

Egg Donation Imaginaries: Embodiment, Ethics and Future Family Formation

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journals.sagepub.com/home/soc**Nicky Hudson**

De Montfort University, UK

Abstract

This article considers the sociological utility of the ‘imaginary’ for understanding how a growing number of women who seek to conceive using donated eggs might make sense of their future desires, hopes and ambivalences. By combining the imaginary with insights from authors working on ideas about everyday or ‘ordinary’ ethics it considers how deliberations about egg donation take place and how future motherhood is constructed. Three main aspects of what are referred to as ‘egg donation imaginaries’ are defined: ‘imagining donor egg motherhood’; ‘imagining donor motivations’; and ‘imagining the donor’. The article illustrates how the imaginary is a valuable analytical device because it illuminates how ideas, ambivalences, deliberations and reflections about future family building are deeply social, embodied and reflexive. The imaginary advances sociological theorising of reproduction more generally and helps to bridge existing tensions between individual practices and wider social and policy imaginaries.

Keywords

assisted reproduction, cross-border reproduction, egg donation, futures, imaginaries, infertility, IVF, motherhood

Introduction

As a contemporary reproductive technology, egg donation raises dilemmas regarding the biomedicalisation and commercialisation of reproduction, the welfare of women who provide eggs and the implications for genetic, social and legal motherhood. While there is growing scholarship and debate surrounding these concerns, there is surprisingly little empirical work which explicitly considers how women who conceive using third party eggs make sense of their experiences. Existing studies have provided insights into the impact of successful egg donation treatment on later parenting and disclosure practices (Readings et al., 2011), and on childhood development (Golombok et al., 2013), as well as on the management of genetic and non-genetic relationships within donor conception

Corresponding author:

Nicky Hudson, Centre for Reproduction Research, Edith Murphy Building, De Montfort University, Leicester LE1 9BH, UK.

Email: nhudson@dmu.ac.uk

families (Nordqvist and Smart, 2014). Specific questions relating to future kinship and family relatedness are relevant because egg donation disrupts the biogenetic connection between mother and child (Konrad, 2005). While there has been some work which describes how recipients of donor sperm (Hargreaves and Daniels, 2007; Nordqvist, 2010, 2012; Tober, 2018) and sperm providers themselves think about or imagine future relationships (Mohr, 2014; Wheatley, 2017), few have considered the ways in which egg donation re-configures ideas about future motherhood. This article considers for the first time, the sociological utility of the ‘imaginary’ for understanding how a growing number of women globally who seek to conceive using donated eggs might make sense of their future desires, hopes and ambivalences.

Compared to the long history of sperm donation, egg donation¹ is a relatively recent development. However, since its first use in 1984, demand for egg donation has increased exponentially with more than 56,000 cycles of egg donation treatment now taking place annually in Europe alone (De Geyter et al., 2018). The technique accounts for 6 per cent of all cycles of IVF globally (Dyer et al., 2016) and has also become a key driver in the global movement of both patients and egg providers as chains of supply and demand emerge from an international patchwork of regulation and commerce (Nahman, 2013; Pande and Moll, 2018; Whittaker, 2011). Associated debates about donor anonymity and welfare, payment and compensation have played out in the UK and globally and against this backdrop, the somewhat shadowlike figure of the egg donor has become an increasingly significant cultural and political subject. Little work exists which considers how egg donation recipients make sense of wider social formations or how they imagine potential egg donors as they plan their treatment. There is also an absence of theorising about how imagination and reflexive deliberations are significant social practices through which the complexities of using assisted reproductive technologies are negotiated more generally.

The data presented in this article are drawn from a larger study of cross-border reproduction, which explored why and how people travel abroad from the UK for fertility treatment (Culley et al., 2011). This form of reproductive travel has proliferated in the last decade due to the availability of cheap air travel, the marketing of international clinics online and the growing availability of a range of novel fertility treatments (Culley and Hudson, 2010; Inhorn and Gürtin, 2011). While this larger study included a diversity of cases involving a range of treatments, this article is based on data from interviews with a subset of women who were using third party eggs in their quests to conceive. It considers the ways in which women who are engaged with this technique deliberate, imagine and perceive dilemmas relating to motherhood via donated eggs, in this case, in an overseas context. It is argued that by paying attention to this imaginative production of knowledge – that is, ideas, deliberations, thoughts and perceptions – we can better understand how the imagined production of knowledge is not separate to social life but is integral to and helps to create it (Dawney, 2011).

