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Abstract

This paper aims at demonstrating the manner in which the recent focus of the public and legislative debate in France on the issue of embryonic stem cells has contributed to silencing the previously strong opposition to any kind of embryonic research. After explaining what the legal state of affairs was subsequent to the 1994 law of bioethics as far as the embryo was concerned, the article presents and analyzes the new provisions of the 2004 law of bioethics. It then stresses all the "rhetoric tricks" that have made the 2004 legalization of research on embryos and embryonic stem cells possible (ambiguous legal provisions, strategic uses of scientific imagery, opportunistic changes in vocabulary…). Finally, it assesses the 2004 legislative construction as a compromise that embodies no particularly coherent axiological choice, thus as a fragile and unsettled agreement.

Keywords

Bioethics – France – Embryonic research – Stem cells

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How Interest in Stem Cells has made the Embryo Available: A Look at the French Law of Bioethics

Stéphanie Hennette-Vauchez*

I. Introduction

Is the embryo a 'person' or a 'thing'? This question has haunted French legal thought for thirty years[1], not least because the embryonic entity as such challenges the clear-cut binary legal division between 'persons' [*personnes*] and 'things' [*choses*] inherited from the Napoleonic Civil code[2]. Words do count, for it is feared that classifying the embryo as a 'person' would – among other things - jeopardize any liberal approach to the abortion issue[3], whereas putting it in the category of 'things' does not match the commonly shared intuitive perception in France that embryos and, say, pieces of furniture over which property rights can be exercised, are of different nature.

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[1] See notably C. Labrusse-Riou, 'L'enjeu des qualifications: la survie juridique de la personne', (1991) 13 Droits, 19 ; J.-C. Honlet, 'Adaptation et Résistance de Catégories Substantielles de Droit Privé aux Sciences de la Vie', in C. Labrusse-Riou, ed., *Le Droit Saisi Par la Biologie* (Paris : Librairie Générale de Droit et de Jurisprudence, 1996), 233 as well as emblematically, the titles of the following studies published in French law journals: J.-F. Niort, 'L'embryon et le droit: l'impossible statut?' (1998) 2 Revue de la Recherche Juridique, 459; F. Bellivier, L. Brunet, C. Labrusse-Riou, 'La filiation, la génétique et le juge: où est passée la loi ?', (1999) 3 Revue trimestrielle de droit civil, 529.

[2] Thus causing some scholars and judges to suggest that a "third category" be created, in order for legal categories to accommodate entities such as embryos. See notably M.-A. Hermitte, 'Le corps hors du commerce, hors du marché', (1988) 33 Archives de Philosophie du Droit, 323 ; G. Farjat, 'Entre les personnes et les choses, les centres d'intérêt', (2002) Revue Trimestrielle de Droit Civil, 221.

[3] For a recent re-opening of that debate, see pro-choice groups' reactions to a recent ruling by the Cour de Cassation according to which a born dead fetus may be registered. For the ruling, see http://www.courdecassation.fr/jurisprudence_publications_documentation_2/actualite_jurisprudence_21/premiere_chambre_civile_568/arrets_569/aux_arrets_11171.html. For a comment, see M.-J. Gros, 'La Cour de cassation relance le débat sur le statut du fœtus', *Libération*, 8 Feb. 2008.

The conundrum has proven to be so puzzling to French law-makers that, although three major statutes on bioethics,[4] and an even greater number of ones more indirectly related to biomedical issues,[5] have been enacted by the French Parliament over the past fifteen years, the legislator has remained silent on the legal status of the embryo.

So much for the common image of civil law systems being all about statutes. This example of French legislators refusing to classify the embryo demonstrates that even in civil law systems, statutes do not engage on *all* terrains. French law offers no statutory classification of the legal nature of the human embryo. However, indirect legislative and judicial rulings come to indicate that a common legal understanding according to which the human embryo deserves 'respect', for it is a 'human being' –if not yet a 'person'. The position the *Cour de Cassation* has held for a decade according to which unborn fetuses cannot be considered as 'persons' in terms of criminal law (and thus, the criminal offence of unintentional homicide cannot be charged against anyone who destroys the fetus *in utero*)[6] is both well-known and often described as disrespectful of the unborn. However, various other legal rulings shed a different light on the question. For example, the 1975 Abortion Law proclaimed the principle according to which all human beings are entitled respect from the outset of life[7]. A 1994 Constitutional Council decision reaffirmed the principle and said it applied to all human beings –save *in vitro* embryos[8]. Therefore, regardless of the fact that what such a principle really encompasses may remain unclear[9], I would contend that it is understood to have something to do with not treating embryos as pure laboratory material, as mere means towards various instrumental ends. In other words, there is in French jurisprudence a strong idea of the intrinsic worth of embryos that is to be protected at law. This certainly accounts for the choice made in the 1994 first Law on Bioethics to ban embryonic research and restrict scientific manipulation of embryos solely to procreative purposes.

The aim of this paper is to discuss the impact of the emergence of the embryonic stem cells (ESC) issue in public debate about embryonic research at the end of the 1990s on the socio-legal (non)construction of the embryo. Once ESC were derived and cultured

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[4] Law n°94-653 of 29 July 1994 *relative au respect du corps humain*; Law n°94-654 of 29 July 1994 *relative à l'assistance médicale à la procréation, au diagnostic prénatal et au don et à l'utilisation des éléments et produits du corps humain*; Law n°2004-800 of 6 August 2004 *relative à la bioéthique*. Unless otherwise mentioned, all translations from French to English are mine.

[5] Among which : Law n°75-17 of 17 January 1975 and 2001-588 of 4 July 2001 on Abortion; Law n°88-1138 of 22 December 1988 and 2004-806 of 9 August 2004 on Human Experimentation; Law 2002-303 of 4 March 2002 on Patients' Rights; Law 2005-370 of 22 April 2005 on Patients' Rights at the End of Life.

[6] Cass. Crim., Ass. Plen. 29 June 2001 (available at: http://www.legifrance.com/affichJuriJudi.do?oldAction=rechJuriJudi&idTexte=JURITEXT000007071215&fastReqId=1180821895&fastPos=1, visited 11 Feb. 2008). This judicial interpretation has been challenged before the European Court of Human Rights, which has eventually decided that redress from offences leading to the death of unborn children need not be of criminal nature and thus concluded French law did not violate the ECHR ; see ECtHR, 8 July 2004, *Vo v. France*, 53924/00).

[7] Law n°75-17 of 17 January 1975, art. 1: 'The law guarantees the respect of all human beings from the outset of life" ["La loi garantit le respect de tout être humain dès le commencement de la vie"].

[8] See Const. Council, 27 July 1994, 94-343-344 DC (available at http://www.conseil-constitutionnel.fr/decision/1994/94343dc.htm visited Nov. 23rd, 2007).

[9] See on the concept of 'respect' due to the human embryo generally M.J. Meyer, L.J. Nelson, 'Respecting What We Destroy. Reflections on Human Embryo Research', (2001) 3 The Hastings Centre Report 1, 16-23.

from human embryos[10] and as soon as therapeutic applications began to be considered of (i.e. the potential of "regenerative medicine")[11], the whole edifice of the embryo as an untouchable entity in French legal culture was jeopardized – to the extent that eventually, thanks to the 2004 Law on Bioethics, interest in ESC made the embryo legally available for research purposes[12]. The new 2004 Law permits research to be conducted on embryos [and embryonic stem cells], albeit on the basis of a temporary exception to the prior prohibition rule. Moreover, recently initiated preparatory works for the next 2009 new Law[13] seem to favour the legalization of therapeutic cloning[14], and potentially will allow for the possibility of creating embryos solely for scientific

[10] See notably J.A. Thomson et al., 'Embryonic Stem Cell Lines Derived from Human Blastocysts', (1998) 282 Science, 1145-1147.

