The "Authenticity of Photography": Comments on a Strained Term[1]

by Michael Fehr

A mishap

When the head of the Federal Criminal Police Office (BKA), Horst Herold, had to publicly admit on August 22, 1978, that three persons urgently wanted as terrorists had been observed in detail during "reconnaissance flights" over parts of the Federal Republic of Germany, but had not been recognized as the three wanted persons, not only one of the biggest search mishaps in West German post-war history was disclosed.[2] Rather, this day was also a memorable date in the history of photography.

Let us remember: due to "various hints," the three people had already become so suspicious before the incident in Michelstadt that the Federal Criminal Police Office (BKA) initiated a comprehensive surveillance.[3] In the process, the "target investigators" finally stood "eye to eye with the terrorists"[4] and sat with them at the same table.[5] However, they were recognized and identified only later – after they had escaped – on the basis of "photometric measurements of unchangeable features on a person's face",[6] when comparing (old) mug shots and pictures taken by the investigators during the observation. In the *FAZ* one could further read that "on the original photograph of Adelheid Schulz (...) under the coat the part of a submachine gun, underneath the front sight of the weapon (should have been) recognizable." "This," commented the *FAZ*, "admittedly does not mean that the person who took the photo could also have made the discovery with the naked eye."[7] Finally, the *Stern* reported on a man who had recognized Willy Peter Stoll in downtown Frankfurt even before the incident in Michelstadt and had given the police a detailed description of the person. According to the *Stern*, this man's collar burst when he heard about the mishap. "He called the BKA and wanted to know why, based on his description, none of the existing photographs had been retouched and a new sketch had been made. BKA answer: 'What use would have been a new picture – they change their appearance every two weeks'."[8]

So, it could no longer come as a surprise that Horst Herold publicly doubted the "immediate recollection value" of photographs two months after the incident in Michelstadt. Otherwise, he said, it could not be explained that 44 million distributed wanted posters, with the help of which one had searched for the terrorists, had in no case led to a serious clue. "A photo," Herold opined, "is more likely to give an extremist hints as to what he must not look like under any circumstances if he does not want to attract attention."[9] As the *FAZ* further reported, the president of the Federal Criminal Police Office then sketched on the same occasion a "future image of forensic technology as that of a 'closed system of objectification', (which), with electronic data processing at the center, with procedures for the identification of fingerprints, writings, faces, voices, traces according to features and elements resolved in digits (...) will enable an 'investigative forensic technology on the spot'."[10]

The most important indication that the incident in Michelstadt was by no means merely a mishap was thus provided by the supreme guardian of the law himself; his attempt to use the incident to propagate a new forensic system – which he had long been calling for – makes this clear: The police had fallen victim to a structural weakness in their investigative system – their apparently blind faith in the power of photography as a means of detection and identification. However, it is not the spectacular circumstances that make the incident in Michelstadt interesting here. But rather the fact that with this incident, some essential questions concerning the properties of the medium of photography, which were otherwise at best discussed theoretically, gained current significance – and became generally known as at least practical difficulties in dealing with photography. The most important question that arose in this context was probably that of the character of photography as a

means of "authentic" reproduction of reality. I will discuss it above all using the example of the incident in the following paragraphs.[11]

Figure 1

'Terrorists' or 'Young Entrepreneurs'? On the immediate recollection value of photographs

Some things about the incident in Michelstadt seem rather unreal. Not least the attempt of the Federal Criminal Police Office to cover up the whole affair.[12] In retrospect, however, the behavior of the authorities in this respect seems understandable to me – however politically unwise it may have been. For one thing was obviously certain: whether the officers in Michelstadt had indeed made an avoidable, embarrassing mistake or whether it would have been a relatively improbable, fortunate coincidence whether the wanted persons had been able to be identified on the spot; in any case, the public would have judged the incident to be a mistake on the part of the police.

For even in this society, in which almost everyone has experience with photography and in which one is accustomed to being identified on the basis of officially approved photos of oneself – whether at the border or at so called 'vehicle checks' – it remains the specific experience of the police that it is two different things whether one concludes from a person to his photo or from a photo to the person it shows.

Matching the appearance of a person in front of one's face with his or her photo usually succeeds even if the person should have changed his or her appearance considerably – by a beard, for example; if, for example, an officer insisted that the person had to match his or her appearance exactly to that in the photo, this would be perceived as harassment, and probably rightly so: For just as it is a general value of experience that a person changes his or her appearance in the course of time – even without any special intervention – it is no less a common certainty that basic features,

especially of the face, remain essentially the same and can hardly be changed. And these are also depicted in the photo.

From this point of view, therefore, there is hardly any reason to doubt with Herold the "immediate recollection value" of photographs. Rather, the difficulty lies above all where remembering a photograph is supposed to serve to recognize a person. Therein lies the core problem of the incident in Michelstadt – as with all police investigations based on photographs. This difficulty can be experienced in a less spectacular way when one actually sees a frequently depicted politician for the first time ("Oh, he's really small!") or also in an everyday context, for example, when one meets relatives for the first time at a funeral, whom one had previously only known from the family album. What in these everyday situations is at best a surprise ("Oh, that's what he/she looks like!"), becomes under extreme conditions – and the police handling of photography is the most productive example of this – the often unresolvable difficulty of identifying a person from its photograph.[13] First of all, in police situations there is usually a lack of certainty, given in everyday life, that it is the person one wants to recognize. Then, a police officer can hardly expect the person he has to identify to identify himself as the person in question: the many little signs that someone who wants to be recognized gives off fall away. Finally, and this seems to me to be the most important thing, the police officer has to reconcile the picture he has formed of the person he is looking for in the course of his research with the actual appearance and the impression the persons under observation make on him. The situation is further complicated by the fact that this recognition work usually has to be carried out in more or less everyday situations, i.e. under conditions that do not allow for an experimental isolation, so to speak, of the persons under observation. In other words: Especially in the context discussed here – the identification of persons by means of photographs – the information content of these pictures usually turns out to be so limited that it urgently has to be supplemented by further information if they are to be of any use at all: Photos can hardly be remembered, they contain too many details for that; if you nevertheless try to remember a photographed face, you have to interpret the photo, make an image of the person photographed, and that means simplifying and supplementing it – changing it.

