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Containing Sperm—Managing Legitimacy: Lust, Disgust, and Hybridity at Danish Sperm Banks

Sebastian Mohr

Abstract

The governance of assisted reproduction in Denmark through legislation regards semen as a reproductive substance and thus restricts donor semen's reproductive potential by setting terms for its use. What is not addressed in legislation is semen's status as an ambiguous male bodily fluid that also carries other meanings. Making semen into a governable and exchangeable substance happens instead on the practice level. Based on qualitative interviews with Danish sperm donors and ethnographic fieldwork at Danish sperm banks, this article explores how material-semiotic practices at Danish sperm banks contribute to the legitimacy of sperm donation by making donor semen into a governable reproductive substance. Inspired by the containers that are used at sperm banks, in order to handle donor semen, these practices are understood as *containment practices*. By managing donor semen's lust and disgust potential, containment practices help to secure donor semen's conversion into an exchangeable means of donor-assisted reproduction.

Keywords

hybridity, laboratory, material-semiotic practices, donor-assisted reproduction, sperm donation

In October 2012, the law governing uses of reproductive technologies in Denmark—called *befrugtningsloven* (fertilization law)—was amended, tightening control around the use of donor semen. As a consequence, Denmark's two largest sperm banks fell directly under this law for the very first time. Until then, fertility clinics and sperm banks had only been affected by the Danish fertilization law if they were headed by a physician.

The amendments to the Danish fertilization law bear with them a restriction for the use of donor semen. Whereas formerly, one donor's semen could be used to help up to twenty-five families/individuals conceive children in Denmark, this number is now reduced to twelve. Not surprisingly, this restriction was opposed by the two largest Danish sperm banks, literally cutting their potential sales of donor semen in Denmark by half.

Restricting the use of donor semen had been under discussion for some time in Denmark. In 2010, a donor from a Danish sperm bank was reported to be the bearer of a genetic disorder by the name NF-1 (von Recklinghausen disease or neurofibromatosis type 1) (Callum et al. 2012). His semen had been used for forty-three children worldwide, of whom at least nine were diagnosed with a likelihood of developing disease symptoms. As a consequence, the Danish Health Authority *Sundhedsstyrelsen* advised that new guidelines for the use of donor semen be set, affectively leading to the amendment of the fertilization law in 2012.

Sidelining this development was media coverage of what came to be known in Denmark as the *NF-1 affair*. The first media reports on the use of semen from the donor with NF-1 were published in the beginning of 2011 in several Danish newspapers and magazines. Parents who had conceived children with the help of this donor's semen came to the front, voicing their disappointment over how the Danish Health Authority and the involved sperm bank and fertility clinics had handled the case. Yet, it was not until late 2012, a few weeks before the new version of the fertilization law came into effect, that the NF-1 affair caught the attention of a broader public. During prime time, Danish national television *Danmarks Radio* ran a series of reports that gave voice to the parents' disappointments and effectively staged public protest against what was deemed irresponsible use of donor semen.

What followed was a media smear campaign lead by the Danish tabloid *Ekstra Bladet* against the director of the involved sperm bank, contesting the legitimacy of his business. The affected parents, the media, the *Danish Council of Ethics* as well as politicians from all Danish parties engaged in a public debate about the use of donor semen, calling for a tightening of controls around sperm donation. After many successful years for the Danish reproductive industry with sperm banks leading the way internationally, the Danish public was now in the midst of debating what constitutes legitimate use of donor semen.

In this article, I am concerned with how sperm donation becomes legitimized. As the Danish NF-1 affair and the subsequent change in

governance of sperm donation in Denmark shows, the use of donor semen still raises public concern even after decades of sperm donation being practiced on a wide scale. Semen's reproductive potential when distributed on a global scale—large numbers of offspring and potential spread of genetic diseases—worries political and general publics. Yet what legislation such as the Danish fertilization law and public debates assume to be self-evident—donor semen is a reproductive substance—is not that clear-cut on a practice level. Engagements with semen at Danish sperm banks make obvious that instead of being only one thing—a reproductive fluid—semen never really is one and the same. Rather, making semen into the procreative compound addressed in legislation and public debate requires managing semen's lust and disgust potential. As I want to show, local material-semiotic practices by sperm donors and sperm bank staff perform the work necessary to make donor semen into a reproductive substance that can be governed by legislation. Making semen into a governable reproductive substance legitimizes its use as part of donor-assisted reproduction and therewith makes sperm donation into a legitimate business in Denmark.

Sperm banks, laboratory staff, as well as sperm donors all have to contribute to what I call the *containment of sperm*—material-semiotic practices that aim at making donor semen into a governable reproductive substance by managing its lust and disgust potential—in order for sperm donation to become a legitimate undertaking. Therefore, I want to attend to practices at Danish sperm banks that involve donor semen. As an ethnographer, I am concerned with

encounters with donor semen as part of work at Danish sperm banks. I am interested in how semen as part of these encounters is made meaningful by sperm donors and sperm bank staff, not in cultural representations of semen (cf. Aydemir 2007; Daniels 2006; Moore and Durkin 2006, Moore 2008). I argue that, in order for donor semen to be governable as a reproductive substance, sperm donors as well as sperm bank staff need to successfully manage semen's potential to matter as more than that, thereby performing the work necessary to legitimize sperm donation in a larger societal context. How this legitimacy work is accomplished through containment practices will be the focal point of this paper. Before departing on this journey though, I want to explicate how legitimacy work can be studied through material-semiotic practices of sperm donation.

