

Project Proposal for the Fellowship

The cultural construction of the body and the embodiment of culture in nineteenth century America.

(A "Sciences of the Archive" Project: *The Body in the Archive, the Archive of the Body.*)

Abstract:

The project proposed is a study of a 19th century descriptions and depictions of the human body in culture and science. The study will prove that, in the 19th century, the "cultural production of the body" and the "forms of embodiment" were no less "fragmented" or "virtual" than contemporary theorists suggest that *fragmentation* or *virtualization* are exclusive features of the recent decades. Instead, the present *micro- and nano-scopic* representations are consummations and refinements of processes that connected 19th century productions of the body in science, technology, and society. This will turn a central hypothesis of the current global knowledge society on its head, upheld by many theorists of post- or transmodernity and in scholarship of knowledge and information society: a) Contemporary construction of the body, its representations and practices are fragmented, virtual, multiple or polymorphous are a result of the postwar revolution in information and communication technologies (ICT) and, subsequently, b) the social transformation that is defined to be the emergence of information society was supposedly enabled by this revolution in technology.

From the perspective of this study, it would seem logical that the opposite must be true: The revolution in ICT, the emergence of modern knowledge and information society, and, finally, the subsequent transformation of biomedicine have been enabled and become socially acceptable because of the social, cultural, and scientific transformations in the nineteenth century - these can be summed up as *virtualization*, a process we will find in 19th century literature, art, public culture, and above all else, in (biomedical) science. This inherently polymorphous process will be revealed in our genealogical reconstruction of the fact that the representations, constructions and practices of the human body in the nineteenth century.

„The 'practical turn' in the history of science of the past three decades has, naturally, privileged micro-stories, However, the smaller the temporal intervals under scrutiny, the more grave the danger of the systematic omission of historical duration has become. In order to prevent the return of the „grand narratives of progress“, time has come to put before us the question for the long duration within historic interrelations without abandoning their richness in details.“

(Hans-Jörg Rheinberger, *Epistemologie des Konkreten*, 2006: 17; translation by author.

Die 'praktische Wende' in der Wissenschaftsgeschichte, der letzten drei Jahrzehnte hat naturgemäß Mikrogeschichten privilegiert.

Doch je kürzer dabei die untersuchten Zeiträume geworden sind, umso mehr droht die systematische Ausblendung der historischen Dauer.

Gerade um die Wiederkehr der grossen Fortschrittserzählungen zu verhindern, ist es an der Zeit, nach längerfristigen historischen Anschlüssen zu fragen, ohne deren Detailreichtum aufzugeben.“)

Research Premise:

The human body, science, and society constitute a precarious relationship: Notable scholars and writers suggest that, today, we have entered an era of the *posthuman* body; others suggest that, with the so-called medicalization and geneticization of society, the idea of an individual body will disappear from society and be replaced by fragments and snapshots produced by specialists of differentiated and isolated aspects of our biological organisms. Some authors suggest a shift from a macro- or somatic perspective to a micro- or nano perspective in biomedicine and society at large, where the only objects remaining are genes, proteins and hormones that constitute the human body as a neuro-chemical machine, ready for micro-interventions by clever pharmacology and nano-machines. The body is represented in streams of quantitative data, produced from physico-chemical samples and body scans with PET, fMRIs, and other types of technology.¹ What these perspectives share is that they all describe the results of a process called *virtualization*. This process is not just part of science or medicine, it permeates all aspects of our society and culture, including literature, art, television, and movies.

Virtualization of the human body means that information patterns produced by specialists are assembled into a body image, which no longer corresponds with the individual “material instantiation” – a person’s actual body. While the number of “specialist fields” continues to increase (*hyperspecialization*), the norms and economies that are applied to enable the communication between these different patterns of information (and the respective specialists) must follow an ideal of objectivity and effectivity (*hyperuniversalization*). These two processes constitute the development that we are enabled to sum up as *virtualization*. However, this development did not emerge from a vacuum in history. The interplay between the body and science, culture, and society was not only a precarious phenomenon for the past few decades.

Society, science, and culture have always provided the norms and ideas that constituted “the body” while bodies are always the location where culture and society is ultimately “enacted” and, therefore, changed. In other words, we cannot take for granted that each of us can say a sentence as simple as “I have a body” or “this is my body”; and nobody throughout history could have made such a statement as if it was self-evident.

