The Status and Meaning of Criminal Procedure

An exploration of the reception of DNA evidence in the criminal process

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1 Introduction

The world's first DNA murder hunt took place in a small village in Leicestershire in England in 1988.¹ Five thousand local men were asked to volunteer blood and saliva samples in search for the rapist and murderer of a schoolgirl. The DNA profile in semen from the crime committed in 1986 matched the DNA profile of the rapist and murderer of another young girl in a village nearby in 1983. Richard Buckland had confessed to the 1986 murder, but denied responsibility for the murder in 1983. Buckland's DNA did not match the perpetrator's profile, and he was acquitted on the basis of DNA evidence. Colin Pitchfork, on the other hand, was convicted of both murders on the basis of DNA evidence. Although Pitchfork had managed to escape the DNA screening after bribing a man to take his place, his deceit was discovered and he was found to have a DNA profile matching the semen found on the victims. Pitchfork was the subject of the world's first conviction based on DNA evidence. The entry of DNA evidence in court has given rise to an allegation that the legal world has been changed and will never be the same.² This article explores the truth of this allegation with regard to the objectives and sociocultural meanings of criminal procedure: has the use of DNA evidence in the investigation of crimes somehow caused a change in the status and meaning of criminal procedure?

The acceptance of the use of DNA evidence to lawfully combat crime represents in and of itself something new in the criminal process. The new Queen's witness in criminal procedure is commonly referred to as a "silver bullet" because it has an almost magical

capacity to single out suspects. Due to the fact that every human being has a unique combination of hereditary material in his or her DNA molecules, a suspect may be pinpointed with laser-like accuracy. No previously known identification tool matches DNA evidence in availability at a crime scene and in suitability for investigatory requirements. The qualities of DNA evidence are indeed remarkable.

In the following, a scrutinising of the status and meaning of criminal procedure will be carried out by an exploration of the reception of DNA evidence in the criminal process, divided into several distinct steps. First, the political triumph of the implementation of DNA as an investigative tool in the criminal process will be examined in order to cast light on the legitimate objectives of the criminal procedure (section 2). Then, in order to answer the question of whether DNA represents something genuinely new that may cause a change in the meaning of the criminal procedure as a social phenomenon, the historic entrance of experts of facts and law into the criminal process is briefly sketched (section 3) and the question of how an expert-driven process can be managed will be reflected upon (section 4). The sketch of how experts have invaded the criminal process, and questions concerning how experts challenge the balance between the *dramatis personae* at the trial stage, paves the way for a discussion of the need to recognise *communication* as an objective in the criminal trial (section 5), leading to concluding remarks on the sociocultural consequences of the DNA reforms that have been implemented throughout Europe (section 6).

2 2. The status of DNA

The Norwegian DNA reform, enacted in 2008 to conform to the practices of other European countries, has been described as one of the major reforms in Norwegian criminal procedural law, implemented to strengthen the national police force. The reform expanded police authority, allowing officers to obtain and retain DNA samples not only from suspects in grave offences such as murder or rape, but also from suspects of less serious crimes such as theft and burglary. The Norwegian government has already spent several hundred million kroner on a reform that encourages police to collect more biological samples from crime scenes and to order more DNA analyses from forensic scientists. The reform implies a future economic priority for public expenditure to fulfil the visions of the reform, and has not been contested. The political success of financing

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5 The funding of the DNA reform was raised from 66 million kroner in 2008 to 103 million in 2009 and 117 million in 2010, Prop. 141 L (2009-2010) p. 71.
the DNA reform could not have been possible if the use of DNA evidence did not comply with the core values of the criminal procedure at present. In fact, it is reasonable to assume that the qualities of DNA evidence strongly reflect the legitimate meanings and objectives of the criminal procedure.