Questions of Legitimacy and Containment Practices

The use of donor semen can encompass several dimensions of anxiety. Its use interferes with concepts of privacy, intimacy, and relationship as research on donor semen recipients attests (Burr 2009; Mamo 2007; Nordqvist 2011). The use of donor semen needs legitimization because it breaches "the socially accepted boundaries between private and public . . . by bringing into light something that by convention should be kept concealed" (Layne 2013, 147), as Linda Layne observes. Conceiving children is supposed to happen naturally without the intervention of medical sciences and, most importantly for societies structured around heterosexual procreation as the norm, without the interference of an outsider, a sperm donor, as

research on the experiences of infertility treatment shows (Culley and Hudson 2009; Inhorn 2006, 2012). Having to use donor semen thus turns something that is supposed to be sacred—conception—into a social space soiled by donor semen (Moore and Durkin 2006).

Yet, existing regulation in Denmark does not address these dimensions of donor semen. As part of governing donor-assisted reproduction in Denmark, donor semen is understood as a substance with inherent reproductive potential, not as an ambiguous male bodily fluid that can cause other anxieties besides reproductive concerns. Individuals who are directly involved in reproductive donation have to confront the ambiguous nature of semen. They remake donor semen into a reproductive substance, addressed in legislation, through certain material-semiotic practices, work that is necessary in order to legitimize sperm donation in a larger societal context. Failing to remake semen into a governable reproductive substance threatens the legitimacy of sperm donation, for if sperm banks were selling a sexual rather than a reproductive fluid, their business could not be part of a biomedical establishment that combines private sperm banks and fertility clinics, public health services, and publicly financed fertility treatments. I want to turn to this kind of legitimacy work at Danish sperm banks by looking at the containment of sperm.

During my first week of fieldwork at Andersen Sperm Bank, I was startled by the way that specimen cups were handled. Instead of directly giving the cups, in which semen is collected, to donors, they were placed on papier-mâché trays. Oddly enough, most of the men

also brought their specimen cups back using these trays. When I asked Martin, the leading lab technician at Andersen Sperm Bank, why the trays were used, he did not have an immediate answer. After reflecting upon my question, he told me that the trays were probably used in case that donor semen would be on the outside of specimen cups. The trays would then help to avoid donor semen touching the counter.

Why would it be important that semen, once outside the donor body, is not dropped on the front desk of sperm banks? In her book *Purity and Danger*, Mary Douglas provides an analysis of how rituals of purity and impurity make for clean and dirty matter ([1966] 2010). Through these rituals, people make sense of different bodily fluids as pure and impure, thereby symbolically enacting the world. Things considered *matter out of place*, as Douglas refers to it, are thought of as dirty and impure, not to be touched and therewith taboo. Other things are deemed sacred and therefore very much *matter in place*, thought of as clean and pure enough for contact with the sacred and the human body. Specific historical and cultural contexts make thus for different kinds of matter—taboo or sacred—and specific practices can turn matter normally thought of as out of place and taboo into matter in place and therefore sacred.

The practice of returning donor semen in specimen cups on papier-mâché trays in order to avoid it touching the counter can be understood as such a ritual of purity. It is part of the legitimacy work performed at Danish sperm banks that helps to manage semen's lust

and disgust potential through containment. Containment turns donor semen from being matter out of place into matter in place.

Semen can potentially matter in all kinds of ways. It can be revolting, enticing, threatening, and desirable all depending on the situational context in which it is encountered (e.g., Aydemir 2007; Gonzalez 2010; Herdt 1993). In that sense, besides contributing to the cohesiveness of social order by enfolding its reproductive potential, semen also bears the potential to disturb social order, a substance very much ambiguous in what it is and what it can (Carsten 2004; Kristeva 1982).

This ambiguity of semen has to be managed in order for semen to be turned into a governable reproductive substance. As Ayesah Émon's work on American sperm banks attests, language is one tool that helps to manage semen as an ambiguous substance (2012). As she argues, anthropomorphizing semen by referring to sperm cells as *little guys* helps lab technicians to alleviate the ambivalence of having to work with donor semen. Sperm donors on the other hand invoke gender and sexuality when making their contributions as sperm donors meaningful. As Rene Almeling in a study of American egg and sperm donors shows, sperm and egg donors make sense of their contributions as clearly gendered phenomena, with men talking about being a sperm donor as a job (2011). Moreover, as my research on Danish sperm donors suggests, donating semen involves embodiments of masculinity and male sexuality, an experience particular to being a sperm donor (Mohr 2014). Different actors at sperm banks such as laboratory staff and sperm donors thus engage in containment practices to remake donor semen

into the reproductive compound addressed in legislative texts. Placing semen inside specimen cups and then placing these specimen cups onto papier-mâché trays contains donor semen symbolically as well as materially thereby making it into a fluid that can be used for and effectively governed by institutionalized donor-assisted reproduction.

It is these kinds of practices that I am interested in. Inspired by the different containers used at sperm banks—specimen cups, pipettes, test tubes, straws, vials—I refer to these practices as containment practices or practices of containment: material-semiotic practices that allow for the containment of donor semen by managing semen’s potential to be more than only a reproductive fluid. Being both semiotic and material, they encompass the ways that semen is referred and related to by sperm bank staff and sperm donors (semiotic) as well as the ways that semen is handled by donors and lab technicians and the containers and other materials that this handling involves (material).