[11] See J. Gearhart, 'New Potential for Human Embryonic Stem Cells', (1998) Science 282, 1061-1062, mentioning genetic transplant therapies as a therapeutic horizon. See also Stem Cells and the Future of Regenerative Medicine: Committee on the Biological and Biomedical Applications of Stem Cell Research Board on Life Sciences National Research Council Board on Neuroscience and Behavioral Health Institute of Medicine (Washington: National Academy Press, 2002). On a more dubious standpoint, see D.A. Prentice, 'Current Science of Regenerative Medicine with Stem Cells', (2006) 54 Journal of Investigative Medicine, 1: in this paper, the author underlies the many difficulties that ESC manipulation still faces and insists on how distant therapeutic applications remain. Also, he insists on the higher than expected potential of adult stem cells. In a less strictly scientific and more regulatory (ethical and legal) approach, see R. Brownsword, 'Stem Cells and Cloning: Where the Regulatory Consensus Fails', (2005) 39 New England Law Review, 536, 553: "Are we looking hard enough for the negatives?". However, it has convincingly been argued that whether one focuses on the positives or the negatives of scientific [in this case, ESC] research depends on pre-existing moral conceptions; see notably, M. Mulkay, 'Rhetorics of Hope and Fear in the Great Embryo Debate", (1993) 23 Social Studies of Science 4, 721, 724 : "The rhetoric of hope is an institutionalized interpretative form which is widely used in our culture to express support for current developments in science and technology. Use of the rhetoric of fear, in contrast, seems to become appropriate only when science and technology can be represented as violating basic cultural categories and moral values. I will show how participants' adoption of one rhetoric rather than the other in parliamentary context was linked to their varying conceptions of the human community and thereby to differing judgments concerning the moral character of embryo research".

[12] It can be argued that this is what has happened in most countries in which legal responses to the ESC issue have been crafted. To be sure, the German law of 2002 maintains a ban on embryonic research and thus strongly contrasts with the 2001 regulations in the UK that permit therapeutic cloning. However, these two countries that are often presented as the emblems of opposite responses to the ESC issue already had very opposing legal constructions of the human embryo *before* the ESC issue arose. Therefore, it might be worth noticing that the ESC issue made them move *in the same direction* (ie. towards a more liberal legal regulatory framework, for Germany has authorized research on imported ESC, thus parting from a solely ontological approach) instead of insisting on the fact that they still treat those issues differently. For a comparative account of ESC research regulations (focusing on the differences in approaches however), see S. Halliday, 'A Comparative Approach to the Regulation of Human Embryonic Stem Cell Research in Europe', (2004) 12 Med. L.Rev., 40.

[13] The 2004 Law on Bioethics contains a provision (as did the 1994 one) according to which it is to be revised within five years.

[14] The issues of ESC research and therapeutic cloning are tightly linked, for any prospect of therapeutic use of ESC-based technology would, were random ESC to be used for a particular patient, face the problem common with all transplants : that of rejection from the receiver's immune system. For that reason, it soon was argued that ESC obtained via therapeutic cloning originating from an enucleated cell of the person to cure would enable autologous transplants of ESC therapies and thus circumvent the problem. For that reason, the prospect of therapeutic use of ESC based technology is linked to the issue of therapeutic cloning.

purposes[15]. In analysing the impact of the scientific concept of ESC and their potentialities on the law, I focus on semantic issues. Recent legislative changes in France are a striking example of the extent to which words count in manufacturing consensus in the field of bioethics, for it seems that the very moment the debate was presented as being about "embryonic stem cells" –as opposed to "embryos"- coincided with the vanishing, or the successful silencing of much of the reluctance and opposition that had been central to bioethical debate in France over the last ten years. Part II of this paper will present the evolutions the ESC issue has triggered in the French law of bioethics. Part III will then turn to a closer look at the words by which these legal evolutions were conveyed and especially a number of semantic tricks[16] that have been necessary for them to be accepted.

II. French Law of Bioethics before and after ESC

A crucial step in the history of French legal regulation of bioethics dates from July 1994, when two Laws were adopted that aimed at providing both the (founding) principles and (technical) regulations that were to govern emergent questions of bioethics[17]. The first 1994 Law contains the most formal part of the legislative framework. It creates a new title within the Civil Code devoted to the human body, proclaims a number of principles (such as that of the dignity of the person[18]), and imposes core prohibitions (such as banning surrogate motherhood[19]). It does not engage however in defining a legal status for the embryo: the legislator only referred to 'persons' or 'human beings' without saying precisely into which category the embryo should be considered to fall in. The second 1994 Law is more technical and addresses a variety of issues ranging from organ retrieval and transplants, to means of genetic identification and intellectual property; but its main goal was to provide a clear legal

[15] Prominent French biologists have publicly made clear that they would not oppose such a legislative option at the *Journées parlementaires de bioéthique* held in Paris in February 2007. It is worth keeping in mind that the Oviedo Bioethics Convention of 1997 prohibits (art. 18) the creation of human embryos for research (S. Halliday, above n 9, 44); this potentially accounts for the delay in ratifying the Convention encountered in different signatory countries such as France.

[16] In that respect, the trick consisting of presenting ESC as radically different from the embryo echoes the one that consisted, in the 1980s, of distinguishing between the pre-embryo and the embryo. On the progressive consecration of the pre-embryo concept (in the United Kingdom after the 1984 Warnock report but also elsewhere as in Spain, or in the 1988 Report of the Science and Technology Commission of the Council of Europe's Parliamentary Assembly presented by M. Palacios, doc. 5943, Rapport sur la Recherche Scientifique Relative à l'Embryon et au Foetus Humain), and its critical role in establishing the admissibility of embryonic research, see P. Oliviero, 'La notion de 'pré-embryon' dans la literature politico-scientifique', (1991) 36 Archives de Philosophie du Droit, 85-107; M. Mulkay, 'The Triumph of the Pre-Embryo : Interpretations of the Human Embryo in Parliamentary Debates over Embryo Research', (1994) 24 Social Studies of Science, 611-39.

[17] For a general presentation, see C. Neirinck, ed., *De la Bioéthique au Biodroit* (Paris: Librairie Générale de Droit et de Jurisprudence, 1994).

[18] See art. 16 of the Civil Code: "Legislation ensures the primacy of the person, prohibits any infringement of the latter's dignity and safeguards the respect of the human being from the outset of life" (translation available on the www.legifrance.com website).

[19] See art. 16-7 of the Civil Code: "All agreements relating to procreation or gestation on account of a third party are void" (translation available on the www.legifrance.com website).

framework for assisted reproduction. Ultimately, this consisted for the most part of an attempt to assimilate assisted and natural reproduction[20] and limit the manipulation of human embryos (creation and screening[21]) to assisted reproduction processes only. Therefore, the 1994 Law banned the production of embryos, save within the context of assisted reproduction. In other words, all this second 1994 Law said about the embryo was that its use was to be confined to procreative purposes.

These restrictive legislative options were hardly challenged in this particular respect[22] before the issue of ESC arose in the early 2000s. But they did not resist ESC's conceptually revolutionary potential, from both a scientific (the whole perspective of regenerative medicine) and legal (subversion of ancient categories and taxonomies such as that of 'persons or things') standpoint. In that sense, the emergence of the ESC issue in public debate promoted the idea that the 1994 Law was outdated in that it failed to grasp and deal with the issue of ESC satisfactorily. In turn, this strong sense of an outdated legal framework certainly significantly contributed to scientific preoccupations ensuring their authority in a way they had not managed to do so far[23].

A. ESC Outdate Existing Law

On 30th June, 2002, the French Minister of Research authorized the importation from Australia by the National Centre for Scientific Research (CNRS) of two ESC lines. In 2002, the 1994 Law was applicable; and it said nothing expressly about ESC. According to the 1994 Law however, research on human embryos was prohibited[24]. It was not only clearly forbidden to create embryos in France for scientific purposes, it was also illegal to undertake research on spare embryos. The 1994 legislation was totally oriented towards procreation. *In vitro* embryos could thus only be obtained within an assisted reproduction process. If unused the embryos could be given by the couple from whom they had been produced for to another infertile couple[25]. In exceptional circumstances, spare embryos could serve for "studies", defined as research that does not harm the

[20] Therefore, the 1994 law defined eligibility to assisted reproduction procedures as being conditioned by heterosexuality, proof of a minimal length and seriousness of the relationship, and medically asserted sterility.

