The Encrypted Notes of Murderer Petras Dominas

Klaus Schmeh
Schmeh.org
klaus@schmeh.org

Abstract

Petras Dominas was a Lithuanian-born criminal active in Germany and the Netherlands during the 1960s. His violent series of robberies—including two murders—was documented extensively in contemporary media. Dominas left behind a corpus of encrypted writings consisting of roughly twenty volumes of ciphertext, created between 1952 and 1964. His manually constructed encryption system, comprising more than one thousand distinct symbols, employs homophones as well as glyphs representing entire words or syllables. Although visually reminiscent of shorthand, the cipher was designed not for speed but for secrecy, and its complexity posed substantial challenges to cryptanalists. After multiple failed attempts by various experts, the system was ultimately deciphered by Dieter Bäusch of the German Zentralstelle für das Chiffrierwesen (ZfCh). Based on exclusive materials provided by the German Federal Intelligence Service (Bundesnachrichtendienst, BND), this paper presents the first public examination of Dominas's encrypted texts. The recovered German plaintext reveals not a diary, as sometimes claimed, but detailed accounts of Dominas's criminal activities, notes on his legal representation, and a range of personal reflections and narrative fragments.

1 Introduction

In 2015, while conducting a Google search using the keywords "encryption" and "crime", I came across an article published in 1966 by the German weekly magazine *Der Spiegel* (Der Spiegel 1966). The article discussed the secret writing system of a criminal named Petras Dominas.

According to the article, during his career as a murderer and robber, Dominas kept extensive encrypted notes—amounting to roughly twenty volumes in total. He used a cipher that he apparently invented himself. The article stated that deciphering his writings proved to be a difficult task. An illustration accompanying the article shows an excerpt from Dominas's encrypted notes (Figure 1). However, the article provides no description of Dominas's encryption method, and I was unable to find further information online.

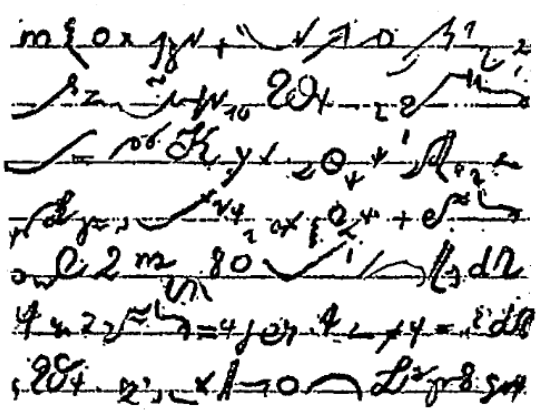

Figure 1. This excerpt from Petras Dominas's encrypted notes was published in *Der Spiegel* in 1966.

However, via the German Federal Intelligence Service (Bundesnachrichtendienst, BND), I received extensive documentation regarding Dominas's cipher and its eventual decipherment. The present work is based primarily on these materials obtained from the BND.

2 The Murderer Petras Dominas

Petras Dominas was a Lithuanian by birth and worked professionally as a typographer. He was born around 1929 and is believed to have died around 1972. Little is known about his life prior to 1959. In that year, Dominas was convicted in Germany and sentenced to four years in prison. Following his release, he quickly returned to criminal activity, embarking on a violent series of robberies during the 1960s that spanned both Germany and the Netherlands.

Between 1963 and 1964, Dominas and his accomplices carried out a string of armed robberies, primarily targeting jewelry stores. The operations were characterized by their precision, boldness, and frequent use of firearms. His criminal record includes the following incidents:

- *19 November 1963 – Bochum, Germany*: Robbery of a jeweler; loot valued at 30,000 Deutsche Marks. A female passerby was shot in the abdomen.
- *3 January 1964 – Witten/Ruhr, Germany*: Robbery of a jeweler; loot valued at 73,000 Marks. A pedestrian was shot in the thigh.
- *28 February 1964 – Dortmund, Germany*: Robbery of a jeweler; loot valued at 97,000 Marks.
- *1 April 1964 – Essen, Germany*: Robbery of a jeweler; loot valued at 30,000 Marks.
- *20 April 1964 – Gelsenkirchen, Germany*: Robbery of a jeweler; loot valued at 30,000 Marks.
- *2 May 1964 – Siegen, Germany*: Robbery of a jeweler; loot valued at 115,000 Marks.
- *7 June 1964 – Amsterdam, Netherlands*: Robbery of a jeweler; loot valued at 60,000 Marks.
- *31 July 1964 – Gelsenkirchen, Germany*: Robbery of a jeweler; loot valued at 115,000 Marks. An exchange of gunfire with police occurred during the escape.
- *25 August 1964 – Lünern near Soest, Germany*: Armed robbery of a truck stop; amount of stolen goods unknown. Two people were shot dead.
- *26 September 1964 – Amsterdam, Netherlands*: Robbery of a jeweler; loot valued at 380,000 Marks. Shots were fired at two passersby.

