Neither Gametes nor Children

Italian Prospective Parents and the Variable Meaning of Donor Embryos

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Abstract "Sperm donation", "egg donation", "double donation", "embryo donation" and "embryo adoption" are the main terms that prospective parents in Italy employ to refer to donor reproductive practices, which are forbidden within Italian national territory since 2004. Italian residents who think of donated gametes or embryos as viable ways to parenthood currently need to address assisted reproduction centres abroad. Drawing on a four-year ethnographic research on Italian cross-border reproductive travellers approaching donor conception, this paper aims at investigating the ways in which prospective parents choose and make sense of different kind of donation practices that consist in the use of donor embryos and explores their understanding of such practices with reference to the notions of personhood and parenthood in a context of transnational reproduction. In particular, this paper explores how they make sense of different "histories" of embryos, included the way in which reproductive cells have changed owners according to different trajectories.

Keywords: Italy, cross-border reproductive care, embryo adoption, embryo donation, donor conception.

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I. Introduction

Since February 2004, when the first Italian law on assisted reproduction, known as Law 40, came into force, Italian residents who aim at becoming parents with the use of donor gametes and embryos have to look beyond national borders and to possibly seek assisted reproductive treatments abroad. Donor conception was, in fact, banned by this law, on the basis of principles such as the protection of heterosexual family unity and the right of children not to be abandoned by their genetic parents.

Strenuously supported by the Catholic Church and catholic "pro-life"





movements, which heralded the law as a necessary step to put an end to the perceived reproductive "far west" (Hanafin 2006) which at the time hold sway over Italy, the law explicitly introduced a particular protection of the *concepito*¹ that was new to Italian existing jurisprudence.² Among the most important novelties brought in by this law, there was the ban of cryopreservation of embryos which had been normally performed by Italian fertility centres before.

The destiny of these already cryopreserved embryos has sparked an interesting discussion that has brought to the forefront the different understandings of life, right, ownership, human dignity, kinship and progress, and transformed the fate of these embryos into a matter of contention around which different legal, medical, political and cultural perspectives have clashed.

In July 2004, a Ministerial decree established that all fertility centres storing cryopreserved embryos were compelled to contact all the people whose assisted reproductive treatments produced such embryos and ask them whether they wanted to keep them stored for transfer or relinquish them. All the relinquished embryos and all those for which no answer was received were to be considered *in stato di abbandono* ("neglected embryos"). The decree gave instructions to establish a National Biobank at the "Ospedale Maggiore" in Milan where to store all the cryopreserved embryos that had been declared *in stato di abbandono*.

Despite the around 450.000 Euros which have been so far spent to make a census of these embryos and to prepare the National Biobank, no embryo ever joined the Biobank. In 2010 a special commission called by the Ministry of Health with the task of examining the possibility of finally transporting these embryos to the National Biobank recommended against this operation, claiming, among other reasons, the high risk of legal cases and the high cost of transportation. Moreover, since 2009, a verdict by the Constitutional Court indirectly opened up again to cryopreservation of embryos, leading to a continuous increase in the number of stored embryos and fuelling the large debate about the ways in which embryos are to be considered ethically and from a juridical viewpoint. As a result, no decision has been taken yet regarding the relinquished cryopreserved embryos stored in the fertility centres all over Italy.

While this debate has been going on in the public sphere, where dif-

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¹ A detailed definition of *concepito* (conceived being) is lacking both in the text of the law and in the ministerial guidelines. This is alternatively referred to as "embryo" and "baby-to-be" (*nascituro*) according to the context.

² Among the measures introduced, there was a limitation on the access to infertile heterosexual couples of age; the prohibition of fertilizing more than three ova and of withdrawing from consent after the embryos were produced; and the obligation to transfer all embryos that were produced at any cycle immediately and at once. In addition, the law hampered the performance of preimplantation genetic diagnosis, ruling that no selection of embryos was allowed.

ferent ontological status of embryos have been confronted and different possible uses of existing cryopreserved embryos discussed, a number of Italian prospective parents seeking donor conception practices have privately embarked on reproductive travels abroad. Being exposed to different procreative options, including the use of donor gametes and embryos, they have produced their own understandings of both reproductive cells and embryos and brought about different narrative and practical ways to accomplish their own parental project.

By focusing on Italian prospective parents who address donor conception practices as cross-border reproductive travellers, this paper aims at presenting how the intention of becoming parents and the choice of addressing donor conception interact with people's understanding of reproductive cells and embryos as part of their parental project. In particular, this paper does so by exploring the cases of Linda,³ a single woman, and Camilla and Michele, a heterosexual couple, who are exposed to the option of employing donor gametes and embryos for their own reproductive purpose at different points of their reproductive experience. These people's approach to what they call "embryo donation" and "embryo adoption" is analysed in order to highlight the "boundary-making practices" (Barad 2003) by which a shift in the ontology of gametes and embryos is operated by prospective parents during their assisted reproductive experience.

2. Donor gametes and embryos

Several terms may be employed to describe practices involving the use of donor gametes and embryos and their use is yet another marker of the different moral, legal, medical and social concerns that surround donor conception. Donor conception is a general expression that refers to the practice of conceiving children with the use of reproductive cells coming from people who do not plan to participate in and are not allowed to take on any legal or social parental role with regards to children who will be born from this act. Donor conception practices include a rather vast array of techniques that go from non-clinical sperm donation to clinical sperm donation, egg, and embryo donation.