[21] The 1994 does indeed provide with a legal framework for pre-natal and pre-implantation diagnoses.

[22] To be sure, the restriction of assisted reproduction to heterosexual couples is nowadays is under question –in France as elsewhere. This was certainly the case in 1999 when the Parliament was adopting the law creating the PACS (*pacte civil de solidarité*), a sort of civil union available to homosexuals (see P. Lascoumes, D. Borillo, Amours Egales? Le PACS, les Homosexuels et la Gauche (Paris: La Découverte, 2002). Nonetheless, my aim here is to focus on what the 1994 laws said about the embryo, and in that respect, one can say they were not challenged before the early 2000s.

[23] In his comparative study T. Banchoff argues that "over the 1998-2004 period, scientific associations with proven success in lobbying governments for increased funding took up the stem cell research issue. They forged ties with two key allies: biotechnology and biomedical companies seeking eventual profit from genetic and regenerative medicine and medical and patient advocacy groups seeking eventual cures for victims of Parkinson's, Alzheimer's and other degenerative diseases": T. Banchoff, 'Path Dependence and Value-Driven Issues. The Comparative Politics of Stem Cell Research', (2004) 57 World Politics 2, 200-230.

[24] Art. L. 2141-8 of the Code of Public Health [Code de la Santé Publique]: "All experimentation on embryos is prohibited" [toute expérimentation sur l'embryon est interdite].

[25] See art. L. 2141-5 et 2141-6 of the Code of Public Health [Code de la Santé Publique].

embryos[26] (not surprisingly, this limited legislative possibility did not lead to any major findings, save for a small number of observation protocols on the conditions for conservation of embryos). Therefore in the early 2000s, *importation* of ESC appeared to be the only possibility for French researchers to take part in the then-developing worldwide research agenda on ESC. Unsurprisingly, a pro-life association called *Alliance pour les droits de la vie* challenged the importation authorization before courts, based on the provisions of the 1994 law that forbade embryonic research. This put the judiciary in the uneasy situation of having to decide a case relating to ESC on the basis of legislative provisions that only addressed embryos, legislation enacted when legislators were unaware of the nature and potential of ESC. The Administrative Court[27] explicitly based its reasoning on the understanding that the legislative ban applicable to embryos was *not* applicable to ESC for ESC were *not* embryos – and rejected the association's argument. On appeal, the same result was reached[28] and the challenge to the importation decision failed wholly.

Such judicial reasoning is noteworthy, for not only does it take a nominalistic stance on legal categories[29] but it does this on the basis of the very vague legal category of the 'embryo'. In this case the judges chose to rule that they knew enough about the legal scope of the category 'embryo' to decide ESC did not fall within it. Regardless of the motives of the judges[30], what is interesting here is that these judicial rulings participated in the construction of a conceptual severance between the 'embryo' and 'embryonic stem cells'. I contend that this conceptual differentiation played a critical role in the legal reforms in France that took place shortly afterwards. Distinguishing between the two made it possible for the public debate to maintain the illusion according to which legalizing research on ESC was not exactly the same thing as legalizing research on embryos; so the interest in stem cells did contribute to making the embryo available for research in France. Additionally, despite the fact that the decision to import ESC lines was eventually upheld, this judicial challenge contributed to depicting the 1994 legislative framework as outdated and ill-adapted to the new ESC scientific paradigm, for the judges chose to say that they had no legislative norm of reference when it came to ESC. In this respect, these court decisions constituted a favorable opportunity for the

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[26] Art. L. 2141-8 of the Code of Public Health [Code de la Santé Publique, in its 1994 version]: "Exceptionally, the man and woman forming the couple may accept that studies be conducted on their embryos" ; "those studies must have a medical finality and may not infringe upon the embryo's integrity". This possibility has been maintained under the 2004 legislation; see now art. L. 2151-5 of the Code of Public Health [Code de la Santé Publique, current version]: 'Exceptionally, when the man and woman who form the couple give their consent, studies that do not harm the embryo may be authorized".

[27] Paris Administrative Tribunal (TA Paris), 21 January 2003; see commentary S. Hennette-Vauchez, (2003) 29 Actualité Juridique Droit Administratif, 1563.

[28] Paris Administrative Court of Appeal (CAA Paris), decision n°03PA00950 (available at http://www.legifrance.gouv.fr/WAspad/Visu?cid=234091&indice=1&table=JADE&ligneDeb=1, as of nov. 23rd, 2007)

[29] Indeed such stances strongly contrast with the audacious or creative role that judges are most often seen to be playing in contemporary legal orders.

[30] It has been argued (and this was actually the French Minister of Research's argument before the courts) that since the 2004 law on bioethics that was at the time being discussed in Parliament was very likely going to authorize embryonic research anyway, it was worth upholding the particular challenged decision for it only anticipated on the results of the legislative work and did so with the intent of speeding French scientists' ability to take part in the worldwide research agenda on ESC.

scientific community to start developing an "emergency rationale" and present the existing Law as one that unduly impeded French scientists from participating in the worldwide research agenda on ESC. By 2003-2004 as a result, the idea that the law needed to be modified (and quickly so) had gained widespread acceptance in the public debate in France.

B. ESC and the Process of Updating Law

Subsequent to these court decisions, the legal framework did evolve. On 6 August 2004, the Parliament enacted a new Law of Bioethics[31]. Although ambiguous in some respects[32], the 2004 Law legalizes embryonic research, that is both research on embryos and research on ESC. A specific authorization procedure is created under the authority of the newly created Agence de Biomédecine[33]. The procedure is the following: if a research unit wishes to conduct research on human embryos or ESC, it must apply to the Agence de Biomedicine. The Agency's director designates two scientific experts who give a primary evaluation of the research protocol. Then another examination is conducted within the Agency's *conseil d'orientation*, composed of scientific and medical experts, lay members including human sciences experts as well as representatives of associations, MPs and institutional officials. After the *conseil d'orientation* gives its opinion, the Agency's director takes a decision[34]. Additionally, the Agency has the responsibility of inspection and control of implementing the authorized research protocols. Research units who have been authorized to research on human embryos or ESC are likely to be inspected within the 18 months following the authorization and thus if they do not conform with the terms of the authorization they were granted, such authorisation may be suspended or revoked. As of November 2007, some 25 research protocols have been authorized by the Agence de Biomédecine, many of which on the basis of imported ESC lines. 2 have been refused[35].

Almost two years elapsed between the 2004 law, which in principle legalized embryonic research, the actual creation of the Biomedical Agency supposed to deliver the corresponding authorizations (2005), and the publication of the decree precising both the conditions and the procedure applicable to those authorizations (2006). Such a two-year delay is not mentioned here to be commented upon, for it is traditional in civil law systems that legislative provisions can not be applied as such, and generally need decrees (*décrets d'application*) to become applicable. Typically, a legislative act will create a demerit-scheme drivers' license but will leave it to the decree [*décret*] to figure how many points are to be withdrawn in case of speeding or burning traffic lights.

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[31] For a general presentation, see S. Hennette-Vauchez, ed., *Bioéthique, Biodroit, Biopolitique. Réflexions à l'occasion de la loi du 6 août 2004* (Paris : Librairie Générale de Droit et de Jurisprudence, 2006).

[32] See *infra*, 9.

[33] Site: http://www.agence-biomedecine.fr. S. Halliday has noticed that the licensing of embryonic research by a central regulatory body is a point of consensus between many countries that have established otherwise differing legal frameworks for ESC research, S. Halliday, above n 12, 68.

[34] If the decision is a negative one, the Ministers of Health and of Research may act as appellate authorities and ask the Agency to re-examine the case; also if the decision is positive, they may overrule it with consideration of ethical and/or scientific principles.

[35] See information on these authorizations at: http://www.agence-biomedecine.fr/fr/experts/pegh-recherche-projets.aspx#liste (last visited Nov. 23rd, 2007).