The June 1964 robbery in Amsterdam was witnessed by a woman and her daughter. In their statements, they reported that one of the three assailants bore a resemblance to a well-known Dutch television personality, quizmaster Theo Eerdmans. Although Eerdmans had no connection to the crime, his photograph was compared with images in criminal archives, which ultimately contributed to the identification of Petras Dominas.

Dominas was arrested one day after the second Amsterdam robbery, bringing an end to his series of violent crimes.

3 Dominas's Encrypted Notes

According to the said *Der Spiegel* report, the German criminal police (Kripo) first discovered encrypted notes belonging to Petras Dominas as early as 1959. Among the possessions of Dominas's attorney, investigators also found a notebook written in cipher. Over time, more than a dozen additional encrypted notebooks were uncovered in various hiding places connected to Dominas.

These notebooks—ordinary school exercise books and ledgers—were distinctively decorated. Dominas covered their outer pages with children's drawings and pressed flowers, lending them a deceptively innocent appearance. The series of encrypted manuscripts is believed to have been created between 1952 and 1964.

At first, the police were unable to decipher the writings. Even the Federal Criminal Police Office (Bundeskriminalamt, BKA) in Wiesbaden failed to make progress. Believing initially that the texts might be based on a modified form of

shorthand, investigators enlisted Gottlieb Jahn, a Krefeld specialist in stenographic systems from Eastern Europe. His efforts were unsuccessful.

Next, the police turned to Mansour Elias Mansour, a Jordanian merchant and sworn court interpreter in Düsseldorf, hoping his expertise in Arabic scripts might provide clues. Mansour, however, could not identify the writing. Members of the Jewish community in Düsseldorf were also consulted, but they confirmed no resemblance to Hebrew or related alphabets.

Next Dr. Ludwig Franzheim, former head of the Cologne Customs Criminal Institute and a specialist in invisible inks, was brought in. His analysis confirmed that no secret ink or chemical encoding methods had been used. Meanwhile, investigators scoured the libraries of every prison in which Dominas had ever been incarcerated, searching for books that might have inspired his system. They found nothing.

At one point, the public prosecutor in Dortmund presented Dominas with samples of his own secret writings and asked for a translation. Dominas reportedly replied, “Pay me 1,500 dollars, and I’ll read you a few pages. You’ll never find the code.”

Ultimately, according to *Der Spiegel*, the case was referred to the “Office for Deciphering Affairs” (Dienststelle für Dechiffrierwesen) in Bad Godesberg-Mehlem—most likely the Zentralstelle für das Chiffrierwesen (ZfCh), the Federal Republic’s central cryptographic authority at the time. There, an unnamed expert undertook the task of decryption. After four months, he achieved a breakthrough; the full decipherment took approximately eight months in total.

Dominas’s background likely contributed to the sophistication of his cryptographic system. Born in Lithuania, he was noted for his high intelligence, exceptional memory, and strong linguistic abilities—he spoke Lithuanian, German, English, Polish, and Dutch. After the war, he had trained in Brussels as a typographer, a profession demanding meticulous attention to symbols and structures.

Over nearly a decade, Dominas refined and expanded his system. By its final form, it contained more than a thousand unique symbols, all of which he memorized. No practice sheets or cipher keys were ever found. Expert assessments described his work as “a unique achievement in the field of cryptography.” *Der Spiegel* concluded unequivocally: “There is no doubt—Petras Dominas, aged 37, devised one of the most sophisticated secret scripts ever confronted by police experts.”

