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Law

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Abstract Almost all decisions with regard to allowing or forbidding research with and on the embryo as well as any other diagnostic invasion into the embryo depend on what kind and range of protection human life in this early stage of its development is or should be entitled to. This question is commonly referred to as that of the 'moral status' of the embryo or – with special regard to legal provisions and sanctions – as its 'legal status'. The answer to this fundamental question, however, is much debated and highly controversial, both nationally and internationally. Therefore professional and legal regulations range from the rather permissive (as in the new English Human Fertilization and Embryology Act of 1990) on the one hand to the total prohibition of embryo research or certain reproductive procedures on the other (as has recently been enacted by the German Embryo Protection Act of 1990). Thus, trying to reach consensus with regard to an embryo's legal/ethical right to protection is made all the more difficult because such an opinion is often, consciously or unconsciously, prejudiced by the desire to give researchers either more or less freedom of action, depending on one's point of view: Those who wish to see diagnostic or other experimental procedures with embryos facilitated, are inclined to deny their human quality from the very start. They base their arguments on the lack of individual personality in the prenidation phase of development, or simply on the fact that in many countries abortion is not illegal at that stage. Those who, on the contrary, find abortion as well as embryo research indefensible, believe their position well-founded by assuming that the embryo, from the time of fertilization, has the individuality and personality of a human being and thus is entitled to its own basic legal rights. Since to me neither of these extreme positions seems to be particularly cogent, I will try in this article to show the reasons for and consequences of adopting a middle course which neither leaves the embryo at free disposition nor bars any kind of diagnostic or other scientific invasion.

1 MEDICAL-SOCIAL BACKGROUND: THE PARTIES INVOLVED

As with all new technologies, the exciting developments in modern reproductive and diagnostic medicine also have their price.¹ This price involves first and foremost the sacrificing of embryos that need to be 'used

up'² for the development and investigation of *in vitro* fertilization (IVF) before any extracorporally conceived child can successfully be brought into the world.

This statement does not imply any short handed moral judgment. Rather it suggests that in the case of IVF one is dealing with a more complex ethical-legal, as well as factually more multidimensional, situation than is usual in the traditional doctor-patient relationship. Over and above this 'bi-lateral relationship' one must also include the welfare of the prospective child. Thus, in effect, one is confronted by a problem with 'three corners', all of which need to be considered. In addition, regard must be had to the fate of those embryos that are 'used up' in further efforts to improve IVF. To this extent it becomes a kind of 'four-cornered constellation' in which value judgments need to be made: The *doctor* helps the *patient* to have a *child* whose existence is at the expense of another *embryo* (if not many other embryos).

With respect to post-fertilization goals, there are in general three categories to be distinguished:

- a The first involves an embryo, chosen for implantation, upon which examinations or operations are conducted with the purpose of improving its own chances of development. If the goal of implantation is not achieved, such an embryo can still serve in the discovery of otherwise useful knowledge. Legally, because of its individual and concrete relation to therapy, this 'therapeutic trial' (*Heilversuch*) would fall in the category of so-called 'therapeutic research'.³
- b The next involves an embryo which, although originally chosen for implantation, has become 'superfluous' by lack of a chance of transfer, and consequently becomes the subject of research. This research can have various goals: improvement of IVF, other medical research, or perhaps even pure basic research.⁴ Because this research does not promote the health of the individual embryo in question, this 'using up' experiment would fall in the legal category of so-called 'human experimentation'.
- c The latter applies especially to a third category, in which an embryo is designated from the very beginning as a research object, no matter what kind of research is envisaged. Without coming to a premature value judgment, one may label this category of cases as 'experimentally-oriented embryo production'.

Even though this analysis already contains categories of evaluative character, at this stage I merely want to give a value-free description of the aims and reasons for an embryo to be made the subject of experimentation. A completely different aspect is the extent to which these scientific medical possibilities are ethically and legally feasible. This, however, depends on what status the embryo has or should be entitled to.

