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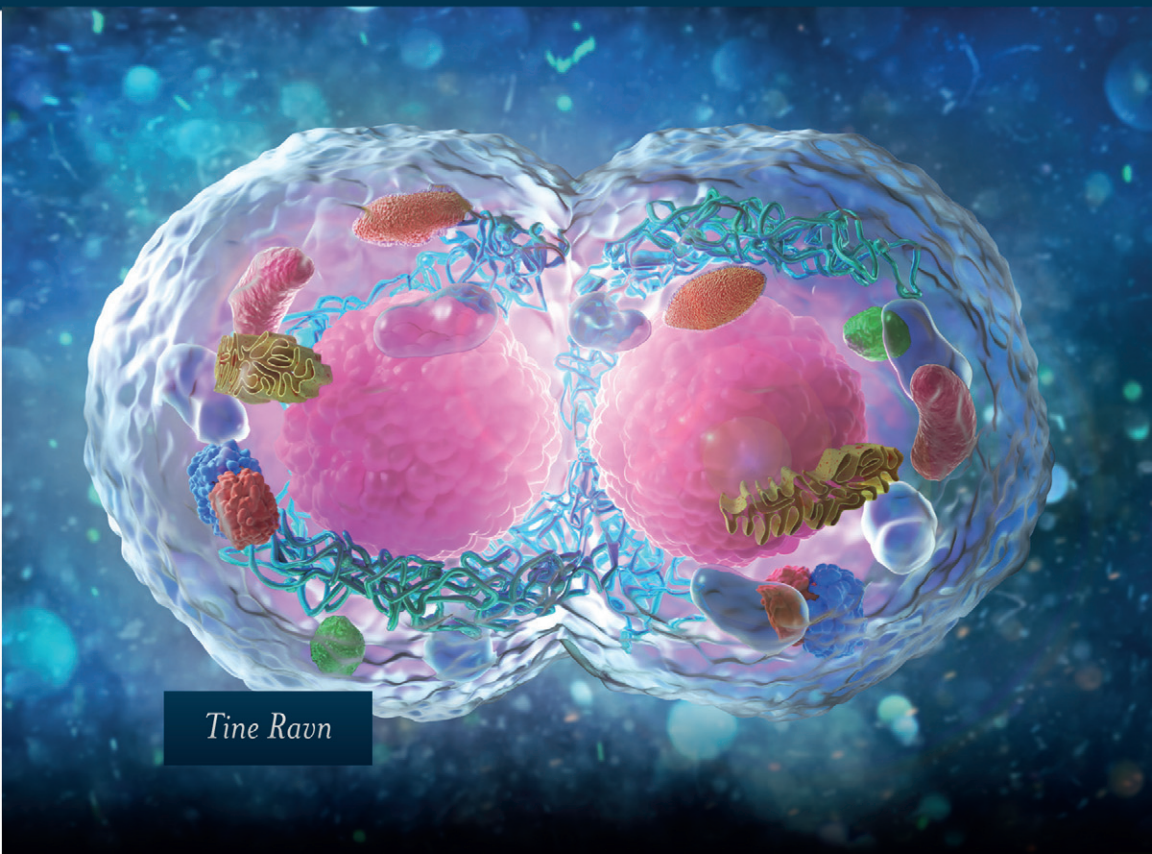
Lived Realities of Solo Motherhood, Donor Conception and Medically Assisted Reproduction



Tine Ravn

Lived Realities of Solo Motherhood, Donor Conception and Medically Assisted Reproduction

Emerald Studies in Reproduction, Culture and Society

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Lived Realities of Solo Motherhood, Donor Conception and Medically Assisted Reproduction

By

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INVESTOR IN PEOPLE

To all the women who participated in this study

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About the Author

Tine Ravn, PhD, is an Assistant Professor at the Danish Centre for Studies in Research and Research Policy, Department of Political Science at Aarhus University. Her work broadly concerns the relationship between science and society with a particular focus on the social, legislative and ethical aspects of medical biotechnologies, research integrity/research ethics and public engagement with science and technology. She has a particular interest in assisted reproductive technologies (ARTs), solo motherhood, kinship and identity. Together with good colleagues, she has co-authored the book *Social Theory: a Textbook* published by Routledge.