Understanding containment practices as material-semiotic highlights that it is the simultaneous interplay of language on the one side and materiality on the other that produces donor semen as a meaningful phenomenon. How people make sense of semen thus depends on a particular interplay between semen’s material characteristics and the physical as well as symbolic dimensions of the context in which it is encountered. The performative coming together of these dimensions, something that Karen Barad understands as *intra-action* (2007), is what I refer to as the material-semiotic of containment practices. Semen is actively involved in producing

meaning about the world. It is not simply inscribed with meaning, remaining invisible as what Lisa Jean Moore and Heidi Durkin call a *silent witness* (Moore and Durkin 2006). Rather, at Danish sperm banks, semen becomes a noisy actor that needs to be managed. What semen is, and as what it comes to matter, depends on an ongoing process of intra-action, not just between semen and the bodies that produce it but also between semen and the bodies that handle it, and the containers that this involves. Semen's boundaries materialize in social interaction and they are constantly shifting and redone, since, as Donna Haraway puts it, "[w]hat boundaries provisionally contain remains generative, productive of meanings and bodies" (1988, 595).

As a result of containment, donor semen becomes the focal point of a nature-culture dynamic (Mohr and Høyer 2012). After containment, rather than being a natural fluid associated with the male body, donor semen can be understood as a hybrid compound that Lisa Jean Moore and Matthew Allen Schmidt call *techno-semen* (1999). It combines naturalistic ideas about masculinity and reproduction as well as ideas about the betterment of life and culture through technological intervention. Once processed and stored in cryo-tanks, it is a mixture of sperm cells and freezing medium representing modernity's hybrid constitution, something that Sarah Franklin has called *transbiology* (2006): donor semen is *made biology*, infused with social values that become part of new human life through the use of technology. As such, donor semen challenges the separation between culture and nature so important for the

constitution of the modern world (Latour 1993), and thus this hybridity becomes part of managing donor semen's potential to be more than just a reproductive fluid.

I want to look at how these dynamics of donor semen's containment play out in practice at Danish sperm banks. The questions that I focus on are: how do sperm donors' and lab technicians' containment practices manage semen's potential to be more than just a reproductive fluid, and what kind of work—material as well as semiotic—does this management of lust, disgust, and hybridity require. Paying attention to this kind of legitimacy work is important if biomedical exchanges of bodily material, the ways in which they are governed, and the stakes they involve shall be understood adequately. Addressing the material-semiotic practices in place at Danish sperm banks, that remake donor semen into a governable reproductive substance by managing its lust and disgust potential, draws attention to the work that goes into the establishment of biomedical interventions as legitimate interferences in human procreation. As my ethnographic exploration at Danish sperm bank shows, this work is not just that of legislative texts and authoritative language, but rather a performative coming together of materiality, symbolism, and language that creates meaningful phenomena. There is never a clear determination for how bodily material such as donor semen will come to matter (e.g., reproductive substance, commodity, gift). Rather, there are only specific attempts to deal with bodily material's different ways to matter in relation to a specific time and place (Hoeyer 2013). Before turning to these

attempts of containing donor semen, I will reflect on the methodical background of my research.

Fieldwork with Donor Semen¹

My fieldwork began in early 2011 when I carried out participant observation at Nielsen Center, a clinical treatment and research center for male infertility in Denmark. Interested in the assessment of semen and semen quality, I followed the working practices at the lab in which the semen of infertile men was analyzed (Mohr and Høyer 2012). My fieldwork at two Danish sperm banks, Andersen and Jensen Sperm Bank, began in the fall of the same year. First after signing a formal agreement that bound me to not to reveal company secrets, I was granted access to the labs and the donors of each sperm bank. This makes obvious that donor semen might not be the only thing that needs to be contained at Danish sperm banks.

My ethnographic fieldwork took place in these sperm bank's labs, at their registration desks where donors check in, during physical examination of donors and donor candidate interviews, and in the sales offices of these sperm banks' different locations across Denmark. Originally interested in how working standards at semen laboratories travel between different contexts, I also visited Jensen Sperm Bank's subsidiary location in the United States, Miller Sperm Bank. Andersen Sperm Bank's American location, however, did not grant me access.

Comparing the working procedures across the laboratories of Andersen, Jensen, and Miller Sperm Bank, certain differences

emerged. Procedures at Jensen Sperm Bank were automated and more specialized than those at Andersen Sperm Bank, a difference that resulted from different approaches to semen processing. Whereas Jensen Sperm Bank more or less subjects every semen sample to a filtering process in which seminal fluid, dead sperm cells, and other residue are removed, Andersen Sperm Bank only carries out filtering procedures on particular days of the week. Simultaneously, lab staff at Andersen Sperm Bank was responsible for tasks other than semen processing such as packaging shipments of donor semen as well as donor contact whereas at Jensen Sperm Bank staff was more secluded to work in the laboratory itself.

Yet despite these differences in how work at the lab was organized, managing semen's lust and disgust potential was central across all contexts. Just as Andersen Sperm Bank uses papier-mâché trays to handle semen samples, Miller Sperm Bank has a special window latch on which semen samples are supposed to be placed by donors, and Jensen Sperm Bank has a designated tray on the reception desk onto which donors have to place specimen cups when dropping off samples.

The donors that I was able to interview, had received an email sent out by Andersen or Jensen Sperm Bank, which explained my research project. It also contained a link to my research project homepage through which men, interested in talking to me about their experiences as a sperm donor, could contact me. I received more than thirty contacts in this way but was only able to interview twenty-three men that donated their semen at either Andersen or

Jensen Sperm Bank. Some men that had originally contacted me did not come to interview appointments or never wrote back after I had replied to them. Other men had contacted me so late during my research that I was not able to interview them. Three of the overall twenty-six men whom I talked to donated semen as part of informal donor insemination arrangements. They were registered at contact sites for women and men willing to arrange donor insemination informally and had contacted me after having read my post on one of these websites.