Figure 2

Thereby, to remain with the example, the momentary expression that the photographed person offers becomes a substitute for the experience of his behavior and as such is inevitably absolutized: If the person photographed happens to make a stupid face while the picture is taken, you will probably look for a stupid person, and if he should look scowling and dismissive, you might look for a criminal. It is no different with regard to the spatial detail that a photograph can only offer: You make a person out of the face, and if a person is depicted, you think of the situation he might have been in when the picture was taken: The purpose-oriented perception of a photo stylizes the momentary expression that a photographed person offers in the photo (= the temporal section) to a typical behavior (= to a state) and takes the depicted detail (= the spatial section) for the whole (= the experience of the spatial continuum). This happens inevitably. Because what the photo shows cannot be experienced in real terms, it has to be translated according to real experience.[14]

The incident in Michelstadt is a rarely vivid example of how this can happen – despite a great deal of recognition work and far-reaching suspicion. Its essential cause seems obvious to me: The three persons were not recognized because the "target investigators" did not get the idea that they could have the wanted persons in front of their eyes. The decisive factor was the unexpected discrepancy between the image the officers had constructed by themselves of the terrorists and the image the terrorists had conceived of themselves and which they presented in Michelstadt: As could be gathered from all the relevant reports,[15] the terrorists did not appear at all as they had been imagined and as they had been photographed – haggard, hounded, aggressive, broken, but rather like "dynamic young entrepreneurs," i.e., like persons who would have been expected to have everything except straight terrorist intentions. For the impression made by the three wanted men, their physical appearance was probably far less important than their habitus, their unbiased behavior, which they documented above all by openly renting a helicopter: By means of not only an external disguise, but a profound, psychologically calculated change in their appearance, the terrorists had so effectively undermined the image that had been made of them, their *image*, that the concomitant adjustment of their appearance was only a formality in relation to it. Incidentally, there is much to suggest that this appearance was by no means mere naive acting, but rather a calculated and perfectly implemented performance:[16] Built precisely on the fact that the investigating officers, with terrorist images in their heads and pockets, would be on the lookout for "terrorists" and not for their opposite: "young entrepreneurs". And so, significantly, the three wanted persons were first noticed where they did not behave perfectly in the sense of their performance: by the helicopter pilots, who, used to dealing with people from the film, found the behavior of the three so unprofessional that they therefore became suspicious (i.e. without definitely recognizing one of the three) and turned to the police.[17] Seen in this light, it therefore seems not at all improbable that the wanted were seen by the officers, but recognized by them only when they could no longer behave according to their performance and had to flee.

What can be stated first – now more abstractly spoken – is: If at all, a photograph can at best be the reproduction of a single, specific situation of reality; as such, it is in every respect an excerpt: from the space and time continuum, thus no more than a single, external aspect of what was depicted. If one knows or has before one's eyes the situation and its conditions, the photograph may be a useful means to recognize them – a reference back, the reconstruction of the situation and its conditions from the photograph itself seems possible only in special cases.[18]

Cognition through official channels: On genuine and authentic images

The fact that the natural appearance of a person never coincides with the impression it creates in a recognizing subject is a general empirical value. Not least for this reason, no one would ever think of comparing two painted portraits of a person with the help of metric measurements and using possible correspondences in the distances between the eyes as proof of the identity of the portrayed

person. They would only be coincidence. For in the painted portrait not only the physical appearance of the person in question is the subject, but also the painter's perception of this person. Thus, the painted portrait is never only a representation, but in it also always an expression of what the painter perceived and wanted to reproduce or could. Therefore, the painted image corresponds to real experiences, indeed is a part of it. For just as the recognizing subject gains its image of the person in the confrontation with the "raw material" of its physical appearance, it realizes its image as a painter in the confrontation with the raw material of paint and canvas. Quite independently of whether the outer appearance of the portrayed person is well met or not, the painted picture is therefore always genuine, at least in this respect: as a direct production of the painter. Signature of both the genuineness of the painted image and its autonomy (vis-à-vis natural appearances) is the artistic technique: As the specific form of the work practiced by the recognizing and realizing subject, the artistic technique is the material expression of the in each case own reality of the painted; and as such also the material cause that prevents the direct comparison of painted images. For what artistic technique accomplishes: the transformation of the pictorial material (paint, canvas, tools, etc.) to the image, cannot be quantitatively grasped.[19]

On the other hand, photographs can be compared metrically (quantitatively): The fact that, despite the mishap in Michelstadt, it was possible – admittedly too late – to clearly identify the persons under observation is one example of this, and another can be seen in the fact that, for some time now, we have always had to submit two identical photos for identity cards or passports – so that the computers do not have any difficulties in comparing them.[20] If now in the circumstance that photographs are metrically comparable all argumentations about the authentic character of photography ultimately converge, the question is useful why, in contrast to painted pictures, photographs are amenable to quantitative comparison. For in this difference an essential aspect of the photographic process seems graspable.

