46. 66 | desgl. im Erdgeschoß qm | 230,00 | 2,80 | 644,00       |
| 47. 67 | Stufen 18/25 cm Steigung m | 16,75 | 16,75 | 16,75        |
| 48. 68 | desgl. 17/30 cm " " m | 16,60 | 46,40 | 251,00       |

Table_footnote: Pauschal. 1.348
<table>
<thead>
<tr>
<th>Nr.</th>
<th>Menge</th>
<th>Gegenstand</th>
<th>RE</th>
<th>NE</th>
<th>TE</th>
<th>GE</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>69</td>
<td>m Stufen 18/26 umgewandelt</td>
<td>1,80</td>
<td>2,10</td>
<td>2,90</td>
<td>3,90</td>
</tr>
<tr>
<td>50</td>
<td>72</td>
<td>cm glatter Zementstreif</td>
<td>8,00</td>
<td>12,10</td>
<td>14,00</td>
<td>19,00</td>
</tr>
<tr>
<td>51</td>
<td>76</td>
<td>8,8 cm Rutsche der Treppe</td>
<td>1,80</td>
<td>2,40</td>
<td>2,90</td>
<td>3,90</td>
</tr>
<tr>
<td>52</td>
<td>77</td>
<td>330 cm Isolierung der Wanne 11. Nachrüstung</td>
<td>2,00</td>
<td>2,70</td>
<td>3,40</td>
<td>4,40</td>
</tr>
<tr>
<td>53</td>
<td>78</td>
<td>820 cm Isolierung der Kellerdecke</td>
<td>6,00</td>
<td>7,40</td>
<td>9,00</td>
<td>11,00</td>
</tr>
<tr>
<td>54</td>
<td>79</td>
<td>180 cm desgl. der Fundamente</td>
<td>0,00</td>
<td>0,10</td>
<td>0,20</td>
<td>0,30</td>
</tr>
<tr>
<td>55</td>
<td>80</td>
<td>354 cm desgl. der Kellerisolationenstreifen</td>
<td>0,80</td>
<td>1,30</td>
<td>1,80</td>
<td>2,30</td>
</tr>
<tr>
<td>56</td>
<td>81</td>
<td>500 cm Stampfbeton des Kellerbodens</td>
<td>16,50</td>
<td>20,50</td>
<td>25,00</td>
<td>31,00</td>
</tr>
<tr>
<td>57</td>
<td>82</td>
<td>563 cm Stampfbeton 10 cm stark</td>
<td>2,70</td>
<td>3,70</td>
<td>4,50</td>
<td>5,50</td>
</tr>
<tr>
<td>58</td>
<td>82a</td>
<td>220 cm Magerbeton</td>
<td>1,00</td>
<td>1,20</td>
<td>1,40</td>
<td>1,80</td>
</tr>
<tr>
<td>59</td>
<td>83</td>
<td>67 cm Betonfundamente 1:7</td>
<td>1,70</td>
<td>2,40</td>
<td>3,00</td>
<td>3,60</td>
</tr>
<tr>
<td>60</td>
<td>85</td>
<td>28 Stück Blockstufen der Kellerstreppe</td>
<td>9,00</td>
<td>12,00</td>
<td>15,00</td>
<td>19,00</td>
</tr>
<tr>
<td>61</td>
<td>86</td>
<td>15 Stück desgl. 1,00 m breit</td>
<td>8,20</td>
<td>10,20</td>
<td>12,50</td>
<td>15,50</td>
</tr>
<tr>
<td>62</td>
<td>87</td>
<td>820 cm Isolierung des Kellerdecke</td>
<td>13,50</td>
<td>17,00</td>
<td>20,00</td>
<td>25,00</td>
</tr>
<tr>
<td>63</td>
<td>88</td>
<td>785 cm desgl. z.B. Erdgeschoss</td>
<td>11,40</td>
<td>14,20</td>
<td>17,00</td>
<td>21,00</td>
</tr>
<tr>
<td>64</td>
<td>89</td>
<td>240 cm Eisenbetruntzüge</td>
<td>16,50</td>
<td>20,50</td>
<td>25,00</td>
<td>30,00</td>
</tr>
<tr>
<td>65</td>
<td>90</td>
<td>24 cm Eisenbetonstüten</td>
<td>17,20</td>
<td>21,00</td>
<td>26,00</td>
<td>32,00</td>
</tr>
<tr>
<td>66</td>
<td>91</td>
<td>5,5 cm Massivdecken</td>
<td>11,50</td>
<td>14,50</td>
<td>18,00</td>
<td>22,00</td>
</tr>
<tr>
<td>67</td>
<td>92</td>
<td>7,5 cm Eisenbetontreppe</td>
<td>16,50</td>
<td>21,00</td>
<td>25,50</td>
<td>31,00</td>
</tr>
<tr>
<td>68</td>
<td>93</td>
<td>6,0 cm Eisenbetonstüten</td>
<td>19,40</td>
<td>24,00</td>
<td>30,00</td>
<td>38,00</td>
</tr>
<tr>
<td>69</td>
<td>94</td>
<td>19 Stück Stützungsfundamente</td>
<td>5,50</td>
<td>7,50</td>
<td>9,50</td>
<td>11,50</td>
</tr>
<tr>
<td>70</td>
<td>95</td>
<td>18,5 cm Fenster und Türrahmen 52 cm st.</td>
<td>9,80</td>
<td>13,00</td>
<td>16,50</td>
<td>21,00</td>
</tr>
<tr>
<td>71</td>
<td>95a</td>
<td>11,5 cm desgl. 38 cm stark</td>
<td>9,10</td>
<td>12,50</td>
<td>15,00</td>
<td>19,00</td>
</tr>
<tr>
<td>72</td>
<td>95b</td>
<td>100 cm desgl. 25 cm stark</td>
<td>8,25</td>
<td>10,20</td>
<td>12,50</td>
<td>15,50</td>
</tr>
<tr>
<td>73</td>
<td>95c</td>
<td>14 cm desgl. 12 cm stark</td>
<td>7,70</td>
<td>9,60</td>
<td>11,50</td>
<td>14,00</td>
</tr>
<tr>
<td>74</td>
<td>96</td>
<td>10 m Feldbahngleis einbetonierte</td>
<td>5,50</td>
<td>7,00</td>
<td>8,50</td>
<td>10,00</td>
</tr>
</tbody>
</table>