Sometimes, such delays between the legislative decision and its implementation are lengthy. It certainly had been the case after the 1994 law of bioethics had authorized pre-implantation genetic diagnosis: the corresponding decree was only issued in 1998[36] which caused the first French PGD baby not to be born until 2000 – that is, six years after the technique was made legal. However, means of evading with this waiting period were found in the case of embryonic research: it was circumvented by the unusual implementation of a temporary authorization procedure. An *ad hoc* committee was thus nominated by the end of 2004 that was authorised to act as the Agency in terms of delivering authorizations until the 2006 decree was promulgated[37]. During its time of existence, this interim committee examined 45 applications, delivered 15 importation authorizations and 17 research authorizations, as well as 9 conservation authorizations (and 4 refusals)[38].

Therefore, not only was the 2004 Law revolutionary in France in so far as it authorized embryonic research, but its immediate application appear to be important enough for extraordinary procedures to be implemented. Arguably, both these phenomena are explained by the special status the ESC issue had acquired in the public debate[39], one linked both to issues of French competitiveness on a worldwide scale[40] and to short-term promises of 'regenerative medicine',[41] promises appeared particularly attractive in ageing societies only uneasily coping with the downside aspects of the prospect of longer lives[42].

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[36] Decree 98-216 of 24 march 1998 available at: http://www.legifrance.gouv.fr/jopdf/common/jopdf.jsp?numJO=0&dateJO=19980327&numTexte=&pageDebut=04624&pageFin=270398 last visited 12 feb. 2008.

[37] To be more precise, the *ad hoc* committee gave opinions on a number of applicants' protocols and it was the Ministers of Health and Research who actually delivered the authorizations –but always according to the committee's recommendations.

[38] Information gathered from A. Claeys, Les Recherches sur le Fonctionnement des Cellules Humaines, Official Report of the Parliamentary Observatory for Scientific and Technological Options, Dec. 2006 (available at : http://www.assemblee-nationale.fr/12/rap-off/i3498.asp last visited Nov. 26th, 2007).

[39] This does not account for the reasons thanks to which the ESC issue itself has acquired such a salience in the public debate. Certainly, further investigation should here be directed towards the specific parliamentary management of the issue (for a tentative account of the relevant factors in that perspective, see M. Kirejczyk, 'Parliamentary Cultures and Human Embryos', (1999) 29 *Social Studies of Science* 6, 889-912), but also to the other external or structural factors that explain that the state of affairs was propitious for the ESC issue to become a major one (focusing on actor constellations, balance of interests and the terms of legislative debates, see T. Banchoff, above n 23). For a careful comparison of the influence of one of the great markers of the terms of the legislative debates (eg. abortion) on the way the ESC issue has been addressed in three countries, see K.L. Belew, "Stem Cell Division : Abortion Law and its Influence on the Adoption of Radically Different Embryonic Stem Cell Legislation in the United States, the United Kingdom and Germany', (2004) 39 *Texas International Law Journal* 3, 479.

[40] For example, see how important the "brain drain" rationale has been in the legislative debates in Germany (S. Halliday, above n 12).

[41] Interestingly, much less attention has been paid to the fact that the therapeutic prospects of ESC based technology were remote than to the fact they were invoked ; in particular, see the centrality of the vocabulary of "magic" in the debate, underlined by R.D. Orr, C.C. Hook, 'Stem Cell Research : Magical Promise v. Moral Peril', (2001-2002) 2 Yale J. Health Pol'y L & Ethics, 189.

[42] For example, see how discreet the Alzheimer's disease has remained recently in France albeit being declared 'national cause' [*cause nationale*] for 2007.

III. The Law-Making Lessons From Esc: New Words, New Options

One of the crucial features of the French 2004 Law on bioethics provisions relating to embryo research is their ambiguity. The radical novelty of legalizing embryonic research at all should not be diminished, especially since such a legislative move strongly contrasts with the prior socio-legal context in which the human embryo had long been a taboo subject that French legislators did not want to engage with. However, it was only reluctantly that the 2004 Law makes embryonic research legal; and it is interesting in that respect to focus on the choice of words that has enabled the construction of this new framework. On this particular subject, one can indeed notice a number of interesting elements. For example: (i) although the whole point of the 2004 law was about legalizing embryonic research, the vocabulary of prohibition is maintained; (ii) much rhetorical effort was displayed in order to strengthen the idea that ESC have very little to do with embryos; (iii) and a likely aftermath of the 2004 Law could well be the legalization of therapeutic cloning, but under a different name, that of nuclear transfer.

A. Say you Prohibit, but Really Legalize

As explained above, the starting point of the debate in the 2000s was the unequivocal and strong prohibition (outlawing) of embryonic research in the 1994 Law[43]. Banning of embryo research was one of the conditions of possibility of the 1994 law coming into existence at all. Indeed, it is only because such a ban was promised at the time, that the legalization of assisted reproduction (and the accompanying pre-natal and pre-implantation diagnoses) in the 1994 Law was possible, and the Law gained sufficient support in Parliament. In other words, one can say that the restrictive stance allowing embryos only to be available for procreative purposes (and never for scientific ones) was a core and conditional element of the 1994 legislative edifice[44].

However, by the end of the 1990s, advocates of embryonic research managed to make their voice heard clearly. Emblematic in that regard was the 1999 report of the French Council of State[45], that suggested embryonic research should be accepted under a

[43] See above, n 24.

[44] This is not to be understood mathematically, for the strongest opponents to embryonic research were inferior in numbers to the margin in votes that enabled the adoption of the 1994 law. Nonetheless, the strength of the idea that embryos were reserved to procreative means was such that it was a condition of general acceptance of the law by many members of the French Parliament. Here again, it is worth noticing that despite a common presentation in comparative literature in the UK being very liberal on these subjects, Germany very conservative and France standing somewhere in the middle, this particular structure of lawmaking being keen on regulating assisted reproduction and achieving that goal rather easily, but simultaneously facing considerably stronger tensions when addressing the issue of embryonic research, is quite common. Even in the UK has that question revealed a very acute divide, and in 1990 when the HFEA was passed, a ban on the controversial provision allowing the creation of embryos for research under exceptional circumstances only narrowly failed (246 to 208; see T. Banchoff, above n 23, 214).

[45] Conseil d'Etat, (1999) *Les Lois de Bioéthique, Cinq Ans Après* (Paris: La Documentation Française). See notably pages 15 and following, in which the Conseil d'Etat explains that in 1994, embryonic research only aimed at improving assisted reproduction techniques and could thus be banned given the fact that many such techniques were already available and satisfactory with regard to the existing

number of conditions – followed by a number of other reports endorsing that position, emanating from learned societies such as the French National Medical Academy[46], the French Sciences Academy[47] and also the National Ethics Committee[48]. Consequently, the initial draft for the 2004 Law of Bioethics simply enunciated as a principle that research on human embryos was to be authorized, and then defined the conditions under which authorizations were to be granted. Early in the legislative process and after electoral changes, the principle was reversed: from the first discussions before the Senate in January 2003, the formulation became: "Research on human embryos is forbidden". It is only the following paragraphs that read: "as a dispensation, and for a limited period of time of five years after the corresponding decree will be published, research can be authorized on human embryos and ESC according to the following conditions"[49].

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needs, whereas in the late 1990s, it appears that embryonic research aims at therapeutic developments of many diseases among which some incurable ones –and thus ought to be authorized.

[46] Opinion of 23 June 1998 : "it is necessary to admit that as far as the embryo is concerned, research on the fertilization process, cryoconservation and implantation is a medical duty. It is a necessary condition for the therapeutic improvements… Research on the human embryo is capable of improving the prognosis of extra-corporeal fertilizations by enabling the identification of embryos that carry lethal abnormalities. Therefore the number of implanted embryos could be diminished, thus the number of multiple pregnancies of which the danger for the mother and the children is well known".

[47] Opinion of 10 June 2002, that expresses the Academy's concern for the fact that French research is impeded by restrictive legal regulation that thus ought to be changed, and underlies the importance of research in human embryonic stem cells.