The article draws on conceptualisations of the ‘imaginary’ combined with insights from authors working on ideas about everyday or ‘ordinary’ ethics to consider how deliberations about egg donation take place. The theoretical origins of the article are discussed in more detail below, following which, a brief description of the study and its methods is provided. The article then sets out three main aspects of what are referred to here as ‘egg donation imaginaries’. It concludes with a consideration of the conceptual utility of the

imaginary for sociological theorising of reproduction more generally and for bridging existing tensions between individual practices and wider social and policy imaginaries.

Reproductive Imaginaries: A Conceptual Framework

The concept of the imaginary is gaining increasing salience in social science scholarship and has seen a growing use in several fields including politics, economics and sociology (Adams et al., 2015; Lennon, 2004). It is a concept which has been used previously by authors such as Benedict Anderson (1991), Arjun Appadurai (1996) and Charles Taylor (2004) to explore the construction and contours of the ‘imagined’ social world in varying ways. It has also received growing attention in the field of STS (science and technology studies), where authors have developed the idea in relation to the entanglements of technology with the social (Jasanoff, 2015; McNeil et al., 2017). Its growing use has led some authors to speculate that it is a ‘paradigm-in-the-making’ (Adams et al., 2015: 15).

First and foremost, imaginaries are best conceived of as collectively formed meanings and affects. They are not a feature of an individual mind and are not *opposed* to the real (as in the idea of the imagination), but instead they constitute the way we experience the social world. Our collectively formed ‘reproductive imaginaries’, for example, inform how to think about who is part of our kinship network, who or what constitutes a parent, how to do family, and ideas about biogenetic relatedness. Imaginaries draw on and are constituted by wider political, economic, technological and cultural formations, which in the context of reproduction include particular policy or regulatory forms which support or inhibit particular reproductive practices. Imaginaries are therefore both social – they are collectively formed – as well as being reproduced via individual practices and bodies.

If we consider imaginaries to be reproduced at the individual level, we must therefore consider them as material, embodied practices. How we think, imagine, perceive and deliberate need to be considered as practices which happen at the corporeal level (i.e. thinking and imagining are things done by bodies). In this sense, our ideas and imaginings do not cause practices: they *are* practices (Dawney, 2011: 539). To assist with this conceptualisation, Dawney (2011: 536), whose work considers therapeutic spaces, offers the category of ‘embodied imagination’ as a means to move away from accounts of experience that privilege practice but deny thought and imagination as practices. This also allows a theorising of imaginaries as not (only) discursive, but as produced by bodies through practices and technologies. In the context of assisted reproduction treatment such as egg donation, therefore, such imaginative practices might involve deliberations, thoughts, feelings, ambivalences and expectations about treatment, alongside actions more traditionally conceived of as material practices – that is, those relating to embodied experiences of drug regimens or clinical encounters.

The conceptualisation of embodied imaginaries developed in this article also highlights their implicitly ethical and moral character. Ideas about ethical practices are embedded in the notion of the imaginary, as Dawney (2011: 535) suggests, ‘a subject’s capacity to work with and through imaginaries is central to an ethics of the self’. An ethics of the self, here defined as ‘a set of techniques for managing everyday life’ (Rose and Novas, 2004), provides the basis on which to consider the ethical character of reflexive practices and the way individuals construct and negotiate boundaries in this regard. This

is particularly significant in the context of deliberations about contemporary biomedical technologies and their use in everyday social contexts (Banks et al., 2006; Franklin and Roberts, 2006; Rapp, 1999; Rothman, 1986), since the sense-making involved in these processes informs and is informed by the ethical frames in which one is situated (Hunt and Carnevale, 2011; Scully et al., 2006a, 2006b).

This conceptual framework offers a means to interrogate questions of individual agency (here defined as embodied imaginative and reflexive practices) in the context of wider social imaginaries (the social formations with which we negotiate and through which we move). The article draws together these ideas in order to explore how egg donation imaginaries – as a particular form of reproductive imaginary – are constituted, and to consider the uses of this conceptual framework for sociological theorising around reproduction.