2 COMPARATIVE OBSERVATION: THE PREVAILING SILENCE OF THE LAW WITH REGARD TO THE LEGAL STATUS OF THE EMBRYO

One would expect many basic policy statements to be advanced regarding the status of the *embryo as human life* – since this, at least according to widespread opinion, seems important and may even be prejudicial

to the feasibility and scope of research on embryos. In fact, however, openly voiced opinions on this matter are few, with other countries actually showing more restraint than the Federal Republic of Germany. Whereas in this country there have been numerous statements of principle claiming the origin of human life to exist at the time of union of sperm and egg, with accompanying demands for protection of this life,⁵ in other countries similar assurances are more sporadic.⁶ An example is article 1 of France's parliamentary proposal according to which a 'legal subject' exists from the time of fertilization, whose life is that of a human being and has to be respected as such.⁷ Furthermore, the same tendency is found in the European Council's recommendations, according to which human life develops in a continuous manner from the time of fertilization (No 5), and therefore human embryos and fetuses are to be handled in all cases with due respect for human dignity (No 10).⁸

Without wishing to denigrate this status problem, one should also avoid overdramatizing the eventual lack of such express acknowledgments. In other areas the legal recognition of interests is not necessarily dependent on verbal proclamations but rather, often in a contradictory fashion, follows from the proscription by which harmful acts are prohibited. Similarly, a matter such as the moral status of the embryo that is so controversial and, more importantly, burdened with so many basic questions about personal and social values, might better be dealt with in a less direct fashion. Instead, as already demonstrated by the English Warnock Report, it may be preferable to turn directly to the question 'how is it right to treat the human embryo?'⁹

On the other hand, there are several reasons not to overvalue general proclamations that are meant to be in favour of the embryo. This is because the protection that is offered is not absolute, but relative. There are cases, like an earlier German draft for example, in which it was expressly declared that the respect of human dignity even if already extended to the embryo, 'does not preclude differentiations in degree, kind, and extent of the guaranteed protection as compared to later stages of development'.¹⁰ Similarly, in other cases, despite recognition of the embryo's human status as a legal subject, particular experiments that do not benefit the embryo are permitted. Therefore the focus of attention should be directed to the questions whether all encroachments on the fertilized ovum should be forbidden or to what extent such encroachments should be allowed.

3 INVASIONS OF EMBRYONIC LIFE: PROHIBITIONS AND PERMISSIONS

Instead of giving a worldwide survey, which would need more space than is available here,¹¹ it is sufficient to contrast the two most recent statutes in this area which also represent the two possible extremes of how to handle invasions of embryonic life: the rather prohibitive German Embryo Protection Act of 1990 (*ESchG*)¹² on the one hand and the more permissive English Human Fertilization and Embryology Act of 1990 (*HUFEA*)¹³ on the other hand. To give just a few, but characteristic examples:

The German *ESchG* does not only, as do most countries, forbid –
a gene transfer in human germ cells (§ 5);

- b cloning by artificial production of genetically identical human beings (§ 6); and
- c the operation and development of chimeras and hybrids of humans and animals (§ 7),

but also prohibits –

- d the intentional production of human embryos for research purposes (§ 1 sect 1 no 2);
- e the extracorporal fertilization of more egg cells than can be implanted within one cyclus (§ 1 sect 1 no 5);
- f intratubular fertilization or transfer of more than three egg cells or embryos respectively (§ 1 sect 1 nos 3–4);
- g the use of a human embryo other than to preserve it (§ 2 sect 1); and
- h any extracorporal development of a human embryo other than for producing a pregnancy (§ 2 sect 2).

In comparison to this almost absolute and rather rigid bar to research on the embryo, which effectively closes research loopholes, the English HUFEA appears distinctly more permissive by allowing –

- a the creation of embryos under licence (sect 3 subsection 1 lit a);
- b the keeping and use of an embryo up to the appearance of the ‘primitive streak’, that is, the end of the period of 14 days when the gametes are mixed (sect 3 subsection 1 lit b, 3 lit a, 4); and
- c the mixing of gametes with the live gametes of an animal at least under authority of a licence (sect 4 subsection 1 lit c),

and beyond the above by listing the criteria for research licences in a non-exclusive but rather open way (sched 2 sect 3).

4 THE MORAL STATUS OF THE EMBRYO AS CARDINAL QUESTION

Even without having to go into detail, it is quite obvious that the evaluation of these and other similarly divergent positions is certainly dependent on the ‘moral status’ of the embryo even in its earliest stages of development – a matter, however, that is much debated, both nationally and internationally.¹⁴ To find a consensus of opinion becomes even more difficult if the question of the ‘moral’ status of the embryo is – as it should be – meant in the sense of its *legal right to protection*; because then the decision on the status of the embryo is often, consciously or unconsciously, prejudiced by the desire to give the researcher either more or less freedom of action, depending on one’s point of view:

- a Those who wish to see research on embryos facilitated, want to deny their human quality from the very start. They base their arguments on the lack of individual personality in the prenidation phase of development, or simply on the fact that abortion is not illegal at that phase.
- b Those who, on the contrary, find abortion as well as embryo research indefensible, believe their position is well-founded by assuming that the embryo, from the time of fertilization, has the individuality and

personality of a human being and is thus entitled to its own basic legal rights.