Non-clinical sperm donation may be self-arranged by women who make informal arrangements with male friends or other male donors who provide their semen for insemination outside the clinical settings. This practice is known as being especially common among lesbians (Nordqvist 2011; 2012) since the 1970s (Luce 2010). In clinical sperm donation, and in medicalized donor conception in general, donors are recruited by sperm banks and/or fertility centres, who organise collection of sperm

³ All the names that will appear in this paper are pseudonyms.

and retrieval of eggs within clinical settings and play as mediators between donors and recipients, managing both technical and legal relationships among the parties and actively participating in the "ontological choreography" (Thompson 2005) that makes the transfer of reproductive cells from one subject to another productive of new kinship realities.

While conception with donor sperm may occur both through insemination, namely the insertion of semen in the woman's womb, and through *in vitro* fertilisation (IVF), which consists in the fertilisation of eggs in a petri-dish, conception with donor eggs necessarily requires IVF. In sperm donation, sperm is usually cryopreserved at the time of collection and thawed at the moment of insemination or IVF, while in egg donation, eggs are preferably fertilised immediately after being retrieved. In both cases, the embryos that result from IVF are either transferred in the womb of the prospective mother or surrogate, otherwise cryopreserved in order to be thawed and possibly used some time in the future.

Individuals and couples may have access to conception with donor reproductive cells under different rulings which control recruitment and match of donors and recipients and the ways in which information may circulate among all the actors involved in the process. Sometimes, recipients may ask to attain conception with both donor sperm and eggs. In these cases, they may be offered to choose what kind of embryos they prefer to be transferred.

Embryos that are available for donation may be fresh or cryopreserved embryos that result from the combination of sperm and eggs produced by donors who were separately recruited (ad hoc embryos) or have been stored in behalf of individuals or couples as a result of some previous treatments and appointed for being given to other prospective parents (relinquished embryos). Such practice, which we will refer to as embryo relinquishment (Blyth et al. 2011) emerges from the combination of clinical protocols, regulations and negotiations between prospective parents and doctors, which aim at reducing the risk of multiple pregnancies while maximising the chance of safe pregnancies and living births and the possibility of cryopreserving unused embryos for successive implantation. Afterwards, prospective parents may be asked to take a decision about unused cryopreserved embryos and are usually offered to choose among four main options, which consist in (1) keeping the embryos stored; (2) allowing their destruction; (3) giving them away for research; (4) or donating them to other prospective parents. In some cases, the embryos that individuals or couples decide to place for donation after having undergone their own treatments may have not been produced with their own reproductive cells but rather with donor sperm and/or eggs.

The availability of such options and their applicability depends on different national or local legislation or on clinics' policies.

3. The variable meanings of reproductive cells and embryos

Fertility centres are places where human reproductive cells are isolated, manipulated and stored in order to fabricate parenthood. In these reproductive medical settings an "ontological choreography" (Thompson 2005) takes place every day to transform the coexistence and interplay of ontologically different kinds of things into actors of a highly coordinated dynamic process that produces parents, children and kinship. Sperm, eggs and embryos are expected to play crucial roles in the accomplishment of such choreographic goal and the time and way in which these entities enter and take part to the process represent important elements in defining these roles. Reproductive cells and embryos are given special meanings and are manipulated in different ways according to the purpose of their use and to social and cultural contexts (Almeling 2006; 2007; 2009; 2011; Franklin and Roberts 2006; Franklin 2006).

In sperm and egg donation practices, reproductive cells by donors are forced into an evaluation and manipulation process that makes them especially suitable for reproducing receiving prospective parents. This process involves measures of de-substantialisation and re-substantialisation (Bestard and Orobigt 2009) of gametes and consists in depriving donated reproductive cells of their original meaning as kinship-carriers (desubstatialisation) and in re-conceptualising them as substances which allow kinship to take place (resubstantialisation). In other words, donor gametes are recognised as substances that do not carry kinship ties but make kinship ties possible.

The selection and manipulation of gametes by sperm banks and fertility centres contribute to this process insomuch as they generate new products that are proposed to their clients and patients as untied and highly specialised body parts. These products are "technosemen" (Moore 2007) and eggs which are presented to the public as especially selected gametes, which have been prepared to enhance the chances of healthy conception.

The circulation of reproductive cells through medical donor conception is affected by and affects the ways in which people think of and address donor conception as a reproductive and parental project. Rene Almeling (2007; 2009; 2011) has argued that economic, cultural, structural factors interact in shaping the market of reproductive cells as they lead to a different evaluation of reproductive cells and reproductive bodies in unexpected ways. Although both sperm and eggs are equally needed to produce embryos, in fact, they have attached a different economic value according to located cultural norms. Speaking about North America, Almeling observes that reproductive cells are especially turned into means to market and purchase "visions of middle-class, American femininity and masculinity and [...] motherhood and fatherhood" (2007, 336). Moreover, reproductive cells may be expected to carry race and ethnicity (Almeling 2007; Fox 2009; 2011; Moore 2007; Tyler 2007) and their circula-

tion between donors and recipients be affected by or/and organised according to these principles (Khan 2000; Nahman 2006; 2013; Thompson 2005) in order to reproduce (or avoid to reproduce) supposed race or ethnic phenotypical and ontological characters.