Zusammen: 103.400,00
| VGB. Nr. | Betrag | Zeit der Ausführung | Umfang | Gegenstand | Geldbetrag
|---------|--------|---------------------|--------|------------|-----------
|         |        |                     |        |            | im einzelnen | im Doppelp.
|         |        |                     |        |            | €         | €         |
| Fachtechnisch richtig! | Fachtechnisch richtig! | Fachtechnisch richtig! | Fachtechnisch richtig! | Fachtechnisch richtig! | Fachtechnisch richtig! |
| Auftrag d. 13. 2. 1943 | Auftrag d. 13. 2. 1943 | Auftrag d. 13. 2. 1943 | Auftrag d. 13. 2. 1943 | Auftrag d. 13. 2. 1943 | Auftrag d. 13. 2. 1943 |
| Nachgerechnet am 13. 2. 1943 | Nachgerechnet am 13. 2. 1943 | Nachgerechnet am 13. 2. 1943 | Nachgerechnet am 13. 2. 1943 | Nachgerechnet am 13. 2. 1943 | Nachgerechnet am 13. 2. 1943 |
| Herauf wurde eine | Herauf wurde eine | Herauf wurde eine | Herauf wurde eine | Herauf wurde eine | Herauf wurde eine |
Sonderbefehl

Ein heute mit leichten Vergiftungsercheinungen durch Blausäure aufgetretener Krankheitsfall gibt Veranlassung, allen an Vergasungen Beteiligten und allen übrigen Angehörigen bekanntzugeben, daß insbesondere beim Öffnen der vergasten Räume von Angehörigen ohne Maske wenigstens 5 Stunden hindurch ein Abstand von 15 Metern von der Kammer gewahrt werden muß. Hierbei ist besonders auf die Windrichtung zu achten.
Das jetzt verwendete Gas enthält weniger beigesetzte Geruchsstoffe und ist daher besonders gefährlich.
Der Standortarzt Auschwitz lehnt die Verantwortung für eintretende Unglücksfälle in den Fällen ab, bei denen von Angehörigen diese Richtlinien nicht eingehalten werden.

gez.: HÖS

Obersturmbannführer und Kommandant,

F.d.R.:

Hauptsturmführer und Adjutant

Verteiler:

7 Stück an: Fe-Stuba.
7 " " Verwaltung
3 " " Ablage
2 " " Bauleitung
1 " " Poli. Abt.
1.5 " " 9./H.T.-Stuba.
1 " " Landwirtschaft
1 " " Reitstall
1 " " Schutzhaftlager
1 " " FKL
1 " " Gerichtsoffizier
1 " " Personalabteilung
1 " " Haus der Waffen-SS
Abschrift A. Abschrift

Der H-Untersuchungsleiter
Auschwitz, am 10.12.43.

Betreff: Entwesen von Baracken
Zusatz: Meldung des H-Oscha. Klehr
Anlagen: keine

An den
Leiter der Bauinspektion
der Waffen-SS und Polizei "Schlesien"
vorläufiger Sitz

Auschwitz.

Nach Meldung des von mir beauftragten Desinfektors, H-Oberscharführer E 1 e h r hat trotz eingehender Belehrung und Verwarnung ein Zivilarbeiter am 9.12.43, mittels eines Nachschlüssels eine Unterkunftsbarracke aufgeboben, die eben entwesen wurde, und konnte nur zufällig im letzten Augenblick vor dem Betreten der Barracke und damit vor seinem sicherem Tod bewahrt werden.

Der H-Oberscharführer Pantke wurde durch H-Oberscharführer Klehr eingehendst auf die mit der Entwesen verbundenen Gefahrenhinweise gewiesen, trotzdem hat ein Zivilarbeiter versucht, die soeben entwesente Barracke zu betreten.

Der H-Standortarzt Auschwitz weist auf den Standortbefehl hin, wonach bis zur Freigabe durch den von mir beauftragten Desinfektor, H-Oberscharführer Klehr keine Unterkunftsbarracke betreten werden darf und vor jeder entwesenen Unterkunft bis zur Freigabe ein Posten aufzustellen ist.

Der H-Standortarzt
Auschwitz
gez. Dr. Wirths
H-Hauptsturmführer

Bt gb. Nr. 723/43/Ins p. W/H.
18.12.43.

U. an die
Zentralbauleitung der Waffen-SS
und Polizei Auschwitz

Das vorliegende Schreiben ist zur Kenntnis zu nehmen. Es ist in Zukunft genau entsprechend den Weisungen der zuständigen Stellen in Bezug auf Sicherung zu verfahren.

Der Leiter der Bauinspektion
der Waffen-SS und Polizei "Schlesien"
gez. Bischoff
H-Sturmbannführer.
Verteiler: 1.) Bt g. E l u. Landw.
2.) KOL.
3.) Rekreationen
4.) Bt g. Industriebauten
5.) Abt g. Bauwirtschaft

