

# **The Weimar Murder Case – Strength and Risk of Material Evidence**

*by attorney Gerhard Strate, Hamburg*

## **1. The Chronology of Events**

On the early afternoon of August 4, 1986, Karola and Melanie Weimar, five and seven years old, are reported missing in the village of Philippsthal/Hesse by their mother. During her first few hearings the mother, Monika Weimar, reports that the children had got up at around 9.30 am and, after a short breakfast at round 10. 15 am, had left the house to go to a playground nearby. The father of the children, Reinhard Weimar, told the police that he had slept until the late morning, finally got up at around 11.30 am and waited for his wife to come back who had driven into town an hour earlier on some errands. She had come back at around 12.15 pm.

In the afternoon already, the neighbors of Mr and Mrs Weimar start to search for the girls. Monika Weimar does not participate in this search. On the other hand, her husband, Reinhard Weimar, is seen making inquiries after the children at a pigeon release stand and at a fair, five kilometers away from the Weimar domicile. During the following two days several hundred police and Federal Border Police comb all surrounding forests, fields and meadows for Melanie and Karola, in vain.

On August 5, 1986, already, the officers of the homicide squad of the criminal investigation department in Bad Hersfeld learn that Mr and Mrs Weimar's marriage is not quite a happy one. They find out that Monika Weimar has been friends with an American soldier, Kevin Pratt, since May 1986. There has already been talk of divorce. The criminal investigators' first suspicion falls upon Monika Weimar; they assume the children were abducted, possibly with the help of Kevin Pratt.

In the afternoon of August 7, 1986, Hans-Georg Führer, a bus driver, stops on a car park on road 3255 between Wölfershausen and Herfa to have a coffee break. While busy straightening the net curtain on a side window of his bus, his eye falls on a dense strip of stinging nettles that has grown in front of a bank on the next field. A short gust of wind stirs the stinging nettles, and Hans-Georg Führer notices the legs of a child about one meter deep behind the straight-growing nettles. He calls the police, and Melanie Weimar's body is recovered. Karola Weimar's body is soon found after intensive search on surrounding picnic areas. They find her at around 6 pm on a disused street in the so-called Bengendorfer Grund, four kilometers from the other place where her sister was found. Both corpses have the clothes on that Monika Weimar had described in her report of the missing girls. The panties of both children show no signs of wetting; they are – as one detective will describe them later – “sparkling white”. Melanie Weimar's clothes and hair are covered with clinging seeds, the fruits of goosegrass. Both Melanie and Karola are wearing hair-

slides. The next day, a post-mortem is carried out, and the specialists in forensic medicine diagnose that Karola died of strangling and Melanie of suffocation, possibly under a soft cover.

On August 11, 1996, the children are buried with great participation and sympathy of the public. Officers of the special task force created meanwhile have also come to the funeral ceremony. The couple make their farewell to Melanie and Karola. The pictures published afterwards show Reinhard and Monika Weimar side by side at their children's grave; they do not support each other. Monika Weimar's brother-in-law is holding her arm. The death notice that had appeared the previous day in the "Hersfelder Zeitung" contains a mysterious epitaph, the origin of which never became clear: "Father, when Mother asks: 'Where have our children gone?' tell her that we are in Heaven."

On August 22, 1986, the special task force receives the first results of various investigations which were ordered from the criminal department of the Office of Criminal Investigation of the state of Hesse. They find out that a crack in the windshield of the Weimar car cannot have been caused from outside – i.e. by falling rocks, according to Monika Weimar -, but by a ramming impact from inside the car. Furthermore, it becomes evident that two allegedly anonymous letters that Monika Weimar received and handed over to the criminal investigators were very probably written by herself. Moreover a witness, who went to his dentist in Wölfershausen on his motorcycle on the day the girls were reported missing, states that he saw a white Volkswagen Passat with black fancy stripes – like the one that Mr and Mrs Weimar own – on the car park of road 3255, both on his way to the dentist at 11.03 am and back home at around 11.20 am. Three days later, Melanie's body was found a few meters away. One thing seems to be obvious: Monika Weimar must have been the driver of the car. And there is even more that seems to be evident: Her false statement concerning the cause of the damaged windshield, the origin of the anonymous letters as well as her appearance, a few hours before the children were reported missing, on the site where Melanie's body was later found, focus suspicion on her.

On August 28, 1986, Monika Weimar is questioned again. At the same time, Kevin Pratt is questioned too, as well as other members of the family. Monika Weimar denies to be the author of the letters. She now explains the origin of the crack in the windshield with the fact that, on the night before August 4, 1986, when she came back from a discotheque with Kevin Pratt and had sexual intercourse with him in the car, her foot slipped and her heel bumped on the windshield. On the evening of August 28, 1986, she is arrested.