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Acknowledgements

Overall, this is a book about life trajectories and how one is to navigate them, when no well-defined maps of life are available; when there is only the most basic coordinates and greater landmarks but no master cartography to be found. Some routes are, however, more well travelled than others. Embarking upon solo motherhood through donor conception as a particular route to motherhood is not one such well-travelled path and new strategies for and in life have to be explored. I am exceedingly grateful to the women in this study, for choosing to share their life stories with me and for giving me an insight into the lived realities of solo motherhood through donor conception. Their honest, personal, detailed and vivid narratives have formed the basis of this book and they deserve to be read in full with all the depth, complexity and richness that characterize them. Still, I hope my selection, analysis and representation will do them justice and also demonstrate individual life story integrity and profundity.

I would also like to thank Lone Schmidt, Maria Salomon and Karin Erb for lending their vast knowledge and expertise on this field, and for their readiness to answer my many questions and requests. In August 2015, I spent two days at the Fertility Clinic at Arhus University Hospital. I am very grateful to all the employees at the clinic for letting me be part of their professional daily routines and for taking time out of their busy schedule to acquaint me with the various fertility procedures and practices. I owe special thanks to Hans Jakob Ingerslev for arranging and coordinating my stay at the clinic. I would also like to thank the many fertility clinics across Denmark who helped me disseminate knowledge about this study. These are the public fertility clinics located in Odense, Skejby (Aarhus), Dronninglund, Randers and Greater Copenhagen. The private clinics are The Danish Fertility Clinic Copenhagen (Danfert), Stork Clinic in Copenhagen and Fertility Clinic IVF-SYD in Fredericia. I would also like to thank Signe Fjord and the online forum for single women by choice (SEM) for helping me disseminate information about this study through their online resources.

This book builds on the study on solo motherhood conducted as part of my PhD and the monograph 'Strategies for Life – Lived Realities of Solo Motherhood, Kinship and Medically Assisted Reproduction'. I am grateful to the Aarhus BSS Graduate School for funding this work based at the Danish Centre for Studies in Research and Research Policy (CFA) at Aarhus University. It is an absolute pleasure to be part of the Centre and its vibrant, interdisciplinary and convivial atmosphere. I would like to thank all of my current and former

colleagues for adding to this positive setting and for all the support, valuable collaborations, inspirational academic presentations, discussions and social events that have shaped my daily work life and formed my professional identity.

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At last I would like to thank my closest family and friends for their great and treasured support during this prolonged process. It must seem as if I have been researching and writing this book forever, and I am very grateful for their constant caring and encouragement.

First and foremost, I am exceedingly grateful for my partner Stefan, our children Selma and Theo and their unconditional love and support. I do not know how I would have found my way through this project – and through life in general – if it had not been for them. They are truly the ones who provide meaning and direction in my life and words cannot express how privileged I feel being able to share and explore life with them.

Introduction: Puzzling Paradoxes of Nature versus Nurture

> Love is what ties a family together. Comfort. So it doesn't have to be the family tree in perfectly straight, beautiful rows, dak dak. There can be a few offshoots here and there, things that aren't connected purely genetically.
>
> –Charlotte (Physiotherapist, in treatment with IUI-D)