The answer is obvious: In photography, in photography, the specific autonomy that is determinative for handcrafted images is abolished. It is replaced by the autonomy of an image production system.[21] In it, the artistic techniques are suspended in a uniform technical process that, in its essential processes uninfluenceable by man, can only be applied individually: Just as all cameras are built according to the same principle and, like the image carriers, differ only in nuances, all products of this image-making system are also basically, i.e. technically, the same –and therefore directly comparable; they differ only with regard to the different motifs to which the process has been applied.

With this objectification of artistic techniques in the uniform technical process, a radical change in the way images are produced has taken place: The cognitive performance of the image producer is separated from the actual production of the image; making an image no longer means: mediating the natural appearance with the cognized one, but only: taking an image. The creative act of mediating thus becomes a bureaucratic act of registering – and the craftsman the worker at a machine.[22] This, however, also eliminates the category of authenticity as it is determinative for painted pictures: as only indirect reproductions, reproductions that the process performs, photographs can only be genuine in the sense of being vouched for, but that is: authentic.

The autonomy of photographs is therefore quite different from that of painted images. It is a technical one: as products of a process that in its essential sequences takes place automatically and without human influence, photographs must first be subjected to a process of cognition if they are to be given meaning; as 'semi-finished products' and not 'raw materials' for experience, they direct it to the external, behind which every real experience reaches: for the most part, nothing can be learned from photographs that one does not already know or that has not been explained about them.[23] Even my aunt's album would remain completely incomprehensible to me if she did not take the trouble to explain each picture to me; because none of these pictures transports anything that points

beyond what has just been photographed, that makes its classification in a context possible; each photo must rather be explained and brought into a context by references, made into an image. In the words of Siegfried Kracauer: "In order for history to present itself, the mere surface context offered by photography must be destroyed. For in the work of art the meaning of an object becomes its spatial appearance, while in photography the spatial appearance of an object is its meaning. Both spatial appearances, the 'natural' one and the one of the recognized object, do not coincide. By cancelling those for the sake of it, the work of art at the same time unites the similarity achieved by photography. It refers to the appearance of the object, which does not readily reveal how it shows itself to cognition: but only the transparency of the object is conveyed by the work of art."[24]

I thus hold as a second essential aspect: if the handcrafted image is the immediate product of the real experience of its author, the photograph remains the product of a technical process; as an indirect product, it is at best evidence that the user of the photographic process had an experience, participated in a situation. And: if the handcrafted image is autonomous to the extent that it can be regarded as the realization of an author's cognition, the autonomy of the photograph, in contrast, results only from the autonomy of its technical production process.

Finally, to return to the starting point, the direct comparability of photographs: Two different photographs of a person can therefore be metrically compared with one another and used as proof of the identity of the person in question because, first, they were produced on the basis of an identical process which – in principle uninfluenceable by its respective user – delivers materially (technically) identical images of the person; second, because photographs can be stripped of their authenticity without difficulty: transported from one context to another, enlarged, reduced and disintegrated into sections; third, and finally, because, despite all such processing, the autonomy of the process of photography guarantees its authenticity as a reproduction. It is obvious that comparing two photographs, especially in the way the police are used to doing it, is not a creative but a genuinely bureaucratic work: measuring and matching can (today) be done more efficiently by machines than by people.[25] Comparing two painted pictures, on the other hand, requires an act of cognition: the determination of their common quality.

Photographed but not seen? Speculation about a Submachine Gun

Clichéd ideas are tough, and photos have to be made into images so that one can deal with them. What can happen in this process in reliance on the 'authenticity of photography' is also illuminated in a drastic way by the incident in Michelstadt: Only an undefinable, black structure on the photo in question (see Figure 1) and the idea that, if not in its appearance, then in some other detail, a clue to the 'true' identity of the three persons under surveillance could be hidden, were presumably the reason for the *FAZ's* assumption that "on the original photograph of Adelheid Schulz under the coat the part of a submachine gun, underneath the front sight [sic:!] of the weapon, (had been) recognizable." For this assumption could not be based on facts: In none of the eyewitness reports (published later, however) is there any mention of such a weapon that the terrorists had had with them.[26] Exactly this contradiction makes the *FAZ*'s assumption interesting here: It is obviously based exclusively on the photograph, is a fanciful, but false reconstruction of the situation from the photo in question. This example appears remarkable above all because it can be used in an exemplary manner[27] to understand the circumstances and argumentations on the basis of which inaccurate reconstructions can arise from photographs: Their essential condition lies outside of what can be taken from the photo; on the one hand, in the certainty that everything that can be seen in the photo depicts something: must have an equivalent in reality even if one cannot specify it; and on the other hand, in additional information that somehow concretizes what can be seen in the photo – in this case, the indication that the woman depicted is a terrorist. Only with this knowledge, which, as said, cannot be taken from the photo itself, but is guaranteed on the one hand by the process of