Interviews with sperm donors were arranged a couple of weeks to several months after the first initial contact. Sperm donation and the experiences of sperm donors are frequent media topics in Denmark (Mohr 2013). In addition, Denmark has a long history of mandatory sex education in schools as well as a nonstigmatizing approach to the use of pornography. However, as a recent survey among Danish sperm donors shows, about half of them have either never talked about being a sperm donor or only to a selected few people (Bay et al. 2014). This experience on the donors' side, that they are involved in something, which one rather not talks about, was also reflected in their narratives.

Making phenomenological dimensions of everyday life, such as masturbation, accessible through interviews is of course epistemologically limited (Gore et al. 2014). Yet given the circumstances of semen procurement as part of sperm donation, I saw an engaging conversation as the only feasible and ethically permissible approach. My own approach to making encounters with

semen and sexual practices a topic of conversation during interviews was based on an understanding of the ethnographic interview as a conversational space in which interviewer and interviewee co-produce the unfolding narrative (Kvale 2007). Yet contrary to my expectations, the dialogue, which I had hoped for, often subsided once the topic of masturbation was approached. Interested in sexuality as an experiential space, in which men are able to enact themselves as gendered and sexed individuals, I engaged interviewees in talks about their sex life first at the end of the interview. My hope had been that they had gotten a better picture of who I am and what I was interested in at that point. However, not all men gave elaborate answers. Mostly, they resorted to short answers and it became clear to me that these brief answers were also due to their assumption, that I as a man would somehow share their experiential horizon in regards to how to masturbate, and that I also understood what it feels like to masturbate in a semi-public place such as a sperm bank. In addition, in some instances, my own inhibitions of talking about sex with strangers prevented me from posing follow-up questions. In these cases, I saw myself confronted with exposing my own sexual desires, something I did not always feel comfortable with, especially when interviewees' displays of masculinity were contesting my own identity as a man, such as for example when one interviewee showed outright homophobia.

In what follows, I attend to donor semen's journey at Danish sperm banks. I focus on containment practices as well as on situations of overflows where the containment of donor semen is not

successful. The examples that I provide have to be seen as local practices situated in a specific time and place and therefore do not represent an exhaustive list of all containment practices in place at Danish sperm banks. I will concentrate on three examples: sperm donors' encounters with semen, processing donor semen in the lab, and sperm banks' online representations of donor semen.

Containment through Cleansing—Donor Narratives

Donors at Danish sperm banks are engaged in containment practices that aim at preventing semen from disturbing the normative script (Akrich 1992) that governs male sexuality as part of sperm donation in Denmark (Mohr 2010). In this script, non-heterosexual and lust-excessive desires are marked as non-acceptable, with semen, if encountered in donor rooms, threatening to transgress the boundaries of such controlled heterosexual male lust. The containment practices sperm donors engage in thus aim at managing these situations and remake the donors—even if only to the interrogating gaze of sperm bank staff—into men that adhere to the heteronormative script that governs sperm donation in Denmark. Therefore, it is also not surprising that donors overwhelmingly self-identified as heterosexual during the interviews. The acknowledgement of bisexual interests by three men is even more surprising when taking into consideration that Danish legislation bans men who have sex with men from being sperm donors. The containment of sperm is achieved by practices of cleansing oneself

and the rooms, in which one is supposed to masturbate, from any remaining semen.

During the interviews, I was, among other things, interested in how sperm donors perceive sperm banks and the atmosphere in them. I asked them if they liked being there or if there was anything that they did not like. Most men were indifferent about the sperm bank's atmosphere and answered similar to August, a young student at the beginning of his twenties who had been a sperm donor for roughly a year: "I think it is fine the way it is. It looks clean and you meet the same people that work there pretty much every time. . . . I mean, this is just a place to which you go to three times a week, that's it." Other men, such as for example Victor, a married sperm donor in his late thirties who had been donating semen for about two years, had a different opinion. When I asked him what he had thought about sperm donation, when he first started as a donor, he answered:

Victor: Well, I thought: what is this all about, what kind of fishy thing is this. I mean, of course I had seen some programs on it before. What kind of place is this, you go into this sinister/murky [skummelt] place where the curtains are closed, and what kind of place is this that cannot take daylight, what is this all about.

For him, sperm donation was not automatically a legitimate thing to be part of. Only by actually going to the sperm bank and seeing what it really looks like, he came to honor it as a venture that was worth participating in: "It turns out, that this is actually a sober place, where

the people, that work there, do what they are best at and where the people, that use it, and the things, that come along with it, are good taken care of.”

Still other men like Thommy, at the beginning of this thirties and sperm donor for two years, faced their own inhibitions about donating semen even after some time of being a sperm donor. Thommy described to me his feeling of awkwardness every time he enters or leaves the sperm bank:

Thommy: Of course, the most challenging part every time is still once you are down on the street [in front of the sperm bank]. There is a doctor’s office, a sperm bank, and a recording studio in the same building, and either people think: there are a lot of male musicians here, or, this doctor has a lot of male patients, or, well, they think: there must be a sperm bank here. I don’t know how many actually know about this, but there are times when I come down to the street and think: is he looking strangely at me? I mean, this is not a problem once you’re inside the sperm bank, everyone knows what is supposed to happen there. It can be a problem though when you leave, when you can feel those looks.

For sperm donors, the perceived illegitimacy of donating semen arises out of the taboo that surrounds sexuality in general and masturbation in particular (cf. Kirkman 2004). As the history of masturbation in Western Europe and Northern America shows, masturbation was, for a long time, thought of as corrupting the individual (Laqueur 2003; Stengers and Neck 2001). As I have written

elsewhere in regards to the recruitment of sperm donors in Denmark (Mohr 2010) and as both Rene Almeling (2011) and Ayesha Émon (2012) point out in their work, sperm donor sexuality is at odds with the image of cleanliness and responsibility that sperm banks try to convey to a larger public (c.f. Adrian 2010). The sexual enjoyment and lust, which are connected to ejaculation and of which donor semen is the material proof of, leaves a trace of dubiousness as Thommy's experience shows.

