

## **BETWEEN THE SOCIAL AND THE BIOLOGICAL: RETHINKING MATERNITY IN LIGHT OF NEW TECHNIQUES OF ASSISTED REPRODUCTION**

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### **ABSTRACT**

Scientific advances in the area of biotechnology allow for an increasing dissociation between the social and biological components of parentality, with medical discourse attempting, in most cases, to frame the social in the context of the biological so as to not jeopardise consensual definitions of parenting, particularly as regards the understanding of ‘maternity’. This framing of the social within the biological is visible in the way assisted procreation techniques are often described in the press as simulating a ‘natural’ biological process, a naturalness that the pathology of infertility prevents from taking free course. This article analyses the different and sometimes conflicting understandings of the concept of motherhood subjacent to news coverage of Medically Assisted Procreation by the newspaper *Público* in the years 2008 and 2009. The analytic corpus demonstrates that by favouring medical discourse in the hegemonic interpretation of the risks and benefits of these reproduction techniques, *Público* maternity design conveys which privileges the social detriment biological: the transmission of a genetic heritage is regarded as the most important factor when it comes to the definition of motherhood, being that overlaps the dimension of “educate/raise a child”. *Público* articulates a conception of maternity that clearly privileges the biological to the detriment of the social: the transmission of genetic heritage is regarded as the most important factor when it comes to the definition of motherhood, impinging upon the dimension of ‘educating/raising a child’.

### **KEYWORDS**

Medically assisted procreation; motherhood; infertility; feminine identity, newspapers; medical discourse

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### **INTRODUCTION**

Article 4 of Decree-Law no. 32/2006, which regulates Medically Assisted Reproduction in Portugal, defines such techniques as ‘a subsidiary, and not alternative method, of procreation’, which can ‘only be used upon diagnosed infertility’. Infertility is considered a condition that can be ‘cured’ by medical techniques that simulate the ‘natural’ reproductive process. Among such techniques are intrauterine insemination, ovarian induction, in vitro fertilization and intracytoplasmic sperm injection.

Scientific advances in the field of biotechnology allow for an increasing dissociation of the social and biological components of parenting. Medical discourse seeks to frame, in most cases, the social under the biological order, so as to not jeopardise normative definitions of parenting, especially as regards the concept of ‘motherhood’. This framing of the social within the biological is visible in how assisted reproduction techniques are often described as simulating a ‘natural’ biological process, a ‘naturalness’ that the pathology of infertility prevents from taking free course.

However, despite the many attempts at contextualisation, by the medical profession, of the possible new understandings of the concept of maternity within the remit of a discourse that privileges the 'biological' or 'nature', the rapid progress of technology causes the gap between the social and the biological to become increasingly visible to the naked eye.

This discrepancy between polarities that revolve around the 'nature' Vs. 'culture' dichotomy has multiple implications for what, until recently, was regarded as a relatively consensually defined concept, that of 'maternity'. The instability of the latter also challenges other concepts that are tangentially connected, namely gender, sex, sexual orientation, health, social class and even nationality/ethnicity.

This article aims to analyse the different and sometimes contradictory understandings of the concept of motherhood that emerge from the news coverage of Medically Assisted Procreation (MAP) by the *Público* newspaper over the timespan of 2008 and 2009.<sup>1</sup>

## 1. FEMALE INFERTILITY

Female infertility is difficult to define categorically because, from the menopause onwards, it can be understood as a 'natural' physiological, rather than pathological process. As such, medical discourse seeks to articulate consensus on what are to be understood as natural physiological processes and their deviations. However, if we understand infertility as 'an inability to conceive or to carry the pregnancy to the end', in accordance with the interpretation of Mário Sousa, director of the Institute of Biomedical Sciences Abel Salazar (ICBAS), then even a menopausal woman can be considered infertile and a potential 'recipient of the treatment' (Faria, 11.07.2008).

