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Merete Lie: Brainwashing: Taking another turn with biology

With this opportunity of taking turns, I would like to share one concern and at the same time point to some new and positive trends of bridging the nature-culture gap. First to the concern, that is what I see as a widening gap between feminist theories and 'folk theories' of gender. Since the 1990s feminists have remodelled the notion of gender as performative and the gendered body as a product of materializing cultural discourses following the influential work of Judith Butler. 'Gender is *only* what you do'; or, 'just a social construction', are public understandings of contemporary feminist theory – in other words, gender researchers are seemingly ignoring evident facts of biological differences that are visible to everyone else.

In Norway, the TV-progamme '*Hjernevask*/Brainwash', sent weekly in spring 2010, focused primarily on gender research and secondarily on the social sciences generally, within the framework of the social constructionist turn. This programme had an audience much larger than expected for a popular science programme (partly because the anchor man was a well-known comedian) and released very heated debates about research, biased social researchers, nature versus nurture, and of 'what gender is'. The agenda of the programme was to demonstrate that gender researchers hold gender differences to be cultural and social products solely, whereas researchers from the natural sciences know better. In the programmes, the focus was particularly directed at evolution. The producers also launched a book entitled 'Born or bred?' (*Født sånn eller blitt sånn?*). This question has become a slogan of sorts that is frequently repeated in the media as well as in private conversations. The question was for instance one of the standard questions asked in all portrait interviews in a Norwegian newspaperⁱ during the summer, to which the interviewees, generally businessmen in leading positions, all answered 'both'.

This is an example of what has prompted Evelyn Fox Keller, to launch the title 'The mirage of a space between nature and nature', opening like this: "One of the most striking features of the nature-nurture debate is the frequency with which it leads to two apparently contradictory results: the claim that the debate has finally been resolved (i.e., we now know that the answer is neither nature nor nurture, but both), and the debate's refusal to die." (Keller 2010:1).ⁱⁱ In the Norwegian case it could be invoked by the claim that feminist researchers have been brainwashing people to believe that gender is solely a social construction. Moreover, the researchers are able to hold on to their strange theories because

they belong to a closed academic community, and it is timely to attack this ivory tower position and reveal it as a case of The Emperor's New Clothes. It may be the case that the concept of a social construction is not really understood by the public; it is a term that may appear as rather abstract and is not easily made meaningful related to experiences of living in and with a gendered body. But in that case it also reflects the research community's inability to explain it.

The radical turns in feminist research to poststructuralist theories of gender (as referred to above) have developed at the same time as the new life sciences, particularly gene research, has generated enormous interest from the media and the general public. In the first instance, the new life sciences paved the way for a common understanding of genes perceived in terms of nature - as the decisive feature for a person's looks, interests, skills and personality. Genes became a popular explanation of gender differences, as being based in male and female genetic composition. The field of genetics research is, however, far ahead of 'one gene, one character trait' that the media still love to repeat. The attraction of the gene story is its simplicity and it is actually a challenge to make new popular versions of how genes work that can defy the iconic gene story. The new direction of functional genomics has not received a similar public attention as the human genome project that was launched under headlines like 'Making The Book of Life'. Still, the new trends in genetic research contributes to destabilizing the nature-culture distinction by pointing out a complex interaction between genes, proteins and a broad notion of environmental factors resulting in genes being 'turned on' or not. Moreover, the new life sciences have dissolved former distinctions of nature and culture whereby bodies increasingly appear as malleable. Thus the eternal question of nature and culture has taken a new turn in our times; the field is opening up and making new opportunities for feminists to include the biology of the body in their theories and conceptualise it in new ways - and fortunately there are many interesting attempts of doing this.

How is the latter connected to the widening gap of feminist and 'folk theories' of gender? A learning from science studies is that the boundary of science and folk theories is porous. The directions of research are influenced by ideas scientists share with lay people in the form of general cultural understandings of which and how 'things hang together', and feminist research has revealed how general perceptions of gender have been heavily influenced by shifting theories of the biology of the body. Today, even science and science fiction are progressing in dialogue with each other, as for instance revealed in a study of cloning.ⁱⁱⁱ The traditional understanding of science is that of a the citadel with narrow

entrances and strict doorkeepers, or in other words, that science works by its own exclusive rules and is not meant to be available for anyone. But science studies reveal how common knowledge filters into the citadel in the sense that common knowledge is important for what scientists study, what they look for, and how they look for it, and how new scientific knowledge quickly is absorbed by the public. At present, the new life sciences bring novel conceptualizations of the interior body and alternative stories of how bodies function.

There are many questions following in the tracks of the new life sciences. What new and powerful models of human bodies and human qualities do they produce? What will cloning and other radical steps in technologies of reproduction mean for the perception of sexual reproduction? A recent survey tells that there is rather broad accept of egg donation and surrogacy in the Norwegian population although such treatments are not legalized. What do such answers indicate about contemporary perceptions of biology, bodies and human reproduction? And do they also indicate that the general population is more positive to the new biotechnologies, even more updated, or at least more interested, than the gender research community?

