



A PICTURE OR A THOUSAND WORDS

WHITEPAPER

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Establishing the truth is a complex and central part of the judicial process, which is essential to making fair and justified decisions. Evidence gathering involves examining different types of evidence to obtain the fullest and most accurate picture of the facts. Various types of evidence can be used for this purpose, including witness statements and video recordings. Although the practical use will vary from case to case, these two types of evidence complement each other, especially with regard to the clarification of the course of actions and contribute to a more comprehensive investigation.

The great strength of video surveillance is that it can provide accurate and unaltered footage that documents the facts without distortion. In this way, an objective data base can be introduced into the process, allowing the parties involved to form their own impression of the events to a certain extent. On the other hand, the weakness of video recording is that it only records what is in the camera's field of view. These disadvantages can be minimised by good planning and the use of high-quality products.

A witness statement, on the other hand, provides valuable subjective impressions that can put events into a meaningful context. At the same time, the risk of perceptual errors, incomplete memories and manipulation is higher with this form of evidence.

This whitepaper compares the two types of evidence and discusses their respective importance in the context of criminal prosecution and civil justice. It does this by providing a direct comparison of information on the following topics for both types of evidence:



Video surveillance provides precise, unaltered images and documents the facts without distortion.

COMPARING THE EVIDENCE WITNESS TESTIMONY AND VIDEO RECORDING

In a court case, establishing the truth and clarifying the facts of the case, is the basis for all further steps. What happened? How can the events or allegations be proven or disproven?

These key questions are answered by presenting and examining evidence. After many aberrations in history, the codes of procedure in Germany today contain a conclusive list what may be introduced as evidence in proceedings. The rules for civil proceedings are contained in the German Code of Civil Procedure (Zivilprozessordnung (ZPO)) and for criminal law in the German Criminal Procedure Code (Strafprozessordnung (StPO)). In both codes, evidence includes eyewitness testimony (§§ 373 et seqq. ZPO, §§ 48 et seqq. StPO) and video recordings as an object of the judicial inspection (§§ 371 et seqq. ZPO, §§ 72 et seqq. StPO in connection with § 86 StPO).

Both types of evidence are particularly suitable for clarifying the course of events and making them comprehensible to the judge. The weight given to each type of evidence in the judge's decision will, of course, depend largely on the individual case. However, both categories of evidence have specific strengths and weaknesses, which will be compared below.

OBSERVABILITY - AVAILABILITY OF EVIDENCE

For both types of evidence, the availability of evidence depends on three things: presence at the scene, the possibility of observing the event and availability in the sense of securing the evidence.

WITNESS/ PRESENCE

The first issue, the presence of a person at the scene, is often a matter of coincidence. It is possible to increase the likelihood of witnesses being present by increasing the number of security personnel on site or at critical points. However, such measures are usually associated with high costs. Witness observation has clear advantages if the crime is relocated, as people can move around freely.



Accidents and thefts often happen so suddenly that crucial moments are not consciously noticed.

WITNESS/ OPPORTUNITY TO PERCEIVE

For a useable witness statement, it is also necessary that the person had the opportunity to perceive the event. In addition to an unobstructed view, the ability to hear sounds, etc., it is also necessary to know what the person's attention was focused on at the relevant time.

Many cases of damage (e.g. traffic accidents) or covert crimes (e.g. theft) occur suddenly, without prior notice. In such cases, the crucial moments are often past by the time the people present have adjusted their perspective and focused their attention on the crime. In the case of a car accident, for example, passers-by will often be able to report hearing a bang and seeing the damage caused by the accident. The accident itself will be observed much less often.

WITNESSES/ AVAILABILITY IN THE SENSE OF SECURING EVIDENCE

Witnesses may leave the scene without leaving their contact details. It is therefore important to ensure that personal details are recorded by someone or the police immediately after the incident. If this opportunity is missed, important statements may be lost if witnesses do not come forward themselves afterwards.

Evidence in the form of images from a video security system can also be used to verify the criteria described above.

VIDEO IMAGES/ PRESENCE

With a video security system, it is possible to create a permanent and cost-effective presence in advance by planning and selecting the areas to be monitored. If critical areas are continuously monitored in this way, the likelihood of evidence being provided in the event of an incident can be significantly increased. However, it is important to remember that a video system is location-bound. As a result, planned crimes will usually shift away from the monitored area to avoid the creation of incriminating images. This fact is often used to make vulnerable locations more secure.