F.d.R.d.A.
gez. H-Oscha. Kofler
F.d.R.d.A.
<table>
<thead>
<tr>
<th>Aufstellung</th>
</tr>
</thead>
<tbody>
<tr>
<td>Über die im E. und K.G.L. Auschwitz einge-</td>
</tr>
<tr>
<td>bauten Entwasungsanlagen, Bäder und Desin-</td>
</tr>
<tr>
<td>fektionsapparate.</td>
</tr>
<tr>
<td>a) im E.L. (Schutzhaftlager)</td>
</tr>
<tr>
<td>Block 1: 1 Heißluftentwasungsanlage, Fabrikat</td>
</tr>
<tr>
<td>Fa. Klein, mit einer Tagesleistung für</td>
</tr>
<tr>
<td>und ca. 3 600 Decken;</td>
</tr>
<tr>
<td>Block 2: 1 große Brausebadanlage und Wuschlücke,</td>
</tr>
<tr>
<td>zwischen Block 1 und 2</td>
</tr>
<tr>
<td>Block 3: im Obergeschoß 1 Hlauk-Entwasungsanlage</td>
</tr>
<tr>
<td>und ca. 20 000 Wäschestücke</td>
</tr>
<tr>
<td>Block 26: Effektenkammergebäude, 1 Heißluftanlage</td>
</tr>
<tr>
<td>Entwasungsgebäude bei D.A.W. hinter Bauhof:</td>
</tr>
<tr>
<td>Hlaukentwasungsanlage für ca. 30 000</td>
</tr>
<tr>
<td>Wäschestücke, Decken usw.</td>
</tr>
<tr>
<td>Zivilarbeiterentwasungsbaracke:</td>
</tr>
<tr>
<td>1 Heißluftentwasungsanlage, Fabrikat</td>
</tr>
<tr>
<td>Firma Hoheihm, für eine Tagesleistung von</td>
</tr>
<tr>
<td>mit großer Brausebadanlage und Desin-</td>
</tr>
<tr>
<td>fektionsapparat, ortsfest eingebaut</td>
</tr>
<tr>
<td>Leistung (24 h)</td>
</tr>
<tr>
<td>1600 Mann</td>
</tr>
<tr>
<td>1400 Mann</td>
</tr>
<tr>
<td>2000 Mann</td>
</tr>
<tr>
<td>2000 Mann</td>
</tr>
<tr>
<td>b) im K.G.L.</td>
</tr>
<tr>
<td>E.W. 6a und 6b</td>
</tr>
<tr>
<td>2 Heißluftentwasungsanlagen, Fabrikat</td>
</tr>
<tr>
<td>Firma Hoheihm für eine Tagesleistung von</td>
</tr>
<tr>
<td>zusammen</td>
</tr>
<tr>
<td>mit 2 großen Brausebädern, Sauna und</td>
</tr>
<tr>
<td>2 ortsfesten Desinfectionsapparaten sowie</td>
</tr>
<tr>
<td>1 Hlaukammer, Tagesleistung 5000 Decken</td>
</tr>
<tr>
<td>Außerdem stehen 4 Stück fahrbare Dampf-</td>
</tr>
<tr>
<td>Desinfectionsanlagen zur Verfügung mit</td>
</tr>
<tr>
<td>einer durchschnittlichen Tagesleistung</td>
</tr>
<tr>
<td>für je 500 Mann =</td>
</tr>
<tr>
<td>2000 Mann</td>
</tr>
<tr>
<td>Im Bau sind begriffen: K.G.L.</td>
</tr>
<tr>
<td>1 große massive Entwasungsgebäude</td>
</tr>
<tr>
<td>mit 4 Entwasungskammern (Heißluft), Fabrikat</td>
</tr>
<tr>
<td>Trop &amp; Söhne, mit großem Brausebad</td>
</tr>
<tr>
<td>7000 Mann</td>
</tr>
</tbody>
</table>

*Table 1*

**Table 1: Tabellarische Übersicht**

<table>
<thead>
<tr>
<th>Entwasungsgebäude</th>
<th>Leistung (24 h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Heißluftentwasungsanlage, Fabrikat Fa. Klein</td>
<td>1600 Mann</td>
</tr>
<tr>
<td>1 große Brausebadanlage und Wuschlücke</td>
<td>1400 Mann</td>
</tr>
<tr>
<td>1 Hlauk-Entwasungsanlage</td>
<td>1400 Mann</td>
</tr>
<tr>
<td>1 Heißluftanlage</td>
<td>2000 Mann</td>
</tr>
</tbody>
</table>

**Table 2:**

<table>
<thead>
<tr>
<th>Zivilarbeiterentwasungsbaracke</th>
<th>Leistung (24 h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Heißluftentwasungsanlage, Fabrikat Firma Hoheihm</td>
<td>2000 Mann</td>
</tr>
</tbody>
</table>

**Table 3:**

<table>
<thead>
<tr>
<th>Entwasungsgebäude</th>
<th>Leistung (24 h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Heißluftentwasungsanlagen, Fabrikat Firma Hoheihm</td>
<td>4000 Mann</td>
</tr>
</tbody>
</table>

**Table 4:**

<table>
<thead>
<tr>
<th>Entwasungsgebäude</th>
<th>Leistung (24 h)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 große massive Entwasungsgebäude</td>
<td>7000 Mann</td>
</tr>
</tbody>
</table>
und 3 ortsfesten Dampfdeinfektionsanlagen
(Fertigstellung ca. Anfang September
1943).

Zigeunerlager: KL 1
1 Entwaschungsbaracke mit 4 Stück elektrisch betriebenen Heißluftanlagen,
Fabrikat: Umluftapparatebau G.m.b.H., Berlin-Charlottenburg; mit Brausebad-
anlage
(Fertigstellung der Anlage: 15. 6. 1943).

Ferner sind im Auftrag gegeben:
1 fahrbare elektrisch betriebene Kurzwellen-Entwaschungsanlage für eine stål,
Leistung von = 625 =
Die Lieferung soll ca. Anfang Oktober erfolgen.

1 stationäre elektrisch betriebene Kurzwellen-Entwaschungsanlage (für den
Einbau in Aufnahmegebäude KL. bestimmt)
für eine stål. Leistung von = 625 Mann = 15 000 Mann
Die Lieferung soll ca. Anfang Oktober erfolgen.

Für j-Mannschäften stehen zur Verfügung:
a) Im 6-Revier KL. eine Badestehle mit 4 Wannen
und 9 Brausebädern, außerdem 10 Waschbecken;
b) Im der Bauleitungsunterkunft KL. 2 Wannenbäder;
c) Im K.O.1.: 1 provisorische Truppenruhmvana mit Bad
und einer Heißluftentwaschungsanlage, Fabrikat
Firma Kochheim für eine Truppenleistung von
2000 Mann

d) 3 zentralbeheizte Truppenwaschbaracken mit je
36 Waschbecken und je 24 Brause;
e) Für die Truppe im K.O. wird fernem ein massives
Gebäude erbaut, welches enthält: 1 elektrisch
betriebene Umluftentwaschungsanlage für
1 Dampfdeinfektionsanlage
1 Sauna mit Brausegelegenheit.
(Fertigstellung ca. Ende August.

Aufgestellt:
Auschwitz, den 30.7.1943.
Jahrlein
S.A.

Document 6, continued.
Document 7: Höss Trial, Vol. 11, p. 89 (list of orders from the Central Construction Office to the metalworking shop regarding the crematoria, compiled by Jan Sehn). (Red lines added.)