photography and on the other hand by the photographer, can the photo mean something – be made into a picture. And that then simply works. The more inaccurate the image is or the stranger that which it visualizes, the more easily the photograph becomes a projection field for the ideas of its viewer, and the more readily extra-pictorial information becomes an argument for the interpretation of parts of the image that are difficult to determine: Where there is certainty that a terrorist is depicted, a black structure by her hand – if it cannot be clearly determined otherwise – can only be the image of a submachine gun. And once this idea has been formed, doubts about it are already equated with doubts about the authenticity of the photograph in the first place: surely the black structure on the terrorist's hand must mean something, but what more likely than a gun if nothing else seems plausible? Even the fact that no one saw the weapon is then no longer an argument: For the fact that the weapon can only be 'recognized' in the photograph "does not mean, of course, that the person who took the photograph could also have made this discovery with the naked eye" (FAZ). Rather, just this contradiction can be turned into an argument for the correctness of the interpretation: Where the photo (apparently) offers more than concrete experience knows, and be it also something that cannot be determined in more detail, the better knowledge must capitulate. Thus, finally, even the assumption that the photo was retouched[28] in the relevant place before its publication becomes an argument to make the interpretation of the actually hardly determinable detail more probable: Because retouching is usually only done where something is to be covered up.

Now, the photo in question was actually retouched before its publication (see Figure 2). And this perhaps makes it clearer that the attempt here is not only to comprehend the thought structure of the *FAZ*, but at least also a very concrete fear of the BKA. Namely, the agency's fear that broader sections of the population might interpret the photo as proof of the police's mishap, and that it would have to accept a loss of confidence in its efficiency as a result. What can be stated as a third point – now again speaking more abstractly – is that the slogan of the 'authenticity of photography' does not mean anything more than that someone has used the photographic process in a certain situation. It also says that the photograph is authentic evidence that photographs were taken in that situation. However, the photograph can be considered an authentic reproduction of the situation only as long as what it visualizes can be retranslated into real experience or supplemented by real experience. For, once a photograph has been taken, it loses its authentic character to the extent that it is detached from its context of origin. But to the same extent that it loses its authentic character, its autonomous status emerges. What remains, and this is often not precisely distinguished, is merely the memory of it or the certainty that there must have been a situation in which the photograph was taken. It can often not be taken from the photo. In case of doubt, only the formal, material character of the photo must stand for it, whereby – the example developed above should clarify this – the trust in the principle non-influenceability of the photographic process can easily become an argument against real experiences.[29]

Conclusion or This is why the Police are looking for Fingerprints

The 'authenticity of photography' is based solely on the autonomy of the photographic process. Not because photographs concomitantly correspond to reality, but because every photograph concomitantly corresponds in principle to every other photograph, that is: refers to a principally identical way of dealing with reality – and enforces this on the part of the viewer – photographs appear as authentic images: Photography brings about a "normalization of experience" (Carl Einstein).

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[1] First published (in German) in: Herbert Bardenheuer, Hartmut Beifuß, Michael Fehr: Wie seh' ich denn da aus?! Unheimliche Begegnung mit der 2. Dimension. (How do I look there?! Uncanny Encounter with the Second Dimension), Munich 1979, pp. 147-169.

[2] Cf. FAZ Vol. 183, 24.8.78; Kölner Stadtanzeiger (KStA) Nr. 188, 23.8.78; Der Spiegel Vol. 35/78, p. 21ff., and more.

[3] Cf. Stern Vol. 36/78, p. 109ff.

[4] Cf. Stern Vol. 36/78, p. 109ff; KStA Vol. 188, S. 2.

[5] Der Spiegel Vol. 35/78, p. 27.

[6] KStA Vol. 188, p. 2.

[7] FAZ Vol. 183, p. 2.

[8] Stern Vol. 37/78, p. 169f.

[9] FAZ Vol. 238, 27.10.78, p. 8.

[10] Op. cit.

[11] I assume that the idea that photographs are authentic images is common knowledge to such an extent that I can dispense here with corresponding references for the dissemination of this idea also in the relevant literature. Also, I do not want to further problematize the authentic character of photographs, but only examine what authentic reproduction of reality through photography actually means. After all, at this point I would like to refer to the recently published essay "Zehn Sätze zur Fotografie - Vorüberlegungen zu einer Allgemeinen Theorie" by Leopold Rombach in: Kunstforum International Vol. 30/78, p. 48 ff., in which the author states that neither "objectivity" nor "realism" are appropriate terms to characterize the specific quality of photography, but only the term "authenticity". The fact that Rombach falls short: that, instead of a critical term, he reintroduces a normative one, becomes clear in the way he concretizes it. Thus, on p. 50, he says: "The authentic photo renounces the construction of facts against better knowledge; it is transparent, i.e. it reveals its mode of origin (for example, as a photomontage); the authentic photo is thoroughly researched, i.e. it is representative, to the best of its producer's knowledge and belief, of the factual and meaningful context conveyed; it renounces denunciation and cynicism." And further: "This catalog of assertions obviously implies that the photograph does not derive its credibility and expressiveness from itself, but is also bound therein to the observance of rules which are, in the broadest sense, 'journalistic virtues'. Thus, it becomes clear that the photograph is not of interest in itself, but only in a context (...)." Finally, Rombach writes: " ... the external correctness would then correspond to the quality 'appropriate in relation to the task of the photo', no matter how strange it may initially appear to the viewer. The inner truth would come about in it, in that the respective existing relation of purpose, intention and respective appearance of the photo is transparent and questionable, or rather renounces fraudulent persuasion." Once apart from the fact that the concept of "authenticity" defined in this way might be helplessly at the mercy of a photograph like the one reproduced here (Figure XX), the quotation reveals that here, a theorist of representation is arguing.