When the decoding was finally completed, the prosecutor read aloud several passages from the decrypted notebooks in Dominas’s presence. Dominas appeared surprised and reportedly remarked, “Those are just notes for a detective novel.”

The available sources do not specify what role, if any, the deciphered texts played in the legal proceedings against Dominas.

4 The BND Files

After reading about the Dominas case in *Der Spiegel*, my curiosity was piqued, and I wanted to learn more. A contact of mine suggested that the Federal Intelligence Service (Bundesnachrichtendienst, BND) might hold information related to Dominas. At the time of Dominas, the aforementioned ZfCh was under the authority of the BND.

In June 2023, I therefore contacted the BND via email, requesting access to any available materials concerning the secret writing of Petras Dominas. After nearly two years of waiting, in March 2025 I finally received two extensive PDF files from the agency.

The first PDF file contained a 223-page collection of documents titled “Tagebücher des Verbrechers Petras Dominas, gelöst von Dieter Bäusch” (“Diaries of the criminal Petras Dominas, deciphered by Dieter Bäusch”). It is

likely that Dieter Bäusch was the same expert from the ZfCh mentioned in the Spiegel article.

The first document in this collection (page 4) is a letter dated September 17, 1970, from Bäusch to Dr. Erich Hüttenhain, then head of the ZfCh. The purpose of the letter was to submit the following materials to Hüttenhain.

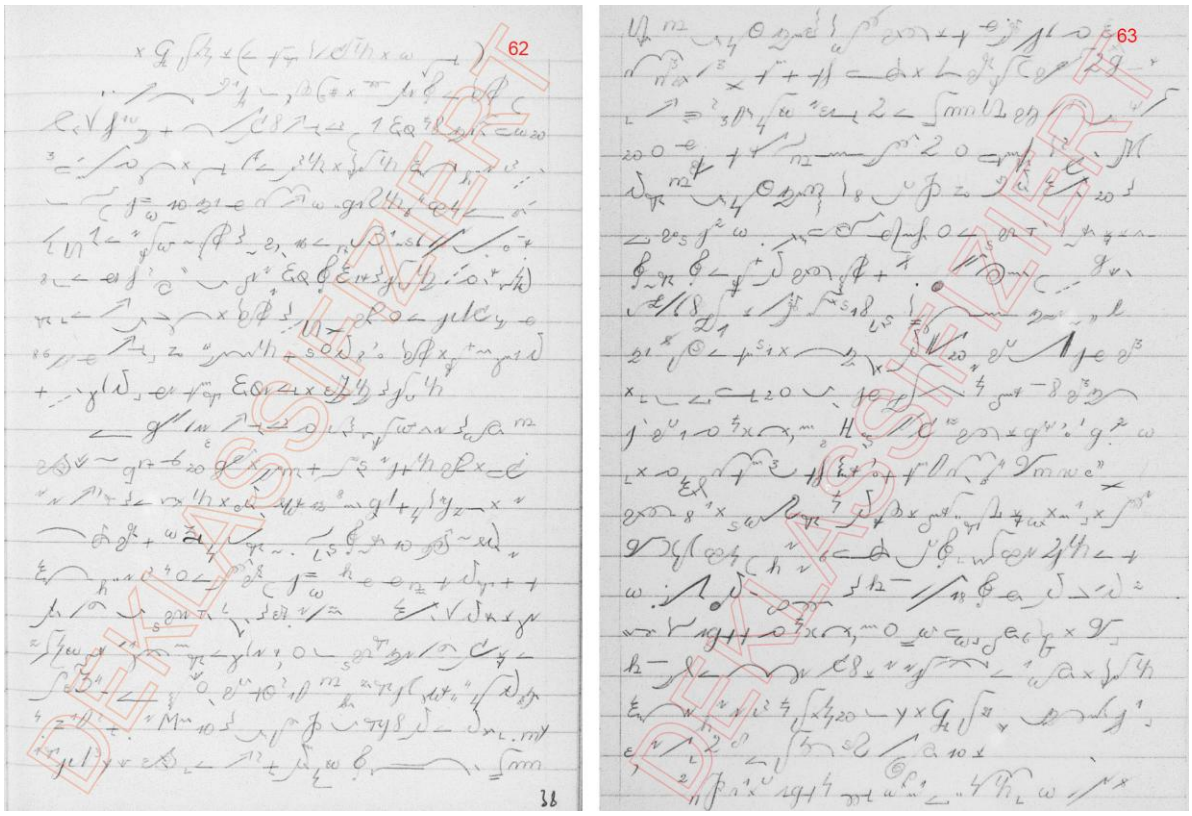

Figure 2. Two pages from the encrypted notes of Petras Dominas

Pages 5–111: A handwritten treatise titled “Die Entzifferung der Geheimschrift des Dominas” (“The Decipherment of Dominas’s Secret Writing”).