The political success of the funding of the DNA reform relies above all on the general recognition of DNA evidence as an ultimate tool for accurate fact-finding. The most outspoken objective of the criminal trial is to establish whether or not the defendant has committed the offence of which he is charged.6

In The Criminal Procedure Act 1981-05-22-25 (Straffeprosessloven) Section 294, it is specified that the court is responsible for ensuring that all information concerning a case is brought to light. DNA evidence is head and shoulders above most other evidence with regard to its potential to contribute to this process of enlightenment. DNA evidence rules out for example questions of dishonesty or false reminiscence, which can be relevant to testimonial evidence. Furthermore, DNA evidence has been credited with transforming identification in the forensic sciences from “a pre-science to an empirically grounded science”.7 A DNA match is the result of testable, reproducible, and falsifiable techniques developed in the natural sciences and hence particularly rational and trustworthy. The use of DNA evidence complies quite extraordinarily with the objective of seeking the truth in order to secure accurate decisions.

Truth is, however, not the only value at stake in a modern criminal trial. The dominant Norwegian textbook in criminal procedural law points to the issue of “security” as one of the main objectives of procedural law.8 In line with Herbert Packer’s description of the criminal procedure as a continuous struggle between the objectives of crime control and due process,9 an English textbook on criminal process describes the objectives of the criminal trial more elegantly as “accurately to determine whether or not a person has committed a particular offence and to do so fairly”.10 These twin objectives do not necessarily fulfil each other. On the contrary, pursuing the objective of due process opposes the possibility to determine truth.

The modern understanding of the demand for fairness and hence due process, is closely connected to ideas that gained a foothold in the Age of Enlightenment. Authors such as Beccaria, Voltaire, and Montesquieu contributed to the recognition of human dignity

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and of the need to limit state power in order to respect human dignity. To comply with this time-honoured respect for human dignity, criminal proceedings were remodelled to appear as what has been called “the first line of defence” to combat the abuse of state power. From this point on, the two branches of the criminal justice system, criminal law and criminal procedure, had to pursue independent objectives. While criminal law protected society from criminals, procedural law protected criminals from the state.

At first glance the use of DNA evidence may appear to be of little relevance to the fulfilment of the idea of a due process. On re-examination however, the question of how DNA evidence can contribute to a fair trial raises at least two issues worth mentioning. First of all, the process of producing a DNA match relies on methods that are considered rational, and is thereby in itself compatible with the due process requirement. The duty to explain why a defendant’s DNA was available at the crime scene can hardly be considered unfair. Secondly, and of greater importance, is the fact that DNA evidence is known to serve as an instrument that can expose miscarriage of justice. Many wrongfully convicted persons, especially in cases concerning sexual offences, have been exonerated due to DNA evidence. There is even an institution, “The Innocence Project” in New York, dedicated to exonerating wrongfully convicted persons through DNA testing. Due to its capacity to serve as an exonerating tool, DNA evidence has become a symbol of justice and due process. The use of DNA evidence allows in fact for a collaborative pursuit of the objectives of truth and due process.

Governmental awareness of limited financial resources to fulfil ever-growing social obligations towards citizens has grown in recent decades. This awareness has been the impetus for a more recently formulated objective of criminal procedure: determinant and cost-efficient treatment, based on the needs of the state. In fact, the dominant Norwegian textbook on criminal procedural law defines the three most important elements of criminal procedure as “security”, “expedience” and “cost-efficiency”. It is striking that two of these three focus on efficient processing. Demands for a speedy and inexpensive criminal procedure undoubtedly counteract the pursuit of truth and the securing due process. The obligation to moderate expenditure in criminal procedure has had a chilling effect on the Norwegian DNA Crime Control project. Due to limited police resources, lawful opportunities to obtain biological samples of suspects are not used in full. The Criminal Proce-

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11 The application of these authors’ ideas indeed resulted in a myriad of constitutional rules in different European countries, rules that were not necessarily consistent with the original author’s idea. See for instance Holmøyvik, Maktfordeling og 1814, (Bergen 2011) for an analysis of the implementation of the separation of powers doctrine in the Norwegian constitution.