More than simple combinations of separate egg and sperm, embryos are considered "good spokesperson[s]" to shed light on the "enduring tension between the sacred and the profane that characterize biomedicine" since the treatments and understandings of embryos account "for patterns of interactions that together make up a 'biomedical mode of reproduction'" (Thompson 2005, 247). In the context of assisted reproductive technologies (ART), embryos may be considered "protopersons or even full persons by some people at some times in some places, when they are maintained by certain kinds of equipment" (Thompson 2005, 250). Although they are manipulated and stored as "material objects" (Thompson 2005, 259), in fact, they may be considered as sacred entities insofar as their viability represent intended parents' possibility of becoming parents and allude to the future child's possible future life. The same embryos may stop being reproductive and loose their sacred character when they are not considered as leading to a pregnancy any longer. In this case, they may be seen as viable but not reproductive entities and may be used for research. In other cases, like in Catholic doctrine, embryos remind of religious sacredness independently of their reproductive potentiality. In Catholic religion, in fact, human embryos represent the sanctity of human life and cannot be used or manipulated in any way.

In fertility centres, prospective parents are expected to take decisions about the embryos that are created or are assigned to them throughout their own treatments. In agreement with their practitioners they take decisions about the embryos that are transferred and are asked to choose what to do with the remaining ones.

In particular, some fertility centres offer the possibility of giving one's own embryos away for other people's family building purposes. Studies about disposition decisions by prospective parents concerning their unused embryos show that "relinquishment of embryos for family building is frequently -although not invariably- the least-favourite alternative" (Blyth *et al.* 2011, 267) among those offered by the centres.⁴ Moreover, people's declared intentions on this subject seem to differ from their actual behaviour, resulting in a much lower number of relinquishments for family building than what expected.

Chantal Collard and Shireen Kashmeri (2009; 2011) illustrate that the question of the use of other people's cryopreserved embryos in assisted reproduction is a problematic one not only because it brings back to the moral and ethical contentious around the definition and disposal of "life"

⁴ Blyth *et al.* (2011) review existing literature on the matter, published between 1995 and 2010 and concerning studies undertaken in Australia, Belgium, Brazil, Canada, Denmark, France, Germany, Italy, Spain, Switzerland, UK and USA.

(Franklin 1997) but also because it challenges the very ontology of kinship. The ethnography by Collard and Kashmeri focuses on the participants in a particular program of assisted reproduction with donor embryos which is based on the assumption that prospective parents who have unused embryos from their own reproductive treatments put them at the disposal of other prospective parents and call it an "adoption" of embryos. This captivating work on the "embryo adoption" program called The Snowflakes® run by the Californian Nightlight Christian Adoptions sheds light on the ways in which "placing" and "adopting" embryos, parents make sense of their adherence to the program and show how they mobilise different logics for supporting the circulation of such embryos.

In particular, a comparison between this ethnography and that by Elizabeth Roberts (2007) in fertility centres in Ecuador, highlights that different logics work in favour and against relinquishment or destruction of embryos by prospective parents. Roberts argues that instead of being only "embroiled in the politics of life" (Roberts 2007, 182), embryos may be subject to different understandings. Especially, two different rationales emerge in the context of possible embryo relinquishment, one supporting life ethics, which considers embryos interchangeable living beings, and the other supporting kin ethics, which imagine embryos as belonging to a given network of kinship relationships. This last logics is, according to Roberts, the one that leads some Ecuadorian to throw out embryos instead of cryopreserving and giving them away, on the basis that these were rather "conceptualized as 'family members' who required protection from temporal discontinuity and uncontrolled circulation beyond family boundaries, not as 'life' to be preserved." (Roberts 2007, 182). Collard and Kashmeri (2009) observe a different scenario, where prospective parents draw both on life ethics and on kin ethics in order to support their decision to "place" their embryos for adoption, considering embryos their own "potential preborn children", for which they need to find another worthy family. Eric Blyth and colleagues (2011) account for studies whose findings confirm that both attitudes are present in different national contexts.

Interestingly, Christopher R. Newton and colleagues (2003, 883) observe that people who are more likely to relinquish their cryopreserved embryos for family building tend to consider their act as part of a process of "embryo adoption" instead of a "traditional medical donation". Blyth and colleagues (2011) agree that the model of gamete donation does not fit embryo relinquishment for family building as motivations and perceptions of the people who create the embryos may be very different. They conclude that, although different ways of understanding embryo relinquishment coexist, the majority of people participating in existing studies mobilise kin ethics more than life ethics when making disposition decisions about their embryos.

For what concerns prospective parents who receive embryos relinquished by other people, Collard and Kashmeri (2009) illustrate that life

ethics and kin ethics are differently combined in the approach by embryo receiving parents of their population. In fact, receiving parents seem to be still moved towards these embryos by a life ethics, as they declare to be interested in preserving "life" of embryos. Nevertheless, they result less keen to maintain close live kin relationship with "placing" parents and biological siblings.

Other studies about prospective parents using already cryopreserved embryos in the UK compare the way in which these parents relate to donors to the ways in which infant adopting parents relate to children's biological parents (McCallum 2009) and the ways in which parenting criteria change for embryo receiving parents and infant adopting parents (Widdows and MacCallum 2002). The main result of such studies is that less interest for donors is demonstrated by embryo receiving parents than the interest in biological parents shown by infant adopting parents and that pregnancy constitutes a crucial biological argument that supports activation of kinship for embryo receiving parents.

The accurate contribution of these studies opens up interesting routes for more exhaustive research about embryo reception, which is presently lacking especially because of the low number of people who address donor embryo conception in comparison to the number of those who address single gametes conception; the prohibition of such procedure by many legislations; the difficulties that are encountered in many countries and centres to support this practice; and the relatively recent appearance of "embryo adoption" programmes. Further research on this topic is strongly needed for a more comprehensive understanding of kinship formation processes in contemporary societies.