In the intersecting contexts of novel technologies and sociocultural transformations, new options for parenthood and family formation have emerged, fostering a diversity in kinship practices and revised understandings of relatedness and familial ties. New meanings are ascribed to biogenetic relations while they also continue to form an important part of contemporary family life (Franklin, 2013b; Nordqvist, 2017). Likewise, the meaning of motherhood has branched out from biological and social motherhood to include notions of genetic, gestational and epigenetic motherhood (Hertz, 2021; Payne, 2016). Single women, like Charlotte in the introductory epigraph, constitute a growing group of women who pursue the technological options available and choose to embark upon solo motherhood through the means of medically assisted reproduction (MAR). Based on an interdisciplinary approach and an array of empirical data, this book asks and seeks to answer questions such as: How do single women experience the choice of contemplating solo motherhood and how do they rationalize and normalize this choice? How do processes of fertility treatment influence the life planning/biographical revisions of solo mothers and how does the interplay of biogenetic and social ties influence family and kinship conceptions and actual family constructions?

Hence, this book explores the lived realities of embarking upon solo motherhood and the process of undergoing fertility treatment. It provides insights into the complexities related to forming donor-conceived families through MAR, and it explores to which extent such technological possibilities in combination with sociocultural developments and the production of new legislation have challenged traditional ideas about kinship and facilitated the increase in 'new' kinship and family practices. The book explores personal narratives to uncover how established, sociocultural narratives are adopted, negotiated and transformed in the processes of decision-making, fertility treatment and in the building of solo mother families.

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This introductory chapter sets the stage for the remaining book. It frames the rise of new family forms by means of assisted reproduction, and it presents a series of paradoxes that characterize the developments and expansion of MAR in a context of human reproduction and donor conception. These paradoxes all revolve around reproductive technologies and their uncanny ability to both mirror and destabilize our 'natural' assumptions about reproduction, family and kinship (Franklin, 2013a). Originally designed to help heterosexual couples build nuclear families, assisted reproductive technologies (ARTs) are now helping in bringing about new types of families – such as the solo mother family (Golombok, 2015). In the wake of these developments, the introduction asks how we define, legislate and practice relatedness now that human procreation has ceased to depend on sexual relations, and distinctions between biogenetic and social aspects of family formation have been weakened. By addressing the culture and nature (nurture and nature) distinction and its transgression – a recurring motif in this book – the introduction queries and outlines how such paradoxical pairs are subject to interpretation, normalization and malleability in relation to the concept of the solo mother family.

MAR and the Formation of Solo Mother Families

> The bio-cultural impacts of ARTs is not likely to decrease any time soon – on the contrary, reproductive technologies are likely to continue having a major impact on how we understand not only reproductive practices and rights, but also human life as such.
>
> –Jenny (2013, p. 241)

During the past three decades, advances within MAR have led to its rapid development and expansion and the various reproductive technologies and techniques available have increasingly become a widespread and routinized means of alleviating infertility and assisting with conception. Yet, as Sarah Franklin argues, the 'technologization of reproduction is both ordinary and curious' (2013a, p. 1) in the sense of becoming ever more familiar, while simultaneously possessing a number of paradoxical features by both imitating and destabilizing 'natural' forms of procreation and kinship relations, and therefore transgressing taken-for-granted dichotomies such as that found between nature and culture (Franklin, 2013a; Inhorn and Birenbaum-Carmeli, 2008; McKinnon, 2015).

While ARTs were initially developed and designed with the purpose of helping heterosexual couples build nuclear families comprising a mother, father and one or more biological children, 'new families' (Golombok, 2015, p. 3) such as lesbian mother families, gay father families and solo mother families are increasingly being formed via the utilization of assisted reproduction. These novel ways of 'doing' family – novel in the sense that they did not exist or were unknown to society until late in the twentieth century - create new relationship

forms that often involve known or unknown 'reproductive others' (Freeman, 2014, p. 2) in the form of eggs, sperm and embryo donors and/or surrogates (Mckinnon, 2015; Golombok, 2015).