In the last twenty-five years since the death of Michel Foucault, scholars influenced by his ideas, such as Arnold Davidson, Philipp Sarasin or Paul Rabinow, have done much to help us understand the conditions a society and its “scientific culture” must satisfy to enable its members to speak about “their body” and what it used to mean if one were to say “I have a body” in the history of science and society from the middle ages until today. My current research is part of this interdisciplinary effort. The geographic and temporal limitation for this project are the New England States of the United States on the one hand, and, on the other, the cultural and intellectual exchange between Germany and the US in the nineteenth century.

We will answer for the following questions with regard to this limitation:

Is virtualization a novel development of the recent decades or was it already present in 19th century America?

Has the process of virtualization always been an aspect of the “production” of the body, in other words, was the human body always divided into a body imagined from information patterns and determined by cultural somatic norms on the one hand, and, on the other, a real individual body?

What is the role played by the technologies and practices that produce the information from which science and medicine construct the bodies they study, experiment on, or try to heal? By what rules are these practices governed?

And finally, can we learn from 19th century predecessors, how can we reconcile virtual and actual bodies to achieve a goal of living a happy and successful life today?

¹ These machines do not produce the images we have come to know from press releases. They produce digital data sets that are rendered into images that researchers use for lectures and presentations. For more, see Joe Dumit’s study *Picturing Personhood*, MIT Press, Cambridge, Ma. 2004.

Overview:

Every era in science and culture produces "ways of living" (*ethos*) that are, ultimately, embodied. The nineteenth century was one of the most productive periods in science, culture, and literature when it came to the "production" of body images. These body images are descriptive and normative at the same time. According to (scientific) norms of objectivity and the moral economies of science and aesthetics, the human body was described, displayed, painted, photographed (Lorraine Daston, Peter Galison). According to cultural norms, people disciplined, shaped and styled – in short: produced – their bodies, either by adhering to therapeutic, gymnastic, and hygienic regimes – in short: dietetics – or by succumbing to the conditioning through industrial labor (Anson Rabinbach). Contemporary "postmodern" and "transmodern" theorists have claimed that we have achieved an exclusive and special way of constructing and perceiving the body today. It is being argued in what we can call the "myth of the digital revolution" that, since the 1950s, science and medicine have reshaped our cultural image of the body into that of virtual, fragmented, or multiple bodies (Anne Marie Mol, N. Katherine Hayles).

The aim of this study is to take the claim that the contemporary state is exclusive and special to the test. Using an extensive range of material from archive collections of photographs, illustrations, experimental set-ups, medical instruments, text-books, manuals, correspondence, and primary literature, we will prove that the body practices and representations of the 19th century were no more coherent than those that many contemporary scholars criticize today. We will argue that the interplay between scientific description and study, and cultural norms has a) probably never produced coherent "body images", that b) this is most certainly true for 19th century America, and, moreover, that c) the same social processes that apply to modern *virtualization* were responsible for the production of the body in this time place.

For a historian, the study of the relation between the body and its culture, situated in its respective context and era in history, is always the dual relation between the body and the archive: The body in the archive and the body as an archive. The reconstructive methods applied in this kind of research are the cutting edge of discourse analysis and have been published or are presently part of forthcoming publications.

For the course of this research, two books are being planned (volume three and four, concluding a four-volume project, titled *Fatigue and Reason*) that will reveal that the body images of the nineteenth century in science, politics, literature, and the arts in American society are not merely only less or more fragmented than contemporary writers suggest in our present era. It will become clear that the relation between the archive and the body is crucial for reconstructing the body image in discourses that established an idea of what we consider to be a normal and healthy human being in an industrial society at large; a late 19th century image of the human condition that still subliminally structures 21st century education and health care systems.

Explanation for the methods and subject area *The Body and the Archive*:

The body has become the subject and object of "social construction", a metaphor that is invoked in the social sciences and humanities with increasing frequency, despite rising criticism. Ian Hacking critically remarked in *The Social Construction of What?*, that it does not generally have to lead to a more comprehensive understanding of our contemporary world or the histories that shaped it.

This is not to say that the body does not emerge or become enacted at the fringes and margins of social or human discourses, such as the discourse of hygiene and sexuality that Phillip Sarasin and others wrote about in great detail (however, restricted to continental Europe). It is, precisely, in the margins of these discourses where the body is performed. In order to understand what "the body" is, we must, indeed, know what "the body" was. "The body", like all other objects, subjects, and actor-networks (Bruno Latour), can be lifted from the archives; or at least the mechanisms and practices of the study of the body can be retrieved from these "forgotten depths", including preserved body-parts, anatomical sketches, etc. .