On August 29, 1986, the questioning continues. At first she sticks to her description. After a break of the questioning, at around 11 am, there is a turn:

Monika Weimar now declares that the children had already been dead when she returned home on the night of August 4, 1986. When she opened the apartment door

the rooms were dark; the dining room alone was lit. She immediately entered it and went from there to the children's room. Her husband was sitting on the edge of Karola's bed, bent down, weeping and totally confused. He made a very absent impression on her. Next to him, on the floor, there was an empty beer bottle. Then she saw the children. Both were still half covered with the blanket. She touched and shook the children, but they gave no sign of life at all. She took her husband by the shoulder and asked him: "What have you done?" As she could no longer bear the sight of the dead children she ran to the bedroom and sat there on the bed. She was totally desperate and did not know what to do. After she had sat for some time in the bedroom, shocked and dazzled, she heard the sound of a car; she believed it to be the family car. Some time later the car came back. Her husband entered the apartment and came to her in the bedroom. Again she asked him: "Why did you do that?" He answered: "Now nobody will get the children." He described to her where he had disposed of the bodies. She explained her stay next day on the place where Melanie was found with the fact that she wanted to see her children once more. Yet she could only find Melanie's body. Asked why she had reported them missing and why she had given a false statement of what happened on that Monday morning, she said that she felt pity for her husband and that she had also blamed herself for the death of the children. Nobody beside her husband and herself knew how the children died and were brought to the places where they were found. To this day, she sticks to that description.

On August 30, 1986, the husband is arrested on the order of the responsible public prosecutor, Raimund Sauter. His application for a warrant of arrest is rejected by the Local Court in Fulda; a complaint against this decision with the Regional Court in Fulda is to no avail. In the middle of October, the public prosecutor Raimund Sauter is replaced as the officer in charge – after members of the criminal investigation department in Bad Hersfeld used their influence with the head of the public prosecution in Fulda with urgent requests. The arrest warrant his successor applies for is issued immediately on October 27, 1986. Monika Weimar remains in custody and under arrest until December 4, 1995. Concerning the judgment of the Regional Court in Fulda, pronounced on her on January 8, 1988 – sentenced to life for double murder –, the Federal Supreme Court, in its appellate decision one year later, confirms that the circumstantial evidence has been assessed in a "judicious and comprehensible" way (NJW 1989, 1741, 1744).

On December 4, 1995, the Higher Regional Court in Frankfurt am Main orders the retrial. Monika Böttcher, divorced Weimar, is released after more than nine years in jail. On April 24, 1997, she is acquitted by the Regional Court in Gießen in a retrial, after 55 days of trial.

## **2. Criminological Starting Point**

The solution to any criminal case begins with certain preliminary considerations as to the possible course of events and the culprit's motives. Then there is the question

concerning the group of people, one of whom the culprit might be: Did the victim know him/her, or was it an unknown third party? The special task force was soon able to answer this question, as no signs of sexual abuse whatsoever were found on Melanie and Karola Weimar. The hypothesis that an unknown third person could have suffocated and strangled the children near their home and then taken them away in a car seemed absolutely improbable with regard to the initial assumption that they were killed by day. If the children were not killed close to their home but somewhere near where they were found later, they must have entered the murderer's car, and the assumption is unavoidable that there must have been some relation to the culprit.

If the culprit came from within the victims' personal environment, the answer to the question of motive led to a further elimination of people who could have done it: None of the relatives, and even less so the neighbors in the two adjoining houses, had a motive for killing the girls. The outline of a motive seemed to develop around the parents alone: Monika Weimar might have had one with regard to her relationship with Kevin Pratt; Reinhard Weimar could have had the motive of jealousy, watching this relationship.

The basic assumption that only one parent could have been the murderer suggested itself but proved to be fatal for the quality of the investigations. The alternative whether it was the father or the mother gave every sign of evidence a result-oriented ambivalence. In short: The findings that exonerated the father weighed upon the mother; when he was found guilty of something, she was excluded. And as many signs of evidence need to be *assessed* before they become the basis of conclusions, to clear up the Weimar murder case became a kind of religious war in which, at one time or another, all people involved – criminal investigators, public prosecutors, defense attorneys and judges, too – participated. Who was rather believed capable of the deed, who had the most probable motive? The seemingly coarse Reinhard Weimar or Monika Weimar with her sphinx-like gaze? The *emotional* answer to this question was the fundamental tone that accompanied most reflections, even the assessment of outwardly objective material evidence. This assessment was sometimes made very naively: It was said that the mother's responsibility for the crime was proved by the allegedly “gentle” way of killing; two members of the special task force interpreted the orderly clothes and the hair-slides as follows – in a file note dated August 19, 1986, that only appeared during the trial in Gießen “Only the mother found the children *beautiful* even as corpses.” On the other hand, public prosecutor Raimund Sauter followed a totally different direction in his petition to issue an arrest warrant against *Reinhard* Weimar. This petition and the subsequent complaint create an impression of conclusiveness which is only surpassed by the seeming power of persuasion of the Fulda judgment against *Monika* Weimar.

Unavoidable as the hypothesis of either the mother or the father being the culprit was, it was as dangerous for the objective establishment and assessment of the findings: The guideline of the 'either/or' developed a suggestive power which won recognition for prejudices both imperceptibly and effectively. The new criminal

proceedings against Monika Böttcher dramatically demonstrates the fact that even seemingly neutral material evidence can be detrimentally affected by such suggestive power.

### 3. Material Evidence: Fibers

#### a) False choice of comparative material

If this was a case of two suspects, with the measure of suspicion cast on them being of only minor difference, a thorough examination of the fiber traces collected on the clothes and the bare parts of the children's bodies must be preceded by two investigational steps:

- It was necessary to find out what clothes the suspects were wearing at the supposed time of the crime (Including the hours immediately before and after the presumptive time of the crime) through questioning the suspects themselves as well as the witnesses among the members of the family, circle of friends and possible witnesses from the neighborhood;

- The second step would have to be to secure the outer clothing of *both* suspects, which they wore at the time in question (depending on the outcome of the previous questioning of witnesses); in case the evidence of the witnesses led to vague or contradictory results, virtually *every* piece of outer clothing worn at that time of the year was relevant with regard to a clue; in this case it was irrefutable to secure the *entire – seasonal* outer clothing of *both* suspects.