'Single mothers by choice' (SMC), 'solo mothers' or 'choice mothers' are women who intentionally choose to conceive a child and act as the sole parent. The 'by choice' aspect constitutes the key defining element which sets this group of women apart from mothers who, for instance, have become single-after-the-fact due to factors such as divorce, separation or the death of a partner (Golombok, 2015; Graham and Braverman, 2012). The means of becoming a single mother by choice varies and where some choose to adopt or become pregnant through a sexual encounter, others make use of assisted reproductive procedures (IUI-D and ART) with a known or un-known donor. The latter approach seems to be the most common route to motherhood (Golombok, 2015). The interviewed women in this book have all embarked upon solo motherhood through MAR.

The possibilities provided or enhanced by reproductive technologies have raised a number of legal, sociocultural and ethical issues and provoked responses regarding their ramifications whilst simultaneously shaping and being shaped by the societal and individual contexts in which they are situated and practiced (Inhorn and Birenbaum-Carmeli, 2008; Freeman, 2014). How are we therefore to legislate, define and practice relatedness when the distinction between biogenetic and social aspects of family formation and kinship-making are no longer as connected to nature as previously presumed? As Charis Thompson states in this regard, 'assisted reproductive technologies demand as much social as technological innovation to make sense of the biological and social relationships that ARTs forge and deny' (2005, p. 5). In this regard, Nordqvist and Smart argue that families with donor-conceived children 'are at the forefront of a modern debate about the conflicting significance of nature versus nature' (2014, p. 150) in defining and redefining the meaning of genetic and social relatedness.

A number of puzzling paradoxes seem to characterize the developments and expansion of MAR. These paradoxes revolve around the double feature of imitating and destabilizing 'natural' forms of procreation and kinship relations in diversifying hitherto unquestioned binaries, such as nature/culture, biology/sociality and sex/procreation (Franklin, 2013a; McKinnon, 2015). This book explores the empirical manifestations of such paradoxes within a particular situated context and provide in-depth understandings of solo motherhood through assisted reproduction as a specific case to understand the lived realities and experiences of creating donor-conceived families.

At its heart, the book is engaged with how biogenetic and social connections (nature-culture) are defined and given meaning when family and kinship relations are literally and actively created by those involved in them. It is explored through the women's strategies for creating life through assisted reproduction and building life as a solo mother, for instance in terms of the strategies used to motivate the decision to parent alone and the strategies invoked to claim an own child through the use of donor conception. The book seeks to provide new understandings of how single women 'do' family, identity and kinship and how the choice to create

life as a solo mother is continuously rationalized and normalized. While the decision – and the child's conception – is for life, the book shows that the considerations and understandings of what is 'given' and what is 'made' in terms of establishing kinship and family relations (Carsten, 2004, p. 9), are dynamic and variant and help to shape familial narratives of e.g. mother–child relations and donor–donor sibling relations.

The (re)configuration of the nature/culture distinction – with regard to normalization processes vis-à-vis technological advances – constitutes a main perspective in this book's exploration of the ramifications of assisted reproduction, as these technologies may possibly incur further redefinitions of our understandings of 'normal' procreation, 'normal' family formation and 'normal' motherhood, among others. There have always been certain prevalent ideas – about what can and cannot be conceived of as 'natural' states and ways of life in the context of human beings – and 'with time, it is striking how different the line between the natural and the unnatural has been drawn' (Balling and Lippert-Rasmussen, 2006, p. 19). In this regard, biotechnological innovations represent ongoing possibilities which challenge our perceptions of the notion of 'natural' (p. 20). In this regard, ARTs constitute a normative as well as moral and ethical field of research, as they bring essential issues into play and transgress a number of more or less established concepts within modernity in collapsing 'the separations between nature and culture, home and work, love and money, the domestic and the economic' (McKinnon, 2015, p. 477). Moreover, the increasingly fluid boundary between nature and culture has spurred legal and political efforts to re-establish and define this line in new ways, through processes of regulation (Lemke, 2009). While the implications of innovations within the field of MAR (e.g. new techniques within embryo research and gamete donation) have yielded policy actions and legal responses internationally from the 1980s onwards, the issues of when a life begins, of 'natural' family structures and access to treatment and of women's reproductive rights, among others, have been managed and regulated in diverse ways across the world (Cooper and Waldby, 2014, p. 46).