[48] See opinion n°53 of 11 march 1997, 4: "given the important perspectives generated by ESC lines in terms of therapeutic research (…), new legislative provisions should be adopted when the law is revised in order to modify the prohibition contained in [art. L. 152-8 of the Code of Public Health]. With respect to such aims, it would be envisaged to authorize research on embryos donated by couples who have given up their parental projects and do not wish conservation to be continued ".

[49] See Art. L. 2151-5 Code of Public Health: "Research on human embryos is forbidden… As a dispensation, and for a limited period of time of five years after the corresponding decree will be published, research can be authorized on human embryos and ESC when it is susceptible of enabling major therapeutic progress and under the condition that it cannot be achieved by any other method of comparable efficiency… Research can be conducted only on embryos created in vitro within an assisted reproduction protocol and if they no longer correspond to a parental project. It can only be undertaken after the couple the embryos come from (or, were it to be the case, its surviving member) has expressed its written consent, given that the couple shall have been priorly informed of the possibilities it has of either donating the embryos to another sterile couple or ending their conservation. In all cases, both members of the couple may withdraw their consent at any time and for wny motive. Research cannot be undertaken unless the corresponding protocol has been authorized by the Biomedical Agency. The decision to authorize such research is based on the project's scientific relevance, its implementation conditions with respect to ethical principles and its interest in terms of public health" [La recherche sur l'embryon humain est interdite (…) Par dérogation au premier alinéa, et pour une période limitée à cinq ans… les recherches peuvent être autorisées sur l'embryon et les cellules embryonnaires lorsqu'elles sont susceptibles de permettre des progrès thérapeutiques majeurs et à la condition de ne pouvoir être poursuivies par une méthode alternative d'efficacité comparable, en l'état des connaissances scientifiques… Une recherche ne peut être conduite que sur les embryons conçus *in vitro* dans le cadre d'une assistance médicale à la procréation qui ne font plus l'objet d'un projet parental. Elle ne peut être effectuée qu'avec le consentement écrit préalable du couple dont ils sont issus, ou du membre survivant de ce couple, par ailleurs dûment informés des possibilités d'accueil des embryons par un autre couple ou d'arrêt de leur conservation… Dans tous les cas, le consentement des deux membres du couple est révocable à tout moment et sans motif. Une recherche ne peut être entreprise que si son protocole a fait l'objet d'une autorisation par l'Agence de la biomédecine. La décision d'autorisation est prise en fonction de la pertinence scientifique du projet de recherche, de ses

Arguably, there is something specious in a legislative construction that consists of saying that a particular conduct is prohibited and then defining the conditions under which exceptions may be granted. Yet, it is not an uncommon regulatory approach to morally sensitive issues[50] such as the one at stake here. Nonetheless, it is worth unveiling the true reasons for such ambiguous legislative wording. In this particular French case, it so happens that the prohibition / exception approach was not implemented, as is sometimes the case, in order to enable hypothetical *future* developments. Rather, what the various concerned actors (scientists, but also many law-makers) truly sought to do was to make embryo research *immediately* legal – what really mattered was the exception and not the principle. The need for this semantic trick is explained by the history of the debate, that accounts for the great attention paid to the symbols of legislative discourse[51] – and, in the particular case, to the necessity of retaining the 'prohibition principle' to rally support among those to whom it had been promised in 1994 that embryonic research would never be authorized, and whose support was necessary both in terms of votes and of legitimacy[52]. Such contextual elements also account for the recurrent provision in French laws of bioethics according to which Parliament is to re-examine the Law within five years[53]. There is a strategic function of ambiguity here, the prohibition principle aiming at rallying those who oppose the authorization exceptions, and *vice versa* the dispensatory authorization ensuring the support of those who favored legalization. In sum, the political compromise focused on obtaining acceptance from the scientific community that it would after all have to operate on the basis of an exception to a prohibition clause, instead of an authorization clause, since it was necessary for the law to be passed at all, that it embodies a prohibition principle.

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conditions de mise en oeuvre au regard des principes éthiques et de son intérêt pour la santé publique…].

[50] S. Halliday, for example, has noted that the German *Stammzellgesetz* of 2002 proceeded much the same way: it 'sets out the basic position that the import and use of embryonic stem cells is forbidden. However, the following paragraphs are devoted to setting out the exception to that rule" (S. Halliday, above n 12, 60). Many other examples could be mentioned.

[51] See explicitly in this respect German National Ethics Council, Opinion: The Import of Human Embryonic Stem Cells, Dec. 2001, 39: "The symbolic function of the protection of human embryos: Apart from the moral status attaching to the embryos as such, their reliable protection has a symbolic function and significance in our culture. Preventing the instrumentalization of embryos for extraneous purposes is a token of a protection of all who are unable to protect themselves and to argue in favor of their own protection" (available at: http://www.ethikrat.org/_english/publications/stem_cells/Opinion_Import-HESC.pdf as of Dec. 10th, 2007).

[52] Indeed, it is constant in the French bioethics debate that not only do laws on bioethics, as all laws, need a majority for being adopted in Parliament, but also that they need more than that for only is a law on bioethics that is adopted beyond political cleavages, by a vast majority, a good law on bioethics. In other words, actors of the politico-legal debate on bioethics recurrently insist on how freed from the structures of party discipline do they engage upon legislative action; they claim to have an a-political (or a-partisan) approach on these issues. On all those aspects, see S. Hennette-Vauchez, 'Bioéthique, Biodroit, Biopolitique : Politique et Politisation du Vivant', in S. Hennette-Vauchez, ed., above n 31, 29. This perspective is confirmed on a comparative scale, see T. Banchoff, above n 23, 206, and 215 in the British case ("While he effectively set the agenda [T. Blair] could not invoke party discipline on an issue that the Parliamentary leadership deemed a matter of conscience").

[53] See above n 13. Indeed, such provisions are difficult to explain on a theoretical standpoint, for there is no need for Parliament explicitly to auto-enable itself to examine or re-examine a given piece of legislation, for what Parliament does, it can undo or redo.

Thus, the 2004 legislative definition of the conditions under which embryonic research may exceptionally be authorized should viewed as embodying a socio-political compromise rather than coherent principal policy – which they are not, for they rest on the idea that ESC research has *therapeutic* outcomes, whereas the scientific state of the debate on ESC to this day remains very cautious in that respect[54], if only because of the ascertained risk of cancerous cells proliferation. The two conditions that the 2004 Law says must be fulfilled for research protocols to be authorized are the following: i) the envisaged research must be susceptible of enabling 'major therapeutic progress' and ii) such progress can not be pursued by any 'alternative method of comparable efficiency'[55]. Additionally, the February 2006[56] *décret d'application* struggles to convey an extensive interpretation of these abstract legislative provisions, by explaining that the expression "major therapeutic progress" must be understood as encompassing research that is *aimed at* developing therapeutic goals regarding particularly serious or incurable diseases, or the treatment of embryonic or fetal affections[57]. As a result, all actors of the ESC debate today agree that not only are the legal conditions in truth currently unattainable and illusory but also cynical, for they convey the message according to which research units have strategic interests in presenting their research protocols as aiming at, say, curing Parkinson's disease, whereas it is publicly accepted that such therapeutic goals of ESC-based medical technology are still remote and uncertain.

Although information as to the way the Agency actually evaluates the protocols is not available, interesting elements can be found in the former temporary *ad hoc* committee's report of activity. In their Report[58], the committee indicated the following principles of interpretation of the legislative provisions. First, the committee considered that the "therapeutic finality" required by the 2004 law did not encompass only therapeutic applications, but also 'fundamental research for it is an indispensable preliminary to such therapeutic applications'[59]. Therefore, it decided that research

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[54] Arguably, this has been a feature of the pro-embryonic research discourse well before the ESC issue arose. See in that respect the analyses of M. Mulkay, who points at as the critical role one-sided predictions of promised-by-embryo-research blessings played in weakening the strength of respect to unborn life paradigm, whilst these therapeutic horizons remained opportunistically silent on the level of uncertainty (if not of failure at the moment they were depicted); M. Mulkay, *The Embryo Research Debate: Science and the Politics of Reproduction* (Cambridge, New York and Melbourne: Cambridge University Press, 1997).