To me, neither of these extreme positions seems to be particularly cogent for the following reasons:

- a Even if the embryo has human qualities, it is no more entitled to freedom from all interference than is an individual who has been born. Realistically speaking, even the life of a duly born individual is not treated as 'holy' or absolutely entitled to protection. Thus, killing in self-defence (even while mere property interests are being protected), as well as legal killings in war (particularly if not fought for vital defence but for economic purposes), to say nothing of the death penalty as still practised in some countries, suggest that killing has been justified in cases of simple material interests or expansionist territorial demands without considering whether or not innocent life is at stake.¹⁵ To this extent the much acclaimed 'sanctity' of human life is unfortunately revealed to be a sham, as is demonstrated in other spheres if one looks at legal historical changes regarding the protection of human life.¹⁶ In this sense, using relative standards in making distinctions about protecting unborn life does not appear to be fundamentally inconceivable.¹⁷
- b On the other hand, however, it would be as incorrect to conclude that the embryo does not have a right to protection just because in certain instances abortion is not a criminal offence. Giving priority to the interests of the pregnant woman, as is done in Germany as in Great Britain in specific cases,¹⁸ does not imply that the embryo is therefore not worthy of protection from the time of its coming into existence. Even taking into consideration the German provision, according to which interferences before nidation, that is the completion of implantations of the fertilized egg in the uterus, are not considered to be abortions (§ 219 d Penal Code), one cannot simply conclude that one is not dealing with human life prior to the time of nidation. For, like § 1 German Civil Code which, though connecting the beginning of 'legal capability' (*Rechtsfähigkeit*) with the completion of birth, does not deny the existence of human life prior to that stage, the aforementioned penal norm too avoids – very wisely, in my opinion – any definition of human life and its beginning, and rather limits itself to describing the boundaries of criminal liability.

Similarly, the question that is often raised about whether the fertilized egg cell possesses constitutional rights even outside the mother's body,¹⁹ bypasses the heart of the problem. Even without considering the question when the 'personhood' of human life begins,²⁰ one is at any rate dealing with life that originates from human germ cells and thus is species-specific human in the sense that it is different from any other plant or animal life, not to speak of a mere thing. And furthermore, when one considers that with a fertilized human egg cell one is already dealing with the developmental stage of a human subject that, genetically at least, is completely endowed, that has all its characteristics already enclosed and that only needs to be brought to fruition in order to realize the full potential of a human being, then one can hardly deny all moral status to this 'potential subject'²¹ – where 'potential' should, of course, not be understood in the everyday sense of merely

'possible', but rather in the ancient Latin sense of *potentia*, as described by Aristotle in his *Metaphysica* when he speaks of *dynamis*: 'All that which has in itself the principle of coming into being is that which, depending on its ability, comes into being through itself, if no hindrance comes from the exterior.'²²

Therefore it would be desirable if the conceptual struggle about whether or not the embryo should be considered a *Mensch*, that is a 'human being' in the sense of man or woman, and to what extent this is dependent on its 'individuality' or 'personality' were abandoned. Likewise, although understandable as an effort to de-emotionalize the issue, the similarly naïve (speaking from a normative-theoretical perspective) and rather simplistic efforts to get rid of the basic value problem through terminological 'degradation' of the pre-implanted embryo to the status of 'pre-embryo', 'conceptus', or even to simple 'seed' or 'germ'²³ should be abandoned.²⁴ Rather than prejudicing the value questions involved through conceptual terminological game-playing it would be better to concentrate on the question that is decisive in the final instance: To what extent does or should a species-specific human (since originating from human gametes) new entity of life that is, at least genetically, capable of achieving the full 'potency' of a human being possess sufficient value to make one unwilling to allow for total freedom of choice with respect to maintaining or destroying this life?²⁵