Pages 112–163: Another handwritten document titled “Die Geheimschrift des Petras Dominas (bearbeitet von Dieter Bäusch)” (“The Secret Writing of Petras Dominas, edited by Dieter Bäusch”).

Pages 164–189: A list of cipher symbols and their meanings—essentially, the decryption key.

Pages 190–203: Copies of nine press articles about Dominas:

1. General-Anzeiger Bonn, 12 December 1964 – Contains information about the loot, but none about the cipher (General-Anzeiger Bonn 1964).
2. Welt am Sonntag, 13 December 1964 – Mentions the secret writing, but adds no new details (Welt am Sonntag 1964).
3. Welt am Sonntag, 11 September 1966 – Again references the cipher, without new information (Damrow 1966).
4. Bonner Rundschau, 4 September 1966 – A brief article unrelated to Dominas, reporting instead on an alleged codebreaking machine (Bonner Rundschau 1966).
5. General-Anzeiger, 10 September 1966 – Mentions the cipher but provides no further insights (General-Anzeiger Bonn 1966).
6. Der Spiegel, Issue 41/1964 – Not identical to the Spiegel article that first drew my

attention; contains no details about the cipher (Der Spiegel 1964).

7. Bonner Rundschau, 13 November 1965 – Refers to twenty volumes of Dominas's diary written in cipher, noting that three volumes (a total of 750 pages) had already been deciphered (Hiller 1965).

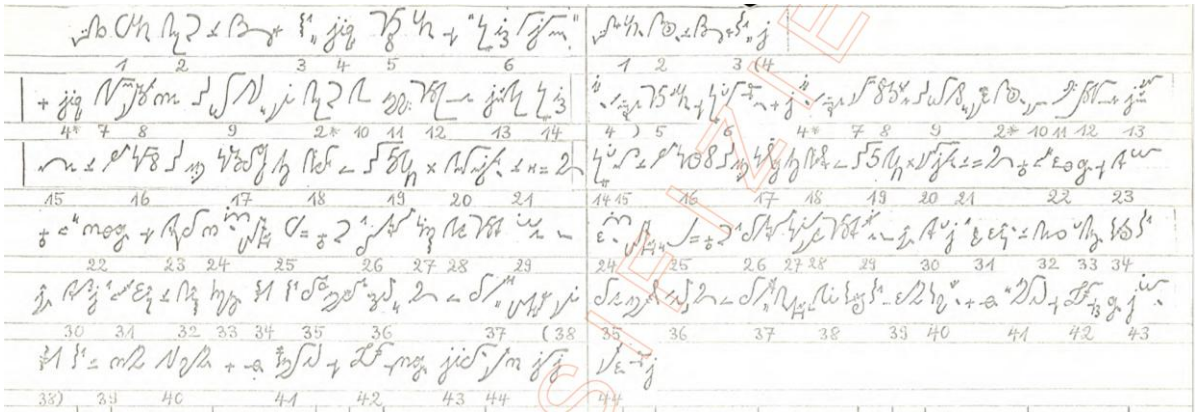

Figure 3. Two encrypted passages (left and right) with similar content. The cryptanalyst Dieter Bäusch employed comparisons like these to break the cipher.

8. Bonner Rundschau, 20 August 1965 – Mentions twenty notebooks of encrypted entries by Dominas (Bonner Rundschau 1965).

9. Quick, 1964 (issue not specified) – Contains no information on the encryption itself (Quick 1964).

Pages 204–223: Various notes by Bäusch, the purpose of which is often unclear. Some appear to be frequency analyses.

The second PDF file comprised 72 pages. After two cover sheets, it contained 70 pages of encrypted notes written by Dominas (Figure 2). These are likely only a fraction of the approximately twenty notebooks mentioned in the press articles.