[12] The incident became known only two weeks later.

[13] The police's use of photography, which can only be touched on here, is also of particular interest because it began very early and may be one of the first attempts to use photography in the sense of its specific properties, i.e. above all its exactness and objectivity (as a reproduction process that cannot be influenced in principle, see below): Erich Stenger, Siegeszug der Photographie, Seebruck 1950, p. 137, reports on a press publication from the year 1839 (!) in which it was claimed that the "daguerreotype had acted as a witness in a divorce case; namely, the husband had succeeded in photographing his wife unnoticed during a tryst". If Stenger does not believe this report (in fact, the procedure at that time was still so cumbersome and time-consuming that a photograph as described could hardly have been made) and leaves open whether a report of the Münchner Morgenblatt from 1841 is correct, in which it is reported: "The Paris police now have the faces of all criminals who come into their hands daguerreotyped and attach these portraits to the files," but daguerreotyping and photography seems to have been practiced by the police forces at the latest from the beginning of the 1860s – even if not yet systematically. Stenger reports that from the mid-1860s, "crime albums" were already being created, and in 1864, Odebrecht suggested photographing crime scenes, found objects and traces in his work "Benutzung der Fotografie für das Verfahren in Strafsachen".
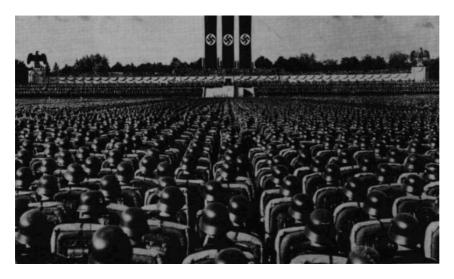
[14] The problem raised here is, of course, not a new one. It has occupied the police and their theorists for as long as they have been taking photographs: "(The identification of a person at large with a photograph) The difficulties, on the other hand, are great when the person sought and to be identified by means of a photograph is free, moving unrecognized in the crowd from which he must be picked out among thousands before he is arrested. The photographic image, which is hidden in the pocket of the police agent, should usually be consulted in secret, so as not to arouse suspicion or curiosity of the people around him. It can be said that

under such circumstances only the memory can help to find out the unknown person among thousands. (...) It is a mistake to believe that it is enough to look long and attentively at the physiognomy of a person in order to imprint his facial features permanently on the memory. With few exceptions, and if one is not gifted with an extraordinary physiognomy memory, this attempt will bring a certain failure with it. The isolated examples of surprising recognition given by individual police officers gifted with this rare quality should not make us waver in our experience gained over ten years. In the majority of cases, an image thus imprinted will soon disappear from memory. In addition to this, the same causes which sometimes give two photographs of the same person a quite dissimilar appearance, have a confusing effect and prevent identification at the given moment. Let us suppose that the police possess the old portrait of a recidivist criminal, taken years ago during an earlier arrest; can one expect to find the same physiognomy in him long afterward, when on the day following a 'successful prank' he walks about the streets newly dressed and well fed? In all these cases it is necessary to keep to the details of the structure and the similar forms. In order to find these details and to memorize the image, it is necessary to make a systematic study of it and to be familiar with physiognomic nomenclature. (...) It is remarkable that such external anatomical peculiarities of human beings, which in and of themselves are sufficient to identify one individual among thousands, only come into play as important features of identification when we know how to name them. In the other case they are as good as not available for us. One remembers here the well-known saying: We think only what we can express with words. Conclusion: The police agent, who has been entrusted with the difficult task of seeking out and arresting a criminal by means of a photograph, should be instructed to describe from memory the figure of the one he is pursuing. This is the best way to prove to his superior that he has taken to heart the task entrusted to him. (...) (Identification by memory): The rules we have given before, as well as the knowledge acquired through study or experience, lose their value almost completely when the photographic prints come into the hands of the public, witnesses or laymen, etc., to be examined and judged by them, when they are to comment on the resemblance of a person whom they have seen or known more closely and whom they can still remember. (...) How does one make use of the forensic photograph in order to derive the desired benefit from it? In what way does one ensure the recognition of the portraits presented? What precautions must be taken in order not to induce erroneous answers? One of the most common and well-known means of doing this is to mix the photograph to be viewed with several others and to present all of them to the witnesses. If the latter take it without hesitation, if they 'separate the wheat from the chaff', so to speak, then the test is successful. But it very often happens that, despite the correctness of the suspicion, none of the photographs is recognized at first sight, or even that the hesitant affirmation refers to other photographs that were accidentally mixed in. One must then put the latter aside and concentrate one's attention on the only interesting picture by listing the conspicuous distinguishing marks that one could collect about the color of the eyes, the face, the beard and the hair. (...) The related questions about the shape and the girth of the shoulders, the bone structure and the corpulence come subsequently to it, because sometimes the portrait can give a wrong idea about it. (...) In spite of all these precautions, it often happens that even a very similar portrait is not recognized by the persons questioned, although they have seen the original. The reason lies in the fact that the picture, which the witness has in memory, does not agree with the photograph shown to him. (...) In such cases, the recognition will sometimes be more successful by means of a photograph of the whole figure than with the help of a bust portrait. The former also has the advantage of giving us a more precise idea of the social position of the person. (...) If we consider the peculiarities of a photographic breast image and want to compare these with the peculiarities of a portrait in the whole figure, we must keep in mind our final purpose, namely: the recognition according to mere memory. We conclude from this that all persons who know someone well, first and foremost his parents, his acquaintances, his company and work colleagues, will more easily find out the drawing of the characteristics they have become familiar with on a breast portrait, because the change in clothing, a change in posture caused by age, or a changed social position could mislead them on a photograph in the whole figure. On the other hand, it happens that the photograph of a person in everyday dress is easily recognized by such people who have seen the person in question only from a distance and in passing, but without paying any particular attention to him at the time." Quoted from: Alphonse Bertillon, Die gerichtliche Photographie - mit einem Anhange über die anthropometrische Classification und Identificirung, Halle 1895, p. 33 ff; Bertillon, Chef du service d'Identification de la Prefecture de Police in Paris from 1888, was the first to introduce scientific methods into criminology after 1883. First, he developed a cumbersome measuring method (Bertillonage) for identifying persons: Building on the insight of anthropologists and statisticians that the body measurements of one person never perfectly matched those of another, he subjected arrested persons to extensive, meticulous measurement, the results of which were stored in card indexes. From 1888/89, systematically taken photographs (one each en face and profile) were added to the measurements (see also note 20). Almost at the same time, the fingerprint was discovered in England by the private researchers Faulds,

