

COMMENTARY

Homo oeconomicus and homo politicus in Ecological Economics

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Abstract

The model of homo oeconomicus has been criticised in Ecological Economics. We discuss this critique and alternative approaches that have been developed in the literature. In contrast to these approaches, which are based on Arrow's concept of the Social Welfare Function, psychology, biology, and general considerations, we propose a concept of homo politicus that is founded in political philosophy. We show that this concept is suitable for normative purposes of Ecological Economics. At the same time, we demonstrate in a case study that the concept has empirical relevance in explaining real political processes. © 2002 Elsevier Science B.V. All rights reserved.

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1. Sustainability as central issue of Ecological Economics

Ecological Economics has been characterised as the 'science and management of sustainability' (Costanza, 1991). Viewing Ecological Economics in this way, one central question of the discipline is, how to achieve sustainable development. For investigating this question, Ecological Economics goes beyond the perspective of neoclassical environmental economics, which is based solely on preferences and the well-being

of individuals. Ecological Economics does not view environmental and resource problems exclusively as external effects, or as a problem of public goods, but perceives economy and humans as parts of an encompassing ecological whole: particular attention is given to the interaction between the economy and the environment in the long run.

As a 'science of sustainability' Ecological Economics is normative. The norm of sustainability, however, is not derived from individual or collective welfare, as it is in environmental economics, but from the task of securing the basic foundations of living in the long run. Thus, Ecological Economics is concerned with the conditions of sustainable development, while neoclassical economics and environmental eco-

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nomics analyse the conditions for achieving welfare optima.¹

Conceiving itself as the ‘science of sustainability’, it is one central task of Ecological Economics to investigate how sustainable development is possible. In the remainder of this paper, we shall refer to this task as ‘the normative task of Ecological Economics’.

As the science of sustainability, Ecological Economics has to develop a general theory of the interactions between humans and nature. For this, the conception of the human being is of crucial importance. So far, the most prominent conception of the human being in economics is the concept of homo oeconomicus. In attempting to establish conditions for sustainable development it becomes more and more evident, however, that this concept is not only an unsuitable element of analysis, but even appears to be an obstacle, in particular when conceived of as a universal and unique conception of human behaviour. For this reason, there is an ongoing discussion on alternative concepts of human behaviour in Ecological Economics and other literature. After reviewing three approaches from the literature, we introduce an alternative conception of the human being, the concept of homo politicus. It is founded in political philosophy and focuses on the human interest in justice and the well-being of the community. We demonstrate the usefulness of the concept of homo politicus in a case study of German environmental administration.

2. Critique of the concept of homo oeconomicus

Homo oeconomicus is viewed as a human maximising his own utility. He is guided by his individual preferences and seeks to achieve his objectives with minimal costs. Homo oeconomicus does not abide by fixed rules, but behaves in an opportunistic and calculating manner (Gray,

1987). The models and theorems of welfare economics and environmental economics are based on the homo oeconomicus hypothesis, for, only if the economic agents behave as homines oeconomici are the welfare optima achieved by market exchange (Debreu, 1959).

As mentioned above, the concept of homo oeconomicus has recently been criticised in the literature. In this section, we discuss the critique by Söderbaum (1999) and Siebenhüner (2000) published in this Journal. In the following section, we investigate the alternative approaches by the same authors and by Nyborg (2000).

Söderbaum (1999) and Siebenhüner (2000) consider the homo oeconomicus hypothesis to be suitable for the framework of Ecological Economics only under severe restrictions. In particular, they reject the claim that one can explain all human behaviour using this conception. They note that homo oeconomicus is foremost ‘a consumer maximising utility’ (Söderbaum, 1999, p. 164; cf. Nyborg, 2000, p. 305) or even an egoist who is solely concerned with his own well-being, pursuing only ‘short-sighted individual interests’ (Siebenhüner, 2000, pp. 17, 18): homo oeconomicus ‘generally opposes the social, ecological, and even the economic goals of sustainable development’. For, in Siebenhüner’s view homo oeconomicus does not know either ‘altruism’ or ‘responsibility for other people and future generations’.