From this perspective, however, the protection of embryonic human life can neither solely nor decisively depend on its being recognized as already possessing and exercising independent basic rights; for, since in other cases the legal order protects some material goods, for example culturally valuable collections, even from their owners (§ 304 German Penal Code), there is no reason to suppose that the artificially produced embryo should be kept as an 'outlaw'. Moreover, just as the claim to protection of animals and plants does not depend upon a corresponding constitutional basis, the claim to protection of the human embryo does not have to stand or fall upon its qualification as 'human individual' or 'person'. For the decisive factor is not the conceptual definition, but rather the amount of esteem that a legal system should accord to a living entity that actually contains within itself the full 'potency' of a human being. Naturally such a claim to protection grows greater to the extent that it can be tied to a constitutional right. Lacking this constitutional right, however, does not mean that its worthiness to be protected can be denied. Even ignoring the normative and related questions about the individuality or personality of an embryo does not mean (and this might easily be misunderstood) that its worthiness to be protected should be denied. On the contrary: By making this value-laden and prejudged matter more relative, one hopes to find a minimal but consensual standard for protection. For it is an undisputed fact of biological knowledge that, even in the case of an extracorporally produced embryo, one is dealing with a species-specific, genetically determinate human entity.²⁶

5 CONSEQUENCES FOR LEGAL POLICY

Drawing the sociopolitical consequences out of this fact is no longer a matter of experience but rather of a normative evaluation and decision. Without going into great detail, one can still posit the following with respect to the research on embryos that is at issue here: Since one acknowledges

that a human embryo has to be granted protection even outside the mother's body, the involvement of such embryo in a research project should not be subject to the free discretion of the individual researcher. Rather the research project needs a specific justification.²⁷ With respect to this matter three categories of cases (which are frequently not distinguished to a sufficient degree) may be distinguished:

- a To the extent that the expected research results can benefit the *particular embryo* being studied, one is dealing with an essentially permissible case of 'therapeutic trial'.²⁸ For such research, guidelines like those of the Benda Commission, that allow for the 'diagnosis, prevention or treatment of an illness', provide a secure foundation.²⁹
- b On the other hand, to the extent that such individual use for the embryo in question is precluded because one is dealing not with its *own* welfare, but with a general research project that could benefit *other* embryos, people or human generations, one is engaging in what might be considered to be 'non-therapeutic human experimentation'.³⁰ In such a case, however, the virtual death of the embryo may be justified only if this result cannot be avoided anyhow and if the degradation of the embryo to an object of research is outweighed by defined high-ranking medical goals.³¹ Even in the case of such a research clause, as conceded by the Benda Commission³² and now also provided for in the English Human Fertilization and Embryology Act,³³ one must be aware that in such 'instrumental' experiments human beings are sacrificed for other (than their own) purposes; and not only through deleteriously affecting their health but also through the deliberate destruction of life. Such experiments would be inconceivable with born human beings.³⁴
- c This estrangement of human life finally reaches the stage of total instrumentalization when embryos (for which no plans for implantation exist) are directly and solely *produced for research purposes* or other uses. If human life is anywhere debased to the point of being purely an object, it is where its destruction is planned at the same time as its creation. Such lack of concern for human dignity would be difficult to justify, even for the most important research purpose.³⁵ This is even more so when an embryo is produced, and is expected to be used, for commercial purposes.³⁶

Yet, whatever limits one might wish to set upon embryo research, the question remains whether this should be done by the way of criminal law or by other control instruments. Although the German legislation has chosen the penal course, I doubt whether this was really the best and only choice. For, since the *worthiness* of a good or interest to be protected is – though a necessary – not a sufficient condition for criminalizing harmful conduct, it is also essential that criminal sanctions must be really *needed* as well as presumably *apt and efficient* for protecting the interest concerned.³⁷

Therefore, before resorting to criminal law one would have to consider whether protection of the embryo against uncontrolled experimentation might not be achieved through means other than specifically penal ones. As long as one can presume that research on embryos is being performed by certain identifiable individuals, trained in medicine and bound by professional ethics, and as long as scientists are aware and publicly confess to their moral

and legal responsibility to human life and dignity,³⁸ it seems possible and feasible that guidelines – such as those suggested by the German Federal Chamber of Physicians³⁹ – would provide an efficient way to avoid abuses in this kind of research.⁴⁰