Such steps of investigation, vital for a thorough and conscientious assessment of the fiber findings, were not taken in the Weimar murder case. All witnesses were *only* questioned as to what clothes *Monika Weimar* wore on August 3, 1986 and on the following day. The entire collection of summer clothing of *Monika Weimar* alone was secured, a total of twenty-seven garments.

*None* of the relevant witnesses was questioned as to what Reinhard Weimar wore on August 3 and 4, 1986. Only he himself and his wife were asked questions in this respect. During his questioning on August 28, 1986, he stated that he wore a “light-blue jeans” and a T-shirt, “probably a white T-shirt with a pattern”. Furthermore, he believed to have worn these clothes the previous day too.

The investigators made *no* efforts to receive further statements as to the clothes that Reinhard Weimar wore at the time of the crime, although Reinhard Weimar himself was only able to *suppose* what he had on. The other suspect alone, Monika Weimar, was asked during a questioning about the clothes her husband wore on the night of Sunday to Monday, August 4, 1986. She declared that he wore “dark-blue trousers and a T-shirt striped white and blue”.

Instead of securing Reinhard Weimar's *entire* outer clothing – suggesting itself in view of the unclear evidence situation and the inconsistency of information given by Reinhard and Monika Weimar – the special task force confined themselves to those three garments of which Reinhard Weimar stated that he had worn them on August 4, 1986, i.e. on the day on which, from the start, he was *not* considered to be the culprit – according to both the “night version” and the “day version”.

The biased choice of clothing used to compare fibers – 27 garments belonging to Monika Weimar, three garments belonging to Reinhard Weimar (while the blue jeans and the white-blue cotton T-shirt could be excluded a priori for a lack of significance of the fiber material) inevitably pre-formed the outcome of the examinations: The bodies and clothes of the children only showed fibers originating from *Monika Weimar's* clothing. It was quite obvious that this result could not be correct as the children were constantly in contact with their father too, so that their clothes *had* to be contaminated with fibers from his garments. Despite the evident inaccuracy of these findings, the Regional Court in Fulda later found it “evident that the specialist, during the examination of the children and their clothes, found fibers which did not belong to one of the couple's garments handed over, *but none that could be related to a garment belonging to Reinhard Weimar*”.

#### b) Errors committed during the safeguarding of fiber traces

Monika Weimar had been arrested on October 26, 1986. Among other things, the warrant of arrest was based on a report of the Office of Criminal Investigation of the state of Hesse according to which “partly no, partly a small amount of fibers that could be assigned to the fibers used in the clothing of the children (was) found” on their bed linen. What was all this about?

In her statement made for the first time on August 29, 1986, Monika Weimar had claimed that, on her return in the night of August 4, 1986, the children had worn the same T-shirts as during the day and had lain lifelessly in their beds.

The Office of Criminal Investigation checked this statement by means of three test series. From the very beginning, the examination had to be limited to Karola's T-shirt since Melanie's T-shirt was made of white cotton. The bed sheet revealed eight (polyester) fibers and the bed cover a total of six fibers of Karola's T-shirt. In adhesion tests with a dummy, however, eight to fourteen fibers – without friction – and 109 fibers with friction – were transferred to the bed sheet. In one of the test series, the bed sheet contained 22 to 43 fibers without friction and “approx.” 200 fibers with friction. The discrepancy between a total of 14 secured fibers and (a minimum of) 30 and (a maximum of) 57 fibers during frictionless contact as well as approx. 309 fibers during a contact with friction suggested a strong contrast which seemed to imply that Karola could have lain in her bed wearing her T-shirt, as stated by her mother.

According to the Regional Court of Fulda, Monika was – *seriously incriminated* – by another examination with the following background: A total of 73 fibers of a yellow blouse which Monika Weimar had worn on August 4, 1986, was secured on Melanie's white T-shirt. Monika Weimar claimed that she had also worn this blouse on the previous day, at least in the evening when saying good-bye to the children. This seemed to be the key to the truth: The yellow fibers, had they been transferred during normal domestic (“legal”) contact or in the course of a last close contact when killing the child?

The Office of Criminal Investigation tried to answer this question. The following hypothesis seemed to suggest itself. If the fibers had been transferred to Melanie's white T-shirt on the previous day – e.g. when Monika Weimar gave her child a good-bye hug -, Melanie would inevitably have transferred part of the fibers of the blouse to the bed linen, if she wore this T-shirt in bed on the return of her mother at night.

However, only one fiber was found on Melanie's bed sheet which could be assigned to the material of the yellow blouse. To support that finding, the Office of Criminal Investigation carried out three test series: 35 fibers of the yellow blouse were applied to the back of the T-shirt (the number of fibers found there). The T-shirt with the 35 blouse fibers was then put on Melanie's bed sheet and a bottle weighing about one kilogram was rolled over the T-shirt. This test was repeated twice. Out of the 35 fibers of the yellow blouse, a minimum of six and a maximum of ten fibers remained on the bed sheet.

In the report of the Office of Criminal Investigation of June 11, 1987 a conclusion of serious consequence was drawn:

“On the evening of August 3 or during the night of August 3 to 4, 1986, a contact between larger parts of one side of the T-shirt and the bed sheet took place.