Despite the Portuguese law not establishing a maximum age limit for Medically Assisted Procreation, age is the most frequently cited variable acting as a deterrent in infertility treatment. Usually, the age limit for applying any kind of technology to female oocytes in Portugal is around 45 years; however, in the case of egg cell donation, this limit is extended to 50 years of age. Alberto Barros, founder of the Genetics of Reproduction Center, affirms the following: 'Portuguese law does not impose age limits, but it is assumed that these are the age to procreate. From the age of 50, investment [in assisted reproduction] is not justified, because most experiments are doomed to failure' (Faria, 11.07.2008). In the United Kingdom, restrictions on access to IVF techniques usually apply from age 55 years onwards. This situation implies that patients who have reached this age limit move to other countries such as the US or Spain, where there is no such age restriction as regards the application of Medically Assisted Procreation techniques (PMA) (Gerschenfeld, 02.07.2008).

Indeed, the media contribute to the creation of the myth that it is easy to conceive after 40: 'If Madonna could be a mother at 41, Cherie Blair at 45, Susan Sarandon at

<sup>1</sup> Originally written within the remit of a larger project titled 'Women and Public Space: The Role of the Media in Priority Areas of the Peking Action Platform' (PTDC/CCI/67146/2006), under the coordination of Maria João Silveirinha, the current article bases itself on newspaper articles collected in that specific context, abstaining from focusing on any legislative alterations later introduced.

46, Beverly d'Angelo at 49, why can't we either?' (Machado, 24.03.2008). In addition to the biographies of the stars of Hollywood, there are also news stories of women who became pregnant around 60, or even 70, years of age: a 66-year old Romanian, followed by a Spaniard aged 67 and, more recently, an Indian woman of 70 years became pregnant through the use of new assisted reproductive technologies (Faria, 11.07.2008). Such episodes are likely to contribute to the 'idea of a false reproductive longevity' (Alberto Barros, quoted in Machado, 24.03.2008), obscuring the fact all these women resorted to Medically Assisted Procreation techniques, namely egg donation. Medical discourse conveyed in the news on the subject adopts a condemnatory tone: reproductive longevity is not natural, but rather a result of the application of artificial techniques, which may incur danger due to amplifying the illusion that human beings can control the surrounding world. Another example is the freezing of oocytes for future use, a technique that allows women to delay motherhood. Although the reader is not informed of the exact reason why such 'scientific and technical progress' should constitute 'apparent panaceas' (Silva Costa, 03/08/2008), this freezing technique is seen as something to avoid, as if there were a tacit consensus on acceptable and unacceptable ages to be a mother. Such acceptability is inextricably linked to what is socially considered 'natural' and 'unnatural', connoting a concept of maternity that is biologically defined.

Portuguese legislation on Medically Assisted Procreation requires that such techniques not be applied to single women or homosexual couples, but only to 'married individuals who are neither legally separated from persons and property nor de facto separated' or to those who, 'being of the opposite sex, live in conditions similar to those of marriage for at least two years' (Faria, 11.07.2008). This situation leads Portuguese doctors to work in Spanish clinics so as to circumvent legal obstacles in Portugal. For example, the director of ICBAS, Mário Sousa, admits the following: 'I inseminate with a donor in Spain, they [the women] live their pregnancies here [in Portugal] and then I send them back to Spain to have the baby, who is given Spanish nationality, because here it is forbidden to be son of an unknown father' (Faria, 11.07.2008).

## 2. IN VITRO FERTILIZATION

*In vitro* fertilization (IVF) consists in a technique whereby an oocyte is fertilized with sperm in a test tube, with implantation of the resulting embryo in the uterus of a woman, usually the parent. Born in 1978 in the UK, Louise Joy Brown was the first 'test tube baby', there now being more than three million test tube babies conceived by IVF internationally. IVF is indeed a Medically Assisted Procreation technique considered commonplace today, and, according to the New York Times, 'almost all Americans today know a family that could not have existed without IVF or one of its variants' (Gerschenfeld, 25.07.2008). However, at the time Louise was conceived, IVF provoked violent reactions, particularly from religious sectors, which accused the doctors of 'playing God' (Gerschenfeld, 25.07.2008). The news piece also notes that Louise Brown is the mother of a son, Cameron. Between brackets, we are told that Cameron was conceived *naturally*, which helps dispel any doubts as regards the capacity of someone who was conceived by

a method similar to science fiction to naturally reproduce herself. Curiously, the ability to become pregnant without using Medically Assisted Procreation techniques serves as a yardstick for assessing the ‘humanity’ of a being – Louise Brown –, who was created by those very same techniques.