Notes

- 1 For a general discussion of this ambivalence within modern biotechnology as well as of the conflicting interests within this field that must be considered, see Eser A *Gentechnologie und Recht: Der Mensch als Objekt von Forschung und Technik* in Däubler-Gmelin H & Adlerstein W (eds) *Menschengerecht* (1986) 149–172.
- 2 I use terms such as ‘using up’ (*‘verbrauchende’*, ‘consuming’) experiments, which have become part of the professional idiom in this field, with the greatest reluctance. Cf also the critique of Wuermeling H-B *Verbrauchende Experimente mit menschlichen Embryonen* 1983 *Münchener Medizinische Wochenschrift* 1189–1191.
- 3 Contrary to a common understanding among physicians, one is no longer concerned here with the category of ‘therapeutic treatment’, but rather with an experimental trial. Therefore, one is basically dealing with research uses, even if one calls this effort ‘therapeutic research’ designed to foster the welfare of the embryo in the sense of the Tokyo-Helsinki Declaration. For a closer analysis of this distinction between ‘therapeutic treatment’ and ‘therapeutic trial’, as well as the attendant category of ‘human experimentation’ (non-therapeutic research), see Eser A *Das Humanexperiment* in Stree W et al (eds) *Gedächtnisschrift für H Schröder* (1978) 191–215 especially 198 et seq.
- 4 For a survey on scientifically thinkable (though not therefore necessarily ethically feasible) research aims, see Seller MJ & Philipp E *Reasons for Wishing to Perform Research on Human Embryos* in Dunstan GR & Seller MJ (eds) *The Status of the Human Embryo Perspective from Moral Tradition* (1988) 22–32.
- 5 Cf in particular § 9 of the *Diskussionsentwurf eines Gesetzes zum Schutz von Embryonen* (Pre-draft of a Law for the Protection of Embryos; hereafter abbreviated as *BJM-ESchG*) by the German Federal Ministry of Justice in April 1986, published in Günther HL & Keller R (eds) *Fortpflanzungsmedizin und Humangenetik – Strafrechtliche Schranken?* (1987) Anhang I 349–362, and the Cabinet Report on Human Artificial Fertilization (2 February 1988).
- 6 In addition, one has to be aware of the fact that quite a few scientists and even official commissions in other countries postpone the beginning of legal protection by talking in the early stages of cell division of a mere ‘pre-embryo’ (as in the Voluntary Licensing Authority for Human In Vitro Fertilization and Embryology *First Report* (April 1986) and the American Fertility Society *Ethical Considerations of the New Reproductive Technologies* (September 1986)), a mere conceptus (as in the South African Medical Research Council *Ethical Considerations in Medical Research* (1987) sect 1.1) or even by equating the ‘embryo’ within a definition of human reproductive material which likewise comprises ‘human semen’ and a ‘human ovum’ (as in the

South Australia Reproductive Technology Act of 1988). Differently, the UK Department of Health and Social Security *White Paper on Human Fertilization and Embryology: A Framework for Legislation* (1987) seems to come closer to the German position when speaking of an embryo 'from the point at which fertilization is completed' though, however, fixing this point only with the start of cell division as 'proof that the process of fertilization has ended' (No 8). This probably corresponds with the new term of 'syngamy', used by the Australian Victoria Infertility (Amendment) Act of 1987, and described as 'the alignment on the mitotic spindle of the chromosomes derived from the pronuclei' (sect 4-9 A 13 A subsect 4 (d)). Cf also the German Bundesärztekammer (Federal Chamber of Physicians) Richtlinien zur Forschung an frühen menschlichen Embryonen 1985 *Deutsches Ärzteblatt* 3757-3764.