Herschel, and Galton as an unchangeable individual characteristic of each person. However, they failed to develop a workable classification and ordering system for the prints. Therefore, although its awkwardness and high error rate soon became apparent, bertillonage was introduced as a method of identification by police forces throughout Europe. After Vucetich in Argentina in 1892 and Henry in India in 1896 had independently succeeded in developing a simple classification system for fingerprints, dactylography, however, increasingly supplanted bertillonage until the beginning of the new century, but was not abolished until 1914 – after Bertillon's death – also in France (cf. also Jürgen Thorwald, Das Jahrhundert der Detektive, Vol. I, Munich 1968).

[15] Cf. KStA Vol. 188/78 p. 1; Stern Vol. 35/78, p. 47.

[16] The use of the term performance may come as a surprise. However, it is not used here to trivialize the actions of the terrorists, but on the contrary: with polemical intent with regard to the rampant fashion for performance as an art form, which I would like to counter with this example. And this on the basis of Georg F. Schwarzbauer's definition of performance as an "artificial direct representation" that differs from its predecessors (Happening, Action, Fluxus) "by (the) exact determination of the role of the viewer. He is to be confronted directly with the artificial creative process through the experience of direct artistic communication. He is no longer the actor, the one directly involved in the event, but has an almost exclusively observing function (...). This, however, also results in a defining determination of the artist ..."(Kunstforum international Vol. 24/77, p. 39 f.). For if, on the one hand, the artistic is subtracted and, on the other, one considers that most performances are not aimed at concrete viewers but at an abstract one, the camera, then the performance as a form of behavior corresponds exactly to what is usually performed when one consciously allows oneself to be photographed. In other words: The performance is a form of behavior that corresponds to the photographing; a behavior that, essentially aiming at an external effect, if not expressed, at least mentally has photography as a prerequisite. And this also with regard to the beholder, who can be forced into the "exclusively observing function" by a medium like photography (but of course also by video and film).

[17] Cf. e.g. the interview with the pilot Ingeborg Rieger in: Der Spiegel No. 35/78, p. 26 f. 15 Cf. e. g. KStA No. 188/78, p. 1; Stern No. 35/78, p. 47.

[18] One such case is the photograph of the Reichsparteitag (Reich Party Congress) of 1937 in Nuremberg shown here. In it, the structure of the depicted situation and the regularities of photographic reproduction merge without contradiction (only the heads, which are not exactly aligned, interfere), and insofar – apart from the missing third dimension – in principle no more can be expected from the real situation than can be reconstructed from the photograph.

Ullstein Bildarchiv, Berlin

[19] Also in the sense of this transformation process the painted picture corresponds to real experience. For the eye likewise knows "the enormous difference between the psychologically conditioned 'visual image' in which the visible world comes to our consciousness, and the mechanically conditioned 'retinal image' that paints itself in our physical eye," so Erwin Panofsky, Die Perspektive als symbolische Form, in: ders, Aufsätze zu Grundfragen der Kunstwissenschaft, Berlin 1974, p. 102 f. As the difference between a "seeing seeing" and a "recognizing seeing", however, this difference only becomes the subject of art theory and painting after the invention of photography. With respect to the relationship between painting and photography, Ernst Kallai recognized the salient difference between them in the different surface structures of paintings and

photographs: "Of a work of painting, the eye is occupied by the great exhilarating tension between the sometimes coarse tangibility of the means of design and the spiritual intention they embody. However fine the fracture may be, however seemingly disembodied and transparent it may be in the service of representation, the eye perceives the most inconspicuous traces of craft precipitation: the appearance stands out against the material substrate in its formation." In contrast, the "real-materially conditioned sensory substrate" of photography, the uniformly glossy or textured paper, is "poor, almost insubstantial," lacking "the optically perceptible tension between pictorial material and image." Ernst Kallai, Malerei und Photographie, in: i 10 Internationale Revue, Amsterdam 1927, p. 151.