5 The Breaking of the Cipher

The two handwritten treatises by Bäusch contained in the first PDF provide extensive insights into the cipher system used by Dominas. The encrypted manuscript itself presents a number of challenges to decipherment: it contains no illustrations, headings, typographical highlights, or plaintext insertions. Its structure is limited solely to paragraph divisions, offering minimal contextual guidance.

Bäusch assumed that the plaintext language of the cipher was German—an assumption that later proved correct. According to his notes, the alphabet of the cipher comprises more than one thousand distinct symbols. From this, Bäusch inferred that the system either employed homophones (indicating a homophonic cipher) or that some symbols represented entire words or syllables (suggesting the use of a nomenclator). It turned out that both was the case

Unfortunately, Bäusch does not describe in detail the exact methods he used to break the cipher. He provides no information on statistical analyses or cribs that might have aided his decryption. Instead, he merely states that he compared passages with a similar or identical plaintext in order to derive information from their differences—a method he refers to as the identification of compromising repetitions. His manuscripts include numerous examples of this comparative approach (see Figure 3).

Apparently, it was relatively easy to find such compromising repetitions, as many text segments occurred twice or even more within the encrypted material. It is likely that Dominas copied certain sections of his text, possibly as an

exercise to practice the use of newly added symbols in his cipher system. This repetitive structure may have inadvertently provided Bäusch with critical clues that enabled his partial or complete decipherment of the system.

6 The Cipher

Although Dominas's secret script bears some resemblance to shorthand, according to Dieter Bäusch it was not designed to accelerate writing. Instead, its sole purpose was to ensure confidentiality.

combination, a word, or a punctuation mark. No transposition takes place, and distinctions between upper and lower case are not observed. It frequently occurs that Dominas encodes the same word differently when it appears multiple times, by dividing it into varying syllables or letter units.

Symbols within a word are often connected or merged. However, these connections have no semantic significance—the manner of connection carries no meaning. Word boundaries, on the other hand, are consistently maintained.

Figure 4. An excerpt from Dominas's encrypted notes (left) alongside the corresponding plaintext

In general, the system constitutes a monoalphabetic substitution cipher. Each symbol corresponds to a letter, a syllable, a letter

Some symbols differ only by their size, position, or stroke thickness, yet convey distinct meanings. Conversely, certain symbols are

polyphonic, bearing multiple, usually related meanings. In other cases, different (often visually similar) symbols represent the same value—homophones are thus used. The number of representations assigned to a character does not correlate with its frequency in the German language. Instead, geometric or aesthetic properties appear to have been the decisive factors. For example, the relatively infrequent letter D can be represented by four symbols, each depicting a rotated variant (90°, 180°, or 270°) of the letter U. By contrast, the frequent E has only two equivalents.

Dominas expanded and modified his script over time. The earliest documented stage dates to around 1952. At this point, the position and size of symbols were irrelevant, and punctuation marks as well as numerals remained unencrypted.

Around 1959, Dominas revised the system once more. The use of dot markings was largely abandoned, while the position and size of symbols gained structural importance. Once again, several characters assumed new meanings.

After 1960, Dominas introduced a few additional symbols, though the system otherwise remained largely stable.

The cipher key reproduced in Appendix A (pages 164–189 in the first PDF) is unfortunately undated but likely represents the final stage identified by Bäusch.

In conclusion, Dominas's secret script lacks complete internal consistency. Many symbols changed in form or meaning over time, while others were added or discarded. It is evident that the system evolved organically rather than being based on a fixed logical framework. Since Dominas appears to have been the sole user of this cipher, there was no need for unambiguous or permanent rules. He could freely adapt the script to his personal requirements—an approach that would hardly be practical in a multi-user encryption system.

7 Content of the messages

The two PDF documents contain several passages of plaintext, but no complete decryption. Still, it becomes clear that Dominas's notes are not a diary, though this term has been used in various press reports. In fact, the records consist of notes of different types and purposes.

Some of the encrypted messages contain detailed descriptions of the robberies, while others provide information concerning Dominas's legal counsel. In addition, they include a variety of personal reflections, observations, and narrative fragments.