[55] Art. L. 2151-5 Code of Public Health, above n 49.

[56] Decree [Décret] 2006-121 of 6 February 2006, *Journal Officiel* of 7 February 2006 (available at: http://www.agence-biomedecine.fr/fr/experts/doc/Decret-2006-121-06022006.pdf, last visited Nov. 23rd, 2007).

[57] Decree [Décret] 2006-121 of 6 February 2006 : "is to be considered as susceptible of enabling major therapeutic progress research on embryos and embryonic stem cells that pursues a therapeutic finality regarding particularly serious or incurable diseases as well as the treatment of embryonic or fetal affections' ['sont notamment susceptibles de permettre des progrès thérapeutiques majeurs au sens de l'article L. 2151-5 les recherches sur l'embryon et les cellules embryonnaires poursuivant une visée thérapeutique pour le traitement de maladies particulièrement graves ou incurables, ainsi que le traitement des affections de l'embryon ou du fœtus'].

[58] Significant parts of the report are cited in A. Claeys, above n 38.

[59] In French: "le comité considère que la finalité thérapeutique ne se limite pas aux recherches sur les applications thérapeutiques et que la recherche fondamentale comme préalable indispensable vers des applications thérapeutiques est incluse dans cette finalité".

protocols that had only remote therapeutic applications could be considered as "susceptible of enabling major therapeutic progress" (and thus fulfilling the legislative requirements) in so far as fundamental (ie. merely cognitive) research is a necessary step towards projects that will ultimately have therapeutic applications. Secondly, the committee also said it had examined the applications and the information given regarding available alternative methods according to the following understanding of what alternative methods are. It said it had paid attention to whether similar research had been conducted on adult stem cells – but did not say what conclusions it drew. It also specified that in particular, it verified whether research had been undertaken on animal ESC, but that it did not require such research to have led to satisfactory results; confusingly, it only added that the absence of such results in the basis of animal ESC did not necessarily lead it to refuse to grant authorization for research on the basis of human ESC. Although there is no hard evidence that the Agency today reasons on the basis of similarly extensive interpretation of the legislative conditions, one is inclined to believe it may, for a stricter mode of reasoning would probably lead to no authorization being granted – which is not the case.

Let us reflect again on the choice of words in the process of law making; it is beyond doubt that French MPs in 2004 were fully aware of the fact that research on human ESC could not definitively be said to have 'therapeutic applications' – let alone to enable 'major therapeutic progess'. Nonetheless the recourse to that expression seems to have been necessary in the debate at the time, because only 'therapeutic ends'[60] (as opposed to scientific ones) appeared worthy of respect and legitimacy to overcome the otherwise strong culture of the 'untouchability' of the embryo[61]. Therefore, it was implicit in the

[60] It must be said here that another thing the 2004 law did was establish a clear rule as to the fact that after five years of their creation, supernumerary embryos can be destroyed if they no longer are related to a 'parental [procreative] project'. In 1994, the previous bioethics law had enabled the destruction of the embryos that had been obtained within an assisted reproduction protocol five years prior (or more) to its coming into force. But no provision of the law allowed destruction for the ones who would be created and conserved for five years (and more) after its entering into force. In that respect, the 2004 law operates an important shift in so far as it perpetuates the idea that destruction of embryos is plainly lawful –and not only exceptional and punctual as under the 1994 law. This is worth mentioning because once destruction is a lawful option, it becomes easier to promote embryonic research as another available option, for 'If the disposal of spare embryos is inevitable, it is difficult to see why washing an embryo down the drain would be morally preferable to using it in order to carry out valuable research": E. Jackson, *Regulating Reproduction* (Oxford: Oxford University Press, 2001), 47.

[61] In that respect, it will be very interesting in the forthcoming weeks and months to see how this rationale adjusts to the publication of important scientific results establishing that pluripotence can be created and not only found in ESC –thus potentially conveying the idea that ESC may no longer be the unique source of interesting cells (see Takahashi et al., 'Induction of Pluripotent Stem Cells From Adult Fibroblasts by Defined Factors', (2007) Cell doi 10.1016/j.cell.2007.11019; and V. Gretchen, 'Stem Cell Research: Four Genes Confer Embryonic Potential', (2006) Science 313, 27). Indeed, the "therapeutic finality' was something critical trends of decision-makers eventually agreed was worthy enough for standing higher than reluctances linked to the 'untouchability' of the embryo; but that part of the consensus may well fall apart if the same finalities can be pursued without using (and destroying) embryos and thus (re)generate controversy. For an analogy, see H. Gottweis, *Governing Molecules. The Discursive Politics of Genetic Engineering in Europe and the United States* (Cambridge: MIT Press, 1998), 229: "The policies for regulating and supporting biotechnology that began to develop in the United States and in Europe in the second half of the 1970s derived a considerable part of their legitimacy from references to 'the public', to 'public interest' and more generally, to the health, the nutritional needs, and the economic situation of the 'population'… This semiotic appropriation of collective identity did not remain unchallenged. From the early 1980s, throughout Europe, a

debate that the embryo's 'untouchability' could be only overruled for such therapeutic perspectives. The same can be said about the other condition according to which research is to be authorized only if no alternative method of comparable efficiency is available. The rationale behind this is the following: during the Parliamentary debates, opponents of the legalization of embryo research made it clear that since adult stem cells existed as well, research should focus on adult cells in order to maintain the human embryo's 'untouchability'. An implicit deal was thus made, according to which research on adult stem cells was going to be encouraged every time it was oriented towards similar goals as research on ESC. In other words, the message is once again one of compromise[62]: ESC are to be made available to researchers because they have a potential of differentiation that adult stem cells do not, and it is only in such cases that research protocols are to be granted authorization. In a sense, there was an implicit understanding before Parliament in 2004 that the legalization of research on ESC was a minimal one, that would produce actual effects only in limitative configurations. So at the end of the legislative day, the 2004 law is one that simultaneously i) maintains a principle of prohibition of embryonic research ii) authorizes it only in a dispensatory manner iii) does so under unrealistic conditions that everyone knows will be bypassed iv) and nonetheless creates an operational framework under which embryo research is now being authorized and conducted in France. This, in many aspects, can be called a socio-legal compromise, for both opponents and promoters of embryo research find some grounds for satisfaction. But it is also one that was made possible only thanks to the (highly stressed) difference between embryos and ESC, for much of the reluctance and opposition raised by the very idea of research on embryos were successfully minimised when research on embryonic stem cells became the core objective.

B. Impose Cellular Iconography in the Debate and Enhance Acceptability of Embryonic Research

In France as elsewhere, pro-life movements insist on the continuity of life from very early stages of fertilization and implantation to actual birth, and thus on the conceptual similarity between 'babies', 'fetuses' and 'embryos'. And this conceptual similarity on which such rationales rest may sometimes be associated with iconographic similarities. Perhaps even unconsciously: when one thinks of an embryo, one may well have in mind a fetus's or even a child's image[63]. This structural element of the power of mental or iconographic representations of life before birth has much to do with resistance that may intuitively be opposed to medical science involving the manipulation of embryos. Leading actors of the bioethics debate in France decided to act on that iconography[64]. It

disintegration of this coherent notion of 'the public and biotechnology' was evident when biotechnology once again became the object of a broad public controversy".

[62] For a similar discussion applied to the EU legal order, see T.K. Hervey, H. Black, The European Union and the Governance of Stem Cell Research, (2005) 12 *Maastricht Journal of European and Comparative Law*, 11, 30-32.

[63] On the importance of mental images (and of their generalization throughout ultrasounds) of the unborn baby in the empirical management of abortions, see D. Memmi, *Faire Vivre et Laisser Mourir. Le Gouvernement Contemporain de la Naissance et de la Mort* (Paris : La Découverte, 2003).