VIDEO IMAGES/ OPPORTUNITY FOR PERCEPTION

As it is not possible to adjust the location of a permanently installed video security system at short notice, planning plays a major role in creating an opportunity for perception. By combining several cameras and selecting the appropriate technology, maximum coverage of the area to be monitored can be achieved. In addition, raised mounting points help to avoid obstacles in the line of sight and ensure a good overview of what is happening. However, as the cameras have fixed locations, it is possible that perpetrators may take this into account when planning their offences and move or camouflage themselves accordingly.

VIDEO IMAGES/ AVAILABILITY IN THE SENSE OF SECURING EVIDENCE

The quality of video security systems is often reflected in the availability of video images as evidence. Dallmeier attaches particular importance to the reliability of the systems and supplements this with sabotage protection for the cameras, as well as options for ongoing monitoring of the system. In this way, Dallmeier can ensure maximum availability of recordings of the monitored area and thus also of evidence generated during the operation of the system.

QUALITY OF PERCEPTION - CONTENT OF EVIDENCE

If evidence can be presented, the next question is what facts or content can be testified or proven with it. The value of evidence in a trial is measured by its validity and the conclusiveness of its content. These mostly depend on the equipment of the means of perception, the reliability of the content and the possibility of authentic reproduction.

WITNESS/ EQUIPMENT OF THE MEANS OF PERCEPTION

In witness testimony, the quality of perception depends on the sensory organs of the witness. Human beings have five senses to perceive their surroundings, sometimes a clear advantage over a video system that is limited to sight and sound. At the same time, however, human sensory organs have limitations that can vary from person to person (e.g., visual impairment, hearing loss) and that cannot be influenced by the party needing the evidence.

WITNESS/ RELIABILITY OF CONTENT

Personal evidence, which includes testimony, is generally considered to be less reliable than material evidence. One reason for this is that human perception is not without its pitfalls and often gives us a distorted picture of reality. This can unintentionally lead to not only incomplete, but even false statements. For example, our perception is limited by our limited absorptive capacity, which the body compensates for by perceiving only part of what is going on around us. However, this so-called selective perception is not the only filter that stands between us and reality. Our environment, emotions, level of concentration, interpretation habits, experiences and much more can also influence our perception. The so-called autopilot, for example, is a well-known phenomenon that makes it more difficult to remember the circumstances of an individual case during ritualized activities. Or compare the perception in an otherwise identical situation, once when the witness is calm and once when he is anxious. The result will be quite different. Tunnel vision, in which a person stares hypnotically at a weapon or a snake, while barely noticing the surroundings, also belongs in this category. For these reasons, it should always be remembered that no witness can give a completely objective account of a crime. A witness statement must always be regarded as a subjective statement by an individual. At the same time, however, a witness statement can provide valuable subjective impressions that can put events into a meaningful context. For example, in a case with only fragmentary perceptions, a witness often instinctively grasps the background and motivation of the people involved, considering important emotional nuances and contributing personal experiences.

It should also be borne in mind that the content of a witness's testimony in a trial can hardly be fully predicted, which often introduces a great deal of uncertainty into the happenings in a court.

WITNESS/ POSSIBILITY OF AUTHENTIC REPRODUCTION

A person's memory is not a machine. Once stored, there are many factors that can change memories. For example, time, which literally makes memories fade, can also lead to incomplete testimonies. Forgetting does not affect every memory, but it can happen that some things are discarded as unimportant and cannot be recalled days or weeks later. Although this does not necessarily affect the whole event to be witnessed, important details can be lost. The time between the event and the court hearing can also be problematic for another reason.

Are you sure it wasn't something else? Memories can be influenced, and even fictitious memories of events that never happened can be created. In an effort to prevent the falsification of witness testimony, studies have investigated how to preserve the maximum truthfulness of testimony. Some of the factors that have been identified as likely to distort a witness's recollection include specific and suggestive questions, conversations about the course of the crime or contact with other sources of information about the subject of the evidence.

It is even more difficult to give an authentic account of what has been seen if the witness is unable to describe his or her impressions succinctly. This may be because the witness has a weakness in putting what they have experienced into words so that others can understand. There may also be temporary language barriers or mental blocks in the stressful and sometimes confusing situation of a court hearing. But even if the description is accurate, a description in words alone can create false impressions in other people. Who has never noticed differences between a description and a personal experience? It does not even have to be objectively false. It is often enough for two people to have different starting points.