4. Methodology

This paper draws on a four-year research project (2007-2011) focusing on Italian residents in different stages of their reproductive experiences abroad. This investigation was based on multi-sited ethnographic work (Marcus 1995) and comprised recorded in-depth interviews and life stories, unrecorded informal conversations, blogs, on-line diaries and forums. It finally involved, in particular, 24 cases, among which there are single women, heterosexual and same-sex couples living in different parts of Italy. Unfortunately, no single men have responded to any call to participate in this study. Informants were contacted through specialized websites and online forums, homosexual family associations, word-ofmouth advertising and during a 1-month ethnographic stay in a private fertility centre in Barcelona, where incoming Italian patients were interviewed. When possible, both partners were interviewed separately; in other cases, they participated jointly in interviews, and some women in heterosexual relationships were interviewed without their partners. Recorded interviews were held at people's homes, at the author's home and

in the fertility centre while informal conversations occurred in various circumstances. All people had an experience of donor conception reproductive assistance at one point in their life.

For the purpose of this paper, two of these cases are especially presented in details, as they illustrate how two similar experiences of embryo reception may lead to different understandings of embryos within the reproductive process. The choice of presenting a deep analysis of these very cases reflects the intention of retracing the process through which prospective parents may relate and take part to the ontological shift that characterises gametes and embryos in the context of donor conception and, in particular, of unpacking the complex intertwining of elements that characterises different reproductive experiences of donor embryo reception for procreative purposes.

5. Embryo reception: an affordable and suitable way to parenthood

All the people who have taken part in this study consider to become parents through assisted reproduction only after having gone through what they describe as a confusing, challenging and sometimes very hard time when they realised that their chance to have a child through (hetero)sexual intercourse was very little or non-existent (because of medical reasons, marital status or sexual orientation). Turning to assisted reproduction corresponds for all of them to engage in a reflection about the meaning of parenthood and to evaluate in what way ART and donor conception may affect their chance to become parents, both at statistical and symbolic levels (Becker 2000; Gribaldo 2005; Thompson 2005). In particular, people embark on a reproductive process where they become parents through a constant negotiation between every technical and clinical procedure they are proposed or come across and their expectations about what moral, cultural, biological and social elements might constitute parenthood. Camilla and Michele and Linda do not constitute an exception. Their cases are presented below as they represent two interesting examples of reproductive strategies where the use of already cryopreserved embryos is valued and differently perceived.

Around the age of 20 Camilla is diagnosed with endometriosis and learns that she will probably need to address assisted reproduction to have babies. In 2005, she and Michele receive the news that he presents a chromosomal translocation, which makes conception very difficult. Although being suggested to address immediately donor conception abroad, Camilla and Michele want to try to conceive with their own gametes.

Camilla feels that the same kind of relationship should link her and her husband to their future child and thinks that this might be reflected genetically in the fact that both or none of them provide their reproductive cells. The use of donor sperm and Camilla's eggs would have jeopard-

ized her attempt to respect this principle.

In need of a preimplantation genetic diagnosis (PGD)⁵, which is not performed in Italy at the time, Camilla and Michele decide to contact a well-known fertility centre in Belgium. They fail two treatments of PGD with their own reproductive cells and turn to donor conception. In the meantime, they take infant adoption into consideration, but they finally abandon it, because Camilla is convinced that the pain of infertility may better be overcome with a pregnancy:

[In adoption] the main subject is not you, it is the child. And I wasn't feeling enough strong to deal with it. [...] And we, as a couple, were not ready for it. [...] I got a picture about it, maybe I am wrong, but I got this picture that adoption [...] does not repair this wound that you have inside. And why? I have seen many mums and dads of children from donor conception or from ART anyway [...] and in front of other people's pregnancies they felt healed. [...] Then I saw two episodes where...for example my aunt, she got an adoption that is really, I mean, she is grateful day and night, she has been so happy, she had a national adoption of a 20 days healthy little-girl [...] she had so little problems, my cousin is wonderful [...]. But when my other aunt has recently got pregnant of her second child, she said something stupid about her pregnancy [...] and the other aunt started crying. And I thought: maybe this feeling does never go away.

Camilla speaks about infertility as a disease and understands pregnancy as an experience that might heal the pain provoked by such a condition. Prospective parents approaching ART tend to consider pregnancy a first important success of their reproductive treatments (Thompson 2005). Pregnancy may represent the success of their reproductive project and hopefully evoke the accomplishment of their parental plan. Moreover, some women describe it as an experience that rehabilitates their body as a reproductive body after that infertility has challenged their reproductive expectations and called into question their perception of gender in relation to reproduction (Becker 1997; 2000). Camilla is one of them. She believes that pregnancy might make up for the deep sorrow and the feeling of inadequacy and helplessness that infertility has provoked to her while infant adoption might not have the same effect.

Camilla comes to the conclusion that trying to get pregnant with the use of donor eggs and donor sperm would be a better choice for her than both infant adoption and sperm donation, as it would guarantee that the child is equally genetically unrelated to both parents and she would not be deprived from the experience of pregnancy.

⁵ Preimplantation genetic diagnosis (PGD) refers to the "screening of cells from preimplantation embryos before transfer, for the detection of genetic or chromosomal disorders" (Zegers-Hochschild *et al.* 2009).

