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Peter Becker

History and the Neurocentric Age

Saint Paul certainly had once an epileptoid, if not an epileptic seizure; George Fox was an hereditary degenerate; Carlyle was undoubtedly auto-intoxicated by some organ or other, no matter which,—and the rest. But now, I ask you, how can such an existential account of facts of mental history decide in one way or another upon their spiritual significance? According to the general postulate of psychology just referred to, there is not a single one of our states of mind, high or low, healthy or morbid, that has not some organic process as its condition. (William James, 1902)

This quote is taken from the philosophical reflections of the American psychologist William James in his book *The Varieties of Religious Experience*, which was published at the beginning of the last century. It is no coincidence that references to biological reflections on the human condition from the fin de siècle reappear in today's neuro-talk. They are both indebted to an evolutionary narrative and to a strategy of reframing problems in biological terms. To William James, religious experience in the sense of transcendental states of mind had to have a neurophysiological basis. The same line of reasoning can be found in current books in the field of neuroreligion (cf. Blume 2009).

This brief look at neuroreligion is relevant for my argument as it emphasizes the reframing of key concerns in the humanities through a neuroscientific perspective. My argument is that we find a similar strategy in neurohistory as well. The fine book of Daniel Lord Smail, *On Deep History and the Brain* (2008), is a good case in point. If we leave aside the lucid reflections on the historiography of prehistory, the book leaves us with a strong impression that psychotropy acts as an interface between cultural practices and brain development. Smail focuses particularly on stress that is induced by random violent acts from superiors. There is an extensive literature on violence, politics, and trauma, which he decided not to consider (cf. Heitmeyer and Hagan 2003). Instead, he relates historical practices to evolutionary patterns based on the interaction between neurochemical brains and social environments:

The similarity in the patterns of behavior between male castellans, male chimpanzees, and female baboons raises the question of how we explain it. Someone might

be tempted to posit a sort of racial memory, as if castellans and spouse abusers were and are controlled by the genes of their distant primate ancestors. . . . It is more productive to explain the similarity of these behaviors as the product of convergent evolution. It is similarity of ecology, not relatedness, that often determines similarity of behavior. In societies or relationships where certain conditions are met—where resources are scarce, power is distributed asymmetrically, and the ability to form coalitions is suppressed—alpha individuals manage to reinvent the pattern of random abuse because it is a psychotropic device toward which certain politically adaptive behaviors will converge. (Smail 2008, 169)

The reframing of problems directs the analytical gaze first to the individual subject and its brain. This makes sense, as it reflects the research agenda of neuroscientists. This research agenda produces fascinating insights into the workings of the brains of rodents, primates, and humans. These insights are rather scattered, however, and thus far have failed to be integrated into a more encompassing system—a point made also by leading researchers in the field of neuroscience like Wolf Singer (2003, 40–42, 95; cf. also Bufkin and Luttrell 2005). To bridge the gap between empirical evidence on the microbiological level and general reflections on the human condition, neurosciences need to take refuge in evolutionary theory (cf. Becker 2010, 106–07).

Opening towards the neurosciences can help certain disciplines sharpen their analytical gaze at subjects and at the role of the body as a highly adaptive interface between nature, society, and individual subjects. It would be misleading, however, to herald the neurosciences as the “resurrectors” of the body as an important concept in social and cultural studies. The long tradition of gender studies, the performative turn, and, in particular, the habitus concept of Pierre Bourdieu—all have contributed to reintroducing the body as an analytical category (cf. Bourdieu 2001, 7–42). It is a different body, though, from the one featured by neuroscience. It is a body situated within its historical, social, and cultural context; it is a body whose mind is not linked to the deep history of humanity but rather to the deep history of a personal biography and its traumatizing events. It is, furthermore, a body densely connected to a wider social, cultural, and political environment, which influences the patterns of perception, thought styles, and agency.

The biographical dimension is not necessarily missing in the neuroscientific notion of subjectivity. Debra Niehoff’s notion of the brain as an *organic historian* suggests that

the role of the brain is “[to keep] track of our experiences . . . through the language of chemistry. . . . These experiences get recorded as changes in the chemistry and the hormones of the nervous system and particularly the circuitry for emotion and our responses to stress” (Niehoff 1999, n.p.). However, the focus on brain chemistry as a privileged field of evidence results in a rather reductionist approach to biography and especially to trauma, as the historian Michael Hagner (1996, 278) has argued. Biographical complexity is reduced in favor of evolutionary psychology.

Daniel Smail argues strongly against the dangerous lure of evolutionary psychology. It is telling, however, that he takes up the narrative of evolutionary psychology when he expands on the implications of psychotropy for deep history. This is not his personal failure but follows from the logic of neuroscientific reasoning about social interaction and the position of individual subjects vis-a-vis society and environment. Evolutionary narratives are an important *filler* that links dispersed evidence on the neurochemical functioning of the brain and on the localization of functions in specific parts of the brain to more encompassing narratives.

I am not arguing against the use of narrative evidence. It links theory and empirical evidence in many fields of research. Narrative evidence has to answer, however, to the question of how successfully it captures social and psychological complexity. The “vulgar” Marxist assumption of a close link between class position and political identification has rightly been criticized. Do evolutionary psychological assumptions hold more potential for describing modern subjectivity? Browsing through the more recently published works in the field of neurohistory or neuroaesthetics, I cannot avoid the impression that the opening of new perspectives is currently linked to a recurrence of conjectural history (Höpfel 1978). Evolutionary projections into deep historical times are then brought back into the argument as supporting evidence.

The Discrete Charm of Reductionist Narratives

The male part is the one synchronizing to be better heard by the females—like in the case of the American grasshopper. In primitive cultures we find social prestige and leadership linked to dancing and musical competence. The evolutionary biological relation between music and courtship can be transposed to a modern situation. We need to think only of the sex appeal of pop musicians for Fans and

groupies. Their sweat-inducing song and dance (similar to the peacock's fan) can be understood as a sign of their fitness, which in turn explains their sex appeal. It is no coincidence that there are ten times more male than female musicians. (Schrott and Jacobs 2011, 271; translated by the author)

The Austrian writer and literary scholar Raoul Schrott has written a fine book about reading and literary writing from a neuroscientific perspective. He widely reflects on his own practice from a genuinely new angle. At times he falls into the evolutionary trap, however. The short-circuiting of grasshoppers and pop musicians in the argument of Raoul Schrott, and of male castellans, male chimpanzees, and female baboons in the reasoning of Daniel Smail is only possible by radically abstracting cultural and social practices from their wider political and social context. Only through this angle we can link the stage performance of Robbie Williams with American grasshoppers, the extractive violence strategies of castellans to dominance relations in primate groups.

Reframing research questions in the humanities based on neuroscientific concepts and narratives is highly tempting, considering the current neurocentric turn (cf. Dunagan 2010). The brief references to the study of religious practices, power relations, and cultural practices are examples of a current tendency of reframing. This can, in principle, carry substantial gains in approaching our subjects. Can we identify these gains, however, in Smail's and in Schrott's books? I tend to answer this question negatively. Putting the analytical focus on the neurochemical brain and its interaction with the social and natural environment provides no added analytical value—even if it offers a possibility to link social and cultural practices through evolutionary narratives to a deep historical past. This is not my understanding of history, however.

Brain research has made substantial and fascinating advances in our understanding of the functioning of the brain. The *bottom up* strategy was highly instrumental for this purpose. The results of this research cannot be ignored by social sciences and the humanities. This does not mean, however, that we should also uncritically take on board the reductionist evolutionary narratives embedded in neuroscientific reasoning on society and subjects.

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