This critique of the ‘shortcomings’ (Siebenhüner, 2000, p. 17) of homo oeconomicus, however, is somewhat oversimplified. Since the appearance of Kenneth Arrow’s seminal monograph ‘Social Choice and Individual Values’, homo oeconomicus may be ascribed preferences for ‘social states’ extending far beyond ordinary ‘consumption preferences’ (Arrow, 1963, 17f). This implies that homo oeconomicus is not necessarily an egoist. Hence, he may have altruistic preferences and thus the model of homo oeconomicus can also deal with human beings who behave in a calculating and utility maximising manner, according to altruistic preferences (Kliemt, 1984).

In essence, however, the critique of homo oeconomicus can be justified. Even if homo oeconomicus

¹ The term ‘sustainability’ is also employed within the framework of neoclassical environmental economics. However, in that framework it is often defined in a much more narrow way than in the framework of Ecological Economics, e.g. as a non-diminishing consumption stream over time.

cus is not necessarily an egoist, there is no reason at all to suppose that he has an interest in sustainable development (Faber et al., 1997, pp. 464, 476–477). Numerous studies of Public Choice (e.g. Buchanan and Tullock, 1962) have shown that although homo oeconomicus has an interest in democracy, because it allows him best to realise his preferences whatever these may be, homo oeconomicus cannot expect to gain similar advantages from sustainable development. Furthermore, Public Choice theorists have shown that interests in common welfare, as in the maintenance of a democratic constitution or sustainable development, cannot succeed in political processes but lead always to suboptimal and critical results. The best-known example for such a diagnosis is the economic theory of the welfare state, according to which modern democracies tend to a continuing growth of governmental bureaucracy and to greater inefficiency, exactly through the actions of homines oeconomici (Bernholz, 1986; Mueller, 1989).

Even if there exist reasons for homo oeconomicus to take an interest in democracy, no such arguments can be given for him to have an interest in sustainable development. In the framework of the homo oeconomicus hypothesis it is only possible that actors *accidentally* have ‘preferences’ towards sustainability and behave accordingly. However, in this theoretical framework it is not possible to investigate whether or under conditions, an actor would have these kinds of preferences.

The normative task of Ecological Economics as the science of sustainability requires an explanation of how, and under what conditions, a sustainable development is possible. A central aspect therein is the question under what circumstances human beings will further sustainability. For the investigation of this question, however, the theoretical concept of homo oeconomicus cannot substantially contribute. Hence, such an explanation, as required by the normative task of Ecological Economics, cannot be based solely on the homo oeconomicus concept. Thus, the range of validity of the homo oeconomicus hypothesis for Ecological Economics is limited. In subsequent sections of this paper, we will therefore propose homo politicus as a new conception of the human being.

Furthermore, recent empirical research shows that in many cases real human behaviour systematically deviates from prognoses based on the homo oeconomicus concept. As shown by Green and Shapiro (1994), the prognoses of Public Choice Theory concerning political processes often diverge from reality; i.e. the predicted suboptimal results do not occur, evidently because there exist motives of political actors other than utility maximising behaviour with respect to individual preferences. In addition, empirical evidence from experimental economics has given many similar results and displayed limitations of the notion of the traditional rational utility maximiser (Gintis, 2000).

3. Alternative approaches

What conclusions should be drawn from the limitations of the model of homo oeconomicus? The political scientists Green and Shapiro (1994, pp. 26, 193) argue for the conceiving of homo oeconomicus according to a ‘particular universalism’. That is, arguments of utility maximisation are of importance for all decisions of political actors, although they are neither always decisive nor are they the only ones. If homo oeconomicus is perceived of as a ‘particularly universal’ model, one must be able to determine what factors other than various defects of rational behaviour systematically influence the decisions and actions of human beings.

Such factors systematically influencing decisions are discussed in the designs of ‘homo politicus’ by Nyborg (2000), of ‘homo sustinens’ by Siebenhüner (2000), and of ‘Political Economic Person’ by Söderbaum (1999). While Siebenhüner and Söderbaum are directly concerned with the conception of the human being, Nyborg confines herself to developing a formal model in order to determine ‘environmental values’ within her explanation of the political process. We shall now investigate these three approaches.