Upon this assumption, the incriminating fibers found on Melanie's T-shirt could not yet have been there since this would *inevitably* have led to a transfer of several blouse fibers to the bed sheet. Hence, the incriminating fibers found on the T-shirt *must* have been applied at a later date.” (Italics by the author)

This was a fatal misjudgment. What would have had to be considered?

This report was about the difference of *one* fiber found and six (max.: *ten*) fibers to be expected in accordance with the test series. Even taken on its own, this difference was not significant enough to allow an assessment of the findings with such apodictic certainty. And yet it was made. At best, a probability statement would have been appropriate. What is even more decisive, however, is that manifold sources of errors were not mentioned and not taken into account either, as the new interrogations in Gießen showed. Here they are in detail:

- Only eleven days after the children were reported missing was the bed linen secured. August 1986 was a very hot month so that one can assume that the rooms were aired a lot. Each movement of the air makes fibers move and disappear.

- Bed sheet, bed cover and pillow were put together in *one single* plastic bag and sent to the Office of Criminal Investigation. There was no insulating material (e.g. silk paper) between the individual pieces of cloth, which could have avoided the transfer of fibers from one piece to the other.

- Despite the possible shift of fiber traces on the surface of each piece of cloth as well as the probable transfer of fibers from one piece to the other, the forensic people only used *sections* of all three textiles: Only the top of the bed sheet and *not* its back was taped, although it must have been obvious that the rubber border of the bed sheet makes an orderly folding of the top side to the inside impossible; each time a sheet is folded, fibers are inevitably transferred from the top side to the back. Again, on the top side just a “central area” of 40 x 70 in was secured; in fact, the bed sheet had a width of 49 in when not fitted. The bed covers, too, were only taped in a “central area” of 27 x 75 in, although they had a width of just under 51 in. The same goes for the cover of the large pillow. With regard to the movement of fibers as a result of aerodynamic and physical influence (gravitation) alone, this limitation of the forensic people to “central areas” was incomprehensible. But most of all: What child really sleeps in the “central area” of his or her bed?

- During the fiber examination, two small pillows from each bed and a neck roll were totally ignored. The criminal investigators of Bad Hersfeld had also sent them to the Office of Criminal Investigation for examination where they had simply been overlooked.

- Even though fiber traces were secured in the packaging material (plastic bags!), too, they were not evaluated because, according to the expert of the Office of Criminal Investigation at his questioning in Gießen the loss of fibers through the transfer of fibers to the packaging material was believed to be “minimal”. What the experts did not even take into consideration as a source of error was the fact that friction of smooth plastic surfaces always causes electrostatic charge and thus magnetic effects on small particles like fibers.

This enumeration is no sophisticated reasoning. Since the beginning of the 80s, textile science in criminology has developed to a prominent discipline due to significantly refined methods of preserving and analyzing traces, which in many cases supplied vital knowledge for the solution of crimes. It is its special importance for the solution of capital crimes in particular which makes a careful research, reporting and evaluation of the sources of error of each fiber analysis indispensable before drawing any conclusions.

After all, not just the conviction in Fulda, but also the acquittal in Gießen have been influenced to a large extent by a fiber analysis. The traces of the yellow blouse on Melanie Weimar's clothing showed an almost regular distribution; fiber clusters (lead traces), caused by carrying the body, as they would have to be expected according to the test series of the Federal Office of Criminal Investigation, were *not* found on Melanie's clothing. As the oral opinion showed, the report presented by Dr. *Adolf* for the Federal Office of Criminal Investigation convinced the Regional Court in Gießen.

#### **4. Material evidence: Stomach Contents**

The post-mortem showed that Karola's stomach was “quite filled” with “light brown, slightly creamy liquid”. The same goes for Melanie. Her stomach contained 30 ml. The examination of the stomach contents by the Institute of Forensic Medicine in Frankfurt (Prof. *Gerchow*) revealed starch grains suggesting that both girls had eaten wheat-flour products before they died. It might have been a roll for breakfast, but it might also have been cookies accessible to them in the dining room.

As, by mistake, Melanie's stomach contents was totally used up for a toxicological examination, it could not be determined whether Melanie had drunk or eaten anything and what it had been. The forensic examination of Karola's stomach contents revealed very small quantities of caffeine and slightly larger quantities of theobromine. *Gerchow* concluded that she must have consumed a beverage containing cocoa. Another examination of Karola's stomach contents was carried out by the Institute for Dairy Farming in Kiel (Prof. *Schlimme*). In his report submitted to the Regional Court in Fulda during the first trial, Prof. *Schlimme* came to the following conclusion:

“It is safe to say that Karola Weimar consumed food containing milk fat and milk proteins (whey proteins and casein). Milk fat and milk proteins are the main fat and protein components in the stomach chyme. Beside the milk fat, further lipids were found which stem from a non-milk fat, based on the fatty acids analysis this probably was, among other things, a wheat pastry (e.g. wheat roll?). Although the fats and proteins were broken down to a large extent, the relatively high amount of immunoreactive, non-denatured whey protein, above all – which, as stomachphysiological findings show, passes quickly through the stomach – shows that the motor and transport function of the stomach came to a standstill soon (between 30 and 60 minutes) after the intake of food. ( ... ) The milk product which was doubtlessly consumed was – based on the relatively high amount of intact whey protein in the stomach – probably low-fat pasteurized milk.”