Linda, on the contrary, does not have the same understanding of pregnancy and would prefer to access infant adoption rather than seeking donor conception abroad. At the age of 44, Linda decides to have a baby as a single mother and, unfortunately, she is excluded from infant adoption by the Italian adoption law, which allows infant adoption only to heterosexual stable couples. Linda puts forwards her understanding of parenthood as being neither biologically nor genetically defined:

Well, I deeply believe that parenthood doesn't have anything to do with genetics... moreover I think that the case of children who are exchanged in the cradle is something that can happen and that until somebody tells you that the one who grew up with you as your child is not your child nobody would think it, and I don't think that this would lead to love him less than what you do. [...] I don't consider a donor-conceived child different from your genetic child, in the sense that a child is a child and that's it, either if she/he comes from assisted reproduction, or in a natural way, or as an adopted child, a child is a child, in the sense that she/he is someone you take care of. [...] If could, I would have adopted a child in the first place.

The ban of donor conception in Italy leads Linda to explore the possibility of seeking reproductive assistance across national borders. Before leaving for treatments, she collects information about different destination options in Europe. In the meantime she sees a gynaecologist who assures her that she may try some treatments implying the use of her own egg cells. Linda reads statistics about success rates which make her think that at her age a simple donor insemination would not give her many chances to get pregnant and that she would need to apply for *in vitro* fertilisation (IVF). Linda likes this option and contacts a fertility centre in Belgium. In the end she considers it too expensive:

If I had a lot of money I think I would have tried with my own genetic material. But I was forced to choose: I mean, either I did one attempt like that and that was it, or, if I wanted to have the chance to try at least two times, then I had to try in another way.

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⁶ Italian law on infant adoption (Law 149, 28th March 2001) identifies only four special cases where singles can access infant adoption - excluding the case of death of one spouse after adoption has been already authorised. These include cases where (1) a parentless minor is linked to an adult by kinship or by a stable and long-lasting relationship; (2) the minor is the child of one's spouse; (3) preadoptive foster care is impossible; or (4) the case where a parentless minor presents a physical, mental or sensory disability.

⁷ IVF, In vitro fertilization: "an ART procedure that involves extracorporeal fertilization." (Zegers-Hochschild *et al.* 2009). In this procedure, sperm and eggs are put in a petri-dish, where they are expected to unify and produce embryos.

Like the majority of reproductive travellers, Linda must pay for the treatments abroad herself, because reproductive assistance abroad is not covered by national health insurance. As a result, the cost of treatments affects people's choice not only about possible destination countries (Inhorn *et al.* 2012; Zanini 2011) but also about the kind of treatment they decide to apply for. Linda is very much concerned by this dynamic. She judges the almost ε 5000 asked by the centre in Belgium too burdensome and decides to address another centre in another country and another reproductive route, hoping in a cheaper offer. She realises that renouncing to the IVF with her own eggs and turning to the use of embryos that have been left from other people's previous treatments may cost much less and possibly increase her chances of getting pregnant.

Managing one's own or the couple's budget in order to optimize every assisted reproductive attempt is crucial to all prospective parents who address private fertility clinics and to reproductive travellers at the point that economic factors may deeply affect the technical and symbolic process through which people become parents (Inhorn *et al.* 2012; Zanini 2011). Linda finally turns to a procedure that she calls "embryo adoption" in Czech Republic, finally spending around € 1500, including all the expenses (i.e. medical exams, travels and accommodation).

Camilla and Linda eventually aim at getting pregnant using other people's reproductive cells, because they believe that this option may make them parents in an affordable way that all in all respects their understanding of parenthood. In particular, Linda appreciates embryo reception for its similarities with infant adoption while Camilla finds in embryo reception a response to her need of experiencing pregnancy and of creating equivalent genetic distance between her, her husband and their children.

6. Embryos as kinship carriers

The decision by Camilla and Linda results in the transfer into their womb of embryos which are created through IVF with the use of other people's reproductive cells. However, the way in which they think of these embryos and relate to the treatments that they are undergoing is different.

Linda chooses a procedure that consists in using relinquished embryos which are cryopreserved and stored in a clinic in Czech Republic and calls this practice "embryo adoption". This choice recalls the experiences described by Collard and Kashmeri (2009; 2011) where "embryo adoption" is a specific programme that proposes the use of embryos that are relinquished by prospective parents for other prospective parents' family building projects. Nonetheless, Linda's reproductive treatment is not advertised in such terms by the fertility clinic that she addresses and Linda is the responsible for this calling. Interestingly, though, she is not moved

towards these embryos by a "life ethics" but by the affordability and accessibility of this procedure in comparison to others. Differently from the people interviewed by Collard and Kashmeri, Linda does not think of these embryos as of "potential preborn children" (Collard and Kashmeri, 2011, 308) to bring to life and does not share the decision by the Italian Ministry of Health to call such embryos "neglected embryos". When I meet Linda after her first successful treatment with cryopreserved donor embryos in Czech Republic, she is very clear on this point:

An embryo is nothing, and it is me saying that and I have one in my belly, but it is a clot of cells. According to me "life" is something else.