Sperm donors' containment practices relate to this trace of dubiousness materialized in semen. This became clear during the interviews whenever men talked about the conditions of the donor rooms. Much of this talk concerned the cleanliness of the computers or magazines that provided access to pornography. Jeppe, a pupil at the end of his teens, told me for example that he never uses the magazines that are present in the donor rooms and that he would rather prefer the computer. When I asked him why that was the case, he said: "I think that has to do both with the fact that they [the magazines] don't really work for me, and also because of, how should I put this, hand to hand contact with other guys, who have used them before." Thommy made it even more explicit why he is not using the magazines:

Thommy: The internet has really revolutionized this business, because I can just imagine what it must have been like with just those dirty/icky [snuskede] magazines. If there were just them, I don't think I could get out of there fast enough either. There is

no doubt that I try to avoid having to touch those magazines because they can get really nasty.

Having to touch the magazines was pretty much avoided by all the donors that I talked to. The image of another man using those magazines while masturbating provoked narratives that marked desire for such encounters as inappropriate. When compared to the computer, donors always rated magazines as worse since they could not be cleaned whereas computers' keyboards and mice could.

Issues of disgust surrounding donor rooms thereby relate directly to the potential presence of semen. The donor rooms are the space in which donors can potentially come across other men's semen. In these situations of overflows, semen is encountered on the floor, the furniture or the magazines. Overflows open up for encounters with semen which were deemed highly inappropriate by the donors. Failing to contain it, in these instances, donor semen turns into matter out of place, it soils the social space (Moore and Durkin 2006) of heteronormative masculinity. Lucas, a man in his midtwenties who had been a sperm donor for about a year, answered as follows when I asked him if he ever had encountered something disgusting in the donor rooms:

Lucas: Not where I am now. But in X I have been subjected/exposed to splotches [of semen] on the floor and that I think is, well, of course it is up to the individual person how they, but, again, you wouldn't be able to prove who that was anyways. I mean, you would assume that people clean up after themselves, but that was disgusting.

Another donor that verbalized feeling disgusted when encountering other men's semen was Victor. When he and I were talking about the cleanliness of the donor rooms, he said:

Victor: I thought that there would be all kinds of weird odors when one comes into these rooms, and maybe if one is number ten after a whole day, then that of course is maybe only half as nice. But actually, when you use alcohol to clean up, then it automatically becomes more clinical.

Sebastian: Do you do that every time?

Victor: Yes, both before and after, because I don't know who the other guy was. And I don't know what it looks like after he is done, that I don't know, especially if you should be unlucky with one thing or another.

In Victor's narrative, semen becomes matter out of place, an ambiguous fluid, meaningful as more than just a reproductive fluid, which needs to be wiped away. In instances in which men, as Victor puts it, are "unlucky with one thing or another," semen lands on furniture or the floor. Its potential, to matter as more than just a reproductive fluid, cannot be contained. Instead, it opens up a space filled with desires deemed inappropriate as part of sperm donation in Denmark. Potentially being aroused by other men's semen was positioned as a taboo by all donors during the interviews.

Oliver, at the end of his twenties and donor for less than one year, put in a nutshell what this dynamic of lust and disgust looks like from a sperm donor's point of view. By invoking the scenario of a public

toilet, he conveys an atmosphere of anxiety and male shame that is part of the normative sexual script in place at Danish sperm banks. Whereas encounters, such as Oliver describes them, would be understood as enticing in gay male cruising culture, the script regulating male sexuality as part of donating semen at Danish sperm banks relies on the self-disciplining male individual that denies himself any possible pleasure derived from encounters with other men and their bodily fluids:

Oliver: There is this special atmosphere when you donate sperm, if, for example, others are waiting [to get into the donor rooms]. It is the same atmosphere as being at the urinals in a men's room, where you also know that there are other men, but you are not allowed to look into each other's eyes, you know. You only look at the floor and you don't talk with one another, the same atmosphere as in a men's room. You don't just stand there and look at another men's penis while he is taking a piss, you know, and you don't look at another man's sperm, this feeling, that whatever happens here is private.

In addition to the cleansing of the room, almost all donors also told me that they cleaned themselves after they are done masturbating, with one donor saying that he did so because otherwise he would smell of sex for the rest of the day.

The disinfecting of the room and the cleansing of oneself are containment practices that manage semen's ambiguity as a male bodily fluid. They are material-semiotic practices that make semen meaningful as either an undesired and ambiguous substance or as a

valued reproductive substance that can be used for and governed by institutionalized donor-assisted reproduction. Cleansing helps to deal with overflows of semen, instances in which semen becomes meaningful as something else than just a reproductive substance. It makes sperm donation into a legitimate undertaking since any semen not used for reproductive purposes is disposed of. This legitimacy work helps sperm donors to reassure themselves and others—sperm bank staff, the questioning ethnographer—that they are men in it for the right reasons: reproductive men with a desire to help people conceive children.