Figure 4 presents an excerpt from Dominas's encrypted notes alongside its corresponding plain-text passage for comparison. An English translation is provided in the following:

Explosive powder consists of saltpeter "69," sulfur "10," and coal "21." Gunpowder consists of "64," "10," and "16." Only potassium saltpeter can be used for production, and only powdered rod sulfur can be used as sulfur. Ammonium nitrate explosives are called safety explosives because they have a low explosion temperature. They consist of approximately seventy to ninety percent ammonium nitrate as an oxygen carrier and charcoal, naphthalene, or oil as additives. Mixtures of ammonium nitrate HN four with finely powdered aluminum metal are called ammonal and are characterized by an explosive effect similar to that of blasting gelatin. They are not very sensitive to heat, shock, or friction. Guncotton is produced by immersing cotton or cotton wool in nitric acid. After about an hour, the liquid is spun off and washed away, and the resulting guncotton is washed with plenty of water, boiled, and then dried. It is almost insensitive to simple impact and shock, especially when soaked in paraffin, and when ignited it deflagrates instantly without any explosion. However, it explodes very violently when an initial impulse is given. Explosion wave seven thousand meters. Nitroglycerin is formed when nitric acid is carefully dripped into glycerin. This process is very dangerous, as

nitroglycerin decomposes easily at temperatures above thirty degrees Celsius. By absorbing diatomaceous earth, it becomes significantly less sensitive to shock and pressure and loses very little of its explosive power. Absorptions of nitroglycerin in diatomaceous earth are called dynamite. Because moisture displaces the dangerous nitroglycerin from the dynamite, the cartridge is wrapped in paraffin or parchment paper. However, since it still attracts moisture, dynamite must not be stored for long periods. Explosive gelatin is produced by allowing nitroglycerin to act on guncotton, which then swells. It has a greater explosive power than dynamite and is insensitive to moisture. Trinitrophenol (called picric acid), which was originally used as a yellow dye for silk and wool, was later used as an explosive for filling grenades. Phenol is a colorless crystalline mass; its solution in water is antiseptic and is called carbolic acid. With nitric acid, it forms the explosive trinitrophenol or picric acid, which is toxic. Mercury salt or fulminate of mercury is produced by complicated reactions of alcohol on a solution of mercury in HNO, which serves as an explosive agent. Trinitroglycerin is an oily, colorless, odorless toxic liquid. Wet guncotton is more suitable for explosions and cannot be ignited by a normal flame; it explodes on initial ignition, which means that it explodes when it receives an extremely rapid physical shock, which is caused by the explosion of fulminate of mercury. So if a torpedo filled with wet or dry guncotton has a detonator made of this material and explodes, ...

8 Conclusion

The cipher created by Petras Dominas represents an exceptional example of the use of cryptography by a criminal actor. For a manually constructed encryption system, it is remarkably complex and presents significant challenges to cryptanalysis.

The materials evaluated for this study—archival records from the German Federal Intelligence Service (BND)—provide a valuable overview of the system and its context. Nevertheless, several important questions remain unanswered:

- How exactly did Bäusch succeed in breaking the cipher?
- What, in precise terms, do the encrypted notes contain?
- In addition to the pages made available by the BND, there must have been numerous others. Do these still exist somewhere?

It would also be of great interest to learn more about Dominas's later life after 1964. The available sources do not even mention the year of his death. Any reliable information or leads regarding these open questions would be highly appreciated.

Acknowledgments

The author would like to thank the Historisches Büro of the Bundesnachrichtendienst (BND).

References

Bonner Rundschau. 1965. Anwältin gab Darlehen für Raubüberfall. In *Bonner Rundschau*, 13 November 1965.

Bonner Rundschau. 1966. Ende des Codes. In *Bonner Rundschau*, 4 September 1966.

Der Spiegel. 1964. Blut und Brillanten. In *Der Spiegel* 41/1964.

Der Spiegel. 1966. Unter gepreßten Blumen. In *Der Spiegel* 9/1966.

Hildegard Damrow. 1966. Drei Monate Monsterprozeß gegen Bandenchef Dominas. In *Welt am Sonntag*, 10/11 September 1966.

General-Anzeiger Bonn. 1964. Dominas-Raub gefunden. In *General-Anzeiger Bonn*, 12 December 1964.