And yet, these bodies, that are "constructed" after this fashion, were themselves never the subject of scrutiny nor have the actual bodies been thoroughly explored that lay behind the practices that produce these constructions. On the other hand, bodies themselves are "mnemonic media for the social" (Rafael Narvaez) or, better yet, archives. This may be more readily evident in, say, a tattooed body which is an archive of its culture. However, it is also the archive of its culture, science and history, for example, in the techniques and dyes that were required to produce the tattoo, or in dancing routines that were enacted at festivities preceding its production, etc. Scientific practices executed on the body, both voluntarily and accidentally, inscribe themselves into it in various ways, just as if they were a tattoo. For example, the eyes of a 21st century scientist who is spending his time on a computer screen are different from the eyes of a 19th century chemist, their outer layers scarred with acid burns, or think of scholarly researchers, like William James, who exposed themselves to various experimental drugs that could have had lasting effects on their organism. Nonetheless, each individual pair of eyes is part of its context in history.

It seems that the progress of technology constantly "reconstructs" even historic bodies in new ways and, therefore, into new bodies: Tissue samples from centuries ago become the subject of contemporary analysis. We seek answers to questions such as to the cause of death of an Egyptian pharaoh, or the medical remedies used in some prior era. In

doing so, we do not simply rewrite history, but rewrite the history of bodies and bodily practices by the same margin as these bodies rewrite our methods of inquiry and storage. There is a manifold of mutual interrelations that exist between the "archiving forces" and the "organic forces" of the body. This manifold has rarely been subject of thorough and careful study that could offer guidelines to aid in the separation of the actual bodies in the archive and the "body" constructed by the "archiving" practices of science, or the "retrieving" practices of the archive sciences – like history. There does not really seem to be a dimension of comprehensiveness in those studies that include the idea of the body as an archive of science in the face of the interrelation between body and archive.

In short, the mutual interrelations and interaction between body and archive are worth a closer look. The study I am busy with is an exploration into the various forms of these interrelations in the nineteenth century. This study and its territory are truly groundbreaking and new, yet a logical consequence of the research that has been undertaken in the past 15 years by scholars in the history of science and science studies, such as Bruno Latour, Isabelle Stengers, Anne Marie Mol, N. Katherine Hayles, Karin Knorr-Cettina, Ian Hamilton Grant, Anne Harrington, and, of course Lorraine Daston, among others. Following these authorities and a refined methodology, we seek to elucidate the forms of interaction, practices, and effects that occurred between the body and the archive in the United States in the nineteenth century with its particular "cultural geography and time-frames".

Rafael Narvaez, suggested with reference to the concept of community in general, that such are not just imagined, they are

also experienced and enacted through the body, through habitual and ritual practices. There is a sense, in fact, in which bodies are reified communities, and sometimes struggling communities. [...]s bodies reify and thus 'remember' communal things, they also are [like archives] sites of forgetfulness.

We will pay special attention to what we best "the emergence of the industrial human condition and its ethnic, age, and gender biases within the *overstretched nineteenth century* of the human sciences, ranging from Kant's anthropology courses (1772) to the institutionalization of the human relations movement (1926)".

Potential outline for a book and a course:

Introduction:

1. Why it is not self-evident that we can say "I have a body!", and why do we have more than one body?
2. Monstrous and wondrous bodies: The discovery of anatomy and physiology: From sensation and spectacle to strict procedure and objective representation.
3. *Virtualization* and the phantasm of control

The Body in America in the 19th century.

4. The rhetoric of the body: American Literature and Culture.
5. The body in science and medicine.
6. Representations of the inner body
7. The "body multiple" and the virtual patient in the 19th century
8. Race, gender and the body
9. Hygiene, sexuality, culture: Somatic norms in science and popular culture.
10. Aesthetics of snapshot and movement: Capturing the body in pictures and paintings.
11. The commoditization, regionalization and control of the body.

Conclusions

12. The body in 19th century America as produced between the interactions of science, culture, and society.
13. Living in a real body between virtual and fragmented spaces: Science and ethos of virtual worlds and a virtual world of sciences and forms of life in the 19th century and today.