Nyborg’s conception of the homo politicus refers to Arrow’s (1963, pp. 17, 18) distinction between ‘tastes’ and ‘values’. The taste of an individual refers to preferences concerning ‘direct consumption’, while values are preferences for ‘social states’ and

reflect “the general standards of equity” of individuals. According to Nyborg’s argument, every individual has two different preference orderings and utility functions: the “personal well-being function” of the “individual ... as a consumer” and the “subjective social welfare function” over social states. The latter determines the behaviour of the individual ‘when the citizen role is perceived as most relevant’ (Nyborg, 2000, p. 305). In the first case the individual is *homo oeconomicus* (p. 309), in the second *homo politicus* (310 ff): “*Homo Politicus* puts himself in the role of the ethical observer, and tries to consider what is best for society” (p. 310).

Nyborg’s interpretation of the subjective welfare function of *homo politicus*, therefore, resembles a distinction between ‘consumer’ and ‘citizen’ introduced by Sagoff (1988, p. 8): “As a consumer ... I concern myself with personal or self-regarding wants and interests.” And “as a citizen”, as Sagoff puts it, “I am concerned with the public interest, rather than my own interest; with the good of the community, rather than simply the well-being of my family”. In contrast to Sagoff, however, Nyborg’s concept focuses completely on the ‘willingness to pay’ of the individual for a certain social state and not on the real behaviour of the individual. Further, Nyborg assumes that the ethical and social preferences of the individual are exogenously given. Hence, Nyborg’s *homo politicus* is a modified *homo oeconomicus* with a special preference ordering.

Siebenhüner (2000) and Söderbaum (1999) discuss the anthropological foundations of such a distinction between an individual and a social preference ordering, on which Nyborg’s model is based. Siebenhüner (2000) refers to the findings of neurobiology and evolutionary biology in order to correct or supplement the model of *homo oeconomicus*. In his view, these two sciences conceive human beings as having, by their nature, “protective or cherishing feelings towards nature and other people” (p. 20) and, in addition, being formed by evolution as cooperative beings (*ibid.*). Finally, Siebenhüner refers to psychology as having shown that “freedom as felt in self-determination” and the recognition of “moral responsibility” is more important for “individual well-being” than “material

prosperity” (p. 22). He concludes that these three disciplines can supply a basis for the normative tasks of Ecological Economics.²

According to Söderbaum (1999), the model of *homo oeconomicus* neglects many social institutional and ecological relationships of human beings as this model is completely restricted to consumer goods.³ He argues that human beings should rather be conceived of as “political economic persons” than as *homines oeconomici*, since their behaviour differs according to the context in which they are situated. In his model, human beings form “ideological orientations” (p. 164) which reflect the human’s perception of his life as a whole.⁴ They are the source of his “valuations”, “ethical orientation”, and, ultimately, the “life-style” which he chooses (p. 165). The ideological orientation dominates more or less his consumption decisions (p. 166).

4. Individual preferences and interest in justice and sustainability

Nyborg, Siebenhüner and Söderbaum investigate the circumstances under which human action can effectively be governed by an interest in justice and sustainability. This interest can be called ethical or moral, as it is different from the short- and long-term self-interested orientation of the *homo oeconomicus*. While Nyborg assumes that this interest is exogenously given and can be modelled within a social preference ordering, Siebenhüner and Söderbaum seek reasons from which this interest might be derived. Siebenhüner considers altruism and cooperation as inherent features of the biological constitution of human beings. He does not, however, provide a theory of *how* biological

² For a systematic attempt to analyse the relationship between the *homo oeconomicus* and *homo psychologicus* see Jager et al. (2000).

³ We note that Söderbaum’s view of *homo oeconomicus* is used in applied welfare economics (cost-benefit analysis etc.). It is, however, not shared by mainstream economic theory (see, e.g. Arrow, 1963; Petersen, 1996; Manstetten, 1999).

⁴ It is important to note that Söderbaum uses the term ‘ideology’ not in the sense of ‘political ideologies’ but generally as ‘ideas about means and ends’ (p. 163).

dispositions influence human behaviour and action. In addition, he refers to the great importance of moral orientation for human behaviour by merely hinting at psychological studies (2000, p. 22). Therefore, we consider Siebenhüner's reasoning for his concept of *homo sustinens* to be insufficient. Söderbaum (1999), on the other hand, attempts to found theoretically his 'ideological orientation' of individuals. His theoretical perspective conceives of a human being as trying to understand and to interpret his own life and decisions.