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dere Act (Straffeprosessloven) Section 158 allows the police to obtain biological samples from all suspects of all crimes that carry a custodial sentence; however, the Director of Public Prosecution has limited the collection of biological samples to crimes that carry a minimum of a six-month custodial sentence.¹⁵

The greatest triumph of the use of DNA evidence to combat crime is nevertheless founded on the ability of DNA to speed investigations. Before the Norwegian DNA reform was implemented, the use of DNA evidence to solve high-volume crimes had already proved successful in the United Kingdom and the Netherlands.¹⁶ It did not take long before politicians were able to declare the reform a success in Norway as well. Half a year after the reform went into effect, the number of samples collected from crime scenes doubled, and fifty percent of the DNA profiles registered with unknown identities turned out to have a match in the register of profiles with known identities.¹⁷ DNA allows an investigation to move more quickly and makes it easier to establish the *dramatis personae* in a criminal case. Even purely economic cost-benefit analyses of the use of DNA in combating crime, for instance those carried out in the USA,¹⁸ unambiguously conclude in favour of the allocation of funds for DNA reforms – because they work.

The triumph of the DNA reform in the political debate concerning efficient government spending is closely connected with the possibility for an automated treatment of DNA profiles. A DNA profile is merely a combination of numbers. Profiles of convicted criminals and suspects are, as previously mentioned, organised in registers that are separate from those containing profiles created from biological stains of unknown identity. Police officers can cross search for matches.¹⁹ Hence, suspects may be identified by a single automatic process. The DNA registers actually provide investigators with suspects almost free of cost. With very small investigative efforts, recurring criminals are pinpointed and returned to prison. The ability to combat recurring criminals is likely the greatest profit of the DNA reform.

To the prosecutor, a match between the defendant’s DNA profile and the profile of a biological sample found at the crime scene is an invaluable piece of evidence. It is accurate, reliable, durable, and efficient. The qualities of DNA evidence support the prevailing objectives of criminal procedure – to seek the truth, to secure due process and an expeditious process – extremely well. The question left to answer is whether DNA evidence not

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¹⁵ Director of Public Prosecution, New Guidelines for registration in the DNA Register, and for the Collection of Human Stains Used for DNA Analysis, 15. August 2008 (in Norwegian).


¹⁹ The registers are authorised in the *Prosecution Instruction*, FOR 1985-06-28 nr. 1629 chapter 11.
only supports the objectives of the criminal procedure, but may also have the capacity to change it. To answer this question I shall begin with a retrospective glance, focusing on the entry of experts in criminal procedure.

3 The entry of experts

The DNA expert is far from the first expert to become involved in the criminal justice system. Experts of factual knowledge have contributed to fulfilling the objective of truth seeking in criminal cases for centuries. In 1901 judge Learned Hand traced the use of experts in the court system to the fourteenth century and recognized three different modes of the use of expert knowledge: expert jurymen, expert advisors to the courts, and expert witnesses in court.20

One example of medical experts serving as advisors to the court can be found in London in 1345.21 At this time the court summoned surgeons to aid them in determining whether or not a wound was fresh. If the wound was fresh, the appellant would be allowed to go to trial. It was in other words for medical experts to decide whether the criminal justice system should be activated or not. The medical expert served as a gatekeeper to the criminal justice system. The first example of genuine Anglo-American expert testimony can be found in the case Alsop v. Bowtrell, which took place in 1620.22 Physicians testified that it was possible for a woman to bear her husband’s child forty weeks and nine days after the husband’s death. The physicians explained to the court that pregnancy might be prolonged by “ill usage and lack of strength”. The court found the physicians’ general propositions of the mysterious behaviour of the female body to be true. The expert information was therefore delivered as datum – a fact – to the jury. The jury grounded their final conclusion on the expert knowledge and determined the child to be legitimate.

In Learned Hand’s opinion the use of expert witnesses in court represents an anomaly in the criminal justice system. He stated that “the expert is not telling of facts at all, but of uniform physical rules, natural laws or general principles which the jury must apply to the facts”.23 In his opinion, the expert has general knowledge, but is no closer to the facts of the case than any other person. Hence, the expert has in fact no particular case-related reason to act as one of the dramatis personae at trial. If the adjudicators trust the expert opinion, Learned Hand was concerned about the effect of the expert contributing to a major premise in the decision-making process. However, removing the jury’s responsibility for parts of the decision may not in and of itself constitute a problem in the handling

of a criminal case, if the transferral of influence assures the accuracy of the decision. The question is: how do we know that the chance of accuracy is improved? Nobody at the trial stage, except from another expert, is actually able to make a proper validation of expert testimony.