[64] It has been argued that much of the debate over the admissibility of embryonic research was a matter of competing symbolic representations of the embryo ; J.A. Robertson, 'Symbolic Issues in Embryo Research', (1995) 25 The Hastings Centre Report 1, 37-38.

is striking to see how numerous are the pictures of 4 to 6 day embryos (eg. pictures that would only allow their object to be described as a bunch of cells) in the Fagniez report on Stem Cells Research[65] established by a MP at the request of the Prime Minister in order to launch the preparatory work on the forthcoming 2009 legislation[66]. Not only are the pictures numerous, but they are often accompanied by scaling elements for the reader to understand that what she sees has been considerably enlarged and that the real scale is radically different – smaller[67]. So the report includes many phrases similar to the following: "at that stage of development, the embryo measures only a sixth of a millimeter. This is an important element for the symbolic representation of the embryo"[68]. Images, scaling instruments and words are teleologically united towards resisting against any fetal or childlike representation of the embryo. This effort to distinguish between embryo and child is further enhanced by additional efforts to entrench a distinction between the embryo and ESC. Indeed, in the Fagniez report[69] as in the public debate more generally[70] by the early 2000s, one finds insistence on the technical fact that ESC are to be found in embryos at a stage at which once ESC are retrieved, they can no longer autonomously develop into embryos. The difference between totipotent and pluripotent[71] cells was thus often relied upon, and this is striking in so far as technical or scientific aspects of biomedical issues are not often put forward in such an explicit manner. The judgment of the Paris Court of Appeal in the ESC importation litigation I referred to earlier is interesting in that respect. Significant parts of the judge's reasoning rely directly and heavily on this particular scientific distinction: "the pluripotent cells retrieved from the human embryo at the stage of blastocyst do not constitute an embryo and are incapable of enabling the development of an embryo"[72]. It is interesting thus to see that an issue that had long be coined as a matter of principle (should embryos be made available for research) was successfully turned into a technical / scientific one (if those cells no longer are totipotent and then unable of developing into embryos, then they can be distinguished from embryos)[73]. This was

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[65] See P.-L. Fagniez, Cellules Souches et Choix Ethiques (Paris: La Documentation Française: 2006) available on line at: http://lesrapports.ladocumentationfrancaise.fr/BRP/064000623/0000.pdf (last visited Nov. 23rd, 2007).

[66] For such striking pictures, see P.-L. Fagniez, above n 65, 44, 49, 67 and 76 (nesting cells).

[67] See the references cited above n 65.

[68] P.-L. Fagniez, above n 65, 44.

[69] Emblematically, one reads in the Fagniez report (above, n 65), 44 and 45: "*Embryonic stem cells thus can not be assimilated to embryos* susceptible of developing into an autonomous individual, nor to potential embryos. They may not by themselves guarantee the development of a complete and viable individual" (emphasis added).

[70] This seems to have been the case in other countries quite the same way. See for example the following German National Ethics Council Opinion on 'The Import of Human Embryonic Stem Cells', above n 51, 41: "In so far as they are pluripotent, human *embryonic stem cells are not embryos* and are therefore worthy of protection not for their own sake but on account of their provenance" (emphasis added).

[71] Fertilization gives rise to a single totipotent cell that will divide into other totipotent cells for about four days. Totipotent cells have total potential in that they can develop into all the tissues necessary for fetal development. After the fourth day, totipotent cells start to specialize and turn into pluripotent ones. Those are the ones ESC research in interested in, for they can be used as a source for developing any type of cells.

[72] Paris Administrative Court of Appeal, see above n 28.

[73] In that perspective, ESC debate in France has operated in a way opposite from that described by D. Nelkin who has argued that scientific controversies were increasingly framed as moral rather than

only made possible by the conceptual breakthrough the discourse on ESC successfully imposed on the modes of reasoning that had been applied so far to the embryo. The idea that there are irreducible differences between fetuses and embryos –at least early-stage embryos that embryonic research and ESC research is interested in- was successfully conveyed in the public debate. This did not only render the 2004 (dispensatory) legalization of embryonic research possible; it may also prove to have further-reaching effects.

C. Don't Say 'Therapeutic Cloning' but 'Nuclear Transfer'

Although the 2004 Law constitutes a breakthrough in terms of authorizing embryo research in France, it nonetheless affirmed or reaffirmed a significant number of core prohibitions. Notably, the principle according to which human embryos can not be created solely for research purposes has been maintained: to this day, embryos in France can still only be created within assisted reproduction protocols[74]. Embryo research can only be undertaken either on spare embryos (under the condition that research has been consented to by the couple for which the embryos were originally conserved)[75], on embryos on which pre-implantation diagnosis has been conducted on the understanding that they cannot be implanted in the woman's womb (this is a innovation of the 2004 Law again subject to the corresponding couple's consent)[76] or imported ESC lines[77]. Accordingly, therapeutic cloning is banned under the 2004 Law[78]; but this too may well

technical ones : D. Nelkin, 'The Public Face of Science : What Can We Learn From Disputes', D.H. Guston, K. Keniston, eds, *The Fragile Contract : University Science and the Federal Government* (Cambridge : MIT Press, 1994), 101.

[74] Art. L. 2151-2 Code of Public Health : "La conception *in vitro* d'embryon ou la constitution par clonage d'embryon humain à des fins de recherche est interdite".

[75] Art. L. 2151-5 Code of Public Health : "research can only be conducted on embryos that have been created in vitro within an assisted reproduction protocol, if they no longer correspond to a parental project" ["Une recherche ne peut être conduite que sur les embryons conçus in vitro dans le cadre d'une assistance médicale à la procréation qui ne font plus l'objet d'un projet parental"].

[76] Art. L. 2131-4 Code of Public Health : "In the case an anomaly responsible for one of the conditions listed in the second paragraph is diagnosed on the embryo, the two members of the couple, whenever they confirm that they no longer wish to carry out a parental project with this embryo, may consent to research being undertaken on the embryo under the conditions of art. L. 2151-5" ["En cas de diagnostic sur un embryon de l'anomalie ou des anomalies responsables d'une des maladies mentionnées au deuxième alinéa, les deux membres du couple, s'ils confirment leur intention de ne pas poursuivre leur projet parental en ce qui concerne cet embryon, peuvent consentir à ce que celui-ci fasse l'objet d'une recherche dans les conditions prévues à l'article L. 2151-5"].

[77] Art. L. 2151-6 Code of Public Health : "The importation of tissue or embryonic and fetal cells for research purposes is subject to an authorization delivered by the Biomedical Agency. Such authorization can be granted only if the fundamental principles listed under art. 16 to 16-8 of the Civil Code are respected" ["L'importation de tissus ou de cellules embryonnaires ou foetaux aux fins de recherche est soumise à l'autorisation préalable de l'Agence de la biomédecine. Cette autorisation ne peut être accordée que si ces tissus ou cellules ont été obtenus dans le respect des principes fondamentaux prévus par les articles 16 à 16-8 du code civil"].

[78] Art. L. 2163-4 Code of Public Health modifying the Penal Code: "Creating embryos in vitro or otherwise cloning embryos for research purposes is punished by seven years' imprisonment and a €100.000 fine" ["Le fait de procéder à la conception in vitro ou à la constitution par clonage d'embryons humains à des fins de recherche est puni de sept ans d'emprisonnement et de 100 000 Euros d'amende"].

change, for the past couple of years have featured increased efforts to enhance general acceptance of therapeutic cloning.