Methods

The study from which these data are drawn involved a total of 41 fertility treatment ‘cases’.² Of these, 23 involved treatment using donor eggs (56%) and it is these cases that are reported in this article. This involved 23 women: 22 who were interviewed alone and one who was interviewed jointly with her male partner. In-depth interviews of between one to two hours were recorded and transcribed in full. The data from the women only are included here as the article is concerned with conceptualisations of assisted motherhood in particular. Interviews were carried out by the author and a second team member and included discussion of: treatment experiences in the UK; reasons for travel; experiences of overseas clinics and treatments; travel plans; use of donors; implications for offspring; interactions with UK health care providers; and views on regulation. Ethical approval was provided by De Montfort University’s Health and Life Sciences research ethics committee (reference no. 459).

Donor egg recipients had received or were undergoing treatment in Spain (the most common destination), Czech Republic, Ukraine, Greece, South Africa, Cyprus, Russia and the USA. At the time of treatment, 22 women were in a heterosexual relationship and one was single. On average they had been seeking treatment for 3.6 years at the time of their first cycle of overseas treatment (range: >1 year–10 years). Fifteen participants had had successful treatment at the time of data collection, that is, where children had been born from successful donor egg treatment, or where the woman was currently pregnant, therefore a range of experiences, including of those without children and who were still in the process of seeking treatment, are included.³

The full data set was analysed thematically (Braun and Clarke, 2006) using the software package Nvivo (see Culley et al., 2011; Hudson et al., 2016 for an overview of the broader study findings). Data from the subset of interviews with women who were using egg donation and which related to their use of third party eggs, the implications of treatment for future children and thoughts about future parenthood were subject to further analyses by the author for the purposes of this article. Three novel themes were identified using principles of interpretive thematic analysis for exploration in the context of the literature on imaginaries. They were refined in iterative dialogue with specified concepts from the literature and form the structure of the rest of this article: ‘imagining donor egg motherhood’; ‘imagining donor motivations’; and ‘imagining the donor’. In each case, the women’s accounts are used to illuminate the contours of donor

imaginaries and to illustrate the ways in which an ethics of the self is shaped by and shapes the reproductive imaginary.

The Good Enough Mother? Imagining Donor Egg Motherhood

While remaining childfree is an increasingly accepted position in many developed countries, motherhood remains the socio-cultural norm in most contexts. The hegemonic authority of the 'motherhood mandate' is also firmly embedded in imaginaries of assisted reproduction where the heteronormative family structure of mum + dad + biogenetically related children remains central to professional and technical practices and their regulation (Becker, 2000; Mamo, 2007). In the present study, the decision to proceed with eggs provided by another woman was complex and in most cases participants described an extended period of deliberation. Most women came to egg donation at the end of a long period of trying to conceive with their own eggs, in some cases for as long as 10 years. Within this context women deliberated about whether donor egg motherhood was a 'good enough' alternative to either 'natural' motherhood or childlessness:

Before donor egg was suggested to me I thought 'well no I don't want, that wouldn't be mine'. But eventually I have come round to thinking 'well if I want a baby, it's the only way'. (P21, Anne, South Africa)

I was upset because you just want to be your child's biological mother. . . it was something my husband and I wanted dearly, our own child, but I knew the only way we could probably have a child was to have donor eggs. (P15, Claire, Spain, Czech Republic and Greece)

The decision was either to have a baby [with donor eggs] or no baby. (P8, Louise, Spain and the Ukraine)

These examples demonstrate how normative imaginaries of biological motherhood are disrupted by deliberations about the need to use third party eggs and represent the loss of an expected and culturally significant genetic connection between mother and child (Becker, 2000; Bühler, 2015; Kirkman, 2008; Nordqvist and Smart, 2014). Egg donation is situated as unusual, less desirable and non-normative. However, for a number of women, egg donation was also eventually imagined as a way to confer a kind of biological relatedness in another way – via pregnancy. Imagining carrying the pregnancy themselves helped them to reconcile the use of another woman's reproductive tissue:

'We had thought about adoption and we were about to progress that and then I decided very clearly that I would much prefer to carry a child myself' (P9, Chloe, USA).

Pregnancy was seen to confer a link to the child that while not equivalent to genetic relatedness, was nevertheless imagined as a desirable form of embodied connection between mother and child. In this regard while egg donation was seen as a last resort, it was also presented as 'good enough' and as preferable to forms of family-making such as surrogacy or adoption which did not offer this embodied connection (Becker, 2000).