   English law recognises bias to be the main problem with expert witnesses, a situation which may be remedied through a “battle of experts” and rules of admissibility of evidence. Continental law has however sought other solutions. In the continental tradition, the judge traditionally takes a more active and prominent part in the process. In Norwegian criminal procedure experts are summoned by the court, and as a rule a single expert is considered sufficient. Even if the problem of controlling bias decreases when the expert serves the court instead of one of the parties, it does not cease to exist. It is perhaps not unreasonable to fear that experts who serve the court are inclined to identify with state interests and hence testify in favour of the prosecutor, or at least fear that the public may think that experts act in such a way. Furthermore, the problem of verifying expert knowledge is fully present and even harder to handle in a system where the use of second opinion is not institutionalised, and where general rules of admissibility of evidence are almost unknown. Norwegian criminal procedure relies, as do most continental procedures, on the principle of “free proof” which means that an expert is not forbidden to use a scientific method that is not “generally accepted” within the scientific community. A DNA match produced through methods that do not meet international recommendations on reliability may therefore serve as evidence.

   To cope with the problem of experts and especially medical experts presenting knowledge to the court that cannot be verified by any of the actors in the courtroom, the Norwegian Board of Forensic Medicine was created in 1900. The Board carries out an external control of all forensic medicine expert witness opinions given in criminal cases. DNA analyses are regarded as a matter of forensic medicine of which the Board has a duty to evaluate. Due to financial concerns, “plain” matches are however not evaluated. The Board only carries out an evaluation of DNA reports that leave room for some degree of assessment by the analysts. The Board is not a second opinion institution, but ascertains the general trustworthiness of the expert opinion and informs the court if the expert conclusion is for instance too ambiguous compared to the analysis performed.

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26 Illegally obtained evidence is, however, ruled inadmissible, see for instance the supreme court decisions referred in Rt. 1991 p. 616 (Norway) and Rt. 1997 p. 795 (Norway).
28 The legal authority of the Board is based on the The Criminal Procedure Act 1981-05-22-25 (Straffeprosessloven) Section 146.
Neither the English nor the Norwegian system of verifying expert testimony is without a risk of bias, a risk of a delivery of knowledge of little relevance to the actual case to the jury, or a risk of flaws in general. As John Langbein has pronounced in connection to the project of seeking the truth through a trial, “seeking the truth does not guarantee finding it”. This is probably all the more true when experts are used as tools in the truth-seeking process.

English and Norwegian criminal procedures may both serve as passable frameworks in which to handle the procedural anomaly of leaving a major premise in the decision-making process to actors outside the judiciary, but there is probably no perfect framework for this project.

In an attempt to sketch the entry of experts in the criminal process, the entry of experts of law cannot be ignored. Over time, judges, prosecutors, and counsellors for the defence have become professional experts of law. In Norway, the trend to professionalise the dramatis personae can be traced back to at least the sixteenth century. However, there was no regular use of professional lawyers in serious criminal cases until 1735. The need for professionalised lawyers was strengthened when the criminal procedure was given an independent mission to protect the defendant from the state. The procedural actor’s capability to ensure the procedural rights of the defendant became at this point crucial. Due process has been described as an “obstacle course” where a series of impediments serve to protect the innocent and to convict the factually guilty. Separation of powers, respect for the rights of the defendant, the presumption of innocence, an equality of arms, oral and public proceedings, and reasoned judgments were characteristic features of the kind of criminal procedure created to serve the rule of law. Someone familiar with these obstacles had to implement them in the process.

A major due process development in the 1950s made it even more necessary for the criminal process to be carried out by experts in law. The defendant was now transformed into a rights holder, able to hold the state accountable for not giving him a fair trial. When the defendant is able to invoke international law as defence, experts in law – which today means experts in multilevel law – are necessary in the criminal process. The question is how the expert dominance of the modern criminal trial, as a whole, affects the trial as an institution.