Legal MAR Framework

In 2000, Australia was one of the first countries to grant single women access to ARTs. Other countries have then followed. For instance, in the UK, single women gained legislative right to use ARTs in 2008 (Golombok, 2020, pp. 145–146). Since 2009, the introduction of ART legislation has expanded and, today, almost all European countries have implemented some kind of ART legislation. Specific legislation do however differ among countries, for instance in relation to ART procedures such as embryo freezing and egg donation, donor anonymity and access criteria. The European countries are for instance divided in whether they grant single women access to ARTs (Präg and Mills, 2017; ESHRE, 2017; see Chapter 3 for details).

Within the Danish context, in which the study is situated, a complex set of regulations and legislation have continuously been produced. Two pieces of legislation in particular constitute a legislative framework for this book. In

January 2007, single and lesbian women in Denmark gained the legal right to assisted reproduction, permitting doctors in both the public and private health care system to offer assisted reproduction to all women, regardless of marital status or sexual orientation. Prior to this amendment, single and lesbian women were only able to make use of donor insemination (DI) in private midwifery clinics and were thus not able to access any kind of medical care which essentially excluded the group of women who needed medical infertility assistance.

In addition to the legislation introduced in 2007, the Danish regulation on sperm donation was revised in 2012 to introduce a new identity-release donor option, in contrast to the sole existing option allowing only anonymous sperm donation to be used in medically run clinics. In the wake of increasing debate and research into 'donor disclosure' (i.e. access to information about one's paternal genetic inheritance), recent years have seen an introduction of identity-release donors in countries such as the UK, New Zealand, Austria and Switzerland. The Nordic countries of Sweden, Norway and Finland have also implemented legislation that makes identity-release donation the only option (Lampic et al., 2014; Blyth and Frith, 2009, p. 177). The distinctive Danish two-way donor system allows for a comparison of rationales for choosing different donor programmes, including underlying perceptions of distinctions between nature and nurture and likewise between kin and non-kin relations, for instance (see Chapter 7). As mentioned earlier and contrary to initial objectives, reproductive technologies have paradoxically destabilized ideas about 'natural' kinship and family relations and while they are still based on 'biological substances and practices', they have nonetheless triggered a questioning of important and non-important biological claims in kinship making (McKinnon, 2015, p. 464). In general, a number of puzzling paradoxes seem not only to characterize the innovations of reproductive technologies but also to map onto the choice of embarking upon solo motherhood.

The Expansion of Assisted Reproduction

It is estimated that around 9 million babies have been born worldwide by means of ARTs. In this regard, Europe takes a leading position in ART with the initiation of around 50% of the reported treatment cycles. Per million population, Belgium and the Nordic countries have the highest ART availability when it comes to cycles (ESHRE, 2020). In addition to helping to create new families and assisting heterosexual couples to become parents, advances in genetic screening and mitochondrial donation have enabled people in risk of passing on a serious mitochondrial disease onto their children to become parents without this risk. Egg donation technologies have furthermore enabled some women to respond to age-related fertility and conceive a child by means of an egg donor (Baldwin, 2019; Hertz, 2021).

Denmark takes a leading position with being one of the countries in the world where most children are born through MAR (Kroløkke et al., 2019). Hence, the use of MAR has become particularly prevalent in Denmark with around 10.5% (2019 estimate) of the children born in a given year being conceived via assisted reproduction. This corresponds to 6.429 of the total number of children estimated

to be born in 2019. Against this, it is estimated that 767 of these children will be born to Danish single women without a partner (Danish Fertility Society, 2020a).