In addition to their apprehensions about embodied and genetic motherhood, the women also expressed anxiety about their ability to be an effective parent in the context of egg

donation. Specifically, they were concerned about an inevitable lack of information regarding the conception and the donor's identity, and the potential for them to effectively parent future children who may experience disrupted biographies:

So I'm just going to end up just writing them a story about it, and to be honest with them about the donor conception from an early age, so I am hoping that they'll be able to live with that. (P30, Karolina, Czech Republic)

As I've become older, I've become more and more interested in my roots and to deny a child that sort of thing, in some ways doesn't seem fair. . . I think that's the most difficult thing really. (P19, Laura, Spain)

I just got to the point where I thought well it's this [an anonymous egg donor] or nothing and if we do have a child, although they won't be able to get that information [about the donor] I do trust in our ability to help them through that. . . I do worry just as I suppose any parent would. (P26, Fiona, Spain)

These examples illustrate how the women imagined themselves as donor egg mothers and considered whether they could ensure the well-being of future offspring despite the challenges that overseas (anonymous) egg donation presented. Their deliberations here were shaped by narratives of the need or right for a child to know about its origins; a wider policy debate which continues in a number of jurisdictions (Nuffield Council on Bioethics, 2013; Pennings, 2017). These accounts are illustrative of how boundary work is a key practice related to the everyday ethics of egg donation more broadly, whereby certain options are accepted and others are resisted (Becker, 2000; Kirkman, 2003). Such deliberations are strongly tethered around ideas of biological and genetic relatedness, and draw on what have been referred to as 'genealogical imaginaries' (Bühler, 2015: 80) or 'genetic thinking' (Nordqvist, 2017), to facilitate the imaginative work through which women re-configure their imagined futures as mothers. They demonstrate how egg donation, as a socio-technical solution, offers hope and how reflexive, imaginative practices reshape ideas about future selves. Via a reflexive ethics of the self, egg donation therefore challenges and simultaneously shores up ideals around 'good enough' motherhood in relation to existing ideals of the heteronormative, biogenetically related family (Thompson, 2005).

Imagining Donor Motivations: Labour or Altruism?

In this study, assumed motivations were a significant aspect of the women's imaginative reflections about egg donors. These reflections were strongly shaped by wider structuring narratives about donor motivations which tend to construct women's motivations as determined by money or altruism. The commercialisation of third party gametes remains central to debates about the expansion of reproductive technologies (Cattapan, 2016; Cooper and Waldby, 2014) and a growing commentary has debated the motivations of egg providers, which are often presented in dichotomous terms as being either financial or altruistic. This literature (mainly from the USA) considers how a growing bio-economy around eggs shapes the experiences of the women who provide their eggs and

presents both financial compensation and altruism as possible motives (see Almeling, 2011; Leve, 2013; Pollock, 2003). Whether egg donors should be paid or compensated, what the limits of this payment should be and how it should be administered, are questions that have come under increasing discussion in a range of public contexts in the UK and globally (Cattapan, 2016; Dyer, 2011). However, little work has considered how recipients of eggs perceive these motivations or has considered how women who use eggs think about the egg donor in these terms.

Most women in the present study considered that financial compensation was probably a significant factor in the decision to donate. In each of the countries to which the women travelled, egg donation was financially compensated to a greater or lesser degree, ranging from around 500 euros in Greece up to an average of \$5,000–10,000 in the USA, and this was often referred to in the discussions:

They [clinic] said they were university students and they paid them about, I think they said something about 800 euros, cos one of the things I realised with my friend doing this was that you can't expect a woman to do it for free cos it's a hard job, you know, taking all those drugs, all the time involved in scans. . . you can't expect someone to do it for free. (P4, Holly, Spain)

However, in contrast to some feminist and bioethical arguments (Pfeffer, 2011), financial compensation for egg donors was not perceived negatively by the women in this study. Many of the recipients had themselves been through multiple cycles of IVF treatment and were therefore intimately aware of what was involved in the process of egg production and retrieval. Women therefore expressed empathy at what was perceived to be a relatively unpleasant experience for egg providers (contrasted with sperm donation which was perceived to be inconsequential and even pleasurable for the provider). Egg donation in this sense was imagined as a form of embodied labour which correspondingly implied that it should be compensated:

I think women should absolutely be compensated because it's not a very pleasant experience at all. There are lots of injections. . . and the egg collection isn't particularly pleasant either. . . as long as. . . it's not just people selling their eggs I think they should be compensated. (P20, Phoebe, Spain)

There was clear ethical boundary work at play here – payment, or in this example, 'compensation' is important, but too much of a financial inducement was seen as morally problematic. Importantly, while compensation was permitted, the selling of eggs was considered unsavoury and outside the limits of acceptable bodily practice.