Prof. *Schlimme*'s report contained a cardinal statement which he explicitly confirmed in Gießen. The high amount of “immunoreactive, non-denatured whey protein” would have had to pass the stomach within 30 minutes or 60 minutes at the most. The gastroenterologists Prof. *Bloch* (Bad Hersfeld) and Prof. *Rösch* (Frankfurt

a. M.) heard during the retrial also confirmed this finding. This meant: *Karola survived her last meal by one hour at the most!*

Thus, the time schedule on which the Regional Court in Fulda had based its conviction (breakfast at around 10 am, between 10.15 and 11.30 am the children were playing outside the house and were noticed by a neighbor and two visitors of the neighbor between 10.50 and 11 am, at 11.30 am Monika Weimar returned unnoticed to the house and left again with the children which were killed at around 11.45 am in the Bengendorfer Grund) could no longer be sustained. What was this time schedule about?

Ascertaining the truth in criminal proceedings is a reconstruction of reality. The reliability of the evidence and the objective judgment of the judges determine how close the reconstruction is to reality.

The events on the morning of August 4, 1986 were partly indisputable, partly disputable concerning the chronological order. It is a fact that Monika Weimar left her home in the Ausbacher Straße with her car at around 10.50 am. It is a fact that she had made some money transfers at a savings bank and the post office nearby shortly before 11 am. It is a fact that her car was seen between shortly after 11 and 11.20 am on the car park near which, three days later, Melanie's body was found. It is also a fact that she was back in the Ausbacher Straße at around 12.15 am at the latest. The big problem was the almost 20-minute stay of Monika Weimar near the place where Melanie's body was found later. If this stay, the exact time of which is documented by a witness on his way to the dentist, is considered to be part of the actual crime (according to the public prosecutor in his indictment as well as in his summing up), the neighbor witnesses who, with increasing precision, said they had seen the children between 10.50 and 10.57 am on the gravel path in front of the house in the Ausbacher Straße and/or on the adjacent playground, must be deemed unreliable since it takes at least ten minutes to drive to the car park. But then there would have been no witnesses at all who had seen Melanie and Karola on the morning of August 4, 1986 (out of a total of eight children who were also playing outside during the period in question none had seen the two; the great-grandmother who allegedly had been shortly greeted by Melanie and Karola in the corridor later stated that she had confused this with the previous day) which would have made a conviction of Monika Weimar impossible. The Court in Fulda realized the problem; in the reasons given for the judgment it relied on a slightly unrealistic construction with regard to the chronological order and dynamics: The Court describes a mother who wants to get rid of her children but carries out two transactions at the post office and the savings bank, then drives to a car park where she tries for 20 minutes to find a suitable hiding place for the bodies of her children still alive at home, who then returns home at high speed, tells her children to get into the car, drives, again at high speed, to another car park, then suffocates and strangles her two children one after the other at around 11.40/11.45 am – to put it bluntly: brutally kills them -, leaves one body at the scene of the crime, puts the other body back into the car and drives

it to the car park where half an hour earlier she had stayed for 20 minutes, throws the second body in a thicket of stinging nettles and finally returns back home at around 12.15 am to greet her husband lying on the couch.

While the chronological restriction of this construction seemed to make it unrealistic enough, the statement of the Regional Court in Fulda was even more shaken by the reports on the stomach contents: Karola and – because of the similarity of the stomach contents – probably also Melanie had to have eaten something (a wheat-containing product and a milk beverage, possible cocoa) between 30 and 60 minutes before they were killed at around 11.40/11.45 am. During most of the relevant time period – 10.40 to 11. 10 am – their mother was not at home. In addition, this time period overlaps with two points in time (10.50 and 10.57 am) at which the neighbor Mrs Nordheim as well as her brother and his girl-friend claimed to have seen the children on the gravel path in front of the house and/or on the playground. The intake of food by both children during this time span – which, according to the expert statements, *must* have taken place *in any case* (with regard to the time of their death) – is not very probable either, if they – as assumed by the Regional Court in Fulda on the basis of the first, later modified statements of Monika Weimar – had already had a similar breakfast (allegedly rolls and cocoa) before 10 am. One breakfast shortly before 10 am and then a second one at around 11 am? Did this first breakfast take place at all? And if the first breakfast did not take place, how did they get breakfast at around 11 am *during the absence of their mother*? Did not all this prove that the earlier statements of Monika Weimar on the chronological sequence of events in the course of the morning of August 4, 1986 could not be correct? (She herself had declared later that the children had already been dead on the morning, that she had used the events of the previous day in her original statement.) And one could even ask: Did all these events during the morning take place *at all*? Was it a fact or fiction?

Of course: Theoretically, even another intake of food – on their own initiative and unnoticed by Reinhard Weimar who was in the apartment – cannot be totally excluded (this was a consideration of the public prosecutor in Gießen). However, on how many unproved assumptions and improbable possibilities is it allowed to base a judgment?

## **5. Mute Witnesses: Plant Fruit**

When Melanie's body was found, her clothes as well as her hair were covered with the clinging fruits of cleavers or goosegrass, *Galium aparine* (bedstraw family). 167 galium fruits clung to her trousers, one fruit stuck to her panties, and another fruit was found embedded in the bag in which the panties had been wrapped. 144 galium fruits were counted on the T-shirt and 49 on the socks; there was a total of 362 fruits. Even in a hair sample taken from Melanie's hair 13 galium fruits were found.