The voices that rose up against IVF thirty years ago are still active when it comes to questioning ethics resulting from the application of assisted reproduction techniques. According to the document *Dignitas Personae*, dated September 8 2008 and published by the Congregation for the Doctrine of the Faith, Medically Assisted Procreation and gene therapy are singled out as ethically reprehensible. The document is based on the ‘principle of unconditional respect for human life (from conception to natural death) and for the creation of new lives in the context of matrimony, “fruit of the conjugal act specific to the love between spouses”’ (Freitas, 13.12.2008). The attempt to control natural processes by human intervention is condemned on the basis of the idea that ‘man intends to replace the Creator’ (Freitas, 13.12.2008). The specialist in genetics, Alberto Barros, a professed Catholic, expresses his shame for the Church’s position, stating the following: ‘I believe in divine creation and in the perfection of creation, but I know that nature has assumed an autonomy that leads to deviations, which are pathologies. The doctor’s obligation is to fight against this’ (Freitas, 13.12.2008). As such, medical discourse considers infertility as a deviation from a natural course, that is, fertility. It aims to replace nature, imitating the latter. Interestingly, despite medical discourse opposing that of the Vatican, both presume nature as a supreme good, something in which we should not interfere, in the Catholic perspective, and something that should be simulated, in the case of medical discourse.

Another recurrent theme in media coverage of IVF concerns it being considered a fairly expensive treatment, with endless waiting lists in public hospitals for about 500 thousand Portuguese couples who suffer from infertility. The promise, dating November 2007, that the State would subsidise Medically Assisted Procreation treatments in private clinics has not yet materialised, thus aggravating the existing waiting lists in public hospitals (*Público*, 13.10.2008). Fertility treatments in private clinics are regarded as responsible for the increase in twin pregnancies, comprising a particularly high risk. This relates to the fact that couples wish to ensure the value of an investment of around four thousand euro per treatment cycle, pressing doctors to transfer more than two embryos each time so as to maximise the opportunity of becoming pregnant by a technique which has a 30 percent success rate. Silva Carvalho, president of the Portuguese Society for Reproductive Medicine, claims that the State’s reimbursement is the best way to control the number of embryos transferred in each cycle of treatment and thus ‘combat the multiple pregnancies’ involved, by easing the ‘financial effort of families’ (Gomes, 07.09.2008). The State hence emerges as guarantor of public health protection by ensuring that assisted reproduction techniques practiced in private clinics do not merely consist in ‘commercial transactions’ devoid of a sense of responsibility. In other words, by decreasing the likelihood of twin pregnancies State reimbursement will allow assisted reproduction techniques to increasingly simulate the natural reproduction process, thus allegedly promoting the health of mother and foetus.

### 3. SURROGACY

In cases in which infertility consists in the inability to produce gametes (egg or sperm cells), couples can resort to surrogates or to the donation of egg or sperm cells. News coverage on the subject of surrogate mothers tends to emphasise the aspect of biological legacy, with maternity and paternity being associated with those who donated their gametes to generate an embryo, the latter which will later be implanted into a surrogate. This technique deconstructs the concept of biological motherhood, investing it above all with a social connotation to the extent that the 'surrogate mother' is merely a carrier of the implanted embryo, with the 'mother' being someone who does not give birth. This technique is singled out as allowing gay couples to have a biological child. However, both in the case of gays and lesbians, 'the child can only be the biological heir of one of the two fathers – or mothers: of the father who contributed with his sperm or the mother who donated her oocyte for gestation' (Gerschenfeld, 25.02.2008). The creation of sperm and oocytes from embryonic stem cells from animals or humans, the latter which can give rise to any tissue of the body, would allow gay couples to 'donate skin cells to generate egg cells which would be fertilised by the sperm of the partner and implanted into a surrogate' (Gerschenfeld, 25.02.2008). To Davor Solter, development biologist of the Institute of Medical Biology of Singapore, this possibility 'means that anyone could reproduce: newborn children could have children and people who are a hundred years old could have children. This could easily happen in the next 30 years.' In this futuristic scenario, one can also imagine the appearance of 'artificial placentas', in which a foetus can 'freely float in fluid, with the umbilical cord attached to a machine' (Solter, in Gerschenfeld, 25.07.2008). The creation of artificial wombs is another possibility, with significant implications regarding the increased survival rate of premature babies. According to the specialist in ethics of Oklahoma State University, Scott Gelfand, 'Currently, babies can only survive outside the womb from 22 weeks onwards, but in the future this may be extended to those who are only 12 weeks old. (...) If an artificial womb is developed, the Government could adopt a law to compel people who interrupt a pregnancy to put the foetuses into one of those wombs' (Gerschenfeld, 25.07.2008). Such a situation would entail the risk that the number of abortions in the US – more than a million – transform itself into the number of babies available for adoption in that country. Gelfand uses this argument to emphasise that between two alternatives that threaten to interrupt the free course of nature – abortion on the one hand and the creation of an artificial womb on the other hand –, abortion is far more acceptable.