Wykonawcy: Walczyński. Ukończono: 29.4.43.


Wykonawcy: Walczyński. Ukończono: 3.5.43.

27.4.43. Nr. 353. Zentralbauleitung K.G.L. Krematorium 4 u. 5 BW. 30 b und c. Preßdienst: 12 Stück Fenstergitter 50 x 70 cm. - 4 Stück Fenstergitter 50 x 100 cm. - 6 Stück Oberlichte cca 150 x 60 cm. - 2 Stück Oberlichte cca 110 x 60 cm. Lieferzeit: 4.5.43. Bautlg. Auftrag Nr. 202 vom 27.4.43. Wykonawcy: Rygwaik. Ukończono: 30.4.43.


15.5.43. Nr. 376. K.G.L. Krematorium III, BW. 30 a. Preßdienst: 2 Stück Treppengeländer & 7.70 m lang. 1 m hoch /Siehe Skizze 1 u. 2/. 1 Stück Treppengeländer & 12.20 lang. 1 m hoch /Siehe Skizze 3/ für die 2-ten Kellertreppen. 2 Stück Kaminbänchen 125 cm für Häfl. Unterkunft.

Document 8: Höss Trial, Vol. 11, p. 92, as before. (Red lines added.)
wykonawaliśmy tam drobniejsze reparacje. W związku z tym pracowali zanieczyszczeni w sonderkommando obsługującym I Krematorium. Przypominam sobie, że pewnego razu pikiem z Mietkiem, Józkiem i Wackiem królka na generatorze. Ponieważ w tym czasie ważył prawie do pokoju przed komórką Lechmann z karabinem, nie mogłem już wyjść i musiałem przeczesować w ukryciu ze pięcem, aż Lechmann wyjści z krematorium. Z ukrycia tego widziałem, iż Lechmann stojąc ze drzwiami, strzelał ludzi wchodzących do drugiego pokoju przed komorą gazową. Dwóch więźniów z sonderkommando lepilo przesroczającego się po straże więźniów i odkleądało na bok. W naj
pobieżności zastrzelili on 6. Byli to sami Polacy, przywiezione samochodem ze Śląska, zdaje się z Kysielowa. Dla krematorii w Brzeszynie robiąmy obrumowanie żelazne dla wszystkich pieców krematoryj
nych, wszystkie ruszta, wyciąg dla podnoszenia zwłok, okrąg do wszystkich drzwi, oraz haki, pogrzebowe i narzędzie potrzebne do obsługi pieców i do spalania w dółach. Instalatorzy wykonali dla tych krematorii instalacje wodne i kanalizacyjne. Większość tych robót odcinane jest w książce zminieniów śluzarni, którą ni
obejmo okresom. Między innymi w śluzarni wykonane zostały ślępe tusze, przemieszane do komór gazowych oraz słupi słatkowe do wstrz
zenie zawartości puszek cyklomowych do komór gazowych. Były to słupy wysokości około 3 m, o przekroju kwadratowym, około 70 cm. Słup taki składał się z 3 siatki umieszczonych jedna w drugiej. Siatka zewnętrzna zrobiona była z drutu 3 mm wzmocnionego na kantórkach 50 x 10 mm. Kantówki takie znajdowały się w wszystkich rogach słupa i u góry oraz u dołu połączone były ze sobą tak, samą kantówką. Często siatki miało około 45 mm w kadracie. Druga siatka była tylko skonstruowana i umieszczona wewnętrz pierwszej w od
stępie około 150 mm. Często ta siatka miała w kadracie około 25 mm. W narożnikach obie te siatki połączone były ziemnymi sztywnien. Trzecia część słupa była ruchoma. Był to płynny słup z cienkiej
blachy cynkowej o przekroju około 150 mm w kadracie, zakończony

od góry stożkiem, a od dołu równą kwadratową podstawą. W odległości około 25 mm do brzegów tego słupek przyłutowane były na cienkich sztychach blaszanym kantówkach z blaszki. Na kantówkach tych rozciągające były drobne sietki o ćwisku około 1 mm w kwadracie. Siećka ta kończyła się u podstawy stożka i stąd ku górze, w przedłużeniu sietki biegło blaszane otrzymywanie aż do wysokości wierzchołka stożka. Zmietowanie puszki cyklowej wypisywano od góry na stożek rozdzielczy, przez co uzyskiwano równomiernie rozsypywanie się cyklonu po wszystkich 4 ścianach bocznych słupek. Po ulotnieniu się gazu wyjściowe cały słupek środkowy i usuwano zwietrzelą kruszynę. Kanały wentylacyjne komory gazowej kute były w ścianach bocznych komory. Cztery wentylacyjne zakryte były przykręcane z blachy cynkowej, w której znajdowały się okrągłe otwory.  

SS-nami w obozie stawali się dobierze spośród więźniów konfidentów, którzy im donosili o wszystkim co się w obiekcie dzieje. Przy dobieraniu konfidentów zalekieli się do najoznaczeńszych systemów, staramy się tych, którym niechętnie groziła kara śmierci, nękając do służby konfidentów ze szczególną particulière życiem. M. in. znałam, że tego rodzaju wypadek z niejakim więźniem Józkiem, którego bliższych dosyć osób nie znam. Był to 17-letni chłopak, Polak, pochodzący z Przemyśla, a zaprzyjaźniony z Kazimierzem Zającem nr więźnia 261, który pracował u mnie w słusarni. W roku 1943 Zając zaczął się do mnie jako do kolonela honorowe we w służbie, bym sprowadzał przyjazne tego Józka do słusarni. Ponieważ się Zając wiedział w dobrych stosunkach i chodził o mnie Józkiem, jego znajomość, znam, poznał, postanowił się o to, by istotnie Józka zabrał do służby przyjazne. Chwalając Józka stwierdzałem, że często wypycha się z pracowni, by handlować przedmiotami, które nabywał i też sprzedał w magazynie tzw. Unterkunft. 