[20] Photographs taken by the police records department (ED) are, moreover, standardized: Almost all departments work with the same camera (type "Robot"), similar lighting conditions, the same (very fine-grained) film material and, above all, with the same shooting situation in which, in particular, a) the positions of the subject (by means of a rotating chair) and b) his distance from the camera are fixed. This is done in such a way that the interpupillary distance of the subject on the standard print (122 x 52 mm) is always about 7 mm. The photographs are also taken with a slight top view. Nowadays, the standardization of the photographs is no longer done for reasons of objectivity alone, but also in view of the phantom image devices with which the police increasingly operates and for which the ED-images serve as source material. Here it becomes clearly comprehensible how far photography influences perception: Describing a person is no longer a cognitive achievement of the witness, which the (police) sketch artist realizes, but only a puzzle game, a compilation of features.

[21] I use the term autonomy here only descriptively: in the sense of inherently lawful with the implication of self-acting in the case of photography.

[22] The objectification of artistic techniques in the uniform technical process of photography is tantamount to an instrumentalization of perception. Excursus: An idea, John Dewey explains, is "a sketch (drawn up about existing things) and an intention to act in such a way that they are arranged in a certain way. From which it follows that the idea is true if the sketch is honored when the realities following the actions rearrange or reorder themselves in the way intended by the idea" (Essays in Experimental Logic, Chicago 1916, pp. 310 and 317, quoted in Max Horkheimer, Critique of Instrumental Reason (1947), Frankfurt 1974, p. 49). This core proposition of pragmatic philosophy (cf. Horkheimer, op. cit., p. 30 ff.) describes the epistemological basis of the exact sciences and is also the basis of the photographic process and its elements: central perspective and the use of the light sensitivity of silver salts. The central perspective is an idea in the sense of Dewey, in that it defines reality (by which I would like to understand the actual, subjective visual impression) as a rational, i.e. infinite, continuous and homogeneous, in short: purely mathematical space with the intention "to represent several objects with a part of the space in which they are located in such a way that the idea of the material image carrier is completely displaced by the idea of a transparent plane, through which we believe to look out an imaginary space, which concerns the entire objects in an apparent succession and is not limited by the edges of the image, but only cut out" (Panofsky, loc. cit, p. 127, note 5).

And true in the sense of Dewey is the central perspective, because with it the picture is transformed into a "window", through which we are supposed to believe to look into a space, in which approximately the following laws are valid: "All orthogonals or depth lines meet in the so-called eye point, which is determined by the perpendicular fallen by the eye on the projection plane. Parallels, however they may be directed, have a common vanishing point (...); finally, equal magnitudes diminish towards the back in a progression, so that – presupposing the location of the eye as known – each piece is calculable from the preceding or following one." (Panofsky, op. cit., p. 99) "Steering and guiding rope of painting" (Leonardo), the exact-perspective construction enables "that homogeneity and infinity, of which the immediate experience of space knows nothing, to be realized in the representation of the same" (Panofsky, op. cit., p. 101); and is thereby the most important tool to overcome the medieval principles of representation: By separating into 'subject' and 'object', the central-perspective construction breaks the unity of time and space in the representation and sensation of the sacred that had been valid until then, and allows the individual to take a 'realistic' standpoint towards reality. From this new standpoint, reality now appears as 'object world' and space as 'system space': as true (in the sense of Dewey) or objective space, insofar as its construction is rational, i.e. verifiable; as *quantum continuum*, i.e. as space in which all qualities: the differences between up and down, right and left, front and back, body and free space, etc., are absorbed and equalized in merely quantitatively determinable, relational relations; but also as space without time; and a rigid space, which presupposes a fixed observer standpoint as well as negating that we see with two constantly moving eyes. "Objectification of the subjective" (Panofsky): rationalization of the visual impression and thus the possibility to grasp reality exactly, the central-perspective construction remains, however, only as long as it is understood as a construction: as a tool of cognition. Objectified as an apparatus from the Velum to the *camera obscura* and used as a technique of representation,