In line with the idea that egg donation should be categorised as a form of compensated bodily labour and not inducement to sell body parts, egg donors were seen by recipients as self-determining agents – able to resist potential exploitation and capable of entering into an informed relationship with the clinic:

The girl we used is at university, I'm sure she's more than capable of making up her own mind, I am sure she was not, you know, didn't feel intimidated. . . she's an independent woman, she's made a decision to do this, so I think all of those things sort of helped us. (P36, Freya, South Africa)

Egg donation was therefore very clearly imagined, not as selling eggs, but as doing bodily work. This feature of the accounts appeared to be shaped by and constitutive of wider feminist and bioethical discourses of a concern for the welfare of women who act as egg providers. Examples were offered in support of the agency of egg providers. Some participants referred to how (especially overseas) providers are represented in the media, where, along with surrogates they are presented as economically desperate and politically disenfranchised, accounts to which they were highly resistant:

I know some newspapers. . . [are] saying about how these poor women are being exploited, really, you know paid small amounts of money and they're treated like an animal really, and there's loads of eggs being harvested, etc. I think that these people have made a decision that they are going to do this, I've got no problems with them being paid for it. (P36, Freya, South Africa)

Imagining egg donation as labour and worthy of compensation did not imply that egg donation was not imagined as a meaningful, and sometimes, altruistic act. Instead, these two sets of imagined motivations were often woven together in the women's accounts:

I really think that if somebody is amazing enough to do that, to donate their eggs for another couple, I think it's an amazing and wonderful thing and I think that 1000 euros is definitely, well I think it probably should be more really because what they're doing is. . . It's not so much like sperm donation which I feel is quite straightforward, I think medically it's much tougher on them to donate their eggs. (P48, Rachel, Spain and Czech Republic)

Here the provision of eggs is imagined as both an amazing and wonderful donation as well as challenging and worthy of financial compensation. In her work on American egg donors, Anne Pollock (2003: 255) suggests that: 'Altruism, like maternal drive, is a socially desirable feminine quality. It becomes the explanation that makes the donor's actions acceptable. . . Somehow the story "a woman who was working in her best interest" is not a comfortable birth story.' Donor imaginaries therefore combine features of both the market (labour) and the gift (altruism), albeit often in subtle ways. While altruistic motivations were important for some women, particularly those who were planning to disclose the use of donation to their children, the dominant imaginary of egg donors in these interviews was of women who deserved to be compensated for the demanding and sometimes risky reproductive work with which they were engaged.

This aspect of the imaginaries was also characterised by reference to wider contemporary modalities of 'ethical consumerism' in which first world consumers are increasingly reflexive about the impact of their consumption practices on third world producers. This ethical boundary work was articulated as a kind of language of fair trade, which made compensation an ethical thing to do and which mapped on to an ethical geography of donation concerning considerations about how providers were recruited and the wider socioeconomic and political climate of the country (Bergmann, 2011; Kroløkke, 2014):

I suppose the ethics of it were important to us. . . We wouldn't have considered going to a third world country, Ukraine, Russia, all of the countries where people's economic conditions are pretty tough. I would be concerned about the exploitation of women in those circumstances. So

I suppose I was looking for a country which was comparable to here [UK]. . . Spain seemed to fit that bill. It's a Western European country, the living conditions are pretty comparable to here. (P11, Deb, Spain)

In the women's accounts, the spheres of money and intimacy were configured as compatible (Almeling, 2011) and the imagined donor is an agential actor – providing her eggs in a meaningful way but being compensated for her significant bodily labour. This articulates to some degree with wider policy and professional positions which clearly seek to situate egg donation as voluntary unpaid donation (EU Tissue and Cells Directive, 2004). Even in the highly commercialised US context, the financial component is pitched as compensation for time and effort, not payment for eggs (ASRM, 2016). In this sense, wider policy imaginaries produce egg donation as a form of compensated gift-giving, something which is at least partly reflected in these accounts. As a consequence, the imagined motivations of donors are used to position the recipients as ethical actors since they are not exploiting women in their journey to motherhood but are compensating them for a challenging and meaningful act.