Although Linda does not consider embryos as living human beings, she has multiple feelings about embryos representing her chance of becoming mother. One day Linda is told by the centre in Czech Republic that two cryopreserved blastocysts are ready for her treatment. In embryology, blastocyst represents a certain stage of embryonic development that corresponds to an embryo of around 150 cells after approximately five days from egg fertilisation (Concise medical dictionary 2010). Prospective parents are often very eager of information about the embryos they will be transferred (Thomspon 2005; Gribaldo 2005) and the stage of development of embryos is something they may want to know. After being told about the availability of embryos for her treatment, Linda feels so much that her own reproductive process has started as to feel already pregnant:

Well, the third of December I got the e-mail saying: "There are two blastocysts"...that are extremely small things, but, in my head, it was as if I was pregnant from that moment. In the same day, then, in the night I had a phone call with a friend of mine who was telling me that she was pregnant and I told her: "me too!"

Some months later, though, Linda gets the same embryos transferred and does not feel that seeing these embryos generates a sense of motherhood:

I saw my blastocysts, because they let you see them. They told me: "these are your blastocysts" and I said, laughing: "They are really nice!", because you only see two small dots in the fog. No instinct of maternity turned on in me, nothing at all... you see two little dots. That's it.

The difference made by Linda between considering herself pregnant and developing an "instinct of maternity" in front of the embryos that she will be transferred sheds light on the meaning that she attaches to embry-

os in her own reproductive experience. On the one hand, in fact, acknowledging the existence of the embryos for her treatment leads Linda to project herself into pregnancy, which she considers the next step of her reproductive experience. On the other hand, this is not sufficient to make her feel a mother, as the reproductive process that she has undertaken has not come to an end yet.

Moreover, as seen, she defines parenthood according to intentionality, love and care rather than by genetics or pregnancy. Linda values embryos in the same way in which she values reproductive cells and pregnancy for the indispensable place these occupy within the reproductive process that she has undergone and confers all of them the power to lead her to parenthood. On the contrary, she does not think of embryos as of her own children-to-be since she does not perceive the ontology of embryos as being related to personhood. Embryos are rather understood as necessary steps towards kinship formation.

Consequently, Linda's reference to her treatment as to "embryo adoption" seems to evoke infant adoption in relation to the non-genetic ties that will link her to her donor-conceived children and to the model of parenthood that is relevant to her.

Camilla and Michele make three attempts of assisted reproduction with embryos created with other people's reproductive cells and, in particular, two with *ad hoc* embryos and one with embryos which are stored in a fertility centre in Spain. They do not do it for "life ethics" either, since they do not attribute "life" to *in vitro* fertilised embryos. Instead, Camilla places the boundaries of "life" in other moments of embryonic development:

Having a child in your womb. [...] Everyone has his own limits, science has 14 days, Catholic people have the moment of conception, to me [...] from the moment in which the embryo has implanted into the uterus it is life.

A the moment of implantation⁸, which is also the moment in which pregnancy can first be technically detected and medically confirmed, the ontology of embryos changes for Camilla from being the development of the combination of reproductive cells into potential living human beings. People's concern about embryos possibly being and meaning "life" refers to public debates going on in Italy, where a growing form of "vitapolitics" (Hanafin 2006) mobilises embryos to ontologically signify "life" in relation to immortality and survival and embryos are recognised rights as unborn coming citizens (Hanafin 2006; 2007; Fenton 2006).

When it comes to experience, though, Camilla finds that blastocysts have some human character even before being implanted in the womb:

⁸ Implantation means "the attachment of the [...] embryo to the lining of the uterus" (Concise Medical Dictionary, 2010).

And then [the doctor] showed us [the blastocysts] on the monitor and this was the first time we saw them and, I swear, seeing blastocysts is striking because, I don't know [...] They make something to me that...they seem already human, I don't know how to explain it, [...] they have some aesthetic consistency, [...] and my God, when I saw them on the monitor, I said... well, it seemed to me that they were staring at me. It really seemed they were staring at me.

Linda and Camilla show that prospective parents may have very different reactions in front of embryos and especially in relation to their belonging to the domains of life, humanity and kinship.

None of them openly addresses the question of embryonic person-hood (Thompson 2005, 250) but they both state that embryos outside the womb are not "life". However, the ontological nature of embryos remains different to their minds as they do not agree about the very moment in which embryos shift their status from cells into "life" and about embryos in relation to humanity. Camilla argues that embryos turn into "life" at the moment of implantation in the womb but she recognises some kind of human character in the embryos that reach a certain stage of development even outside the human body. On the contrary, Linda never refers to embryos as "life" or human entities and refuses to do so.

In the meantime, both Camilla and Linda value embryos as potential kinship carriers insomuch as their use may lead to the accomplishment of their reproductive plans and parental projects.

The very process through which each embryo created with other people's reproductive cells produces kinship, though, is a concern for prospective parents, who elaborate on this point especially taking into account the "history" of such embryos and of the people who provided the reproductive cells.

7. Disambiguating kinship

Linda feels comfortable in referring to the treatment that she has undergone as to an "embryo adoption" without knowing who were the people who provided the gametes. Differently, Camilla changes her attitude towards using embryos created with other people's reproductive cells according to who these people are and to the ways in which embryos are made available. She applies three different terms to what she perceives as three possible scenarios that prospective parents choosing this option may confront. These terms are "double donation", "embryo donation", and "embryo adoption". Camilla distinguishes these practices on the basis of the following principles: whether the people who provide the reproductive cells have undergone reproductive treatments themselves or not; whether other embryos created with the same people's reproductive

cells have been already used for procreative purposes or not; and whether embryos are stored in fertility clinics or not yet created at the moment in which prospective parents decide to enter treatments.