There exists a fundamental difference between the approaches by Nyborg and Siebenhüner on the one hand, and by Söderbaum on the other. The two former authors remain in the framework of the *homo oeconomicus* concept in the sense that they assume that human behaviour can be completely described by an external observer. In contrast, Söderbaum refers to mental actions such as intending, willing and thinking, which are not completely observable from the outside. Thus, the approaches of Nyborg/Siebenhüner and Söderbaum differ in the extent to which they acknowledge the fact that real human beings *always* possess such an internal dimension of action and can, hence, never be fully described neglecting this internal dimension.⁵

Homo oeconomicus is a behavioural model which describes only the human acts of choosing and deciding. For the following reason, this can be observed from an exclusively external perspective. According to the *homo oeconomicus* model, behaviour depends on preferences of the individual. A preference is a psychological phenomenon

which is not observable as such. However, within the framework of the theory based on the *homo oeconomicus* concept, the preferences of an individual are completely revealed by the acts of choosing. Within this model, there is no difference in the information between the two statements "Person X has a preference for alternative A" and "Person X chooses alternative A". Therefore, within this framework there exists an exact correspondence between preferences and empirically observed decisions.⁶ Hence, employing the *homo oeconomicus* hypothesis results in the adoption of a purely external perspective of reasoning.

As mentioned above, Nyborg and Siebenhüner employ only partially non-egoistic preference orderings. Thus, they remain in the logic of the *homo oeconomicus* model, even if it may be modified. From this, it follows that both authors model and causally explain human behaviour from a purely external perspective. Non-observable ideas, conceptions, and intentions of persons are not considered in their analysis. In contrast, Söderbaum's concept of 'ideological orientation' concerns ideas and intentions of individuals. If one wants to investigate this 'ideological orientation' of agents systematically, it is necessary to *understand* the action of the agents. For this reason, Söderbaum's conception of 'Political Economic Person' does not focus only on the behaviour, but also on the intentions, willing and thinking of human beings.

We believe that Söderbaum's remarks on 'ideological orientation' are forward looking for the following two reasons. (i) The interest in justice and sustainability, which is a prerequisite for an effective action towards these goals, can only be formulated appropriately within a model of human behaviour which describes a human being not exclusively from an external perspective as does the *homo oeconomicus* model. (ii) Due to the direct duality of preferences and choice within

⁵ From a philosophical point of view this problem can be discussed using the concepts of an *external* versus an *internal* perspective of reasoning. The external perspective thereby denotes the common view of an external observer on the observed object. An example is the perspective of the physicist describing the motion of some gas molecules, which he seeks to explain using a physical theory. The internal perspective, however, describes the subjective 'view of the world' of a human being. This internal perspective is particularly acknowledged by the so-called 'verstehenden' ('understanding') disciplines, the humanities and arts. For the difference between 'Explanation and Understanding', see the seminal monograph by von Wright (1971). See also Manstetten (1999, chap. 6) and Faber (1999).

⁶ This circumstance is the basis of the theory of revealed preferences (Samuelson, 1947). Within this theory, it is possible to derive the preference ordering of a consumer from his demand behaviour. This is, however, only possible under very restrictive conditions, which in general fail to be fulfilled for issues of environmental policy (cf. Gintis, 2000).

the model of homo oeconomicus, this model requires the existence of clearly determinable and definite alternatives. Such alternatives may be bundles of goods, alternatives in an election, programs of parties or ‘social states’ in a very general sense, as employed in Arrow’s (1963) concept of a welfare function. One can see immediately, however, that such determinable and definite alternatives do *not* exist with respect to goals like freedom, justice or sustainability. From preferences for these kinds of goals no definite options of action can be deduced directly. Indeed, freedom, justice, and sustainability are encompassing ideas, which the individual must first examine, interpret, and determine in the light of specific circumstances which then facilitates the formation of concrete goals.

From these considerations it follows that, for a discussion of an interest in goals such as justice or sustainability, which is of fundamental significance for Ecological Economics, it is necessary to consider the mental actions of individuals, which are not observable as such. We have developed a concept which is also called homo politicus and which systematically takes account of these mental actions (cf. Faber et al., 1997;⁷ Petersen and Faber, 2000a; for relationships of our approach to political philosophy see Petersen, 1996; Manstetten, 1999).