Pewnego dnia Józek nie zajął się do pracy, a natomiast otrzymał meldunek, że został on osadzony w bunkrze na bloku II-tym, po uśrednim przesłuchaniu go w oddziale politycznym w związku z przygolaniem Józka przez SS-nama na fałszywe przechowywanie firank. Po jakimś ty-
Document 11: Trial against the Auschwitz camp garrison, AGK, NTN 162, p. 46; page from the testimony of M. Kula during the trial, describing how people allegedly entered the gas chamber, among other things.
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SECTION ONE:
General Overviews of the Holocaust

The First Holocaust. The Surprising Origin of the Six-Million Figure. By Don Heddesheimer. This compact but substantive study documents propaganda spread prior to, during and after the FIRST World War that claimed East European Jewry was on the brink of annihilation. The magic number of suffering and dying Jews was 6 million back then as well. The book details how these Jewish fundraising operations in America raised vast sums in the name of feeding suffering Polish and Russian Jews but actually funneled much of the money to Zionist and Communist groups. 5th ed., 198 pages, b&w illustrations, bibliography, index. (#6)

Lectures on the Holocaust. Controversial Issues Cross Examined. By Germar Rudolf. This book first explains why “the Holocaust” is an important topic, and that it is well to keep an open mind about it. It then tells how many mainstream scholars expressed doubts and subsequently fell from grace. Next, the physical traces and documents about the various claimed crime scenes and murder weapons are discussed. After that, the reliability of witness testimony is examined. Finally, the author lobbies for a free exchange of ideas about this topic. This book gives the most-comprehensive and up-to-date overview of the critical research into the Holocaust. With its dialog style, it is pleasant to read, and it can even be used as an encyclopedic compendium. 3rd ed., 596 pages, b&w illustrations, bibliography, index. (#15)

Breaking the Spell. The Holocaust, Myth & Reality. By Nicholas Kollerstrom. In 1941, British Intelligence analysts cracked the German “Enigma” code. Hence, in 1942 and 1943, encrypted radio communications between German concentration camps and the Berlin headquarters were decrypted. The intercepted data refutes the orthodox “Holocaust” narrative. It reveals that the Germans were desperate to reduce the death rate in their labor camps, which was caused by catastrophic typhus epidemics. Dr. Kollerstrom, a science historian, has taken these intercepts and a wide array of mostly unchallenged corroborating evidence to show that “witness statements” supporting the human gas chamber narrative clearly clash with the available scientific data. Kollerstrom concludes that the history of the Nazi “Holocaust” has been written by the victors with ulterior motives. It is distorted, exaggerated and largely wrong. With a foreword by Prof. Dr. James Fetzer. 4th ed., 261 pages, b&w ill., bibl., index. (#31)

Debating the Holocaust. A New Look at Both Sides. By Thomas Dalton. Mainstream historians insist that there cannot be, may not be a debate about the Holocaust. But ignoring it does not make this controversy go away. Traditional scholars admit that there was neither a budget, a plan, nor an order for the Holocaust; that the key camps have all but vanished, and so have any human remains; that material and unequivocal documentary evidence is absent; and that there are serious problems with survivor testimonies. Dalton juxtaposes the traditional Holocaust narrative with revisionist challenges and then analyzes the mainstream’s responses to them. He reveals the weak-
ed, foreword by A.B. Butz, epilogue by Germar Rudolf containing important updates; 224 pages, b&w illustrations, bibliography (#29).

Air Photo Evidence: World War Two Photos of Alleged Mass Murder Sites
By Jürgen Graf. Raul Hilberg's evidence and assessments of Dr. Fred Leuchter's studies are meticulously scrutinized with the aid of air photograph documentation. The book includes 8 chapters, nearly 600 pages, 300 b&w photographs, bibliography, index (#27).

The Leuchter Reports: Critical Edition
By Falke Leuchter and Germar Rudolph. Between 1988 and 1991, U.S. expert on execution technologies Fred Leuchter wrote four detailed reports addressing the methodological flaws of the Third Reich's gas chambers in Auschwitz. The first report on gas chambers in the camp hypothesized that up to 2 million Jews were murdered in the gas chambers. The book analyzes the arguments, conclusions, and methodology of the reports, making them perfectly comprehensible to the reader. The book includes 10 chapters, nearly 600 pages, b&w illustrations, bibliography, index (#19).

The Giant with Feet of Clay: Raul Hilberg and His Standard Work on the Holocaust
By Farrel F. Hesterman. This critical study on Hilberg and his seminal works is the first detailed assessment of his methodology, including the scholars and sources he relies on, the analyses he performs, and the conclusions he draws. The book includes 6 chapters, nearly 400 pages, illustrations, bibliography, index (#25).

Analysis of the Holocaust
By Carlo Mattogno. Neither increased media propaganda nor political pressure nor judicial persecution can stifle revisionism. Hence, in early 2011, the Holocaust Orthodoxy published a press release claiming to refute “revisionist propaganda,” trying again to prove “once and for all” that there were no homicidal gas chambers in the camps. The book investigates these claims and shows that they are based on the selective use of contradictory eyewitness statements, methodological defects, or even outright falsehoods. The book includes 10 chapters, nearly 600 pages, b&w illustrations, bibliography, index (#9).

SECTION TWO: Specific non-Auschwitz Studies

Treblinka: Extermination Camp or Transfer Camp?
By Carlo Mattogno and Jürgen Graf. It is alleged that at Treblinka in East Poland between 700,000 and 3,000,000 persons were murdered in gas chambers. The jaw-dropping claim, made without any inquiry or investigation, is based on testimonies, eyewitness statements, and other sources. The book includes 7 chapters, nearly 400 pages, b&w illustrations, bibliography, index (#28).

Sobibor: Propaganda, Testimonies, Archeological Research and History
By Jürgen Graf, Thomas Kues and Carlo Mattogno. Between 25,000 and 2 million Jews are said to have been killed in gas chambers in the Sobibor camp in Poland. The corpses were allegedly buried in mass graves and later incinerated. The book investigates these claims and shows that they are based on the selective use of contradictory eyewitness statements, methodological defects, or even outright falsehoods. The book includes 10 chapters, nearly 600 pages, b&w illustrations, bibliography, index (#19).