There are different markers constituting the distinction of nature-culture and at least two of them are of relevance to the debate on gender and biological bodies. One is referred to above in terms of born or bred, or in other terms, of nature versus nurture. This is the distinction of, on the one hand, what was given at birth and by genetic heritage and, on the other hand, qualities that were acquired later. Another distinction is of nature as matters of pure origin versus those that are artificially produced, in other words products of nature versus products of culture.

Can such distinctions survive in the age of biogenetics? If we start with the latter, the very concept of biotechnology tells that bios/nature is already merged with technology/culture. The most telling example is how technology contributes in the different processes of assisted reproduction, to create new life. In addition to blurring the boundaries of biological and technical it interferes with the basics of sexual reproduction. Another example are embryonic stem cells, produced by fertilized egg cells, which are combinations of biological matter and technology, and they serve as examples of how the notion of the biological as well as the natural are being stretched in our times. Coming to the former distinction referred to above, that of nature (before birth) and nurture (after birth), it is in our times challenged by new medical procedures such as treatment of a foetus within the womb. Even more challenging to this conceptualization is preimplantation genetic diagnosis, PGD; that is, genetic testing of an embryo prior to the placement of the embryo in the womb. What

is the result at birth is not a product of nature but a joint 'techno-nature' product. Moreover, contrary to assisted reproduction, given its name in terms of assisting nature the way is expected to work, PGD is a way of hampering nature in its way of working.^{iv}

The new life sciences are apparently bridging some gaps of nature and culture thus bringing some fuel for those struggling with this distinction related to gendered bodies. Still the question remains of how to approach the body without being trapped in conventional ways of thinking and speaking about it. The predominant language is the biomedical one and modifications of it that is used in ordinary language. Speaking in terms that do not associate to either is not a good solution if dialogue across disciplines as well as with the public is the goal. Some feminist researchers speak in favour of conjoined neologisms;^v that is, to create new concepts that are conjoining previous conceptual distinctions, such as those already created in terms of technoscience, biosociality, biovalue and natureculture - some of them familiar from Donna Haraway's work. "Importantly, however, in maintaining the original words in these neologisms, social theorists signal that what is at stake is not the complete disintegration or breakdown of categories, but rather the reconfiguring of boundaries and the visibility of new movements, mobilities and flows across them." (Roberts 2007:198-199) This is a constructive suggestion of not tearing down but to construct something new that still connects to different scientific traditions and can gain followers from different sides. Within feminist studies such neologisms have been inspiring to many exactly because they are open and associative but they will need thorough explications to work outside of the cultural/interpretive disciplines. New concepts are, however, also characteristic of the life sciences, maybe making a fertile ground for some new joint concepts that are developed in dialogue.

Human, gendered bodies are definitely boundary objects, that is, matters that are placed at the junctures of common concern for groups of people with not only different understandings of them but also different interests involved in the matter. The latter is telling for why the debate on gendered bodies is so heated. There are, however, several important effects of thinking in terms of boundary objects. One is that a boundary object provides the possibility to speak about a common theme, although from different angles. Another is that the notion of boundary objects draw attention to how boundaries are made (such as nature - culture, sex - gender, male - female), where the lines are drawn, what are the criteria for the distinctions, and how the boundaries are stabilized. This opens the field for reconfiguring of boundaries, and drawing attention to mobilities and flows across them – as referred to above. Studying how lay people speak about the body within different contexts, and particularly

related to the new life sciences, one might find some fertile ground for neologisms, and maybe some simply exist in common use, that may contribute to bridging gaps of nature - culture, nature - nurture.

Another boundary object is, however, precisely the concept of the natural. What is most intriguing is that the word natural has strong normative connotations. Speaking from the Norwegian context, with reference to the body the word natural is used synonymous with biological. At the same time, the word natural means what is common and evidently the right thing to do.

Summing up from where I started – with the concern on the one hand and the positive trends on the other – there is interesting and exiting feminist research actually going directly to the theme that feminist research is often accused of avoiding, namely human biology. Here, I have pointed to the field of biotechnology where feminists have done groundbreaking work, particularly on the radical changes within the field of human reproduction. A challenging question, and one that I am not ready to answer, is why still it is possible to draw an image of gender researchers as absorbed in cultural discourses and totally ignorant about the biology of human bodies. The challenge is apparently to reach a broader audience and, though not the only matter, it is definitely about language. Another positive thing, surfacing during the brainwash debate, is a broad and engaged audience when it comes to questions of gender. But the audience is sceptic as long as biology is not addressed directly by gender researchers.

ⁱ Dagens Næringsliv (a daily newspaper focussing on business life)

ⁱⁱ Keller, Evelyn Fox (2010) *The mirage of a space between nature and nurture*. Durham and London: Duke University Press

ⁱⁱⁱ Haran, Joan, J Kitzinger, M McNeil and K O'Riordan (2008) *Human cloning in the media: from science fiction to science practice*. London: Routledge

^{iv} Franklin, Sarah and Celia Roberts (2006) *Born and made: an ethnography of preimplantation genetic diagnosis.* Princeton: Princeton University Press

^v Roberts, Celia (2007) *Messengers of sex. Hormones, biomedicine and feminism.* Cambridge: Cambridge University Press; as well as several publications by Donna Haraway, e.g. (1997)

Modest_Witness@Second_Millenium. Feminism and Technoscience. New York and London: Routledge