Legal problems can also be generated by resorting to surrogates. An example referred to in the corpus examined concerns a Japanese couple who paid an Indian surrogate mother to be implanted with their embryo created by in vitro fertilization, resulting in the birth of a baby girl, Manji. The legal dispute relates to the fact that the couple meanwhile divorced, the child being rejected by both the surrogate and biological mother. Although her father, Ikufumi Yamada, wanted to assume custody of Manji, this was prevented due to the Indian law not allowing single men to take custody of children. Therefore, the future of Manji remained uncertain as of the date of publication of this

news piece, with Ikufumi Yamada's mother cited as affirming that her 'son "loves his daughter dearly" and ... as a grandmother, finds herself very unhappy. "I dedicate my entire affection to this girl and I cry all the time" (*Público*, 08.08.2008).' The article concludes with an observation that surrogate mothers are a common phenomenon in India, with deprived women earning between five to 15 thousand dollars in this 'business'.

The reported episode deconstructs the concept of motherhood by the fact that the father is clearly represented as striving to look after his daughter in a more responsible manner than either of the two women involved in the gestation of the child, namely the biological and surrogate mothers. It is as if these women reject the product of a technique that has been manfully imposed on them: the birth mother at a time when she was still married and the surrogate mother for complying with a task that integrates the circuit of 'reproductive' capitalism. The fact that surrogates are allegedly frequent in India revives a scenario of neo-colonialism in which couples from the North Atlantic take recourse in such services in developing countries (Deonandan, Green & van Beinum, 2012: 742), allowing for the native woman's body to be invaded by alien technologies with the aim of ensuring economic subsistence.

It should be mentioned here that the use of 'replacement' wombs in the USA costs an average of 60 thousand euros, and that such 'treatment' is banned in Europe. There are doctors, however, who maintain that European legislation should support the provision of replacement wombs in certain cases. The founder of the Genetic Reproduction Center, Alberto Barros, for example, considers that this feature 'should be considered in cases like that of the mother who provides her uterus so that the embryo of the daughter might be generated.'

In his opinion, this constitutes 'an act of love and generosity that can be framed in the context of medical techniques' (Faria, 11.07.2008). Medical discourse here clearly reveals a traditionalist understanding of maternity, privileging a biological conception that emphasises an almost fusional connection between mother and daughter: while condemning the use of an anonymous replacement womb, it is considered acceptable that a mother donate her uterus to her daughter for the purpose of generating a granddaughter. This promiscuity between categories 'Grandma', 'mother' and 'granddaughter' sustains itself in the idea of a common genetic heritage, a chain of transmission of genetic information that constitutes the domain of 'nature'. Medical discourse that conceives maternity in biological terms is here supported by the cultural discourse of motherhood as a Supreme Act of 'love and generosity', translated by the donation of the mother's womb to her daughter, a gesture that distances itself from the spirit of commercial transactions inherent in surrogacy.

#### 4. DONATION OF SPERM AND EGG CELLS

News coverage of this topic emphasises the right of children to know their 'genetic origins' in the case of parents resorting to the donation of sperm and egg cells, thus facilitating the acquisition of 'further knowledge on their 'identity' (Gomes, 25.02.2009).