Imagining the Donor: Making Selections and Creating a Future Child

Egg donation is subject to varying national governance and professional cultures, which shape its practice and regulation (Bühler, 2014; Cattapan, 2016; Heidt-Forsythe, 2018). The process of selecting a donor and the management of information around that donation therefore differs significantly between countries. In the USA, for example, limited regulatory oversight means that extensive information about a donor's physical and intellectual profile can potentially be made available to recipients. Whereas in Spain, strict anonymity laws restrict the giving of information about donors to basic characteristics such as eye colour, hair colour, skin tone and build. Despite this variability, the donor's identity is usually unknown to the recipient/s at the point of treatment (regardless of whether their identity is made available to them or to future offspring at a later date). Instead, recipients are usually given anonymised information about the donor's characteristics for the purposes of selection or as part of the process of information giving during treatment, making it a key moment for imaginative practices around egg donation. The selection of donor traits based on this information can be both a positive aspect of treatment as well as being experienced as overwhelming and confusing (Rubin et al., 2015).

Within this context, all participants discussed the selection of the donor in the interviews and had thought about who this person might be. For a small number of participants (three or four), making a selection or a conscious choice about aspects of the donor's physical and psychological character was seen as undesirable. This is because it was seen to imply unwanted consumerism, signalling a form of 'baby shopping', which was not seen as commensurate with the creation of a family:

for me, I think people are lucky to have a baby and that you shouldn't choose. . . is it for the child's sake? But the child's going to find out the truth. Or is it so that people outside of the family think 'oh yeah, it looks like the mum?'. . . I think people are too picky. . . I don't think there should be choices. (P1, Katie, Spain)

These participants tended to have traveled to countries where less information was available (i.e. Spain). However, in most cases, women described desire for some level of ‘choice’, even where donor information was more limited. This ranged from discussions with clinicians (in Spain) to browsing online ‘catalogues’ (in the case of the USA and South Africa). These articulations around donor selection drew heavily on ideas of ‘matching’ between donors, recipients and their families. Discussions usually centred around the need for matching so that the future child would fit in to the family physically. The imagined child featured strongly in this aspect of the imaginary where the child should look like or ‘pass’ as a biogenetic child of its parents; a finding relating to the idea of ‘resemblance talk’ which has been illustrated in other work on donor conception (Becker et al., 2005; Hudson and Culley, 2014; Nordqvist, 2010; Quiroga, 2007; Rubin et al., 2015; Thompson, 2005; Tober, 2018).⁴

They try to get somebody to match. If you and your husband have both got bright red hair and green eyes then you’d probably look a bit odd [if you were to have] a child with say dark hair and dark eyes. (P15, Claire, Spain, Czech Republic and Greece)

In a third scenario, representing a smaller number of cases (two or three), this went beyond the ‘resemblance talk’ described above. Here, the participants discussed wanting more control over the selection and to choose the donor according to criteria such as educational achievements:

We were able to assess their intellectual ability and their academic qualifications which is perhaps the most important thing for us. (P9, Chloe, USA)

I can’t provide the actual egg but what I am looking for is somebody who is, for all intents and purposes, like me, to provide the egg. So she is my proxy, my stand in. (P21, Anne, South Africa)

These examples of ‘selection talk’ illustrate the forms of imagined heritability present in the women’s accounts and in the examples of ‘extended’ selection (cases P9 and P21), show how technological assistance was thought of as allowing egg cells from a third party to replace the women’s own eggs with as little disruption as possible to the imagined future family.

The amount of choice or involvement people had depended among other things, on the country of destination. Clinic staff and local ART (assisted reproduction technology) governance and policies around matching and information-giving were key agents here – shaping how much information was available, at what stage it might be given and how it could be delivered, making place of treatment a key factor:

they [clinic] look at you, you take a photograph in on your first appointment, almost as a nuclear family, a picture of me, [my husband] and [my biogenetic son]. . . I think they are required by law. . . to try to find a good physical match. (P6, Beth, Spain)

Strongly tethered to these selection practices, were the ways in which this information was used to make judgements about and to imagine what kind of a person their donor

was. This was an important aspect of the imaginary because it allowed women to create or resist an imagined relationship with the donor, either for them, or for their future child:

We knew five or six facts about the donor and it made it feel much more sort of bonded to that donor. . . just much more in tune with the cycle and thinking about the donor and what she would be going through to give you the eggs. (P22, Tara, Spain and Greece)

She was also someone who's very much, you know, wanted to help people and it was just someone I felt I could identify with and so that's what I was looking for. (P36, Freya, South Africa)

In contrast, knowledge about the donor caused tensions in some cases because the more information that was available during the selection process, the more vivid the imagined donor became (Rubin et al., 2015; Tober, 2018). In some cases, the donor could become an unwanted presence which would upset the family equilibrium:

An anonymous donor simplifies it in my mind more. Even though each time I have felt this incredible gratitude to the donor. . . I've known absolutely nothing about her. . . so I have been able to see it as eggs. . . It's easier to deal with emotionally because it's more of a medical thing. (P31, Vicky, Spain and Czech Republic)

Where donors were also anonymous (the majority of cases), the impossibility of meeting the donor in future also served to limit her perceived intrusion into their family life. These imaginative practices further aided a reflexive 'coming to terms' with donor egg motherhood by allowing donors to be identified and their contribution to the family acknowledged to varying degrees. Processes of selection served to limit the disruption of the donor as an imagined presence within the family unit because phenotypical matching is thought to limit the need for future explanation about the child's appearance. However, too much choice was seen negatively; both because it represented undesirable commercial intrusion into the process of family formation, and because too much information about a donor made her a 'real' person whose virtual presence needed to be carefully managed.⁵ This resistance to too much choice is related to an anti-commercial rhetoric, which positions choice in this context as akin to 'baby shopping'. The role of a good parent was instead imagined to be about accepting the child as they are and limiting intervention in their creation beyond acceptable levels (Scully et al., 2006b; also see Löwy, 2018).

These examples illustrate the significant role clinical processes had in shaping imaginative practices and mediating wider ethical discourses and policy imaginaries around donor identification. The amount of information given by the clinic (or agency) about the donor allowed recipients to imagine her, her characteristics and her motivations, and to use this information (or not) in specific ways. They served to simultaneously position the egg donor, by varying degrees, as an outsider or an 'absent presence' (Nordqvist and Smart, 2014), to the family she was helping to create, but to give meaning to her actions as a genetic contributor to a new family. This boundary work has particular significance in the context of cross-border treatment, since varying national clinical and regulatory practices appear to shape imaginaries in specific ways (also see Hudson, 2017).

Discussion

As the data in this article illustrate, a great deal of affective and imaginative work takes place as those who use assisted reproductive technologies play out a range of possible scenarios and consider their possible associated futures. The imaginary is a valuable sociological device in this context because it illuminates how ideas, ambivalences, deliberations and reflections about future family building are deeply ethical, embodied and reflexive. The ways in which people think through and deliberate about their future selves are embodied practices (because thinking is something bodies do), they are not distinct from the social world but are constituted by and through it. As a 'paradigm-in-the-making' imaginaries allow us to focus not only on discursive or cultural aspects of the social, but to incorporate analyses of thinking and 'doing' (Adams et al., 2015). Imaginaries are also characterised by an ethics of the self, a form of 'reproductive reflexivity' (Hudson, 2017), which involved a constant deliberation between treatment options and their various outcomes. Through these reproductive imaginaries, future selves and new subjectivities are (re)produced – in this case the donor egg mother, the future donor-conceived child and the agential egg donor.

However, for these women while egg donation offered a route to becoming a mother it also represented the loss of an imagined family and a departure from the hegemonic, heteronormative biogenetic motherhood that had been envisaged. Coming to terms with the use of egg donation was described as a necessary practice which enabled women to move forward in their parenting journeys. The use of third party genetic material was simultaneously imagined as both desirable and undesirable in this context. It was this, over the decision to travel abroad, that was commonly a defining feature of their treatment experiences. These practices played out in dialogue with broader imaginaries relating to normative ideals of motherhood, the compensation and welfare of egg donors and, at times, in relation to the enactment of responsible 'pre-parenting' (Lee et al., 2014), working to create and sustain particular subjectivities of the deserving recipients/future parents and of future donor egg mothers as ethical actors.