Containment through Quantification—Laboratory Scenarios

At the laboratory, containment practices are about stripping donor semen from the persona of the sperm donor. As part of donor-assisted reproduction, semen needs to be accessible, storable, and exchangeable. The availability of donor semen as a reproductive substance thereby relies on a foregrounding of donor semen's quantifiable characteristics and a backgrounding so to say of the men from whom it comes. This process is comparable to what Linda Hogle describes as conversion in organ transplant procedures at American and German hospitals: the separation of human biological material from the donor individual (1995, 1999). Through this process, semen samples are transformed from being of the donor body into techno-semen (Moore and Schmidt 1999), an exchangeable substance (c.f. Klotz 2014). Yet this process of separation is never really complete, as my material will show.

The containment of donor semen at the laboratories of Danish sperm banks is accomplished through what I call quantification. Quantification refers to the assessment of semen samples' characteristics and the assignment of numerical markers, making semen meaningful as a reproductive fluid whose material specificities can be quantified, that is, semen is made knowledgeable as a product of laboratory work rather than male sexual lust. Containment through quantification turns donor semen into a fluid that can be assessed and ultimately distributed around the world.

Quantification begins with weighing a sample and ends with storing donor semen in so-called straws or vials, containers that hold between 0.5 ml (straw) and 1 ml (vial) of donor semen. Even though details of working practices differed at Andersen, Jensen, and Miller Sperm Bank as mentioned earlier, the central idea of containment through quantification—separating semen from the donor who provided it by assessing and quantifying its characteristics—was common to all of them. An entry from my fieldwork journal, which describes how the assignment of numerical markers works at Jensen Sperm Bank, once a semen sample is dropped off, shows how quantification ensues as part of the lab routine:

Majken, a young student helper, places the sample on the scale leaving it there for a second or two while at the same time registering the sample's weight that shows up on the scale's tiny LED-screen. Having a permanent black marker in her right hand ready to write on the specimen cup, she takes the sample off the scale, putting it on the counter and holding on to it while

now writing down the weight of the sample and the time of its delivery. The specimen cup now bears four numerical parameters: donor number, elapsed time since last semen discharge, time of discharge/delivery, and weight. Majken continues on to the first of four counts of motile and immotile cells. Before she starts counting, she enters the first four parameters, which are written onto the lid of the specimen cup, into a database that allows the laboratory staff to keep track of the samples' different qualities.

Each semen sample is identified with numerical markers. These markers not only help to identify each individual sample as well as its characteristics such as pH value and sperm count but also make it comparable to all other samples in the sperm bank's inventory. The markers are thus individual—each sample has different numbers as in weight, sperm count, number of straws or vials, and so on—while at the same time uniformizing, since each sample will have the same set of markers.

These markers relate directly to medical regimes that regulate reproduction. Andrology, the medical science that attends to male reproductive potential, has developed methods in order to make that potential measurable, methods represented in guidelines such as the WHO manual for semen analysis (2010). Based on a scientific rationale that assigns authority to numbers, the very goal of these measurements is quantification. Quantification, a result of specific methods, enables comparison and the establishment of a category of the normal which then is used to assign values such as good or bad

quality to each sample. Far from being objective, these quality assessments are nevertheless understood as value free statements about the properties of semen samples (Mohr and Høyer 2012). This is to say that containing donor semen as a reproductive substance as part of sperm donation is enabled through biomedical parameters which have the goal of quantification and comparison in order to be able to evaluate.

Yet, donor semen is not contained that easily. Managing its potential to matter as more than just a reproductive fluid, containment through quantification is not always successful. In these situations of overflows, semen will either land on the hands of laboratory staff or smear on instruments and furniture, which has the effect that the donor persona becomes foregrounded again. While transferring donor semen from specimen cups into pipettes and test tubes, because of the specific material characteristics of each individual sample, it can be more or less difficult for laboratory staff to accomplish this task. For example, the grade of liquification of semen is very important for if overflows will occur or not. Some samples are more liquid than others and therewith easier to transfer. Semen samples that have a rather thick viscosity, on the other hand, are almost impossible to transfer and will land on the hands of lab technicians instead of in test tubes.

This topic of *messy work* came up again and again during my fieldwork at Danish sperm bank's laboratories. Work with donor semen was not characterized as disgusting per se by the staff. Rather, working with donor semen was described as disgusting in instances in

which it would land on the technicians' hands, because it made for an affective encounter with semen that also gave the individual donor's persona a presence normally avoided through quantification. Many of the technicians I met had a background in laboratory work in contexts that involved human and animal feces or animal semen. The technicians were thus used to biological material and its potential to provoke disgust. Yet, overflows of semen were nevertheless described as discomforting. New technicians, who had just started working at the lab, seemed to have the most difficulties with this messiness. But also more experienced technicians told me that, even after years of work experience, disgusting situations could not be avoided when working with donor semen. These overflows hinder work at the laboratory and therewith donor semen's conversion into techno-semen.

While semen landing on hands was considered disgusting by technicians, the worst overflow potentially to happen were instances in which donor semen was contaminated. Samples could be visibly or olfactory (smell) impure. There could be hair or blood in them or the samples could smell very strongly. As another entry from my field journal demonstrates, these contaminations prevent the successful containment of donor semen. This time, we meet Lærke and Stine. Lærke is a leading lab technician at Jensen Sperm Bank with many years of experience and also responsible for training new staff. Stine is Jensen Sperm Bank's donor coordinator with years of experience in the lab:

Lærke and I are talking about working with semen samples in the laboratory. I mention to her that her colleague Rikke [a student helper at the lab] had told me that she thinks that it is disgusting [ulækkert] when samples develop streaks while being transferred from the specimen cup to the test tubes with a pipette. Lærke agrees: “You never know beforehand where the streaks will land, and they always land where they are not supposed to. And then you have them on your fingers and everything. That is definitely not very nice.” This topic gets Lærke talking. She says that the most disgusting thing would be pubic hair in the samples. As if recognizing my astonishment, she explains that the presence of pubic hair in a sample would create a nearness to the person who delivered that sample, which provokes disgust: “All of a sudden the sample is not anonymous any longer. It [the pubic hair] makes me think about the fact that the sample is actually a man’s sperm sample.” And normally she would not think about this circumstance. If she did, Lærke continues, she would not be able to work in the lab. She then turns to Stine: “You also think the same about pubic hair, don’t you?” Stine comes out of her office which is right next to the lab and joins in: that would be the most disgusting thing when working in the lab. It would just be too up and close. Lærke and Stine are now talking more to each other than they are to me and Lærke says that a sample with a strong odor would also be disgusting. Some of the samples do not smell like samples normally do and having such a sample could be

difficult. Stine then tells a story about a man that had wanted to store his semen because he was supposed to undergo chemotherapy for his prostate cancer. And when this man delivered a sample, it contained blood, something she had difficulties working with.

Encountering overflows of donor semen interrupts work at the lab. As the lab technicians Lærke and Stine recount from their own experience, different kinds of contaminations—hair, blood, smell—can provoke a feeling of disgust. In Lærke’s narrative, it is the direct connection to the individual sperm donor in cases of contamination that causes disgust, something that stands in direct opposition to what containment of donor semen at the lab tries to achieve: the separation of sample and donor. At Miller Sperm Bank, staff told me about a donor whose samples would always smell of perfume, with one of the technicians admitting that exactly this concoction of perfume and semen would cause a feeling of nausea for her. Thus, a personal note such as perfume or pubic hair stays in stark contrast to what work with a semen sample at a lab relies on: quantification.

Containment through quantification as a central practice in the lab leads to uniform and anonymous semen samples stored in straws or vials. The contamination of samples through hair, blood, and smell as well as the encounter of semen on one’s fingers or hands breaks with this containment since it reconnects semen to the persona of the individual donor. Just as when donors encountered semen in the donor rooms, semen can turn into an ambiguous fluid, a disgust-provoking substance thought of as taboo. Containment practices

involving quantification through numerical markers and special containers aim at avoiding that donor semen turns into such matter out of place.

Ultimately, the containment of donor semen through quantification is the foundation for the commodification of donor semen. Without containment, not a single straw or vial of donor semen could be sold and sent out to either fertility clinics or private individuals around the world. But in order for donor semen to be accessible, something else has to be dealt with as well: donor semen's hybridity.

Managing Hybridity—Donor Profiles

Having been of the donor body at some point, donor semen, after being processed at the lab, is a rather hybrid substance far removed from the context in which semen is normally encountered: sexual intimacy. Once semen is frozen and stored in cryopreservation tanks at minus 196 degrees Celsius, it can potentially last forever. So far, the longest period in which donor semen had been frozen and stored, before then being successfully used for insemination, is forty years (Snowbeck 2012). But being stored and frozen, donor semen is also rather inaccessible—physically and semantically. Making it available through containment comes at the cost of hybridity. Sperm banks develop certain strategies that aim at managing this hybridity making techno-semen into a substance legitimate enough to be used for donor insemination.

This happens by ways of presenting donor-semen with the help of donor profiles on sperm banks' homepages. Henrik, an IT specialist in his early thirties, who had been responsible for managing all data at Andersen Sperm Bank for many years, explained to me that I should think of data sets belonging to each donor profile as an ever-growing set of connections. Very much inside a growth and connectivity rhetoric that is characteristic not just for information technology but also for sperm donation (Klotz 2012), Henrik made me understand how important it is to connect different sets of data and therewith different spaces in order to manage donor semen's hybridity. Without connections into other spaces besides the cryo-tank, donor semen stays literally inaccessible and thus unused.

Andersen and Jensen Sperm Bank use donor profiles in order to make these connections and to give a picture of what kind of person—physically as well as psychologically—a donor resembles most. In these profiles, a donor persona is constructed by combining information that the donor supplies about himself, such as physical data, medical history, family trees, handwritten notes, and childhood pictures, and with so-called staff impressions based on the staff's evaluation of the donor. Donor profiles are also informed by sperm bank staff's ideas about and experiences with what potential customers might find important and necessary in order to use donor semen.

Being aware of the particularities of using donor semen, professionals at sperm banks thus try to alleviate potential anxieties by anticipating what might help recipients to feel more at ease when

picking donor semen. As part of a conversation with Patrik, director of Andersen Sperm Bank, we also came to talk about what he thought recipients might expect when buying donor semen. According to him, the growing share of single women who opt for donor insemination has a profound impact on how Andersen Sperm Bank presents donors in online profiles. Sitting across from me at the desk in his office, he explained that the ever more detailed selection process of choosing a sperm donor on the recipient side would be directly related to when people meet in real life. He believed that especially single women would look for the man of their dreams when choosing a sperm donor. The profiles and voice recordings available through Andersen Sperm Bank would be one way of accommodating their needs, as he understood it.

Managing donor semen's hybridity, Danish sperm banks apply a logic in which the so-called natural has to be mimicked in order to legitimize the use of donor semen. This naturalizing strategy is visible in the ways in which Andersen Sperm Bank presents its donors on the Internet. Employing a similar strategy as the American sperm bank *California Cryobank*, so-called *donor look-a-like* suggestions are made when donors are presented. As the name suggests, the concept of *donor look-a-likes* stems from the idea that sperm donors can be categorized in accordance to which celebrity they might best resemble by way of their looks. In case of Patrik's understanding of how single women choose sperm donors, this strategy builds on the assumption that women in need of donor semen would want movie stars as their husbands and the fathers of their children. As part of

managing donor semen's hybridity, Andersen Sperm Bank frames the choice for a particular donor as a romantic affair in which pop-culture's celebrity cult is supposed to alleviate anxieties about the use of donor semen. In other words, donor look-a-likes can be understood as sperm banks' attempts to manage donor semen's hybridity by retaining, what they deem to be natural, through a mobilization of heteronormative and naturalized assumptions about gender relations.