In the United Kingdom, the law contemplates the right of all children born after April 2005 to meet their biological parents upon reaching 18 years of age (Gerschenfeld, 02.07.2008). The prevalent legislation in Portugal preserves the anonymity of the donor, 'unless expressly authorised in the process of obtaining information on the existence of any impediment to marriage (for fear of incest)' (Gomes, 25.02.2009). Parents' fears that they may be replaced by donors as 'parental figure' implies greater receptivity as regards knowledge of siblings than biological parents. A study conducted by the Centre for Family Research at the University of Cambridge refers that the majority of women who take recourse in the donation of sperm for pregnancy is constituted by 'single mothers (39 percent), lesbian couples (35 percent) and a minority of heterosexual couples (21 percent)' (Gomes, 25.02.2009).

As the donation of egg and sperm cells is becoming increasingly common, we are witnessing an increasing infiltration of this theme in the public space. For example, Linda and Richard Weeks, a British couple in their fifties, placed an advertisement in the London public transport network in 2008, calling for the donation of oocytes from a woman aged 36 years or less. The *Times* newspaper, quoted in *Público's* news piece, attributes the 'spectacular result' of around 96 replies to the 'impact of the ad in media outlets' (Gerschenfeld, 02.07.2008). However, upon learning that the whole process, which would imply hormonal treatment culminating with the collection of egg cells in a surgery with general anesthesia, would take place for free, only one woman agreed to take the treatment forward to the end.

This case is not only important for demonstrating the way media strategies can be used in favour of Medically Assisted Procreation, but also due to underlining that the dissociation of this type of treatments from the capitalist circuit of commercial transactions can actually result in the inability to take such techniques to the end. Indeed, 'the gratuitousness of the donations' is considered, in the United Kingdom, 'as the main reason for the shortage of egg cells for donation' (Gerschenfeld, 02.07.2008). Furthermore, this case contributes to again revolutionising the traditional conception of maternity to the extent that Linda Weeks recognises that her daughter – Katy – born through oocyte donation was the result of an act of generosity on the part of a woman who offered the 'gift of life': 'Whatever the fate of Katy, it is thanks to the three of us' (Gerschenfeld, 02.07.2008). Parents thus switch from two to three, with the concept of maternity - usually associated with the power of 'giving life' – here split between the biological and social dimensions.

## 5. ETHICS AND MAP

A particularly recurrent theme in debates over assisted reproductive techniques concerns the ethical problematisation of the fate of embryos. ethics questioning related to the fate of the embryos. Sometimes, not all embryos are used when resorting to fertility treatments. With the introduction of a Portuguese law regulating the fate of surplus embryos, a choice has been imposed on patients undergoing treatments as regards what to do with their frozen embryos: if the latter are not used by the couple for new pregnancies

within three years, 'they can either give them over for research or donate them to other couples with [fertility] problems', with Portuguese law not contemplating the destruction of embryos (Gomes, 25.05.2008). Some international studies cited in the news report refer to a clear reluctance on the part of couples in donating their surplus embryos to other couples with fertility problems. This idea proves that maternity and paternity are understood, above all, biologically, and that the sharing of a common genetic heritage can be regarded as an invasion of identity and individuality. Hence, the social component of parenting – the rearing of a child – is dissociated from the biological component, with clear primacy conferred on nature as opposed to culture in the dealing of such issues.

The journalistic coverage analysed singles out the United Kingdom as being at the forefront of research in terms of embryology, having that country adopted the initiative of legalising the generation of human-animal hybrid embryos. These embryos, called 'cybrids' (cytoplasmic hybrids), are made up of 99.9 percent of human DNA and 0.1 per cent animal DNA, avoiding 'recourse to women's donation of egg cells for the purpose of scientific research' (Gerschenfeld, 25.05.2008). The ultimate goal of scientists is to extract and clone cybrid embryonic stem cells, using them to develop innovative therapies to combat degenerative diseases. The news piece claims that the adoption of this law was controversial, having religious and pro-life groups pointed to the risk of 'science fiction doomsday scenarios' resulting from the maneuvers on the part of researchers 'playing Frankenstein with impunity' (Gerschenfeld, 25.05.2008).

