Book review

Review of "The Material Gene: Gender, Race, and Heredity after the Human Genome Project"

by Kelly E. Happe, New York University Press, 2013

Jörg Niewöhner*

2013

This is the accepted manuscript (postprint) of the published book review in a journal as follows:

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man Genome Project, by Kelly E. Happe, New York University

Press, 2013

Author/Reviewer Niewöhner, Jörg

Date of publication 2013

Journal New Genetics and Society

 Volume
 32

 Issue
 4

 Pages
 459–461

Publisher Taylor & Francis

DOI 10.1080/14636778.2013.852466

Acknowledgement of publisher:

This is an accepted manuscript of an article published by Taylor & Francis in New Genetics and Society in 2013, available online: http://www.tandfonline.com/10.1080/14636778.2013.852466.

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Review of "The Material Gene: Gender, Race, and Heredity after the Human Genome Project"

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Ever since the Human Genome Project started to take shape in the late 1980s, social inquiry has been concerned with the consequences of the renewed vigor and depth with which biological knowledge has been shaping life itself. Kelly Happe's book, *The Material Gene*, carries forward this important set of concerns.

Happe sets out to draw out and critique the "political unconscious" of genomics discourses as it manifests in current writing and practice in biomedicine, as well as public and environmental health. Genomics' political unconscious, so Happe's key argument goes, is hereditarianism: the cultural logic of the scientific concept of heredity. Hereditarian ideology resides at genomic science's cognitive core. Distinct from heredity, hereditarianism is a political project in scientific clothing concerned with the continuation of particular arrangements of social relations, cementing social and gender inequalities, racism and environmental injustices.

After setting out this agenda, Happe proceeds to reveal the infusion of genomic discourse with neoliberal ideology. She does so in three case studies all centrally concerned with recent advances in genomic knowledge: genomics and the reproductive body, largely centered on BRCA (breast cancer gene) testing and its consequences in the USA; genomics and the racial body, dealing with reification of race in health disparities research; and genomics and the polluted body, focusing on questions of environmental health, injustice, and the rise of environmental genetics. While the three case studies are equally weighted in terms of numbers of pages, her work on genetic testing for breast and ovarian cancer in different populations of women not only provides the most empirical depth, but also sets the stage for the other two case studies.

The book culminates in Happe's overall evaluation of the material from the three cases, which she reads to be an argument in favor of a biosociality without genes and perhaps even without biology. She gives center stage to lived and embodied experiences, which ought to be developing free of hereditarian discourses that fail to acknowledge the rich

and diverse experiences of life as such and rather reproduce the neoliberal ideological project to the continued and excessive disadvantage, particularly of black women.

Happe's background is in rhetoric and communication. She draws heavily on feminist critique and political economy and uses those to critically engage with social theorists in the field of biomedicine. This explains three strengths about this thoughtful and clearly written book: First, it is passionately written, fully committed to a political agenda, and stringent in its argument to that effect. Second, it builds on an analysis of discourse understood in rhetorical terms as the "transdisciplinary, institutional site for mapping the overlapping interests of genomics and society" (p. 14). Third, it is "critical" in the dialectic tradition of engagement and distant reflection. As such, the book is an important contribution to scholarly critique in the field of biomedical and genomic developments.

The strengths of this book are, however, also its weaknesses. The notion of discourse offers little analytical grip. It is not firmly rooted in the Foucauldian notion of discourse – probably most common in this field – but rather loosely aims at drawing out "interests" from things written in and about the field of genomics. It provides the important link to the concept of ideology, yet it does not help to situate the statements that Happe analyses. We neither know how and why these statements were selected, nor do we learn about their institutional or epistemic context. This is problematic, because the readers are not given the knowledge to appreciate the social field of genomics and its dynamics. Rather, readers need to put their trust in Happe's selection and analysis.

This methodological weakness could be overlooked, yet it has analytical consequences. All three case studies show how discourses of genomics, risk, and prevention interact to reproduce a political project at the expense of (black) women's lived experiences. They do so through a breadth of examples from the scientific and popular press. In all three cases, Happe produces a very homogeneous picture of what readers will know from work over the last 20 years in science and technology studies, the sociology of health and illness, and the anthropology of biomedicine, to be very heterogeneous fields. While Happe briefly mentions alternative readings in and of the field(s), her analysis requires the straw man of narrow reductionist and decontextualizing genomic science in order for her switch to ideology and its critique to work.

Now, I do not want to belittle the importance of critical work on the interpellating forces of genomic discourse. Some excellent pieces have been produced on inclusion and diversity in medicine over the last decade or so. And Happe is certainly right in stating that social and racial disparities and oppression continue throughout the twentieth century and that genomics has become tied up in that not only in the US American discourse. In that sense, it is important to pursue a critical reading. The question is by what means.

Happe considers genomic risk a social construction and thus, in an early Butlerian motion, bans everything genomic or biological from sites of agency for fear of reification or naturalization. Instead, we are to trust social scientific knowledge about embodied experiences as the less cruel reduction. I strongly feel that we moved on from this position and the entrenchment of positivism and social constructivism. As Anna Tsing rightly

states biology may no longer be the enemy of critical thought. Particular feminist analysis of material-semiotic practices in medicine, care, and illness experiences have shown that reality kicks back (see Karen Barad), that agency is distributed, that material bodies resist some forms of enactment and not others and that careful critique is a matter of generative and often comparative involvement (note Helen Verran and Annemarie Mol). Anthropology and sociology alike have for some time argued for local biologies and embedded bodies (discussed by Margaret Lock and myself), for a sociology of disease (advocated by Stefan Timmermans) and for the detailed investigation of biomedical platforms (as Alberto Cambrosio puts it) to understand biomedicalization (in Adele Clarke and colleagues' idiom) and the translation of laboratory knowledge into clinical practice. Happe's critique of Paul Rabinow and Nikolas Rose's reading of biosociality as underestimating the deeply political and unequal rather than enabling nature of genomics discourse will certainly be shared by many in the field. Yet, it ignores the irony in the original term biosociality and it also ignores that "another politics of life" (to echo Didier Fassin) has become possible that gets closer to the heterogeneity of biomedical discourse and practice and that also does not lose sight of "life as such" as the site of care, empowerment, and interpellation. Regular readers of this journal will thus find this book useful in its empirical material and will likely be sympathetic to the political concerns, but might struggle with the analytical style.