- 7 Cf Assemblée Nationale *Proposition de Loi Relative au Statut de l'Enfant Conçu ainsi qu'aux Expérimentations et Recherches concernant la Création de la Vie Humaine* No 2158 of 18 April 1984.
- 8 Cf the Council of Europe Parliamentary Assembly proposed Recommendation 1046 (1986) (1) on the Use of Human Embryos and Fetuses for Diagnostic, Therapeutic, Scientific, Industrial and Commercial Purposes.
- 9 Cf the Committee of Inquiry into Human Fertilization and Embryology *Report* (Warnock Report) (1984) 60; cf also the Australian Senate Select Committee on the Human Embryo Experimentation Bill 1985 *Report* (published as *Human Embryo Experimentation in Australia* (1986)) Nos 3.22 3.23: Without giving the embryo the status of a person in either the ethical or the legal sense, the committee nevertheless adopted the premise that the dignity that attaches to the embryo upon fertilization demands protection against destructive non-therapeutic experiments. See also UK Department of Health and Social Security *White Paper* No 8.
- 10 Cf the introduction to the German *BJM-ESchG* 8.
- 11 A first survey on such legislation and guidelines is to be found in Eser A *Research on the Embryo: Legal Aspects in Comparative Perspective* Institute of Comparative Law Waseda-University Tokyo (ed) *Law in East and West* (1988) 61-88; a more recent, though partly outdated worldwide collection of relevant rules and guidelines has been published by Eser A, Koch H-G & Wiesenbart Th *Regelungen de Fortpflanzungsmedizin und Humangenetik Eine internationale Dokumentation gesetzlicher und berufsständischer Rechtsquellen* 1 and 2 (1990); see further the survey in Morgan D & Lee RG *Blackstone's Guide to the Human Fertilization and Embryology Act 1990 Abortion and Embryo Research, The New Law* (1991) 86-87.
- 12 *Gesetz zum Schutz von Embryonen (Embryonenschutzgesetz - ESchG)* as of 13 December 1990 (*Bundesgesetzblatt* 1990 Teil I 2746-2748), also published in Günther H-L & Keller R (eds) *Fortpflanzungsmedizin und Humangenetik - Strafrechtliche Schranken?* (1991) Anhang I; this act came into force as of 1 January 1991. For a critical review of this legislation, see (before final enactment) Eser A *Neuartige Bedrohungen ungeborenen Lebens* (1990), and

- (after enactment) *Deutsch E Embryonenschutz in Deutschland 1991 Neue Juristische Wochenschrift* 721–725.
- 13 Human Fertilization and Embryology Act of 1990 (HUFEA), published as appendix I in Morgan & Lee 186–225. This act is, however, not yet in force.
 - 14 Cf, for instance, the report on the 2nd International Conference on Bioethics in Rambouillet (April 1985) by Eser A *Gentechnologie – Rechtspolitische Aspekte aus internationaler Sicht in Gentechnologie und Verantwortung* (3/85) 53–64, see furthermore the introduction to Comité Consultatif National d'Éthique pour les Sciences de la Vie et de la Santé *Avis Relatif aux Recherches sur les Embryons Humains in Vitro et à Leur Utilisation à des Fins Médicales et Scientifiques* (15 December 1985) as well as the Australian Senate Select Committee Report 25 et seq.
 - 15 On the same line, holding that the classification as 'human life' or the assumption of 'human dignity' do not say anything definitive about the possibility of permitting interventions, see also Herzog R *Die Menschenwürde als Massstab der Rechtspolitik in Seesing H (ed) Technologischer Fortschritt und menschliches Leben Die Menschenwürde als Massstab der Rechtspolitik* series *Gentechnologie – Chancen und Risiken* 11 (1987) 23–32 27 et seq.
 - 16 Cf Eser A 'Sanctity' and 'Quality' of Life in a Historical-Comparative View in Wallace SE & Eser A *Suicide and Euthanasia – The Rights of Personhood* (1981) 99–105, see further Eser A *Freiheit zum Sterben – Kein Recht auf Tötung 1986 Juristenzeitung* 786–795 especially 789 et seq. Cf as well Dunstan GR *The Human Embryo in the Western Moral Tradition* in Dunstan & Seller 39–57 40.
 - 17 See in the same vein *BJM-ESchG* Introduction 8 as well as the Austrian *Gutachten der Kommission der Österreichischen Rektorenkonferenz für In-vitro-Fertilization* (June 1986) 32. Cf also Hofmann H *Bioethik, Gentherapie, Genmanipulation – Wissenschaft im rechtsfreien Raum? 1986 Juristenzeitung* 253–260 259.
 - 18 For the English law, see the Abortion Act of 1967 sect 1, as amended by the HUFEA of 1990 sect 37. For the German law, see § 218 a Penal Code; for more details cf Eser A *Reform of German Abortion Law 1986 American Journal of Compar Law* 34: 369–383 374 et seq.
 - 19 In confirming this position, see in particular Resolution VII.2 of the 56th German Jurist's Day: *Beschlüsse des 56 Deutschen Juristentages Berlin 1986 1 Abteilung Zivilrecht: Die künstliche Befruchtung beim Menschen – Zulässigkeit und zivilrechtliche Folgen (DJT-Beschlüsse) 1986 Neue Juristische Wochenschrift* 3069–3070; see furthermore Benda E *Humangenetik und Recht – eine Zwischenbilanz 1985 Neue Juristische Wochenschrift* 1730–1734; Vitzthum Graf W *Gentechnologie und Menschenwürde 1985 Medizinrecht* 249–257; to the contrary see Hofmann 1986 *Juristenzeitung* 259.
 - 20 That question was considered most recently by Byrne P *The Animation Tradition in the Light of Contemporary Philosophy* in Dunstan & Seller 86–110 90 et seq.
 - 21 In the same vein, see inter alia *Bericht der gemeinsamen Arbeitsgruppe des Bundesministers für Forschung und Technologie und*