The “Extermination Camps” of “Aktion Reinhardt”
By Jürgen Graf, Thomas Kues and Carlo Mattogno. In late 2011, several members of the termination Holocaust Controversies blog posted a study online which makes a point-by-point response, which makes “mimicmeme” out of the bloggers’ attempts at denigration. The book includes 10 chapters, nearly 600 pages, b&w illustrations, bibliography, index (#28).
The Nazis used mobile gas chambers to exterminate 700,000 people. Up until 2011, no thorough monograph had appeared on the topic. Santiago Alvarez has remedied the situation. Are witness statements reliable? Are documents authentic? Where are the murder weapons? Could they have operated as claimed? Where are the corpses? In order to get to the truth of the matter, Alvarez has scrutinized all known wartime documents and photos about this topic; he has analyzed a huge amount of witness statements as published in the literature and as presented in more than 30 trials held over the decades in Germany, Poland, and Israel; and he has examined the claims made in the pertinent mainstream literature. The result of his research is mind-boggling. Note: This book and Mattogno’s book on Chelmno were edited in parallel to make sure they are considered and not repetitive.

SECTION THREE: Auschwitz Studies

The Making of the Auschwitz Myth: Auschwitz in British Intercorp. Pol. Underground Reports & Postwar Testimonies (1941-1947). By Carlo Mattogno. Using messages sent by the Polish underground to London, SS radio messages sent to and from Auschwitz that were intercepted and decrypted by the British, and a plethora of witness statements made during the war and in the immediate postwar period, the author shows how exactly the myth of mass murder in Auschwitz gas chambers was created, and how it was turned subsequently into "historical" by intellectually corrupt scholars who cherry-picked claims that fit into their agenda and ignored or actively covered up literally thousands of lies of "witnesses" to make their narrative look credible. Ca. 300 pp., b&w illustrations, bibliography, index. (Scheduled for late 2018; #94)

The Gas Vans: A Critical Investigation. (A perfect companion to the Chelmno book.) By Santiago Alvarez and Pierre Klein. It is alleged that the Nazis used mobile gas chambers to exterminate 700,000 people. Up until 2011, no thorough monograph had appeared on the topic. Santiago Alvarez has remedied the situation. Are witness statements reliable? Are documents authentic? Where are the murder weapons? Could they have operated as claimed? Where are the corpses? In order to get to the truth of the matter, Alvarez has scrutinized all known wartime documents and photos about this topic; he has analyzed a huge amount of witness statements as published in the literature and as presented in more than 30 trials held over the decades in Germany, Poland, and Israel; and he has examined the claims made in the pertinent mainstream literature. The result of his research is mind-boggling. Note: This book and Mattogno’s book on Chelmno were edited in parallel to make sure they are considered and not repetitive.

Concentration Camp Majdanek: A Historical and Technical Study. By Carlo Mattogno and Jürgen Graf. At war’s end, the Soviets claimed that up to two million Jews were murdered at the Majdanek Camp in seven gas chambers. Over the decades, however, the Majdanek Museum reduced the death toll three times to currently 78,000, and admitted that there were “only” two gas chambers. By exhaustively researching primary sources, the authors expertly dissect and repudiate the myth of homicidal gas chambers at that camp. They also critically investigated the legend of mass executions of Jews in tank trenches and prove them groundless. Again they have produced a standard work of methodical investigation which authentic historiography cannot ignore. 3rd ed., 358 pages, b&w illustrations, bibliography, index. (#5)

Concentration Camp Stutthof and its Function in National Socialist Jewish Policy. By Carlo Mattogno and Jürgen Graf. Orthodox historians claim that the Stutthof Camp served as a “make-shift” extermination camp in 1944. Based mainly on archival resources, this study thoroughly debunks this view and shows that Stutthof was in fact a center for the organization of German forced labor toward the end of World War II. 4th ed., 170 pages, b&w illustrations, bibliography, index. (#4)

The Real Case of Auschwitz: Robert van Pelt’s Evidence from the Irving Trial Critically Reviewed. By Carlo Mattogno. Prof. Robert van Pelt is considered one of the best mainstream experts on Auschwitz. He became famous when appearing as an expert during the Lothar Pieck Trial. But when the Irving case against Deborah Lipstadt broke out, it was van Pelt’s evidence that stood up to scrutiny. From it resulted a book titled The Case for Auschwitz, in which van Pelt laid out his case for the existence of homicidal gas chambers at that camp. This book is a scholarly response to Prof. van Pelt—only gas chambers. By exhaustively researching primary sources, the authors expertly dissect and repudiate the myth of homicidal gas chambers at that camp. They also critically investigated the legend of mass executions of Jews in tank trenches and prove them groundless. Again they have produced a standard work of methodical investigation which authentic historiography cannot ignore. 3rd ed., 358 pages, b&w illustrations, bibliography, index. (#5)

Auschwitz: Plain Facts: A Response to Jean-Claude Pressac. Edited by Germar Rudolf and Jean-Claude Pressac. In his book, Pressac’s works and claims are shown to be unscientific in nature, as he never substantiate what he claims, and historically false, because he systematically misrepresents, misinterprets and misunderstands all German wartime documents. 2nd ed., 226 pages, b&w illustrations, glossary bibliography, index. (#14)

The Chemistry of Auschwitz: The Technology and Toxicology of Zyklon B and the Gas Chambers—A Crime Scene Investigation. By Germar Rudolf. While respecting the victims, whether of foul play or of circumstance, this study nonetheless tries to conduct Auschwitz research on the basis of the forensic statements and material traces of the crime and their interpretation reign supreme. Although it is generally agreed that no autopsy of any of the victims ever took place, most of the claimed crime scenes—the chemical slaughterhouses called gas chambers—are subjected to forensic examination to a greater or lesser degree. This book addresses questions such as: How did these gas chambers of Auschwitz look like? How did they operate? What were they used for? In addition, the infamous Zyklon B can be examined. What exactly hides behind this ominous name? How does it kill? And what effect has it on masonry? Can it be found still today? By thoroughly examining these issues, the horror of Auschwitz is meticulously dissected, and the subject becomes comprehensible. 3rd ed., 442 pages, more than 120 color and almost 100 b&w illustrations, bibliography, index. (#23)

Auschwitz Lies: Legends, Lies and Prejudices on the Holocaust. By C. Mattogno and G. Rudolf. The fallacious research and alleged “refutation” of Revisionist scholars by French biochemist G. Wollers (attacking Leuchter’s famous report), Polish chemist Dr. J. Markiewicz and U.S. chemist Dr. Richard Green (taking on Rudolf’s chemical research), Dr. John Zimmerman (tackling Mattogno on cremation issues), Michael Shermer and Alex Grobman (trying to prove it all), as well as researchers Keren, McCarthy and Mazal (how turned cracks can also be examined. What exactly of what they are: blatant and easily exposed political lies created to obscure discredited claims) is scrutinized. 398 pages, b&w illustrations, index. (#15)