General-Anzeiger Bonn. 1966. Geheimschrift eines Verbrechers von Spionage-Experten entziffert. In *General-Anzeiger Bonn*, 10/11 September 1966.

Hans Hiller. 1965. Der große Schweiger Dominas. In *Bonner Rundschau*, 20 August 1965.

Quick. 1964. Die Anwältin und ihre Töchter. In *Quick* 40/1964.

Welt am Sonntag. 1964. Das Tagebuch soll Dominas überführen. In *Welt am Sonntag*, 13 December 1964.

Appendix A. The key

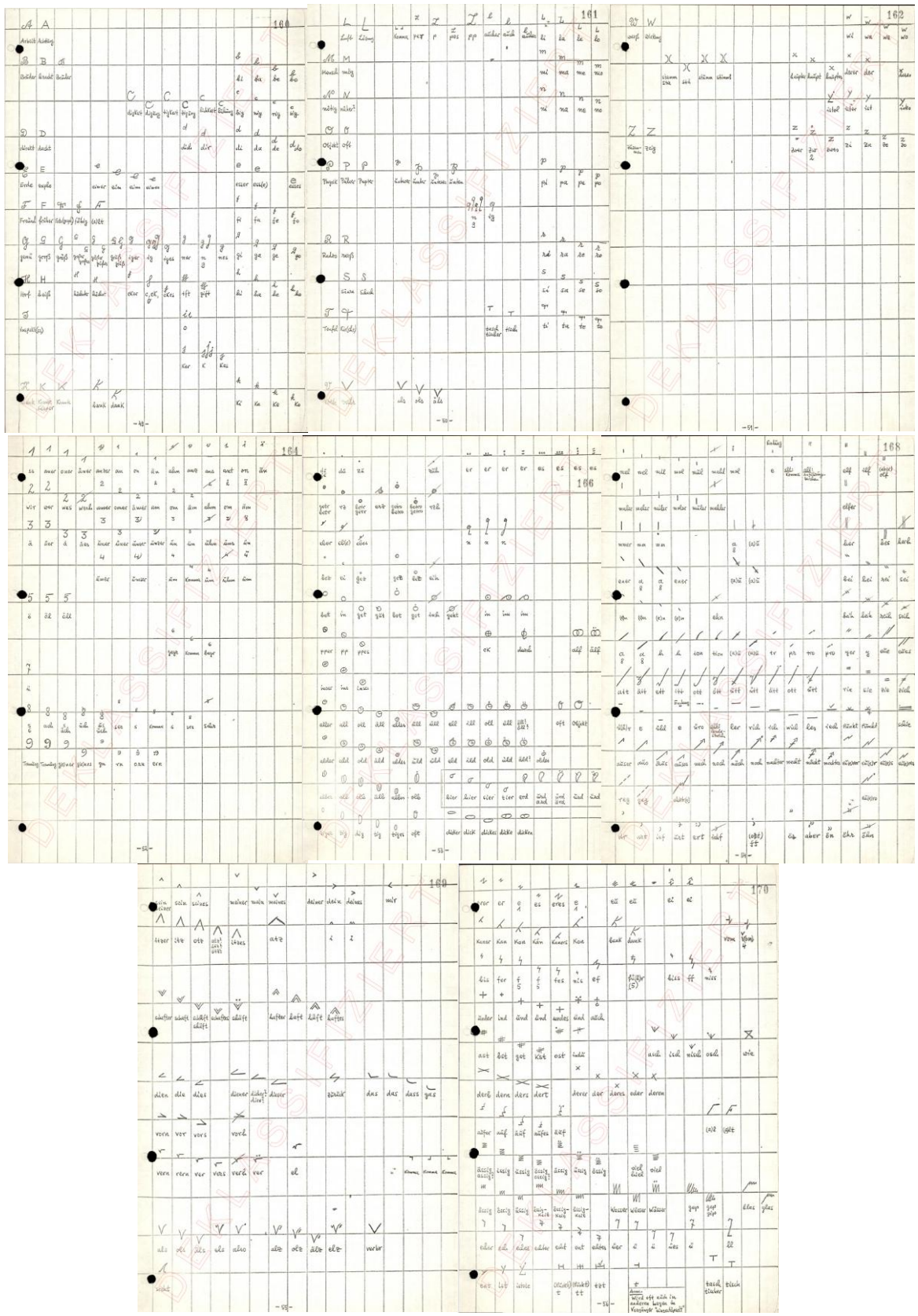

Figure 5. The key of Dominas's cipher (part 1), as derived by the cryptanalyst Dieter Bäusch