31 Øyrehagen Sunde, op.cit.
32 Packer op. cit.
Managing an expert-driven process

It is widely accepted that a criminal trial today is expert-driven. Experts of facts and experts of law are crucial elements in the modern criminal process. A growing complexity in the legal system and in the universe of knowledge feeds the need for experts of law as well as of facts. We cannot ignore the fact that the criminal process is a non-optimal situation for truth seeking. Adjudicators have to make decisions under the pressure of time restraints and must necessarily base a conviction or acquittal on limited resources of information about what actually took place at the crime scene. Decisions have to be made on justified beliefs, not on mere facts. As David Nelken has put it, law “usually aims at more than truth and sometimes settles for less”.33 The court is obligated to make a decision even if the truth as a whole is unavailable. To justify a belief in criminal guilt in a situation where exact knowledge is unavailable, general knowledge of causal connections and probabilities are useful. This is where the experts of facts can and do contribute to the criminal justice system. The fact that the experts contribute with general facts, but are unable to identify the relevance of these facts to the case in question, must however not be ignored.

Although the use of DNA experts complies with, and strongly promotes, the legitimate objectives of criminal procedure in Europe, there are reasons to be wary of an uncritical implementation of DNA reforms. A case from The Norwegian Criminal Cases Review Commission serves as an illustration.34 In this case, Frostating Court of Appeal had sentenced a man to imprisonment for nine months because he stored 74 grams of amphetamine in a zipped plastic bag in his garage. The man’s DNA had been found on the zipped bag, and this DNA evidence was decisive for the court’s conviction. Four months after the conviction, a friend of the convicted man admitted to the police that it was he who had placed the amphetamine in the convicted man’s garage, without him being aware of it. The fact that DNA from the convicted man was found on the bag was explained by the fact that the friend had used a zipped bag found in his friend’s home. The Commission decided unanimously to allow the petition to reopen the case. The man was acquitted in the new trial and justice was finally served.

This case illustrates some concerns with using scientific experts to ascertain the facts in a particular case. To start with, the case is an example of the strength of scientific evidence such as DNA. DNA evidence becomes a major premise in the decision-making process even if the findings of DNA known as “touch DNA” rarely reveal the activity that has taken place at the crime scene. Using DNA evidence in court naturally raises a concern that scientifically proven evidence can become a more persuasive argument in favour of guilt than the simple fact that a biological trace of the suspect was found at the

crime scene is actually able to prove the suspect guilty. DNA is regarded as “pure” science, hard to contest, and may therefore trigger mental shortcuts from the question of fact to the question of guilt. In evidence law, the phenomenon of making shortcuts from statistically proven facts is widely recognised. Psychological scientists explain why adjudicators have a tendency to jump from the fact of a DNA match to the conclusion of criminal guilt. They also explain why adjudicators strive for a construction of the most obvious explanation of a crime and for construction of the easiest established coherent meaning in a situation where information about what actually occurred at the crime scene is scarce. Psychological explanations of why cognitive shortcuts occur are, however, not sufficient to prevent them from taking place.

It is hard to blame the court for making the wrong decision in the case discussed above. Adjudicators are bound to make their decision on justified belief and cannot be criticised for the shortcut from the DNA findings to the conclusion of guilt made in this case. The defendant had touched the bag the amphetamine was stored in. The drug was found in his garage. A conclusion of guilt was highly plausible. The DNA findings on the plastic bag would have been far more difficult to explain if the defendant were not guilty. An allegation of “someone else” putting the bag in his garage could hardly justify a reasonable belief in innocence. This illustrates a second and more general problem with the use of scientific evidence to prove criminal guilt. The question of criminal guilt is a complex matter, involving both factual considerations of objective and subjective character and the application of law. The presence of highly convincing scientific evidence may have a reductionist effect on this evaluation process. When the crucial question in court is reduced to a question of disproving a fact that is underpinned by scientific means, both the defendant and his lawyer may feel powerless. In a survey of Norwegian defence lawyers’ views on DNA evidence, one lawyer expressed his feeling of powerlessness towards the DNA expert in this way:

“When you don’t know something, then you accept what is being said, and then you don’t ask questions; no control questions, no critical questions. You don’t dig deeper into the underlying question. You don’t see the value of everything that is being said.”