Auschwitz: The Central Construction Office. By C. Mattogno. Based upon the entire Auschwitz documentation, this book presents a logical and architectural foundation for the claim that the structure “A Auschwitz” has never existed. This study describes the history, organization, tasks and procedures of the Central Construction Office of Auschwitz, which was responsible for the planning and construction of the Auschwitz camp complex, including the crematories which are said to have contained the “gas chambers.” 2nd ed., 188 pages, b&w illustrations, glossary, index. (#13)

Garrison and Headquarters Orders of the Auschwitz Camp. By C. Mattogno. This book presents a complete list of all the orders ever issued by the various commanders of the infamous Auschwitz camp which have been preserved. It gives a clear and unambiguous contradiction to claims that prisoners were mass murdered. The most pertinent of these orders together with comments putting them into their proper historical context. (Scheduled for late 2018; #94)
SECTION FOUR: Witness Critique

Holocaust High Priest: Elie Wiesel & the Memory Cult, and the Rise of Revisionism. By Warren B. Routledge. The first unauthorized biography of Wiesel exposes his personal deceits and the whole myth of “the six million.” It shows how Zio-

ist control has allowed Wiesel and his fellow extremists to spread lies and deceptions to the children of many nations, the U.N. and even popes to genuflect before Wiesel as symbolic acts of submission to the “memory cult.” In addition to forcing school children to submit to Holocaust brainwashing. 486 pages, b&w illust., bibliography, index. (930)

An Auschwitz Doctor’s Eyewitness Account: The Tell Tales of Dr. Mengele’s Assistant Analyzed. By Miklos Nynisz. Nynisz, a Hungarian physician, ended up at Auschwitz in 1944 as Dr. Mengele’s assistant. Af-

after the war he wrote a book and sev-

eral others that what he claimed to have experienced. To this day some traditional historians take his accounts seriously, while others reject them as grotesque lies and ex-

aggerations. This study presents and analyzes Nynisz’s writings and skill-

fully separates truth from falsehood. Fabrication. 484 pages, b&w illust., bibliography, index. (937)

Books by and from Castle Hill Publishers

Below please find some of the books published or distributed by Castle Hill Publishers in the United Kingdom. For our current and complete range of products visit our web store at shop.codoh.com.

Thomas Dalton, *The Holocaust: An Introduction*
The Holocaust was perhaps the greatest crime of the 20th century. Six million Jews, we are told, died by gassing, shooting, and deprivation. But: Where did the six million figure come from? How, exactly, did the gas chambers work? Why do we have so little physical evidence from major death camps? Why haven't we found even a fraction of the six million bodies, or their ashes? Why has there been so much media suppression and governmental censorship on this topic? In a sense, the Holocaust is the greatest murder mystery in history. It is a topic of greatest importance for the present day. Let's explore the evidence, and see where it leads.
128 pp. pb, 5”×8”, ill., bibl., index

Carlo Mattogno, *Auschwitz: A Three-Quarter Century of Propaganda: Origins, Development and Decline of the “Gas Chamber” Propaganda Lie*
During the war, wild rumors were circulating about Auschwitz: that the Germans were testing new war gases; that inmates were murdered in electrocution chambers, with gas showers or pneumatic hammer systems; that living people were sent on conveyor belts directly into cremation furnaces; that oils, grease and soap were made of the mass-murder victims. Nothing of it was true. When the Soviets captured Auschwitz in early 1945, they reported that 4 million inmates were killed on electrocution conveyor belts discharging their load directly into furnaces. That wasn't true either. After the war, “witnesses” and “experts” repeated these things and added more fantasies: mass murder with gas bombs, gas chambers made of canvas; carts driving living people into furnaces; that the crematoria of Auschwitz could have cremated 400 million victims… Again, none of it was true. This book gives an overview of the many rumors, myths and lies about Auschwitz which mainstream historians today reject as untrue. It then explains by which ridiculous methods some claims about Auschwitz were accepted as true and turned into “history,” although they are just as untrue.
125 pp. pb, 5”×8”, ill., bibl., index, b&w ill.

Wilhelm Stäglich, *Auschwitz: A Judge Looks at the Evidence*
Auschwitz is the epicenter of the Holocaust, where more people are said to have been murdered than anywhere else. At this detention camp the industrialized Nazi mass-murder is said to have reached its demonic pinnacle. This narrative is based on a wide range of evidence, the most important of which was presented during two trials: the International Military Tribunal of 1945/46, and the German Auschwitz Trial of 1963-1965 in Frankfurt.
The late Wilhelm Stäglich, until the mid-1970s a German judge, has so far been the only legal expert to critically analyze this evidence. His research reveals the incredibly scandalous way in which the Allied victors and later the German judicial authorities bent and broke the law in order to come to politically foregone conclusions. Stäglich also exposes the shockingly superficial way in which historians are dealing with the many incongruities and discrepancies of the historical record.
3rd edition 2015, 422 pp., 6”×9”, pb, b&w ill.

Gerard Menuhin: *Tell the Truth & Shame the Devil*
A prominent Jew from a famous family says the “Holocaust” is a wartime propaganda myth which has turned into an extortion racket. Far from bearing the sole guilt for starting WWII as alleged at Nuremberg (for which many of the surviving German leaders were hanged) Germany is mostly innocent in this respect and made numerous attempts to avoid and later to end the confrontation. During the 1930s Germany was confronted by a powerful Jewish-dominated world plutocracy out to destroy it… Yes, a prominent Jew says all this. Accept it or reject it, but be sure to read it and judge for yourself!
The author is the son of the great American-born violinist Yehudi Menuhin, who, though from a long line of rabbinical ancestors, fiercely criticized the foreign policy of the state of Israel and its repression of the Palestinians in the Holy Land.