VIDEO IMAGES/ EQUIPMENT OF THE MEANS OF PERCEPTION

The perceptual means of a video security system is the camera, which captures events precisely in image and sound. Whether video images can be used to good effect therefore depends crucially on the equipment and quality of the camera. The use of outdated or low-quality technology always has a detrimental effect on the recognizability of a process, especially when small details or faces are important. Dallmeier therefore offers a wide range of high-quality products to provide the optimum solution for different surveillance situations. These include cameras that can cover large areas and distances or provide usable images even in the dark. In this way, Dallmeier products can significantly extend the range of perception compared to the human eye.

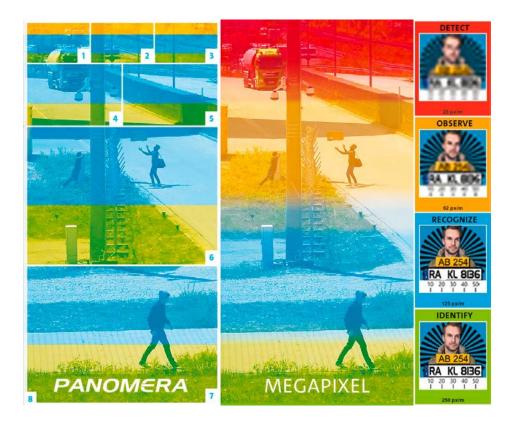
VIDEO IMAGES/ RELIABILITY OF CONTENT

Video surveillance images are completely reliable (technical manipulation excluded for the time being). The content is recorded exactly as captured by the camera. There is no interpretation of events or unintentional exclusion of content to be recorded. In this way, video images introduce a kind of objective data base into the process, which, although open to interpretation, provides an unalterable and unambiguous basis.

A disadvantage of video images, however, is that they can often appear more disjointed than witness testimony. The context of an event is not always clear from video images, especially when only short shots and snippets of the event are visible and important sequences are "missed".

VIDEO IMAGES/ POSSIBILITY OF AUTHENTIC REPRODUCTION

Permanent data backup is a technical issue in a video surveillance system, for which Dallmeier offers many solutions, including high availability. The recorded images can be played back repeatedly without any changes. Time and influence are irrelevant.



Whether video images are useful in the process depends largely on the equipment and quality of the camera. Multifocal sensor cameras such as the Panomera® from Dallmeier can cover large areas and provide usable images even in the dark.



CREDIBILITY - TRUTHFULNESS OF EVIDENCE

Closely related to the collection of content is the question of the truthfulness of the evidence presented. In addition to the weaknesses of the two types of evidence already described, this includes above all the possibility of deliberate alteration or manipulation. Credibility plays a decisive role in the assessment of evidence, which is regulated in criminal proceedings § 261 stop (Principle of Free Judicial Evaluation of Evidence) and in civil proceedings by § 286 ZPO (Formation of the Court's Conviction). Both provisions give the judge wide scope to reach a decision based on the evidence presented in the proceedings and their own assessment of the facts of the case.