It is impossible to assume that these seeds – with regard to their number as well as their distribution -were transferred during playing. One look into botanical textbooks shows us that goosegrass does not grow alone very frequently; as a rule it sprawls over host plants in order to grow straight. It is found among raspberry bushes, but mainly between stinging nettles.

Melanie had reached a height of 131 cm (4.29 ft). It is difficult to imagine the movements of a playing child of that size leading to the transfer of 362 goosegrass seeds, distributed over her whole body, and to a multitude of seeds attaching to her hair. The stinging nettles over which galium aparine usually sprawls seldom reach more than 3.20 ft. Why should Melanie have played among stinging nettles, and in such a way that not only did 167 goosegrass fruits become attached to her T-shirt, but many fruits also clung to her hair?

On the other hand the fruits – with regard to their large number and the regular distribution on the clothing – could not just stem from putting the body down one single time – according to the Regional Office of Criminal Investigation. The traces found suggest another explanation: Before it was finally brought by car to the place where it was later found, Melanie's body was somehow moved to a temporary hiding place, and it was turned from its back to its stomach (or vice versa). A place where this could have happened was the area where her little sister was later found. In this disused street in Bengendorfer Grund – which cannot be observed directly from the outside – the experts of the forensic unit had found a small path at the end of which the grass was treaded over a surface of 6.5 x 6.5 ft. Pictures taken from this trampled stretch of grass showed stinging nettles growing there. Was this the place – some 16 yards from the site where Karola was found – where the bodies of the children (or just Melanie's body) had been put down provisionally in – order to arrange something – e.g. put on some clothes?

This reflection, in itself, seems to be speculative, but it becomes more tangible when we add another detail finding to the general finding (extraordinarily high number of goosegrass fruits attached): Some fruits secured on Melanie's red trousers – the fruits have prickly hook bristles – were found on the *inside* of the trousers, and up to 1.2 inches from the leg seam. The responsible clerk in the Regional Office of Criminal Investigation informed the head of the special task force about this remarkable finding at an early stage. The latter wrote a file note on August 22, 1986:

“There were galium fruits *inside* Melanie's red trousers, which (according to Dr. Sonnberg) could *not* stem from putting the corpse down. While still alive, every child would try to get rid of them (Itchy things); either taken trousers off or removed fruits!”

This perfectly true assessment could not be invalidated by the argument that the red trousers might already have been frayed at the seam. Even if the fruits clinging on the inside, at 1.2 inches, did not touch the skin all the time during wearing, the child

would have noticed them with each movement and would have tried to remove them immediately.

Therefore, if it was most probable that the goosegrass seeds on the inside of the red trousers and the two seeds secured on the panties did not get there while the girl was still alive, and if it was probable that these fruits could not stem from putting her body down, there is only one answer which is just as probably true: *Melanie was not dressed with the red trousers until after her death.*

The evidence of this finding is further supported by another investigation result: An exceptionally high number of fibers was found on Melanie's *panties*, which stemmed from the rear-seat covers of Mr and Mrs Weimar's car, namely 265 fibers (178 fibers directly on the panties and 87 fibers on the inside of the red trousers). The Office of Criminal Investigation explained that these fibers were transferred during *direct* contact between the panties and seat covers. According to a report dated March 20, 1987,

“The numerous incriminating fibers found on these panties cannot simply be explained by a secondary transfer of fibers while the trousers (i.e. the red trousers), mainly on the outside of which the incriminating fibers stuck, were put on. Thus it must be assumed that the panties came into contact with the cover of the rear seats after they were put on.”

This finding also strongly indicates that Melanie was not dressed with the red trousers until after she was transported in the family car, just wearing T-shirt and panties.

There might also be other explanations, if the finding is taken by itself. Melanie could have put her red trousers off and on again during the drive, acting on a playful impulse, which could explain the seat cover fibers on her panties quite easily. *On the whole*, though, this finding smoothly fits into the entire complex of traces.

## **6. Forgotten Material Evidence: “Thick, light-colored fibers”**

In the framework of the further investigations, the clinging seeds on the inside of the red trousers and their possible significance for the reconstruction of the (after) crime got totally out of sight. They were last mentioned in the investigation files of October 1986. On October 27, 1986, Monika Weimar was arrested.

Another, possibly vital cue was also forgotten soon. The analytical zeal with which the fibers on the clothing and the bodies of the children were examined for their agreement with Monika Weimar's clothes – judged objectively and without any subjective reproach – seemed to leave no room for investigations which might have crucially exonerated the accused. I am talking about the “thick, light-colored fibers” about which the responsible clerk in the Office of Criminal Investigation told the

head of the special task force for the first time in a telephone conversation of August 22, 1986. The file note of the same day concerning this conversation has the following wording:

“Furthermore, fibers were found (taped arms and legs of the bodies) which we have not been able to classify yet. The fibers are thick and light-colored (carpet fibers? fitted carpet?) – they can also be of a light-green or light-blue color (for instance). With regard to this finding, the Weimar apartment must be examined (not yet urgent).”

The fact that such “thick, light-colored” fibers were secured, which could neither be classified as belonging to the car-seat cover nor to Monika Weimar's clothes, was confirmed again by the expert of the Office of Criminal Investigation during the trial in Gießen too. In the rush of the other investigation activities this complex of traces was no longer pursued, although it could have gained vital importance to exonerate the accused and confirm her account.