central perspective – like seeing in general – becomes an ideological instrument: where the artist no longer uncovers the structure of a 'higher order' (religion, for example) and fulfills its objectivity, but demonstrates the ordering power of his instrument vis-à-vis the seen reality (nature), the question from which standpoint he gains and communicates his insight, how he uses the instrument: fixes the vanishing point, becomes decisive. Thus, to the extent that perspective ceases to be a mathematical-technical problem, it becomes an artistic problem and a problem of the artist: it forces him to make a subjective decision and to make the form (the 'how') a function of the artistic work. (Cf. in general: Dieter Hoffmann-Axthelm, Theorie der künstlerischen Arbeit, Frankfurt 1974, p. 129 ff. and on the specific problem of perspective representation in the late 18th and early 19th centuries (before the invention of photography) Kemp, op. cit., p. 51 ff, especially p. 61 ff.) But even as an apparatus (*camera obscura*, etc.), perspective remains a tool: since the craftsman's ability is in principle incapable of realizing what the apparatus reveals, it becomes – even if only indirectly – a benchmark for painting and – independently of it – is developed into a scientific instrument. Less problems of the "quantitative stretching" or the "quantitative overuse of painting for (the) mass communication" at the beginning of the 19th century" (Kemp, loc. cit., p. 13), but rather the qualitative problem: the contradiction between the exact, but immaterial images that the *camera obscura* provided and the craftsman's inability to be able to produce just such exact images, therefore seems to me to have been the decisive impetus for the search for a photographic process; as an objectification of artistic techniques in an autonomous chemical-technical process, the researchers envisioned the solution of the contradiction between the technical objectivity of the *camera obscura* and the handicraft subjectivity of the painter or draftsman. Compare Lübeck, Das Bild der Exakten – Objekt: der Mensch. Zur Kultur der maschinellen Abbildungstechnik, Munich 1974, p. 16; J. A. Schmoll gen. Eisenwerth, Zur Vor- und Frühgeschichte der Photographie in ihrem Verhältnis zur Malerei, in: Erika Billeter, Malerei und Photographie im Dialog, Bern und Zürich 1979, p. 11 points to the general objective prevailing around 1800 of obtaining the most objective possible images of nature and the world of objects; accordingly, he interprets *camera lucida* and *physionotrace* as apparatuses "that made a correspondence between object observation and graphic recording mechanically practicable by projectively covering both processes." Kemp, op. cit., p. 15, however, sees in these only apparatuses that "remedy the inability of dilettantes and help professional artists to a more rapid output of their pictures." Kemp, op. cit. p. 11 ff., interprets Panorama and Diorama similarly one-sidedly in their importance as mass media (which is undeniable) and thus seeks to substantiate his thesis of the "quantitative stretching" that precedes the "qualitative turnaround" (photography). On the other hand, the Panorama and the Diorama did not enjoy such great popularity because of the large format of the pictures shown in them, but, as Heinz Buddemeier explains in detail in his work, Panorama, Diorama, Photographie – Entstehung und Wirkung neuer Medien im 19. Jahrhundert, Munich 1970, p. 15 ff, because they came so close to "reality". That dilettantes and not artists endeavored to fix the images of the camera obscura can therefore come as no surprise: If the latter were not interested in questions of exactness already from their self-conception, they had to be aware of the special quality of the images after nature and – if interested in artistic questions at all – their subjective inability (only Talbot explicitly articulated this) had to become the motor to search for a procedure that "would allow these natural images to be permanently drawn" (Talbot). Also familiar to those very explorers-dilettantes of the early 19th century – and not to the artists – was the second essential element that made the invention of photography possible in the first place: the chemical effect of certain substances, specifically: knowledge of experiments with the light sensitivity of certain substances. To have expanded this knowledge and instrumentalized it with regard to its combinability with the camera obscura is the decisive merit of the inventors of photography. Their goal was to develop an autonomous process, i.e. one that was independent of subjective intervention in its essential processes, because only this could be expected to produce true (in the sense of Dewey) or objective images: "But if the art of an engraver could not be dispensed with, then invention would lose all interest. Nature has its simplicity and truth, which one must be careful not to destroy. Only it may be followed in the choice of possible means." (Daguerre in a letter to Niepce) Thus, if until the invention of photography the central perspective construction was "an idea: a sketch drawn up about existing things and an intention to act in such a way that they are arranged in a certain way" (Dewey), with the invention of photography this "idea" is transformed into an "effective procedure". That is, "sketch" and "intention" are now formalized (= purified of any aspect of content) to such an extent that, as rules of a system of rules, they allow the model of the physiological process of seeing to be recognized in the interrelationship between camera obscura and light-sensitive layers – and thus permit the construction of a technical process that functions autonomously in the sense of this model: producing images free of contradictions under all conditions. In the photographic process, then, perception itself is instrumentalized: Freedom from contradiction or (in the sense of Dewey:) truth is only guaranteed insofar as any (subjective or manual) intervention in its course is omitted: Direct experience must be sacrificed to the effective procedure. In return, a second nature is gained. As an

exact reproduction of optically perceivable reality, photography not only surpasses the handicraft production of the central perspective construction to the extent that the light-sensitive carrier layers are improved, but also makes it itself part of the object world. With the camera as a model of the eye and the photographic image as a model of the retinal image, man is confronted with an autonomous reality that can now become a direct standard for perception. The "objectivization of the subjective" thus reaches a new quality. If until then it consisted in a symbolic order of nature, in composition, nature is now factually recreated, technically reproduced.

[23] Where not only known is being shot, and this includes everything that can be seen (the fact that some things only become conscious when they are seen on a photo is not a contradiction to this), an explanation to the photo has to be given as a rule: This becomes clear, for example, in scientific photography, where, to a certain extent, the entire experimental arrangement must always be formulated as well, so that the images in question can be understood. Cf. also Dieter Lübeck, op. cit. Finally, the principle of the illustrated magazine should be mentioned here, which – for the sake of greater shock effect mostly shows only large-scale detail sections from photos (cuts away everything 'unessential') – brings the context necessary for understanding as textual information, very often placed immediately in the picture, and thus opens up great possibilities for manipulation. There is, however, at least one important area of photography in which knowledge can only be gained from the immediate viewing of photographs, which the eye can see but not denote: the area of snapshot photography. A historical example of this are the snapshots of E. Muybridge, who succeeded in making the actual motion sequences of humans and animals visible.

[24] Siegfried Kracauer, Die Fotografie, in: ders, Das Ornament der Masse, Frankfurt 1977, p. 27.

[25] Cf. the remark by BKA President Herold quoted at the beginning.

[26] Cf. e.g. Stern No. 35/78, p. 47 ff.

[27] The fact that this is a relatively extreme example does not diminish its probative value. In the field of scientific photography, such conditions are common.

[28] FAZ No. 183, page 2.

[29] M. Antonioni's film "Blow up"(1966) dealt with the problem raised here with desirable clarity. Cf. also Kemp, op. cit., p. 26, who in this context deals above all with the relationship between format size and time factor. Ugo Mulas' Verifiche Nr. 6 Vergrößerung", 1972, illustrated by Kemp and (better) in Photography as Art- Art as Photography 2, Kassel 1977, p. 18 f, reduces the issue to a merely a formal problem.