- des Bundesministers der Justiz: *In-Vitro-Fertilisation, Genomanalyse und Gentherapie (Benda-Bericht)* (1986) A.1.3, and Resolution VII.1 of the German Jurist's Day.
- 22 Aristotle *Metaphysica* book IX teta 7; Bekker 1094 a 1831.
- 23 See n 6 *supra*.
- 24 In this context is also Herzog's (28) lack of understanding of the 'grim-ness with which the beginning of life is debated on all sides'.
- 25 This is the context in which the portion of the Warnock Report (given in n 9 *supra*) can be understood. Similarly see the Australian Senate Select Committee Report 25 et seq as well as the Austrian *Gutachten* 32 et seq.
- 26 As a result, the definition of 'species-specific' human life found in the *Benda-Bericht* Appendix B. IV has not even been contested by natural science circles.
- 27 Such a requirement for justification may seem strange in view of the researcher's constitutionally guaranteed right to freedom of research (according to art 5 of the German Basic Law). It is explained, however, by the fact that this freedom has limits related to interests that themselves have a claim to legal protection. For a closer analysis, see Eser A *Recht und Humangenetik* in Schloot W (ed) *Möglichkeiten und Grenzen der Humangenetik* (1984) 185–209 especially 190 et seq.
- 28 Cf n 3 *supra*.
- 29 *Benda-Bericht* A.2.4.1; likewise *DJT-Beschlüsse* VII.7.
- 30 Cf also n 3 *supra*.
- 31 Even this rather cautious approach, however, had been opposed by the *DJT-Beschlüsse* VII.6. In the same vein, see most recently the Australian Senate Select Committee Report XV 29 et seq. according to which the capacity even to differentiate between 'spare' and 'specially created' embryos is disputed.
- 32 *Benda-Bericht* A.2.4.1.
- 33 Cf HUFEA sect 3 in connection with sched 2 sect 3 and the comment by Derek & Lee 63 et seq.
- 34 For a closer analysis, see Eser in *Gedächtnisschrift für H Schröder* 210 et seq.
- 35 Similarly opposed are the *DJT-Beschlüsse* VII.3. Even the Austrian *Gutachten*, that generally tends to hold back in recommending criminalization, in this respect also takes a limited stand in favour of criminalization of the production of embryos for research purposes (48 et seq).
- 36 Cf *DJT-Beschlüsse* VII.8.
- 37 For a closer analysis of these three basic requirements of criminalization, that is, a legal interest that *deserves* and *needs* protection by criminal law and that is *apt* to be protected by criminal sanctions (*Schutzwürdigkeit*, *Strafbedürftigkeit* and *Straftauglichkeit*), see Eser A *Strafrechtliche Schutzaspekte im Bereich der Humangenetik* in Braun V, Mieth D & Steigleder K (eds) *Ethische und rechtliche Fragen der Gentechnologie und der Reproduktionsmedizin* (1987) 120–149 123 et seq.
- 38 as has been done by the Max Planck Society in a sort of public moratorium to research on the embryo: see *MPG-Spiegel* 5/1988 9–22 especially 9–10.

39 Cf n 6 *supra*.

40 In this respect, however, one should – as in fact was done by Koch HG ('Medizinisch unterstützte Fortpflanzung' beim Menschen – Handlungsleitung durch Strafrecht? 1986 *Medizinrecht* 250–265 especially 264) – take note of the fact that as 'offenders' not only physicians but also biologists are meant. The latter are not necessarily bound by the kind of professional regulation that exists in physicians' groups. So long as access to embryos is in the hands of controllable and controlling physicians and no highly serious misuse needs to be of concern, however, one should have given peer review by ethical committees at least a longer chance to be tried.