The new possibilities for family formation provided by the 2007 change in access has, among other factors, influenced the growing trend of forming solo mother families largely because of the increase in national treatment options (i.e. availability of treatment in public clinics and access to ART treatment). Data on fertility treatment for the entire health sector are reported on a regularly basis through an established reporting system, however with more complete and precise data from 2013 onwards. Hence, it is estimated that 489 children were born through assisted reproduction to Danish women without a partner in 2013. A number that increased to an estimated number of 709 children in 2018. It is more difficult to assess the number of children born prior to 2013 to single women, but based on the data available, it is estimated that around 300–400 children were born annually in the years before 2012 (Danish Fertility Society, 2020, Erb, expert interview). If we look at the total number of women without a partner embarking upon assisted reproduction, we see that a total of 1,129 single women initiated fertility treatment in 2011 compared to 1,870 women in 2019 (see Fig. 1.1). While increases in percentages are almost similar for both groups,

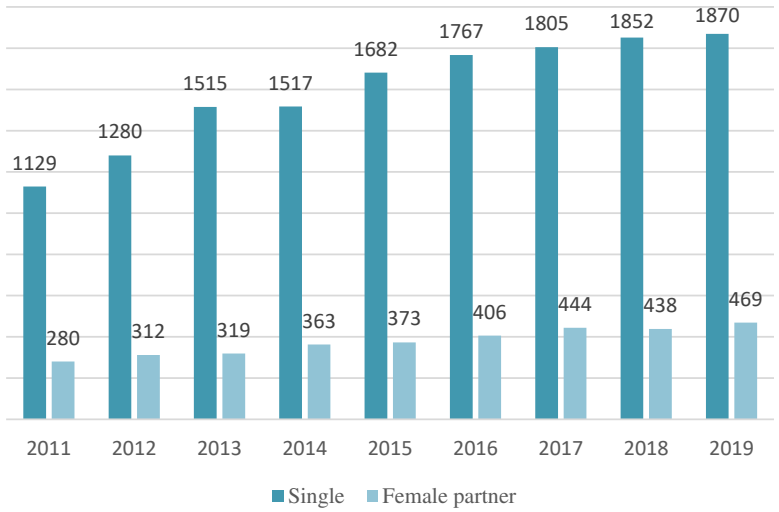

Fig. 1.1. Total Number of Danish Single Women and Women with Female Partners in Fertility Treatment, 2011–2019. *Note:* If a woman has been undergoing fertility treatment for more than a year, she will figure in both years. Women are defined by their civil registration number. Treatments include IVF, ICSI, Oocyte donation, IUI (D), IUI (H) and Frozen Embryo Replacement (FER). *Source:* The table is constructed based on numbers provided by the Danish Health Data Authority (data from the Danish IVF-Register)

a greater number of single women choose to initiate treatment compared to the group of women with a female partner.

Puzzling Paradoxes

In 1978 on July 25, a baby girl called Louise Brown was born at Oldham General Infirmary in Great Britain. In many ways, this particular birth signified the crucial beginning of a reproductive revolution in which human procreation ceased to depend on sexual relations and 'the natural facts' of sexual reproduction (Franklin, 2008, p. 148), and enabled conception to take place outside of the body (Melhuus, 2012, p. 4). Hence, Louise Brown was born as the world's first 'test-tube' baby with the help of in vitro fertilization (IVF). IVF is a technique in which eggs and sperm are fertilized outside the body (in vitro) whereupon the fertilized embryos are transferred back into the uterus. IVF is one of the most familiar of many techniques labelled 'assisted reproductive technologies' (ARTs) (Franklin, 2008; Inhorn and Birenbaum-Carmeli, 2008). ART is a term that refers to 'all treatments or procedures that include the in vitro handling of both human oocytes and sperm, or embryos, for the purpose of establishing a pregnancy'. Moreover, the collective term 'medically assisted reproduction' (MAR) includes ART treatments *and* intrauterine insemination (IUI) with partner sperm (IUI-H) or donor sperm (IUI-D) (Zegers-Hochschild et al., 2009, p. 2685; Zegers-Hochschild et al., 2017).