The use of experts diminishes the power of the other actors at the trial stage, and particularly the power of the decision makers and the defence lawyers. It has also been argued


Ibid.

that the use of scientific experts even threatens the power of the institution of the trial as such, because reliance on science undermines the ability of the court to bring finality to legal proceedings.\textsuperscript{39} Science is a perishable good, and convictions relying on scientifically proven facts may be overturned when better science is available. Moreover, if science has superior methods of fact-finding compared to laymen, why not leave the entire process to experts? DNA evidence manages, perhaps more visibly than any other kind of scientific or highly specialised evidence has done before, to pose the question of how we handle the fact that an expert-driven trial may be hard to justify as a community institution.

5 Criminal procedure, communication, and community

A criminal process is a social process, dependent on a community having defined what crime is and having decided which punishments that are appropriate responses to which crimes. In the thought-provoking and recently published trilogy \textit{The Trial on Trial},\textsuperscript{40} the trial is labelled as a communicative process in a community.\textsuperscript{41} In the authors' opinion, the overall aim of the criminal process should be formulated as calling the defendant to account on behalf of the social community. The criminal process is a communicative process and the trial, the core of the criminal process, serves as a "communicative forum that involves mutual relations of responsibility between the participants".\textsuperscript{42} While a due process is necessary to maintain the human dignity of the citizen accused of a crime, a communicative process is necessary to maintain a democracy of dignified citizens capable of defining and sustaining a criminal justice system.

Recognising communication as an aim of the criminal process means the recognition of criminal procedure as a social project. Recognising communication not only as an objective, but as the objective of the criminal trial, certainly also has some implications for the view of the meaning of experts in the trial. An expert-dominated process is apparently a threat to the fulfilment of the criminal process as a communicative project. Experts complicate the community's call for account towards the defendant and complicate the feedback from the criminal justice system to the social community. The use of experts, not least the use of DNA experts, disentangles the criminal process from the comprehension of laymen and thus from the community that has created the laws defining criminal acts and that has decided the appropriate punishment for wrongdoings. A side-effect, or dysfunction, of seeking the truth and justice by the best means a rational society offers,


\textsuperscript{41} The authors rely on Duff's earlier work, Punishment, Communication and Community, (Oxford 2001).

\textsuperscript{42} Duff, Farmer, Marshall and Tadros (eds): The Trial on Trial: Vol 3, op. cit. p. 3.
by expert knowledge, is the occurrence of a gap between the criminal process and the community that owns the process. How this gap can be diminished is indeed an enigma.

6 Final remarks

An expert-driven process is expensive and transforms the trial into a long-lasting phenomenon. In a modern democracy, overloaded with responsibilities towards its citizens, the focus on cost-effective treatment is necessarily increased by the use of experts. The triumph of DNA experts is that they have proven to be worth the money spent. The exploration of the reception of DNA evidence in criminal procedure has not demonstrated any sudden changes in the legal world caused by DNA reforms. The exploration has, however, shown that DNA evidence renders major challenges and conflicting interest in the criminal justice system more visible.

The use of DNA evidence does not represent something genuinely new in the legal world. As has been pointed out – perhaps with some disappointment – by others, DNA evidence has not generated novel practices or issues at the trial stage.43 The use of DNA experts has nevertheless had a powerful effect on developing a better understanding and greater awareness of critical issues already present in criminal procedure.44 One critical issue, which has received far too little attention, is the importance of maintaining the criminal trial as a communicative forum within a community. The expert-driven criminal trial of today is carried out in a tension field between conflicting interests and objectives. When extraordinarily powerful tools, such as DNA evidence, appear on the scene, an awareness of the inherent conflicts in the criminal procedure is important. Seeking the truth, securing a fair trial, and cost-effective treatment are collaborative and concurring objectives which all must be pursued in the criminal process. However, communication should also be recognised as an objective in the criminal procedure and should be taken into account when a balance between conflicting interests is to be found.

Criminal conflict has previously been analysed from a property perspective. Nils Christie concluded his property analysis of the criminal process in 1977 by accusing the state of having “stolen” the criminal conflict from the offended.45 This article suggests that the victim of the theft has changed. In the modern criminal conflict, it is the community that has lost its property rights. The link between the community and the criminal trial has been gradually weakened for centuries, as experts have taken over the various roles of the dramatis personae. The exploration of the political reception of DNA evidence highlights the fact that experts in the criminal procedure are about to steal the criminal conflict from the community.

44 Similarly Imwinkelried, op.cit. p. 98.