

COMMENTARY

Debating concepts of human actors in ecological economics—a comment on Faber/Petersen/Schiller

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In their paper on ‘*Homo oeconomicus and homo politicus in ecological economics*’ in this volume, Faber, Petersen, and Schiller thoughtfully discuss recent approaches to conceptualize human actors in ecological economics that diverge from the all-embracing notion of *homo oeconomicus*. Thereby, they contribute to an essential ongoing debate in this journal (see Bergh et al., 2000; Janssen and Jager, 2000). However, not all of their accusations concerning my contribution to this debate are valid.

In Siebenhüner (2000), I introduced the notion of *homo sustinens* as an alternative concept of human behavior in relation to sustainable development. It has been criticized by Faber et al. as lacking a proper explanation for the influence of biological dispositions on actual behavior. On the other hand, the concept has been attacked as being deterministic in the sense that it purports to comprehensively explain human behavior from the outside, i.e. by an external observer.

Both interpretations are erroneous in that there can hardly be a deterministic explanation of human behavior exclusively based on biological dispositions. This would completely neglect human mental capacities and the role of socialization.

Therefore, in Siebenhüner (2001) I explicitly argue that there can only be a reconstruction of patterns of behavior that relate to human genetic heritage, but it cannot be a fully deterministic and objective explanation. Actual behavior might mirror these patterns sometimes more or less depending on the actual involvement of conscious reasoning in the generation of behavior. The one extreme of predominantly conscious cognitive decision making definitely cannot be observed from outside but has to be dealt with in a method attempting to understand and reconstruct subjective factors that lead to these outcomes. However, it has to be acknowledged—and this is largely overseen by Faber et al.—that there are fundamental limits to investigating these subjective factors. When they try to find empirical evidence for their concept of *homo politicus* through interview-based research alone, less conscious and more emotional factors can hardly be captured. Only if they conceptualize *homo politicus* as a completely cognitive approach this research method will be sufficient. By contrast, to grasp emotional and subconscious intentions and motivations would necessitate forms of long-term communication as it is common in psychoanalytical traditions.

Nevertheless, Faber et al. raise a legitimate question when they call for evidence or plausible arguments for the importance of biological dispositions in human behavior. In this context, evolu-

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tionary psychology could help to bring some light in this complex issue by maintaining that actual human behavior in its phenotype is always the result of an interaction of genetic predispositions (genotype) and environmental influences such as cultural and situative factors. According to Gardner and Stern (1996), empirical research could provide evidence on genetic dispositions for certain types of behavior through intercultural comparisons and experimental research. For instance, based on this kind of empirical research methodology, Wilson's Biophilia-hypothesis has been scrutinized (Kellert and Wilson, 1993). Evidence has been found that viewing trees or a natural landscape accelerated healing processes from surgery. In addition, it has been observed that people regularly prefer photographs of natural scenes to those of human-made settings such as urban areas. However, these exemplary results do not provide a foundation for a deterministic view

of human behavior, but they might reveal the importance of certain emotional factors in behavioral choices.

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