The women who provide eggs for use in fertility treatment have become something of an enigma in political and cultural terms. Their character, motivations and welfare have been the subject of fervent debate and commentary and increasingly the focus of social science research (Cattapan, 2016; Cooper and Waldby, 2014; Pande and Moll, 2018). However, until now, little consideration has been given to the ways in which they are imagined by the women (or men) who build families using the eggs they provide. These data illustrate the significance given to the donors, and the ways in which information about them is used both within the clinic and by recipients, to strategically bring them into focus or to hold their presence at a distance. Imagining the donor or resisting her presence within the family is important reflexive work for the creation or rejection of kin relations (Hudson, 2017; Nordqvist and Smart, 2014; Rubin et al., 2015). Women also performed reflexive boundary work in relation to choice about donors, weighing the implications for the future child's need to fit in to the family alongside a desire to reject claims of 'baby shopping'.

Situating thinking and reflecting as a material and ethical practice also allows us to consider their significance for shaping the social; thereby allowing us to think through

the stability and instability of particular social formations. Theorising egg donation in this way allows us to situate it in relation to broader political and economic aspects. These data illustrate for example, the interplay between individual reflections and culturally valorised ideals of altruism and associated models of compensated gift-giving. However, for several women who had themselves experienced the realities of IVF, the bodily work of egg provision was a valid reason for them to suggest it should be adequately financially compensated. Bodily labour (but not payment for eggs) was not seen as ethically contentious. These perspectives speak to broader policy debates regarding the potential to regulate egg donation as work and the associated need to validate donors' experiences outside of discourses of altruism. As scholars have suggested, thinking about egg donation as labour would bring the agency of egg donors into the picture and would further emphasise the state's role in the regulation of egg donation (Cattapan, 2016; Cooper and Waldby, 2014).

Disentangling egg donor imaginaries potentially offers a way to open debate regarding the governance and operation of global reproductive bio-economies. It allows us to critique its problematic features and to offer a means by which everyday deliberations about reproductive technologies, such as the ethical use of third party gametes, can be brought into closer dialogue with policy and practice. It may permit us to more closely investigate, as Dawney (2011: 550) suggests, the 'political capacities of imagining subjects' and to consider how their thoughts, feelings and reflections can shape policy. This might make it possible to use these data to rearticulate how we think about particular kinds of family formation, particular policies and particular reproductive subjectivities.

Developing a conceptual framework to understand the construction and significance of reproductive imaginaries has a number of implications for theorising and researching reproduction in broader sociological scholarship. First, it troubles an ingrained and persistent binary in some work on reproduction that constructs a distinction between *perceptions* of reproductive phenomena (or related concepts such as attitudes, views, beliefs), for example about new reproductive techniques, and *experiential* knowledge – that is, from those who have encountered such techniques in a direct, material sense, by blurring the boundary between social imaginaries, and embodied imaginative practice. Second, in empirical terms, if ideas, perceptions, thoughts and imaginings are practices – they also become new kinds of data about reproductive lives. This offers us new ways to consider how interview data can be used to explore future imaginaries, for example. While these kinds of data are commonly reported by social scientists, we need to reflect more centrally on the epistemological assumptions they carry. Conceptualising thoughts, deliberations and imaginings as practices brings bodily processes, social relations and affective practices in reproduction into closer dialogue allowing new empirical insights and potential for social change.

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Notes

1. The terms 'egg donor' and 'egg donation' are used throughout the article (and interchangeably with 'egg provider') as commonly used terms (and used by the participants in the study) to reference the provision of eggs. However, the complex assumptions and discourses related to the use of these terms is acknowledged.
2. A case is defined as either an individual or a couple seeking treatment together, even where only one partner took part in the study.
3. Imaginaries were retold (and performed) within the interview setting. Some women were already mothers and therefore parts of their narrations were retrospective. However, in all cases where there were already children, the children were still very young and the women were therefore imagining themselves as future mothers of older children. This was especially the case in relation to the lack of information about donors.
4. For a discussion about family resemblances in the context of cross-border treatment, see Hudson (2017).
5. For a discussion about future disclosure decisions among the participants, see Hudson (2017).

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Nicky Hudson is a medical sociologist whose work is concerned with the relations between assisted reproductive technologies, subjectivities and social structures. She leads the Centre for Reproduction Research, an interdisciplinary centre of expertise dedicated to the production of scholarship on the social, cultural and political aspects of human reproduction based at De Montfort University. Nicky's research is characterised by a strong commitment to interdisciplinary collaboration and social translation. Her current work explores the social, political, economic and moral configuration of egg donation in Europe.

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