LEGAL CONSIDERATIONS

Finn TAKSØE-JENSEN, Professor at the University of Copenhagen, Retsvidenskabeligt Institut, DK-1455 Copenhagen

Paper to be read by Dr. Taksøe-Jensen:

In paternity cases concerning children born out of wedlock it is the mission of the court to try to determine who is the biological father of the child.

After the conception period has been stipulated the mother is questioned before the court about her sexual relations during the conception period. If she gives evidence to the effect that she has only had sexual intercourse with one man, and if this man in his evidence confirms sexual intercourse with the mother, and if he is also willing to accept the paternity, the judge can - according to Danish law - close the case without use of bio-hereditary evidence, provided that no additional circumstances challenge the paternity of the man. At this stage of the case a decision to obtain bio-hereditary evidence might however be justified: The man can refuse to accept the paternity and claim his firm belief that the mother has had other sexual relationships without he being able to identify the latter. If a blood group determination shows that this man cannot be excluded, and if a statistical valuation concerning blood groups gives an index of 10 for this man compared to an unknown paternity possibility in the population in question, the judge will estimate the weight of the biological index against the probability of the mother having had sexual intercourse with other men. An entirely different situation arises when the man is excluded. In this case the point will be to find other possibilities. When the judge has explained to the mother the meaning of the principle of exclusion she will often point out the next man or men. Here the issue of the first bio-hereditary evidence effects the possibilities for the judge of obtaining perhaps decisive evidence in the case.

In cases with more than one paternity possibility the judge will always decide on biological evidence, although the mother and a certain man both should wish this man to accept the paternity. The picture of the circumstances of the case may change many times during the proceedings.

In cases concerning children born in wedlock the proceedings will be performed in similar ways, but be influenced by the strong presumption of the paternity of the husband as laid down in the law.

The judge will decide to close the proceedings either when the limits laid down in the law concerning conviction or acquittance of the men involved are reached and new evidence cannot be expected to have any effect, or when new evidence simply cannot be obtained.

How is the weight of bio-hereditary evidence now combined with the weight of all other kinds of evidence?

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First of all there will be cases in which biological evidence is of no importance, for instance because new evidence reveals the impossibility of a sexual intercourse between the mother and the man in question. In other cases, however, the assessment of biological evidence will be of great importance. This may occur when it is very likely that the mother has only had sexual intercourse with two men, but very often throughout the whole conseption period with both of them, and where there is no particular evidence concerning these men, for instance about reduced fertility. In this situation the choice between the two possibilities must be justified on the basis of the biological evidence solely.

In most cases it will be necessary to combine the weight of the biological evidence with the weight of all the other kinds of evidence present in the case. It is generally accepted that the probabilities of different pieces of circumstantial evidence must be multiplied, when each piece - independent of other pieces - causes a probability of the theme of the evidence with a certain strength. I will give you an example: In a case with no more than two paternity possibilities one of the possibilities is known, the other, which belongs to the same population, is not identified. The blood group statistical index of the tested man is 20, which indicates his paternity with a weight of 95.2 % against 4.8 % in favour of an unknown paternity possibility. All other evidence in the case indicates the paternity of the tested man with a weight of 80 % against 20 % in favour of the unidentified man, which can be expressed by a combined index of 80 for all circumstantial evidence in the case, or 98.8 % against 1.2 %.

Yet, this can only be a principle. It is not possible for the judge to perform a numerical classification of the non-biological evidential factors of the case. Instead, the judge will try to estimate the evidential strength of the most important and relevant factors and to compare this estimation with the numerical information in the opinion of the biological statement.

Which degree of probability for or against the paternity must be obtained in order to convict or to acquit a man?

In Denmark such limits are described in the law in common linquistic expressions and clarified partly by the motives of the law and partly by the legal practice.

In a case concerning paternity to a child born out of wedlock where the mother has only had sexual intercourse with one man, this man must be convicted unless the circumstantial evidence makes his paternity very improbable. An exclusion based on one of the blood group systems used in Denmark as a routine - which gives a reliability of at least 99.9 % - will be sufficient according to legal practice. In 1970 a limiting case appeared before the courts: There was only one man involved. The only sexual intercourse had taken place very close to the end of the conception period, 195 days. A combined blood group statisti-

cal and anthropological index was 0.007 and spoke against the paternity of the man compared to an unknown paternity possibility in the Danish population with the weight of 140 to 1 or 99.3 % to 0.7 %. The Danish High Court convicted the man to paternity. The Supreme Court acquitted the man with 4 votes against 3.

In cases concerning paternity of children born out of wedlock where there are two or more paternity possibilities, who have not been excluded, the court can convict one of them to paternity, if - as laid down in the law - there is a considerably higher degree of probability for the paternity of one of the men in comparison with the degree of probability of each of the other men. In these cases a degree of about 95 percent for one man against 5 percent for the others is required in order to reach a conviction to paternity.

In cases of children born in wedlock the limits of the law concerning acquittance of the paternity of the husband are considerably restricted, caused by the fact that the acquittance of the husband deprives the child of a certain status.

If the wife has denied having had sexual intercourse with other men than the husband, an acquittance of the husband requires that it is assumed certain that the husband is not the father of the child. According to the motives of the law it is required that the paternity is excluded according to several blood group systems, including one of the most reliable, but even in that case the judge may sustain the paternity of the husband, if the mother's evidence concerning conjugal fidelity carries complete conviction.

If it has been proved that the mother has had sexual intercourse with another man, the husband will be acquitted if it must be assumed that the child has been concepted by this other man. On the basis of the motives of the law and of the legal practice I venture to set the limit of the total weight of probability for the paternity of the third party against the paternity of the husband to at least 99 % against 1 %, unless the mother should have married the third party in the meantime.

In addition to this, it shall be mentioned that in cases where there are doubts as to whether the said limits are reached by means of blood group determination, the courts will nowadays require so-called anthropological determination, especially the HLA-system and the chromosome examination. In most cases this seems to remove any remaining doubt.

Finally, it shall be pointed out that in Denmark we have some court decisions in which the weight of the bio-hereditary evidence has been so predominant that it has influenced the piece of evidence as to whether the mother has had intercourse with a particular man. In a case from 1977 the mother gave evidence to the effect that she had had sexual intercourse with one man, F_1. He was excluded. Subsequently the mother stated that she had had one single relation-

ship with another man, F_2, but she denied a consummated sexual intercourse. F_2 denied having had even genital contact with the mother, because she resisted him. He had not taken off his underwear, and he did not ejaculate. The combined blood group and anthropological index of F_2 was 13.4, which indicated his paternity with a weight of 93 % against 7 % in favour of an unknown paternity possibility. The City Court stated in its judgment that there was not sufficient evidence to the effect that the mother had had sexual intercourse with F_2, and acquitted F_1 as well as F_2. During the proceedings before the High Court the HLA-system was applied, and an increased total combined index for F_2 of 400 to 1 or 99.7 % to 0.3 % appeared. The High Court now stated in its judgment: According to the opinion of the medico-legal institute the burden of proof for sexual intercourse between F_2 and the mother is fulfilled; and F_2 was convicted.

I should like to ask: Can such a use of the biological evidence be justified in relation to the scientific methods and in relation to the public conception of law?