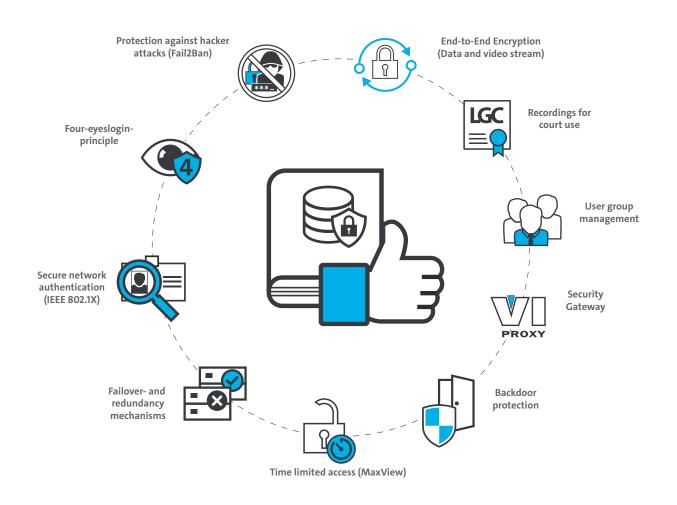
WITNESS/ TRUTHFULNESS OF TESTIMONY

Even the biblical judge Solomon struggled with conflicting testimony. The question of whether a witness is telling the truth, or even more difficult, which witness is telling the truth, is probably as old as the legal process itself. And the search for a method to reliably identify false statements and lies has been going on for just as long. Experience shows, however, that in individual cases we often have to be satisfied with an approximation to the truth. The judge has the difficult task of evaluating the testimony of witnesses. It must be determined whether the statement is true according to objective criteria and whether there is a high probability that the statement is reliable. For this purpose, special questioning techniques can be used when questioning the witness. The way in which the testimony is presented – certain, uncertain, contradictory – is also included in the assessment. In addition to the testimony itself, various aspects are considered, such as the witness's reputation, the witness's interest in the outcome of the proceedings, the witness's relationship with the parties to the proceedings and the plausibility of the testimony in the context of the other available evidence.

VIDEO IMAGES/ DATA INTEGRITY

Deliberate manipulation of video surveillance data is an increasingly hot topic, especially regarding new technologies such as AI and deepfakes. Whereas in the past it was often a question of altered time stamps or looped recordings that could give the impression of a different recording time, must now be reckoned altered image content or completely falsified recordings. Dallmeier observes the development of these technical possibilities and sees them as an incentive to continuously improve the protection of Dallmeier products against such manipulations. Dallmeier works with many different protection mechanisms such as encryption, reliable time stamps, data backup and access control. Accordingly, video recordings made with a Dallmeier system are recognized as admissible in court. The risk of manipulated video data can therefore be significantly reduced by taking planned measures in advance. If there are doubts about video data in a court case, an expert is usually called in to clarify this technical issue. The judge will then assess the probative value of the expert's opinion as part of the evaluation of the evidence. In particular, the technical quality, completeness and conclusiveness of the expert opinion will be considered.





ADMISSIBILITY - USABILITY OF EVIDENCE

Not all available evidence can always be used to reach a verdict in a trial. If there is a prohibition on the use of evidence, the evidence must be excluded from the decision. In such a case, the court will disregard the inadmissible evidence and make its decision on the basis of the remaining admissible evidence. Both pieces of evidence we have considered may fall under such a prohibition.

WITNESSES/ PROHIBITIONS ON THE USE OF EVIDENCE

The use of evidence is regulated differently in criminal and civil proceedings. In criminal procedure law some prohibitions on the use of evidence are explicitly regulated in the StPO. Strict standards apply to the admissibility of evidence, as the fundamental rights of the accused must be guaranteed vis-à-vis the state. Although the investigating authorities are required to investigate the facts of the case ex officio, they cannot find evidence at any price. An example of this is § 136a StPO, which prohibits certain interrogation methods, such as the use and threat of torture, against the accused. If statements are enforced in this way, they are subject to a ban on the use of evidence. One group of cases that specifically concerns witness testimony is the lack of witness instructions, for example when there is a right to refuse to give evidence based on a close family relationship (§§ 52, 252 StPO). These provisions are intended to protect witnesses from a conflict between the duty to tell the truth under § 153 et seqq. StPO and their personal relationship with the accused.



In civil proceedings, there are fewer legal prohibitions on the use of evidence. Here, the presentation of evidence is flexible, as the aim is to enable efficient dispute resolution between two equal parties. Nevertheless, witness statements are also subject to a prohibition on the use of evidence if the witness has not been properly instructed in the case of a right to refuse to give evidence under § 383 (1,2) ZPO. For the remainder, in the case of an unlawfully obtained witness statement or a violation of a constitutionally protected individual right, a balance must be struck between the protected legal interest and the interest in establishing the truth in the individual case.

VIDEO IMAGES/ PROHIBITION OF USE AS EVIDENCE

A prohibition on the use of evidence can also be assumed in the case of a video recording. However, this is not explicitly regulated by law. Problems with usability can arise if the recording violates data protection regulations (Bundesdatenschutzgesetz (BDSG), Datenschutzgrundverordnung (DSGVO)) or the personal rights of the persons recorded. However, such a violation does not necessarily lead to a ban on the use of the evidence. Rather, the judge will decide on a case-by-case basis whether the evidence can be used by weighing up the conflicting interests (including the seriousness of the offence, the interests of the parties involved, the public interest in effective criminal prosecution).



Not all available evidence can be used in a court case.