What made these fibers so important? They were fibers of a kind that the experts assigned to stem, due to their size and morphology, most likely from a carpet or fitted carpet, which pointed towards the home of the children. (On a photograph of Mr and Mrs Weimar's apartment one can actually see a somewhat large, light-blue piece of fitted carpet near the entrance door.) Furthermore, there was a number of fibers secured as “thick, light-colored fibers” from the *bare* arms and legs of *both* children. One has to recall how smooth and fine the skin of children, girls especially, at the age of five and seven. It is most improbable that this number of “thick, light-colored” fibers should stick to the bare parts of the bodies of *both* children for a period of one-and-a-half hours while they were playing and running about outside. Every criminal expert investigating fibers and the loss of fibers due to movements will confirm this. The “thick, light-colored fibers” on the bare parts of the bodies of *both* children thus created a strong piece of circumstantial evidence for the fact that they did not play outside for a longer period of time before they died. Unfortunately, this trace was not followed. The investigation order that “the Weimar apartment must be examined” was not carried out.

In theory, it is possible to conclude that both bodies were transported in a large textile – e.g. in a carpet – before they were hidden. This, however, does not make a lot of sense, because the large number of fibers originating from the car seat covers found mainly on Melanie's clothing and body is only conclusive if her body (during the drive from Bengendorfer Grund to the car park near road 3255) was transported *without* such a wrapping. This wrapping would have been a hindrance to the disposal of the body carried out there – Melanie's corpse was thrown over the stinging nettles “with a certain momentum”.

## **7. Overlooked Material Evidence: The Missing of Sand**

Only during the retrial in Gießen did it come to light how careful the bodies of the children as well as their clothing were examined for *sand traces* at the Office of Criminal Investigation. The investigators in Fulda had limited their efforts to the finding that the *sandals* the children had worn showed no signs of sand, but they apparently had not known anything about the systematic post-examination of the entire clothing. Thus the opening of the two plastic bags in which the panties that the children wore on August 3, 1986, had been stored – and which were obviously opened at the Gießen court for the first time – showed that small pipettes were enclosed to both garments, each of which contained 15 to 20 minute sand grains. However, these were the panties the girls wore on the *previous* day; no sand traces at all were found on the panties the *dead bodies* were dressed with and none on the rest of their clothing, in particular on the socks. In the sandals, too, no single sand grain was found, even though the foot-bed of both pairs were already tom. This sum of findings – no sand adhesion whatsoever: neither on the bodies of both children nor on their clothing, nor on their shoes – also reduces the probability of the assumption that the children were playing outside for one hour and a half before they met their death:

There was not just sand in the sand-box in which a neighbor believed to have seen the children play still on that morning; there was sand mainly on the gravel path on which a couple, who had visited same neighbor shortly before, believed to have seen the children waving to them. Furthermore, August 4, 1986 was a stifling hot day. Should the children, despite the heat, not have sweated between the toes and on the soles of their feet? Should dust and sand not adhere to their sweating feet and damp socks? That is not very likely.

All in all: The lack of even minute traces of sand in the children's clothing, on their feet and in their shoes creates strong circumstantial evidence for the assumption that they did not play in the sand-box and on the gravel path in front of the houses in Ausbacher Straße for one hour and a half before they were killed.

## **8. Further Forensic Evidence**

Out of respect for the victims and sympathy with the family it is personally understandable when the question of how the victims died is treated with reserve. However, this reserve is dangerous – and sometimes fatal when a crime must be solved – if it leads to criminological fallacies. The already mentioned paper of August 19, 1986, of two members of the special task force contained the following sentence: “Both children were not killed brutally but in a 'gentle' way.” This was taken as circumstantial evidence pointing to the mother as the murderer – an assumption that is as silly as the inversed hypothesis that an especially brutal killing would as a rule point to a man as the criminal. Both children were diagnosed to have died from suffocation – Karola died from suffocation, Melanie “from strangling or possibly from suffocation with a soft cover”. The phrase “soft cover” chosen for the post-mortem report might have misled the two detectives to assume that the children

were killed in a “gentle” way. This was and still is a gross misconception, for *death from suffocation as well as death from strangling is a particularly cruel way of killing.*

*Spann*, who was Director of the Institute of Forensic Medicine in Munich for many years, describes the death from strangling as follows:

“As we know from descriptions of crimes, strangling takes relatively long, because it is really necessary to overpower the victim. Therefore, it lasts over a period of five to ten minutes, sometimes even more. All the same, three minutes of continuous strangling is the minimum of time needed to kill a person. *The same goes for children.* Only with very sick people, those suffering from a heart condition in particular, might we expect that a shorter period of time is required.” (*Maresch/Spann, Angewandte Gerichtsmedizin, 2nd edition, p. 67 – Italics by the author*)

Death from suffocation, i.e. holding something over somebody's mouth and nose and closing the respiratory passages, is no less cruel. The obstruction of breathing out leads to a rapid accumulation of carbonic acid in the blood, which changes the subjective appearance of suffocation. The victim suffers the “agony of suffocation” – according to the doyen of the German forensic medicine, *Otto Prokop* (*Prokop/Göhler, Forensische Medizin, 3rd edition, p. 103*). Unconsciousness takes place one minute and a half later, at the earliest, unless the murderer does not just choke the respiratory passages, but at the same time obstructs the blood passage to the brain with pressure on the carotid arteries. Then unconsciousness may occur at an earlier stage. According to the post-mortem report this did not happen in Melanie's case.