Camilla calls "double donation" a programme in which prospective parents approach a fertility clinic where an egg-donor is recruited to provide eggs for fertilisation with donor sperm and *ad hoc* embryos are made available for possible immediate transfer and/or for cryopreservation and future transfer. With "embryo donation" she refers to the possibility for prospective parents to access the embryos that have been cryopreserved by other prospective parents during what she calls a "double donation". Finally "embryo adoption" is the term that she uses to allude to prospective parents who receive embryos that have been created during the assisted reproductive treatments of other prospective parents with their own reproductive cells or with donor gametes.

Camilla and Michele exclude the last option and address the other two in different moments of their reproductive experience, travelling first to Belgium and then to Spain and to Czech Republic. When I ask Camilla where the cryopreserved embryos that she is transferred in the fertility centre in Spain come from she answers:

Ours is an embryo donation with cryopreserved embryos, because they come from a donor who did egg sharing, so probably half of the eggs had gone to a couple who had fresh embryos with the sperm of the husband, while the other half were fertilised with sperm from the sperm bank by the fertility centre, which kept them stored and gives them away for double donations. [...] When I started reasoning about it I had thought that taking embryos from another couple was more...ethical, let's say. It made me feel better, instead of having an egg-donor [...]. But then there are other problems coming up like [...] you set your mind on the idea that your child has siblings around, who are 100% blood relatives. According to me this would have been difficult, psychologically I mean, in the sense that... in order to make me feel better I would have put my child in a messy position. And then those who undergo assisted reproduction have always problems, so there was much more chance to run into [...] a woman with endometriosis like me, so I was a bit afraid.

According to Camilla, the embryos that she and Michele are given in Spain have been created by the fertility centre from donor eggs and donor sperm that had never been combined together before, with the purpose of cryopreserving them for upcoming prospective parents. Interestingly, these embryos cannot be called *ad hoc* embryos nor relinquished embryos. Camilla prefers this option to the possibility of getting some embryos which were relinquished by other prospective parents and perhaps created with these people's own gametes.

In fact, Camilla is afraid that the embryos which have been relin-

quished by other couples may share their genetic material with other existing embryos or children. Moreover, she does not feel comfortable with the fact that the embryos had been produced for the reproductive intention of other prospective parents. On these bases, Camilla imagines the potential children resulting from implanting these embryos to have some genetic siblings somewhere and to share with them some sort of family history. Consequently, she evaluates that the option of getting an embryo that was left over by another couple would put the child possibly resulting from that embryo in a complex psychological condition and in a difficult position in relation to potential existing siblings and finally chooses against it. Moreover, she fears that the child may have some bad health condition if resulting from reproductive cells by infertile prospective parents under treatment.

Drawing on the assumption that making children is, for parents, to be recognised as parents (Bestard et al. 2003) and that fertility centres are places where parents are made (Thompson 2005) through a complex combination of practices, symbols, technologies, performances, knowledges and actors, we may say that considering a particular procedure not suitable for the development of one's children is probably not satisfactory for the production of parents either. The choice by Camilla and Michele reflects, in fact, their preference for a reproductive experience that benefits as much as possible from the enactment of biomedicalized anonymous donor conception which aims at disambiguating kinship relationships among actors involved in the reproductive process by keeping them at distance and mediating their relationship to each other. Fertility centres play an important role of mediation between donors and recipients (Orobitg and Salazar 2005), since they act as warrants of reciprocal reliability and anonymity (where necessary) and promote a process of desubstantialisation and re-substantialisation (Bestard 2004) of gametes. To describe this effect, Irene Théry (2011) proposes the expression don d'engendrement (gift of begetting) to highlight that what is given away by donors and taken on by prospective parents in the process of donor conception is not only reproductive cells, but rather the chance of giving birth to and fathering a child through the use of donor's reproductive cells.

Camilla and Michele opt for a procedure that, although involving the use of stored embryos, emphasises the role of the fertility centre in the creation of these embryos, resetting to zero any parental intention on the part of those who provided reproductive cells and counting on two anonymous donors whose gametes had never been combined for any reproductive purpose before. Camilla and Michele choose on purpose a procedure that excludes the presence of other potential prospective parents promoting the production of these embryos. Before and after this experience in Spain, they did and are going to do the same accessing what Camilla calls a "double donation" first in Belgium and then in Czech Republic. In all these attempts they aim at applying the same kinning strategies (Howell 2006) instead of adventuring into the field of re-negotiating kin-

ship relationships, which is, to their mind, peculiar of infant adopting practices.

Especially, Camilla and Michele do not want to exclude donors from their reproductive story, but rather to save for them the auxiliary role of generous and indispensable people who provided the reproductive cells for their parental project. Camilla is aware that donors might have other children on their own and that other children might have been born thanks to their donation. Although declaring herself ready to mother a child who is genetically related to two anonymous donors, she judges too difficult to mother a child who comes from an embryo that has been created by another couple of prospective parents. Moreover, elaborating on the genetic ties that may link her own donor-conceived children to donors' own children and children who have possibly been born from their donation, Camilla concludes that she would be comfortable to mother children who are genetically linked to other children born from either of the donors but not from both donors at the same time.

By doing this, Camilla seems to imagine a sort of scale of potential intensity of kinship relatedness that may be possibly brought about by embryos. Such a scale is based on the degree of overlapping on a given subject or embryo of elements that may constitute kinship relationships and, in particular, she identifies two of such elements: reproductive parental intention and genetic relatedness. In this scale, relinquished embryos represent the highest degree of kinship relatedness as they embody the reproductive parental intention of two previous prospective parents and are possibly genetically linked to them and their offspring. *Ad hoc* embryos, instead, are created by will of prospective parents and are genetically related to people who do not have other offspring together. In Camilla's terms, these embryos carry less intense kinship ties and are easier to kin to prospective parents.