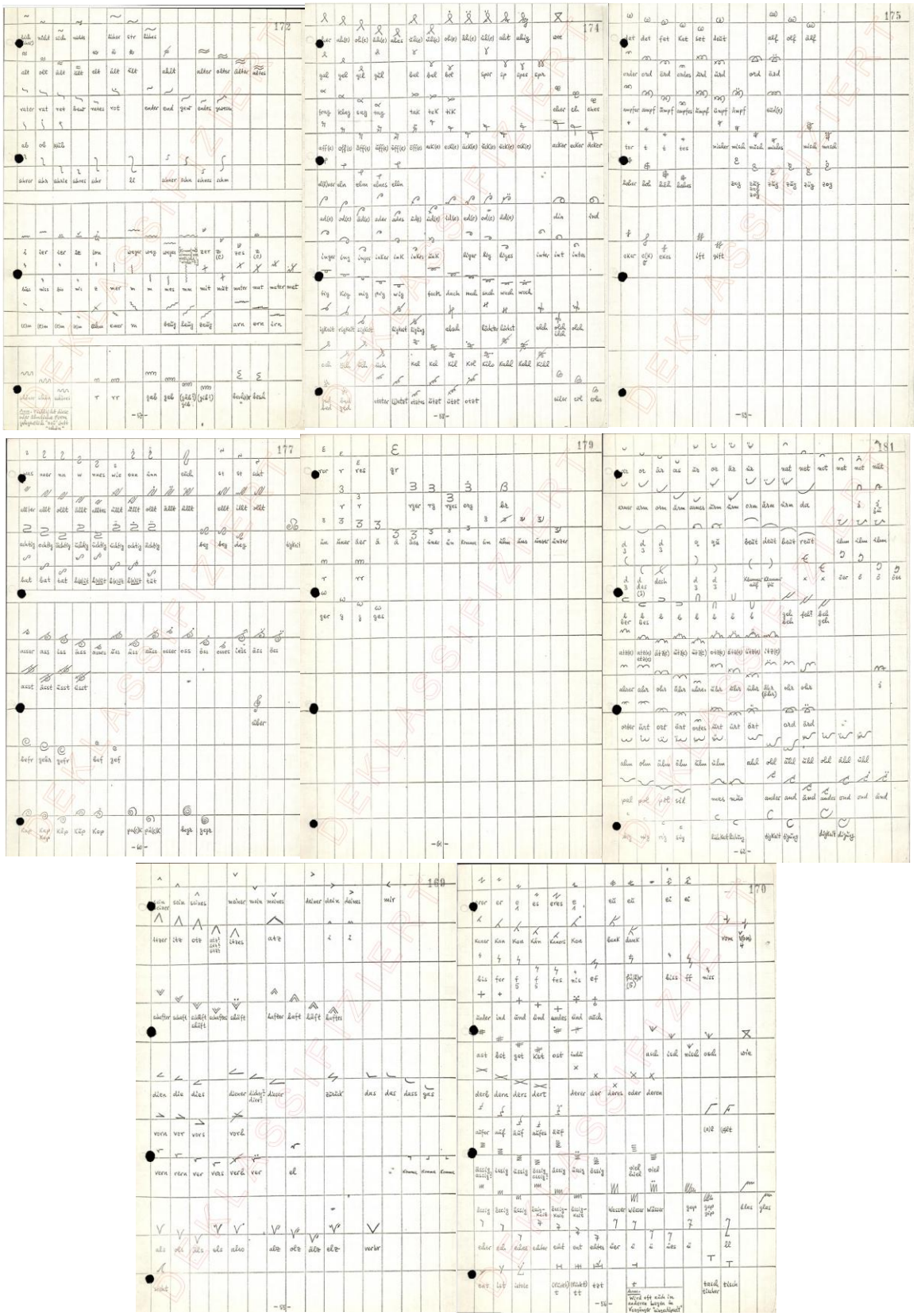

Figure 6. Part 2 of the key