Donor insemination is the oldest technique when it comes to 'the new technologies of reproduction' with the first successfully known case dating back to 1884. However, it did not receive full attention until the 1970s and 1980s with the rise of technologies such as IVF (Haimes and Daniels, 1998, p. 1). For single women wishing to have a child on their own, donor insemination (IUI-D) is the standard technology applied unless IVF treatment is required due to infertility issues. IUI is sometimes described as a more 'low tech' procedure, whereas procedures such as IVF are referred to as 'high tech' since they require to a greater extent 'technical competence and sophisticated technological equipment' (Blyth and Landau, 2003, p. 10).[1]

The 9 million babies that have been born worldwide by means of ARTs, indicates 'the fundamental bio-cultural transformation' which has followed in the wake of the realization of IVF and which has led to comprehensive developments within the bio- and genetic technologies (Jenny, 2013, p. 236).

> Not only has the ability directly to manipulate human fertilization and embryology altered the meaning of 'the facts of life'; it has also challenged the idea that biology provides a 'base' on which society is built.
>
> –Franklin (2008, p. 148)

[1]In a less medicalized form, DI can, and has for a long time also been practiced without medical intervention in a 'do it yourself' fashion (Throsby, 2004, p. 11; Lykke and Bryld, 2006, p. 44).

In becoming 'facts of life', ARTs have helped to denaturalize and diversify hitherto unquestioned binaries, such as nature/culture and biology/sociality as well as sex/procreation, as mentioned above (Inhorn and Birenbaum-Carmeli, 2008, p. 178). In this regard, biotechnical innovations such as reproductive technologies have raised the question of what the 'natural foundations' of life more precisely are and how these differ from 'artificial' life forms (Lemke, 2009). Today, in many ways, we live in a biotechnological culture in which bodies and technologies become increasingly intertwined, reproductive technologies being one example of this development, making it impossible to separate the 'technological/artificial from the organic/natural' (Lykke and Bryld, 2006, pp. 25 and 43). According to Donna Haraway, our bodies have increasingly become technological reconfigured (Haraway, 2004b). These changes include profound shifts in 'the understanding of reproduction as natural, biological processes and of the body as a product of nature' (Lie, 2002, p. 383; Franklin and Lock, 2003, p. 11).

Emphasizing Genetics

It is complicated to grasp the specifics of how the culture/nature relation manifests itself, as several main paradoxes are linked to this distinction. For instance, despite the reconfiguration of 'natural' conceptions, a biogenetic understanding of human nature has gained currency in recent years as a result of medical inventions within the biosciences. An increased focus on 'life itself' both on an individual and political level concerns ways in which we can alter ourselves down to a molecular level. Prenatal diagnosis, stem cell research, genetic testing and IVF technology are just some examples of an amplified concern with biological and genetic questions (Rose, 2001; Franklin, 2008; The Danish Council of Ethics, 2010). This could – paradoxically – imply that 'science has provided another powerful model where human qualities are still based in nature' (Lie, 2002, p. 396). This host of biological issues is joined with another paradox concerning the effects of MAR on family formation – do they for instance promote more inclusive understandings of non-traditional families and 'new families', such as solo mother families?

On the one hand, MAR 'weakens' the influence of the (natural) biological limits to parenthood, since one does not have to rely on the given range of biological possibilities and options in order to become a mother. On the other hand, however, the use of assisted reproduction might enhance the biological interpretation of parenthood since one does not have to rely on social and cultural contracts either. In this regard, it is interesting to ask whether MAR propagates a social, legal, cultural, biological, genetic or technological understanding of parenthood and how these aspects are enacted in everyday practices and form part of the women's self-understandings.[2]

[2]I gratefully acknowledge Dr Karen Kastenhofer, researcher at the Institute of Technology Assessment, Austrian Academy of Sciences, for pointing to this duality and its implications for different parenthood understandings.