All textbooks about forensic medicine describe the micturition and defaecation of the victim during death throes as a typical autonomic reaction, as a result of a spill of hormones (fear of death).

Yet Karola's as well as Melanie's underwear showed no signs of urine or faeces. Their panties were – as a detective expressed it – “sparkling white”, as if they had just been put on. It is true that sometimes the autonomic reactions which can normally be expected fail to materialize. However, it would be an unusual coincidence to find that *both* victims showed no autonomic reactions whatsoever, although they were strangled and/or suffocated for a period of at least three and a maximum of eight minutes each. On the other hand, the small probability of such a coincidence creates strong circumstantial evidence for the theory that the children were not killed outside, but already in the house, and that they were dressed with fresh panties after urination before they were brought out of the house. This theory matches with the fact that in Melanie's bladder no urine was found at all and in Karola's just the minimal quantity of 4 ml.

The Regional Court in Fulda at the time dismissed these reflections with the argument that, if the children had been killed at home, the rooms would have shown considerable traces of urine, either in the children's beds or somewhere else in the apartment. Yet: If the father or the mother was the murderer, should not he (or she) have been able to remove such traces? And: The bed linen was not secured until eleven days after the children were reported missing. It was examined solely *for fibers*.

## **9. Setting the Course Atmospherically: The Shattered Windshield**

In any criminal case there is evidence which in fact is none but which nevertheless sometimes give an enormous impetus to the forming of opinions – to the defendant's detriment. Evidence of that kind was the crack in the windshield of Mr and Mrs Weimar's Volkswagen Passat. This crack had already been noticed by police officers on the afternoon of August 4, 1986. During the first questionings Monika Weimar had stated that she had been passed by a truck on her way to town. In the course of this passing, a stone had hit the windshield and caused the crack.

The special task force mistrusted this story – rightly so. An examination carried out in collaboration with the Fraunhofer Institute in Freiburg revealed that the windshield had been shattered by a kick from the inside. Confronted with this result, Monika Weimar revised her earlier statement in the questioning on August 28, 1986 and explained the damage by describing that her foot had slipped and her heel had hit the windshield during sexual intercourse with Kevin Pratt in the car. She said that this, however, was just an assumption; she had only noticed the crack the next morning when driving to town.

The police officers did not consider this explanation conclusive – but it could never be proved compellingly that it was false. Indirectly, however, this seemed to result from the fact that Kevin Pratt stated that, from his position on the passenger seat, he had not seen a crack in the windshield when Monika Weimar took him back to the barracks after their date. The Regional Court in Fulda considered this credible and thus the judgment of January 8, 1988 contains the following final statement:

“The Court is convinced that the damage of the windshield is directly connected with the killing of the children and that the defendant does not reveal its actual cause since this would expose her as the culprit.” (Judgment, p. 60)

Two things were not taken into consideration here: That Kevin Pratt had not noticed the crack in the windshield on their way to the barracks could only be used to prove Monika Weimar's statement to be false if the picture of the damage remained absolutely identical between the time of its origin and its discovery and in particular if it could be excluded that the picture of the damage had changed on Monika Weimar's way home from the barracks in Bad Hersfeld to her apartment in Philippsthal (approx. 14 miles). But it was exactly this that could not be claimed:

Vibrations while driving can cause a very small and hardly recognizable crack in a laminated windshield to become substantially bigger. One or two potholes can totally change the configuration of the crack.

Much graver, however, was the fact that another aspect had not been considered: Anybody who saw a connection between the crack in the windshield and the killing of the children had to assume that one of the two children was sitting on one of the front seats while it was overpowered by the culprit and that there was defensive action resulting in the crack. What was totally overlooked was the fact that the driver's seat and the passenger seat were mainly made of wool fibers; according to a report of the Office of Criminal Investigation of the state of Hesse of March 20, 1987, however, only a small amount of wool fibers from the front seats was found on the children, but very many chemical fibers as they had been used in the covers of the back seats. This finding, ignored by the Regional Court in Fulda, proves definitely: The crack in the windshield cannot be explained with defensive action by one of the children during the killing. It had no connection with the crime, at least not a direct one.

## **10. Conclusion**

The problems connected with evidence by witnesses were not treated in this paper. In the Gießen trial, there were witnesses who talked about confessions or statements similar to confessions by Reinhard Weimar. There were also witnesses who continued to swear blind that they had still seen the children on the morning of August 4, 1986.

The author – like some other people involved in the proceedings – had repeatedly wished for sending all witnesses – under oath or not – packing.

In contrast to this, the idea of an objectivized process of finding the truth on the sole basis of material evidence may seem fascinating. However: Material evidence is not always objective either. It is its often seemingly compelling probatory force in particular that tempts its interpreters – experts in criminology and forensic medicine – to come to conclusions where precaution would just allow hypotheses. The insinuations of prejudice also retain their significance in the assessment of material evidence. What is always indispensable is a careful analysis of the basis of evidence and the methods. Only then can Goethe's quotation about “reason and science” as “the finest faculty of man” be applied. The *personal* sometimes origin of bias – must not play a role in the development of this faculty.

Monika Böttcher, divorced Weimar, has been acquitted. I hope justice was done to her. There was none for Melanie and Karola Weimar.