For prices and availability see www.shop.codoh.com or write to: CHP, PO Box 243, Uckfield, TN22 9AW, UK
Germar Rudolf, Bungled: “Denying the Holocaust” How Deborah Lipstadt Botched Her Attempt to Demonstrate the Growing Assault on Truth and Memory

With her book Denying the Holocaust, Deborah Lipstadt tried to show the flawed methods and extremist motives of “Holocaust deniers.” This book demonstrates that Dr. Lipstadt clearly has neither understood the principles of science and scholarship, nor has she any clue about the historical topics she is writing about. She misquotes, mistranslates, misrepresents, and makes a plethora of wild claims without backing them up with anything. Rather than dealing thoroughly with actual arguments, Lipstadt's book is full of ad hominem attacks on her opponents. It is an exercise in anti-intellectual pseudo-scientific arguments, an exhibition of ideological radicalism that rejects anything which contradicts its preset conclusions.

F for FAIL

Joachim Hoffmann, F for FAIL.

The novelists and movie-makers James and Lance Morcan have produced a book “to prove all the claims of the Holocaust deniers.” In 2009, a new “updated” version appeared, which bore the same ambitious goal. In the meantime, revisionists had published some 10,000 pages of archival and forensic research results. Would their updated edition indeed answer all the revisionist claims? In fact, Shermer and Grobman completely ignored the vast amount of recent scholarly studies and piled up a heap of falsifications, contortions, omissions, and fallacious interpretations of the evidence. Finally, what the authors claimed to have demolished is not revisionism but a ridiculous parody of it. They ignored the known unreliability of their cherry-picked selection of evidence, utilizing unverified and incestuous sources, and obscuring the massive body of research and all the evidence that dooms their project to failure. F for FAIL

162 pp., 5”×8”, pb, bibl., index, b&w ill.

Carolus Magnus, Bungled: “Denying History”. How Michael Shermer and Alex Grobman Botched Their Attempt to Refute Those Who Say the Holocaust Never Happened

Skeptic Magazine editor Michael Shermer and Alex Grobman from the Simon Wiesenthal Center wrote a book in 2000 which they claim is “a thorough and thoughtful answer to all the claims of the Holocaust deniers.” In 2009, a new “updated” and “expanded” version appeared with the same ambitious goal. In the meantime, revisionists had published some 10,000 pages of archival and forensic research results. Would their updated edition indeed answer all the revisionist claims? In fact, Shermer and Grobman completely ignored the vast amount of recent scholarly studies and piled up a heap of falsifications, contortions, omissions, and fallacious interpretations of the evidence. Finally, what the authors claim to have demolished is not revisionism but a ridiculous parody of it. They ignored the known unreliability of their cherry-picked selection of evidence, utilizing unverified and incestuous sources, and obscuring the massive body of research and all the evidence that dooms their project to failure. F for FAIL

144 pp., 5”×8”, pb, bibl., index, b&w ill.

Joachim Hoffmann, Stalin’s War of Extermination 1941-1945

A German government historian documents Stalin’s murderous war against the German army and the German people. Based on the author’s lifelong study of German and Russian military records, this book reveals the Red Army’s grisly record of atrocities against soldiers and civilians, as ordered by Stalin. Since the 1920s, Stalin planned to invade Western Europe to initiate the “World Revolution.” He prepared an attack which was unparalleled in history. The Germans noticed Stalin’s aggressive intentions, but they underestimated his strength: his Red Army. What unfolded was the most-cruel war in history. This book shows how Stalin and his Bolshevik henchmen used unimaginable violence and atrocities to break any resistance in the Red Army and to force their unwilling soldiers to fight against the Germans. The book explains how Soviet propagandists incited their soldiers to unlimited hatred against everything German, and he gives the reader a short but extremely unpleasant glimpse into what happened when these Soviet soldiers finally reached German soil in 1945: A gigantic wave of looting, arson, rape, torture, and mass murder…

428 pp., pb, 6”×9”, bibl., index, b&w ill.

For prices and availability see www.shop.codoh.com or write to: CHP, PO Box 243, Uckfield, TN22 9AW, UK

Udo Walendy, Who Started World War II: Truth for a War-Torn World

For seven decades, mainstream historians have insisted that Germany was the main, if not the sole culprit for unleashing World War II in Europe. In the present book this myth is refuted. There is available to the public today a great number of documents on the foreign policies of the Great Powers before September 1939 as well as a wealth of literature in the form of memoirs of the persons directly involved in the decisions that led to the outbreak of World War II. Together, they made a mosaic-like reconstruction of the events before the outbreak of the war in 1939. This book has been published only after an intensive study of sources, taking the greatest care to minimize speculation and inference. The present edition has been translated completely anew from the German original and has been slightly revised.

500 pp. pb, 6”×9“, index, bibl., b&w ill.

Germar Rudolf, Resistance is Obligatory!

In 2005 Rudolf, a peaceful dissident and publisher of revisionist literature, was kidnapped by the U.S. government and deported to Germany. There the local lackey regime staged a show trial against him for his historical writings. Rudolf was not permitted to defend his historical opinions, as the German penal law prohibits this. Yet he defended himself anyway: 7 days long Rudolf held a speech in the court room, during which he proved systematically that only the revisionists are scholarly in their attitude, whereas the Holocaust orthodoxy is merely pseudo-scientific. He then explained in detail why it is everyone’s obligation to resist, without violence, a government which throws peaceful dissident into dungeons. When Rudolf tried to publish his public defense speech as a book from his prison cell, the public prosecutor initiated a new criminal investigation against him. After his probation time ended in 2011, he dared publish this speech anyway...

304 pp., 6”×9”, pb, bibl., index, b&w ill.

Germar Rudolf, Hunting Germar Rudolf: Essays on a Modern-Day Witch Hunt

German-born revisionist activist, author and publisher Germar Rudolf describes which events made him convert from a Holocaust believer to a Holocaust skeptic, quickly rising to a leading personality within the revisionist movement. This in turn unleashed a tsunami of persecution against him: loss of his job, denial of a PhD exam, destruction of his family, driven into exile, slandered by the mass media, literally hunted, caught, put on a show trial where filing motions to introduce evidence is illegal under the threat of further prosecution, and finally locked up in prison for years for nothing else than his peaceful yet controversial scholarly writings. In several essays, Rudolf takes the reader on a journey through the absurd world of government and societal persecution which most of us could never even fathom actually exists...

128 pp., 5”×8”, bibl., b&w ill.

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