Indeed, any intervention in natural processes is represented as antagonistic to religious thought, particularly that of Catholicism, which presupposes nature as having an ethical basis in which man must not intervene. Catholic Labour MPs are described as protagonists of a rift with Gordon Brown's Cabinet, due to demanding a free vote on this matter (Machado, 24.03.2008). The intervention of scientists in natural processes also evokes, in the imagination of the ordinary citizen, the specter of eugenics. One of the fears that arise in news focusing on gamete donation relates to the possibility of choosing 'à la carte' babies, with specific physical characteristics. While genetic diagnostic techniques allow for the elimination of certain genetic diseases, such as Familial Amyloid Polyneuropathy (FAP), these same techniques can be used to choose eye colour, hair colour and the sex of the foetus. The North-American clinic *Fertility Institutes*, whose service of 'à la carte babies' was suspended due to causing too much controversy, provides a database of sperm and egg cell donors with diversified characteristics: 'donor 110484 is white, has green eyes, wavy brown hair, studies law and plays tennis; 032284, in turn, is black, has curly hair, studies architecture and practices cycling' (Gomes, 06.03.2009). Curiously, just as it is assumed that the foetus may directly inherit the physical characteristics of a particular donor, it is also presupposed that the hobbies and inclinations of the donor are passed naturally on to the baby. Silva Carvalho, President of the Portuguese society of Reproductive Medicine, affirms, in this context, that donors are selected 'according to the phenotype [appearance] of the man or woman, so that the child may resemble his/her parents. A black donor would not be chosen for white parents'. Although this doctor is not referring to the selection of features with the objective of producing 'a beautiful baby', he does not rule out the discourse that values nature as linked to



parenting: a white donor is chosen for white parents so as to simulate that which is natural. In other words, reproductive technologies interfere in nature when nature fails, that is, when there is a 'pathology' which involves infertility. However, the artifice of human intervention in a so-called natural process should be camouflaged, simulating nature the closest possible. Any intervention that fails in this simulation would draw attention to the fact that parentality is not a totally natural process and, as such, its authenticity would run the risk of being called into question.

## 6. CONCLUSION

The traditional concept of maternity assumes that mothers establish permanent ties with their children due to the experiences of pregnancy, childbirth and breastfeeding (Rich, 1986). By emphasising the separation between the social and the biological, Medically Assisted Procreation techniques make possible the development of a social and non-biological conception of motherhood (Andrews, 1989). However, we have witnessed, in the news pieces analysed, the attempt by medical discourse to camouflage this social component by framing it within a biological conceptualization of motherhood. This frame bases itself on the simulation of nature by assisted reproduction techniques. Any deviation from nature, the latter corresponding to a sort of Platonic ideal form, is conceived as a pathological deviation that should be 'healed'.

M. E. Young believes that the new assisted reproductive technologies are particularly controversial because, by enabling new relationships, they undermine old conceptual patterns relating to the family. We are thus obliged to rethink the meaning of maternal relations if we prefer to not simply forcefully fit new configurations onto existing models (Young, 1995, p. 261). This attempt to redefine motherhood is not consensual, even within feminist thought. If on the one hand there are feminists who celebrate the primacy of the social over the biological, the former being represented by Medically Assisted Procreation techniques, others celebrate 'the sanctity of the biological bond between mother and child' (Rapping, 1990, p. 541). Firestone (1971), for example, considered that biological reproduction outside the uterus would release women from the constraints of motherhood and, more recently, Singer and Wells (1983) pinpointed the growth of the foetus outside the womb as conducive to greater sexual equality. However, a growing number of feminists challenge new assisted reproductive techniques on the grounds that these allegedly pose risks to women's health and threaten their rights and choices, in addition to being too costly (Moss, 1988, p. 40).

In journalistic terms, *Público* appears to have some difficulty in resisting the temptation of forcibly inserting the new configurations of maternity that derive from the use of Medically Assisted Procreation techniques onto traditional models. By favouring medical discourse in the hegemonic interpretation of the risks and benefits of these reproduction techniques, *Público* articulates a conception of maternity that clearly privileges the biological to the detriment of the social: the transmission of genetic heritage is regarded as the most important factor when it comes to the definition of motherhood, impinging

upon the dimension of ‘educating/raising a child’. As suggested by M. Stanworth (1997, p. 485), ‘this approach implies that any “less” natural process from conception to birth represents the degradation of maternity itself.’ Thus, the concept of maternity articulated by medical discourse is defined biologically, assuming that all women relate similarly to the experience of reproduction regardless of differentiation factors such as age, health, social class, nationality, among others.

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