The elaboration of such scale confirms Collard and Kashmeri's finding that "the circulation of genetic material does not automatically make kinship relations nonexistent" (2011, 319). On the contrary, it may make siblingship appear even among people who do not know each other and/or whose binding tie is not legally recognised. Camilla and Michele's reaction to that is to put into action a strategy that does not diminish the chances that their donor-conceived children have genetic siblings somewhere but rather limits the intensity of the ties that can relate their donor-conceived children to other children. In addition, they exclude to use embryos that have been created after the parental intention of other prospective parents as they perceive that a kinship-like tie is potentially present between these embryos and those people.

Camilla and Michele do not experience the presence of donors as non-existent as such and rather embody the "relation of non-relations" described by Monica Konrad (2005) in her work on anonymous egg donation in the UK. In fact, Camilla and Michele acknowledge the existence of donors both in their own perception of reproduction and in the family

and personal history of their children. However, the anonymity of donation makes the relationship between them and the donors a "non-relation" as it is based on reciprocal images of each other (Jackson 2002; Orobitg and Salazar 2005). Camilla finds that although anonymity is respected, in what she calls "embryo adoption" the narrative presence of previous prospective parents would be too invasive and powerful, and the non-relationships to them too full of kinship symbolic meanings to be disambiguated by their own reproductive process, parental intentions and kinning practices.

8. Conclusions

The case of Linda and that of Camilla and Michele suggest that the ways in which prospective parents approach embryo reception shall be put in relation with one's reproductive experience and with the understanding of kinship and assisted reproduction that one has developed along the way.

In both cases, in fact, the resort to already cryopreserved embryos is depicted as a second or third option in comparison to other existing reproductive practices. First of all, the choices by Linda, Camilla and Michele show that the economic aspect of reproductive practices shall not be overlooked as a side-effect of transnational reproduction, as it may determine the practice that people choose and the strategies that they put into action to make sense of it in relation to their parental project. Moreover, people's preference for other reproductive practices may guide their understanding of embryo reception. In particular, Linda shows that her appreciation for infant adoption, which is prevented to her as a single woman, provides her with convincing arguments for deeming embryo reception an appropriate way to parenthood. Reminding adopting parents' experience, Linda evaluates that parenthood is especially activated by intentionality and care.

On the contrary, Camilla and Michele reject what they call "embryo adoption" for the affinities that it has with infant adoption, a procedure that they do not want to address. Specifically, Camilla accepts embryo reception insofar as it responds to two of the main requirements that she demands to reproductive practices: producing pregnancy as a way to overcome the suffering provoked by infertility, and generating parenthood. Especially, Camilla judges that kinship relationships produced by the use of embryos which have been relinquished by previous prospective parents would be difficult to disambiguate in terms of parental intention, genetic relatedness and family history. In fact, she makes room for donors in her reproductive experience by choosing to transfer ad hoc embryos. With this practice she removes previous parental intentions by other prospective parents, scatters genetic relationships among different donors whose anonymity and distance is warranted by the fertili-

ty centre and cuts out for them a small, although important, place within her own and her child's family history. All these strategies are especially common to gamete recipients, although they may be partially shared with adopted parents too.

Using the terms of reference proposed by Roberts (2007), it can be said that neither Linda nor Camilla and Michele address embryo reception inspired by life ethics. Instead, the arguments that especially Camilla moves are indeed ascribable to kin ethics. Her choice is, in fact, driven by the attempt to reduce the risk of ambiguous kinship relations by selecting the circumstances in which the embryos were produced. The understanding of embryo reception as a medical practice (and not only as a family building strategy like adoption) and the emphasis on the producers of gametes as donors (and not as previous prospective parents) help Camilla to keep at distance the people who are genetically related to the embryos that she is using for her own parental plan.

The way in which Linda makes reference to embryos does not support life ethics either. Moreover, it cannot be said that she is concerned about possible kinship relations between the embryos that she has been assigned and donors or previous prospective parents. Although not being ontologically understood as potential children or donors' kin, these embryos represent for Linda the starting point of her own parental experience. Differently, Camilla recognises the humanity of the embryos that she is transferred, even if she does not consider them human life in itself. Both these circumstances show that an understanding of embryos which is distant from life ethics does not prevent people from considering embryos symbolically relevant for the development of human life and the achievement of their reproductive goal.

The analysis of these two cases ultimately highlights that an account of the ways in which prospective parents address embryo reception may provide additional knowledge on how the circulation of embryos in the context of assisted reproduction is perceived by all actors involved. The result of such analysis supports Blyth and colleagues' (2011) conclusion: there is no such thing as a unique model of reference for the understanding of embryos circulation. This paper shows that both donor gametes and infant adoption provide significant arguments for people to make sense of reproduction with embryos created by other people's gametes; that the assimilation of this practice to the one or the other depends on people's attitude towards reproductive practices as a whole; and that the socio-economic condition of prospective parents shall be taken into account as a possible driving motive, especially if this practice is addressed in a context of cross-border reproductive care.

Acknowledgments

I want to express all my gratitude to the participants in this study, who voluntarily shared their reproductive experience with me. I also want to thank Manuela Perrotta for being an extremely solicitous and supportive editor and the reviewers for their helpful comments and suggestions.

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