

# Sliding Cells

## The Situated Making of Bio-Objects in IVF

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**Abstract:** The introduction aims to introduce the topic under investigation in this thematic section and underline connections among the three essays. Taken as a whole, the thematic section explores “ontological shiftings” in life sciences, i.e. how reproductive cells can assume different meanings, roles and values according to the situated processes in which they are embedded. The section sheds light on the co-production of reproductive cells and “moral landscapes”, showing how conventions concerning biological “properties” and “qualities” are intertwined with social norms and values about family, kinship, and gender relations. The term “sliding cells” is meant to evoke the unstable boundaries between “Nature” and “Culture” explored in this section.

**Keywords:** bio-objects; ontological shifting; gametes; assisted reproductive technologies.

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*In memory of Kristin Spilker*

### I. Introduction

In June 2013, *Tecnoscienza* published a special issue on “Creating Human Life Itself. The Emerging Meanings of Reproductive Cells among Science, State and Religion”. The special issue, edited by one of the guest editors of this thematic section (MP), explored the processes of bio-objectification of reproductive cells in the Italian context. The investigation of the case of Italy intended to be an interdisciplinary enrichment of

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\* Work published posthumously.

the STS literature on the study of the relationship between the contemporary politics of life and technoscience. Looking at material and regulatory dimensions of life-in-itself (Clarke et al. 2010), the contributions shed light on assemblages of substances and meanings unpacking the connections between bodily tissues, medical conceptualisations and biopolitical issues of regulation and governmentality. The special issues examined the Italian embryo as a prime example of how a bio-object (Vermeulen et al. 2012) is shaped and how such a conceptualization of embryos emerges from a network of heterogeneous elements and becomes relatively stable.

This thematic section aims to further investigate these connections, focusing closely on the ‘ontological shiftings’ in IVF, i.e. “how multiple translations generate a network able to crystallize biological substances into a specific shape with a specific array of meanings, producing bio-objects” (Perrotta 2013, 9). The three essays presented in this thematic section explore how these ‘shiftings’ are subject to different cultural-political, socio-economic and legal regimes. Drawing from different perspectives, the essays shed light on the co-production of reproductive cells and what Svendsen and Lock (2008) define “moral landscapes”. In their work on the construction of “spare embryos” at the IVF–stem cell interface, they use the spatial metaphor of moral landscape to explore the how professionals negotiate the biological and moral meaning of spare embryos in their daily work “through practical organizational relations, regulatory frameworks, different notions of responsibility and techno-scientific objects” (Svendsen and Lock 2008, 95).

Taken as a whole, the thematic section contributes to deepen the current understanding of how local meanings of reproductive cells emerge in the daily work of IVF labs and beyond (Parry 2006; Ehrich et al. 2008; Almeling 2011), exploring how they emerge as stabilised bio-objects in different contexts as well as how the networks of relations – through which moral landscape are shaped – are co-produced. Based on research carried out in different countries (Denmark/Germany, China and Argentina), the three essays offer illuminating insights on how biological materials, such as human reproductive cells, are embedded in these processes of co-production.

Mohor’s and Hoyer’s analysis of quality assessments of semen in different contexts (male infertility, sperm donation, and in-vitro sperm) unpacks the entanglement of quality measurements with social values and reproductive visions, showing how both the evaluative processes and the emerging meanings of semen itself are situated in different practices and moral landscapes. Quality assessments of semen rely on approximations rather than objective standardised criteria and semen quality is far from being inherent to semen itself. The flexibility embedded in the quality assessments allows professionals to use them as socio-technical tools able to support their decision-making processes that are framed into situated social norms and assumptions about family, kinship, and gender relations.

Drawing from a different approach, Klein’s investigation of the Chi-

nese debate on sperm donation and its evolution in recent years shed light on the multiple shifting relationships between cultural norms, quality criteria of assessment, family heritage, and deep-rooted sociocultural concerns. The essay shows how a variety of factors, such as the diffusion of social media platforms and social-networking practices, the implementation of the new ‘two-child policy’ and aggressive marketing strategies adopted by sperm banks played an important role in changing the public perception of sperm donation in China, thus contributing to reframing it as a mundane practice.

Ariza’s analysis of gametes donation in Argentina offers a novel perspective to the field, looking at the interplay of potentiality and risks entangled in the biological substances. The essay illustrates how Argentine conceptualisations of kinship and IVF professionals’ normative ideals participate in the co-production of gametes as objects of risk. Based on extensive ethnographic data, the essay explores how the fear of endogamy, the loss of biological variation and the risks for donors’ health simultaneously emerge in medical discussions and statistical measures used in the clinics. Ariza’s work highlights how not only gametes as bio-objects but IVF practices themselves are culturally embedded and entangled in local networks of political, economic and moral relations.

Overall, the three essays illustrate local trajectories of the multiple shifting relationships and their ongoing renegotiations, generating hybrid assemblages able to objectify biological entities as material and discursive arrangements that act at the interface among laboratories, clinics and society. The analyses of these emerging hybrid assemblages illustrate how conventions concerning biological “properties” and “qualities” are intertwined with social norms and values about family, kinship, and gender relations. Under this perspective, the possibility to be a “re-productive subject” is a matter of complex socio-technical processes of questioning the unstable boundaries between “Nature” and “Culture”, as the term “sliding cells” strongly evokes.

## **Acknowledgements**

In 2012, two of the guest editors, Manuela Perrotta and Kristin Spilker, organised an open panel titled “Designing cells, tissues and bodies: ontological shifting in the life sciences” at 4S/EASST Conference held in Copenhagen. Inspired by the positive reception and fruitful discussion emerged from the panel, Perrotta and Spilker invited the contributors to submit abstracts for an edited collection. That project never saw the light as Kristin passed away unexpectedly in 2014. A few years later, due to the new energy infused by Stefano Crabu, we asked all the original contributors if they wanted to submit their essays to be published in a thematic section dedicated to Kristin Spilker’s memory. The essays followed the regular double-blinded peer review process and those that were finally

accepted are part of this thematic section.

We are grateful to all the original contributors, the authors who eventually submitted their manuscripts, and the anonymous peer reviewers. We are indebted to Attila Bruni for suggesting “sliding cells” as the title of the collection. Finally, we thank the Editorial Board of *Tecnoscienza* for making this thematic section possible despite its unconventional path.

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