In its judgment of 7 January 2016 (BGH 2 StR 202/15), the Bundesgerichtshof (BGH) ruled that a mobile phone video documenting a criminal offence is admissible if the audio or video files directly document the offence with which the defendant is charged, and its complete clarification is in the special public interest. In civil law, the admissibility of so-called dashcam recordings as evidence in the context of accident liability proceedings is repeatedly disputed. Dashcams are cameras that are mounted behind the windscreen of a vehicle and produce film recordings. They are generally regarded as a prohibited means of surveillance under data protection law. For example, in a ruling of the BGH of 15 May 2018 (BGH VI ZR 233/17), a permanent and unprovoked recording of traffic events was deemed incompatible with the data protection provisions of the BDSG. Nevertheless, the use of these dashcam recordings was



admitted as evidence in court. In contrast, a prohibition on the use of evidence was assumed in a dismissal protection case in which an employer had monitored its employees (LAG Hamm 2 Sa 192/17 of 20 December 2017). And a landlord who had monitored the entrance door of his tenant's flat by video recording on suspicion of illegal subletting was also not allowed to introduce these recordings as evidence in the proceedings (LG Berlin 67 S 369/18 of 13 February 2020). In all these judgments, the court considered the circumstances of each case very carefully.

To ensure that a video recording can be used as evidence in a court of law, particular attention must be paid to compliance with legal requirements when installing and operating a video surveillance system. In addition to comprehensive information material, Dallmeier supports its customers with numerous technical features, such as Privacy Zone and Privacy Shield, which simplify legally compliant use.



Dallmeier cameras can provide important evidence.

CONCLUSION

Investing in a video security system is, among other advantages, also a precautionary measure that can simplify or even avoid legal proceedings.

If a video recording can clearly clarify the facts for all parties involved, civil disputes can often be avoided in advance. In cases where criminal offences are being prosecuted, video recording regularly makes it much easier to provide evidence and convict the perpetrator. Dallmeier has already received a lot of positive feedback from customers who appreciate video recordings as very valuable evidence due to their usability in court and the detailed accuracy of recordings made with Dallmeier products.

Compared to eyewitness testimony, video often provides a fuller and more objective presentation of an event. It provides details that words alone cannot convey – small gestures, the exact chronological sequence of events, details of the surroundings – and is free from the interpretation of a person. In this way, the parties to the proceedings can, to some extent, form their own impression of the event to be proven. A video recording is a piece of evidence that provides an objective database for the trial; whereas in the case of a witness statement, it must always be taken into account that it is a subjective perception of what happened.

Or as the old saying so aptly sums it up: *A picture is worth a thousand words.*



SUMMARY:

	Testimony	Video recording
OBSERVABILITY – AVAILABILITY OF EVIDENCE		
Presence	Whether witnesses are present at the scene of an incident is usually a matter of chance.	A permanent and cost-effective presence can be achieved through planned action.
Opportunity to perceive	In addition to being able to perceive the event with the senses, it is necessary to concentrate on the event.	Maximum coverage and uninterrupted surveillance can be achieved by combining several cameras and favourable installation points.
Availability (preservation of evidence)	Witnesses may leave the scene without leaving their contact details. It is necessary to secure personal details immediately after the event.	Fail-safe video recording, complemented by camera sabotage protection and continuous system monitoring, ensures maximum availability of recordings of the area under surveillance.
QUALITY OF PERCEPTION - CONTENT OF EVIDENCE		
Equipment of the means of perception	Five senses of the witness, although weaknesses (visual impairment, hearing loss) cannot be influenced in advance.	The camera records events accurately in picture and sound. The quality of the recordings can be significantly improved in advance by selecting a high-quality camera that is suitable for the recording situation.
Reliability of the content	Human perception provides valuable, albeit subjective, impressions. Various perceptual weaknesses can lead to a distorted picture of reality. For this reason, eyewitness evidence is considered less reliable than physical evidence.	Video surveillance images are completely reliable (subject to deliberate manipulation, see below). The content is recorded exactly as captured by the camera.
Possibility of authentic reproduction	There are many factors that can alter human memory, such as time, suggestive questioning or new information about the evidence. In addition to the influence of memory, the inability of a witness to describe impressions concisely can also reduce the evidential value of testimony.	The recorded images can be replayed over and over again. Time or influences do not play a role.
CREDIBILITY – TRUTHFULNESS OF EVIDENCE		
Truthfulness of evidence Data integrity	False statements are difficult to identify. That is why one often has to be satisfied with an approximation of the truth. The judge has the difficult task of assessing the testimony. To gain a comprehensive impression, he can use special questioning techniques, observe the way the witness gives evidence and take into account background information about the witness (reputation, personal interests, etc.).	This is a technical problem that has become more explosive due to new technologies such as AI and deepfakes. The risk of manipulated video data can be significantly reduced by taking planned measures in advance. Dallmeier works with many different protection mechanisms. As a result, video recordings made with a Dallmeier system are recognised as admissible in court.
ADMISSIBILITY – USABILITY OF EVIDENCE		
Prohibitions on the use of evidence	Prohibitions on the use of evidence in the case of witness testimony are sometimes expressly regulated by law. An important example is the failure to instruct witnesses, which leads to a prohibition of the use of evidence in both criminal and civil law.	Prohibitions on the use of evidence are also conceivable in the case of video recordings. These are determined by a judicial balancing of interests if the recording violates data protection laws, or the personal rights of the persons recorded. Dallmeier therefore supports its customers in the legally compliant use of video technology with information and numerous technical features.