Managing donor semen's hybridity at Danish sperm banks thus relies on a reverse dynamic: whereas in the laboratory semen has to be disconnected from the donor persona in order to be acceptable to deal and work with, sperm banks deem it necessary to reconnect it to the male body in order to legitimize its use. These male bodies are surely not the donors' actual bodies; neither shall these bodies provoke images of men masturbating at sperm banks. Instead, sperm banks invoke stardom and fame in order to alleviate anticipated fears on the recipient side by giving meaning to donor semen as part of *practices of consumption* as Laura Mamo puts it (2007, 222).

Containing Sperm—Managing Legitimacy

When men are asked to ejaculate into a specimen cup, for purposes of sperm donation, many things are at stake. As portrayed through the description of the so-called NF-1 affair in Denmark in the beginning of this article, semen's reproductive potential causes anxieties on many levels: large numbers of offspring as well as the possibility of spreading genetic diseases spurn reactions from

politicians, ethical advisors, and individuals using donor insemination. The reformulation of Danish legislation governing the uses of donor semen in 2012 can thereby be understood as a direct attempt to legitimize sperm donation by setting certain regulatory boundaries for donor semen's reproductive potential. Yet, what legislation cannot address is the ambiguous nature of semen as a male bodily fluid, its potential to be meaningful as more than only a reproductive substance. Making it into an acceptable means for reproduction happens at the practice level of direct encounters with semen.

Therefore, I have explored practices at Danish sperm banks that help to manage semen's lust and disgust potential. What I call the containment of sperm—material-semiotic practices that aim at making donor semen into a governable reproductive substance by managing its potential to mean more than that—is work engaged in by sperm bank staff and sperm donors that contributes to the legitimacy of sperm donation.

The legitimization of sperm donation described in this article is based on an ongoing management of donor semen—both semantically and materially—that aims at containing its manifold meanings as a male bodily fluid. Donor semen is never the same. Rather, it is a noisy actor that can matter in all kinds of ways besides being made sense of as a reproductive substance. Successfully contained, however, sperm donors and laboratory staff view donor semen as matter in place which can give new life its form. Not contained, in situations of overflows, donor semen turns into matter out of place by becoming meaningful as more than just a

reproductive substance. Uncontained, semen soils the social space of heteronormative masculinity, opening up for eventual desires deemed inappropriate by sperm donors. Moreover, uncontained semen also soils the social space of the sperm bank laboratory by foregrounding the donor persona and thereby threatening the successful conversion of donor semen into techno-semen: a governable and exchangeable reproductive substance. Sperm donors and sperm bank staff therefore engage in practices that help to contain semen: cleansing of bodies and donor rooms, quantifying semen samples and storing them in straws and vials. These material-semiotic practices involve the material as well as symbolic dimensions of semen, turning it into a meaningful phenomenon as part of sperm donation in Denmark.

Containing donor semen through these material-semiotic practices enables donor semen's exchangeability, something that has also been called commodification. Separating semen from the donor persona, quantifying it through the assignment of numerical markers, and containing it inside of straws and vials, makes for its worldwide distribution to individuals as well as fertility clinics around the globe. Yet, the successful containment of donor semen comes at the price of hybridity. After being processed at the lab and thereby successfully contained, donor semen is no longer only a male fluid. It is also what has been called techno-semen, made biology, a hybrid mixture of human biological material and technological intervention. Anticipating certain anxieties in regards to the use of this hybrid mixture, Danish sperm banks manage techno-semen's hybridity by

presenting it online with the help of donor profiles. This hybridity management encompasses a mobilization of naturalized assumptions about gender relations as well as embedding the use of donor semen inside consumption practices.

The local micro-cosmos of Danish sperm banks and the containment practices that take place in it are thus just as important for legitimizing the use of donor semen as are public debates and legal statutes. Legitimacy work as part of donor-assisted reproduction is not only grounded in governance through legislation and authoritative measures but, as my analysis shows, also takes place in direct encounters with the material usually thought of as only providing the biological means for reproduction. Instead of only reflecting the application of legislation on a practice level, encounters with semen at Danish sperm banks, and the containment practices they involve, rather make donor semen into a substance that can be governed by legislation. Donor semen becomes meaningful as a reproductive substance that legislation regulates because of the containment of sperm. It is the material-semiotic practices that sperm donors and sperm bank staff engage in that contribute to making donor semen into an acceptable means of reproduction.

If biomedical interventions into human reproduction shall be understood adequately, the material-semiotic grounding of legitimacy work needs to be attended to. Claims as to what bodily material such as donor semen might mean as part of biomedical exchanges (e.g., reproductive substance, gift, commodity) need to involve the practice level of handling the material itself. Semen is not

just part of the biological means necessary for reproduction; it is not some passive materiality that can be appropriated by technological intervention. Rather, semen is actively involved in the production of meaning when reproduction occurs through reproductive donation. The engagements with bodily material such as semen happen in a space that is characterized by a performative becoming, an entanglement of matter and meaning as Karen Barad would have it (2007), a generative interplay of the material and the symbolic, and nothing less than detailed attention to the ways of handling bodily material will be able to accommodate the particularities of how biomedical interventions are made legitimate.

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1. All names of sperm banks, treatment centers, personnel, and sperm donors are pseudonyms.

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