French legislators ventured on the cloning terrain only in a very specific context. The highly controversial announcement by the Raelians of the birth of the first human clone at the end of 2003 weighed considerably on then ongoing law-making process. In immediate reaction to this announcement, the provisions of the legislative draft that sought to enable therapeutic cloning (albeit under restrictive conditions) were withdrawn, and criminal sanctions to prohibit cloning were inserted. A distinction was drawn between reproductive and therapeutic cloning. Therefore, the first, reproductive cloning gave rise to a new and solemn criminal offence labelled a "crime against the human species" [*crime contre l'espèce humaine*], a person or group convicted of reproductive cloning being liable of a extraordinary fine (7.5 million euros) as well as a lengthy prison time. The latter – therapeutic cloning - led to a more classical but nonetheless serious criminal offence potentially linked to prison time as well[79]. What is interesting is that at the very same time, as France appeared to be criminalising therapeutic cloning, French authorities were promoting a different position in a different arena, that is the United Nations. France opposed the position of countries such as the US, or the Vatican, who wanted the tentative international convention to oppose cloning in general, by arguing, along with many other countries, that therapeutic cloning should not be condemned in a universal convention to ban all forms of cloning[80]. This can be better explained than simply by reference to France being schizophrenic! It was that the specific conditions of Parliamentary law-making obliged a number of governmental and Parliamentary actors in the national bioethics debate to present themselves as strong opponents to cloning, understood to be a sensitive topic in public opinion, even if that entailed a national condemnation of both forms of cloning, a position that differed from the approach France was promoting at the international level[81]. The 2004 Law thus condemns both forms of cloning. Different offences were nonetheless created and the penalties applicable to therapeutic cloning are lighter. Interestingly, it is evident from the Parliamentary debates that condemnation and prohibition of therapeutic cloning was

[79] See art. L. 2151-4 of the Code of Public Health [Code de la Santé Publique]: "It is prohibited to create an embryo by means of cloning with a therapeutic finality" ["All creation of a human embryo by cloning in therapeutic finality is prohibited"]. See accompanying art. 511-18-1 of the Penal Code that defines therapeutic cloning as a crime [*un délit*] and foresee for heavy fines and possible prison time.

[80] A non-binding Declaration was finally adopted on 9 march 2005; see http://daccessdds.un.org/doc/UNDOC/GEN/N05/249/40/PDF/N0524940.pdf?OpenElement (last visited Nov. 27th, 2007). For a thorough account of all the tensions and difficulties that account for the long delay between the Franco-German initiative of 2001 and the final declaration of 2005, see M. Arsanjani, 'Negotiating the UN Declaration on Human Cloning', 100 (2006) American Journal of International Law 1, 164-179.

[81] Many countries have chosen to engage, domestically, upon a solemn condemnation of reproductive cloning. In the United Kingdom for example, it is a criminal offense to place in a woman's womb 'a human embryo which has been created otherwise than by fertilization': Human Reproductive Cloning Act, 2001, c. 23§1(1). At the international scale, numerous are the covenants or declarations that condemn reproductive cloning; see among other examples the Protocol to the Oviedo Convention on Biomedicine and Dignity n°168 of 1 Jan. 1998 or the World Health Association Resolution 50.37 of 1997. On the rationale between that unanimous condemnation, and its intrinsic fragilities, see R. Brownsword, above n 11.

understood even by its supporters to be temporary,[82] necessary only because of elements of context – and not so much as a matter of principle. Look at what was said by some of the leading actors of the 2004 Law explaining that therapeutic cloning has to be forbidden *for now* – implicitly recognizing that the matter may evolve rather quickly[83]. In the event, not only have a number of legislative drafts proposing the legalization of therapeutic cloning already been presented to Parliament since 2004 (although they have not been debated yet) but most of the preparatory work for the new 2009 law seem to consider the authorization of therapeutic cloning a serious option. For example the French MP, Pierre-Louis Fagniez, who was one of the important Parliamentary actors in the 2004 Bill, was later asked by the Prime Minister to deliver a report on stem cell research, recommended that therapeutic cloning be made legal. Two of the 10 recommendations of the Fagniez report[84] are of interest here. First, it suggests a change in the vocabulary of cloning: the expression 'therapeutic cloning' should be abandoned – for it is too close to the language of reproductive cloning thus risking a global rejection of both types of cloning in the court of public opinion. The new term Fagniez offers is 'somatic nuclear transfer'[85]. As a second step, the Faginez Report pleads for the legalization of nuclear transfer as a means of increasing the number of embryos available for research. Such a stance is no longer only held by maverick actors in the French public debate – which is all the more striking in that the recent 2004 Law outlawed therapeutic cloning. Other official reports take a similar line[86], and many scientists and public officials seemed to share this idea during the Parliamentary Conference on Bioethics of 7 February 2007. Quite strikingly then if this evolution is confirmed, the emergence of ESC in the debate will have successfully lifted the ban on embryonic research and on therapeutic cloning in France.

[82] For a similar but nonetheless more straightforward approach, see the Dutch 2002 Embryos Act that 'established a three to five years moratorium on the creation of embryos for research with the presumption that the ban will be lifted within that period of time', S. Halliday, above n 12, 53.

[83] See among other examples the words of C. Haigneré (then Minister of Research) at the National Assembly, 18 march 2003: "today, for reasons linked mostly to the general context that can therefore evolve in a couple of years, the creation of embryos solely for research purposes, throughout the technology of therapeutic cloning, does not seem justified" [aujourd'hui, pour des raisons tenant largement à des elements de contexte qui peuvent évoluer en quelques années, la creation d'embryons à des fins de recherche, par la technique du clonage, ne semble pas justifiée"].

[84] P.-L. Fagniez, above n 65; see all the recommendations at 157.

[85] P.-L. Fagniez, above n 65, 92 : "The confusion between the technology itself and the justification of the technology that results from the words 'therapeutic cloning' is harmful and prevents a good understanding of the problematic and the stakes. Therefore, some would prefer the expression 'somatic nuclear transfer' to be used, in so far it designates the technology instead of the result of the cloning'.

[86] See for example the report by A. Claeys from the Parliamentary Observatory for Scientific and Technological Options, above n 38. Notably, in this report, it is argued that the French ban on therapeutic cloning penalized the French scientific community that it should be lifted before the foreseen 2009 revision of the 2004 law on bioethics.

IV. Conclusion

As far as ESC research goes, it is submitted that the French 2004 Law on Bioethics can be viewed as achieving a socio-political compromise more than as embodying any kind of definable axiological option. The 2004 Law cannot be said to part completely from deontological perspectives, for it cannot be denied that the solemn prohibition of embryo research stills stands at the forefront of the relevant legislative provisions in France. Nor can it be said to ignore the teleological[87] stance on the matter, for the Law does eventually enable embryo research to be undertaken –albeit in a dispensatory mode. Nonetheless, and regardless of the difficulty it causes for one who searches for the legislators' underlying philosophy, the 2004 Law does achieve a very challenging result: rally very opposite political forces. Therefore, this legislative achievement may be coined as a 'compromise'. Certainly, a compromise refers to "mutual concessions for mutual gain"; but more importantly in our perspective is it used to designate cases in which the "matter is not fully settled": there is no "closure", "no harmony" after compromise –which in part distinguishes it from consensus[88]. However, these conclusions are not to be deplored. Rather, they only serve as a reminder that law has no particular capacity to either discover nor embody ontological truths[89]. Such a reminder might be all the more useful in the field of biomedical law which seems to have favored a quite normative stance in legal scholarship[90] and thus revived the idea that legal categories did have things to say as far as foundational moral principles and values go.

[87] We refer to the opposition between these two (deontological / teleological) approaches the same way the European Group fo Ethics does in order to characterize the diversity of axiological approaches of biomedical issues at the EU level ; see EGE, Opinion n.12, Ethical Aspects of Research Involving the Use of Human Embryos in the Context of the Fifth Framework Programme (available at : http://ec.europa.eu/european_group_ethics/docs/avis12_en.pdf, as of Dec. 12th, 2007).

[88] See B. Franklin, 'The Value of Consensus', in R.E. Bulger, E.M. Bobby, H.V. Fineberg, eds., *Committee on the Social and Ethical Impacts of Developments in Biomedicine, Society's Choices : Social and Ethical Decision Making in Biomedicine* (Washington : National Academy Press, 1995), 241, 244.

[89] To say it in E. Jackson's words : "perhaps it simply needs to be admitted that the law is not capable of divining any absolute truths about the moral status of the embryo, and the only certainty is probably the continued absence of any consensus", E. Jackson, above n 60, 229.

[90] Especially thanks to the duty-led approach embedded in many legal usages of the human dignity principle ; see on this topic : D. Beyleveld, R. Brownsword, *Human Dignity in Bioethics and Biolaw* (Oxford : Oxford University Press, 2001) ; S. Hennette-Vauchez, "When Ambivalent Principles Prevail. Leads for Explaining Western Legal Orders' Infatuation With the Human Dignity Principle", Legal Ethics, 2008, forthcoming.