SOURCES (IN GERMAN LANGUAGE):

WITNESS PERCEPTION / WITNESS MEMORY / INFLUENCING WITNESSES

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- Zwischen Wahrheitspflicht und Wahrnehmungsfehlern: Wie verlässlich sind Zeugenaussagen? (anwalt.de)
- Zeugenaussagen: Die schwierige Wahrheitsfindung vor Gericht | Psychologie | Verstehen | ARD alpha
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- <u>Beweiswürdigung: Wie Richter Beweise bewerten</u> (kanzlei-herfurtner.de)
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- Zeugenbeweis: Rolle von Zeugenaussagen im Gerichtsverfahren (kanzlei-herfurtner.de)

PROHIBITIONS ON THE USE OF EVIDENCE

- · Verwertbarkeit Video-Aufzeichnung einer Überwachungskamera als Beweismittel (ra-kotz.de)
- <u>BGH 2 StR 202/15 7. Januar 2016 (LG Aachen)</u> (hrr-strafrecht.de) Strafrechtliche Verurteilung aufgrund von Handyvideos.
- <u>Die Dashcam und das Beweisverwertungsverbot</u> (juracademy.de)
- Urteil des VI. Zivilsenats vom 15.5.2018 VI ZR 233/17 (bundesgerichtshof.de)
- <u>BGH-Urteil: Dashcam-Aufnahme als Beweismittel zulässig vor Gericht</u> | Kanzlei Stefan Loebisch Passau BGH Urteil zu einer Zivilrechtsklage, in der als Beweismittel in einem Unfallhaftpflichtprozess die Aufzeichnung einer Dashcam vorgelegt wurde.
- <u>Beweisverwertungsverbot im Zivilprozess | Beweise, Dash-cam</u> (anwalt.de)
- <u>Videoaufnahmen als Beweismittel Keine Pflicht zur unverzüglichen Auswertung | Küttner Rechtsanwälte Fachkanzlei für Arbeitsrecht</u> (kuettner-rechtsanwaelte.de)
 Beweisverwertungsverbot einer Videoaufnahme in einem Kündigungsschutzprozess



- <u>Heimliche Videoaufzeichnungen können in der mietrechtlichen Auseinandersetzung zu einem</u>
 <u>Beweisverwertungsverbot führen | Terhaag & Partner Rechtsanwälte: Markenrecht, Wettbewerbsrecht,</u>
 <u>Internetrecht, Medien, Presserecht, Urheberrecht, Datenschutz Fachanwalt</u> (aufrecht.de)
 Beweisverwertungsverbot bei Aufnahmen vor einer Wohnung zur Überwachung des Mieters
- Der Videobeweis im Strafverfahren | Teil 3 (confront-strafrecht.de) Kritische Stellungnahme zur Rechtsprechung

MANIPULATION OF VIDEO DATA

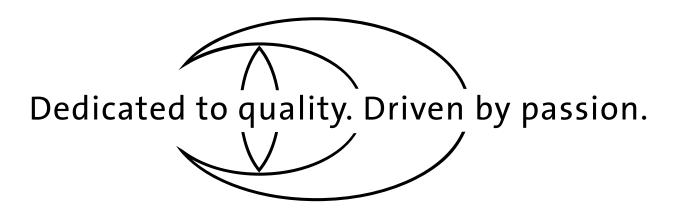
• Deepfake-Videos erkennen und verstehen: ein Überblick (onlinesicherheit.gv.at)



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