5. Homo politicus

We define homo politicus as a human being who ‘tries to consider what is best for society’ in the same way as Nyborg (2000, p. 310). In contrast to Nyborg, however, we conceive the homo politicus as explication of the ‘citizen’ introduced by Sagoff (1988, p. 8) which is ‘concerned with the public interest’ and ‘with the good of the community’. ‘Best for society’ and ‘public interest’ refer to a common good called political justice in political philosophy, which will henceforth be referred to as *the common good*. It not only encompasses a certain distribution of goods, positions, and chances according to given, generally acceptable principles, but in addition a beneficial ordering of the political

community. It is in this way that Aristotle understood justice in his political philosophy: the just is what “produces and preserves happiness and its components for the political society” (Aristotle, 1992, p. 108). Political justice denotes the ordering of a political community, which meets with general approval; i.e. all individuals have good reason to agree with it and, thus, approval of such an ordering may be expected *ex ante*.

Striving for political justice is the central characteristic of homo politicus. In the following we wish to derive the relationship between political justice and the normative task of Ecological Economics, as defined above in Section 1, i.e. sustainability. Since justice denotes the generally approved ordering of a political community, it implies that the natural foundations of existence have to be secured in the long run, i.e. sustainability. Hence, sustainability is implied by political justice. On the other hand, sustainability is only possible if there exists justice (i) among the people presently living on earth and (ii) among present and future generations. i.e. sustainability requires both intra- and inter-generational justice (Petersen and Faber, 2000b, p. 2). Hence, political justice and sustainability are inseparable. From this follows that political justice must be a key characteristic of the normative task of Ecological Economics.

The action of homo politicus is directed towards justice, in particular political justice. Why should a human being behave in this way and act as homo politicus? To deduce such a behaviour, we do not want to take recourse to the biological nature of human beings, for biological dispositions are always reflected and transformed by human reason and, hence, never directly realised. On the contrary, we believe that the striving for justice is grounded in the reason of the human being. Guided by reason, the individual seeks to justify his own behaviour on the grounds of general principles. Human beings do not care solely about their private interests in respect of their own individual preferences, but they also want to receive the approval from their fellow citizens for what they say and for what they do. This does not mean that homo politicus maximises consent by any means. Homo politicus wants not only to obtain but also to merit the approval of others. Guided by reason,

⁷ For a critical discussion of our approach, see Bernholz (1998).

the human being seeks agreement on justice and the common good with his surrounding community and, hence, tries to act and behave in a way such that he receives approval. To put it differently: human beings consider themselves as beings who do have—legal and moral—obligations and rights. In particular, the homo politicus considers the shaping of his social context as a right and, at the same time, feels an obligation to form this context in a just way.

Homo politicus as sketched above and, likewise homo oeconomicus, may be seen as an *Idealtypus* in the sense of Max Weber. This implies that, in reality, one does not observe human beings who completely correspond to these concepts. One will find only traces of their characteristics in real human beings. We define the homo politicus by three characteristics.

1. The homo politicus is not satisfied by solely fulfilling the obligations mentioned above, but also wants to be successful in his pursuit of the common good. His orientation towards the common good can be differentiated in three respects (Petersen and Faber, 2000a, pp. 13–14). A human being acts as a homo politicus if he (i) adopts the common good as his goal and thus the preservation of the liberal, democratic, and social ordering of the state. He must be further able (ii) to make adequate proposals in pursuing this aim and to care that these are carried through. Aristotle (1992, 142f) describes this faculty as phronesis, i.e. as moral sense or moral intelligence. Finally, homo politicus needs (iii) courage or bravery (Aristotle, 1992, 63ff; Arendt, 1981, 36f), or rather the courage to stand up for his beliefs as well as to be willing to take the corresponding risks. In doing this, he attempts to pursue his proposals for a sufficient time until they are ratified by the corresponding legal institutions.⁸The two following characteristics are implications of the general characteristic 1.

2. The actions of homo politicus necessarily refer to public political deliberation and decision making. Either he acts directly in public, or he is working in a public institution or political bureaucracy where he is involved in the process of deliberation and decision making. An example of the latter is the political bureaucrats. The homo politicus wants to convince others of his opinion and to gain their consent, in order to acquire political power. It is important to mention that the consent, which he argues for, has no purely instrumental meaning: it is not primarily a means to pursue his own aims. Rather, since he is interested in gaining the justified approval of other political actors, the consent and support from these is an aim in itself. This relates to another characteristic of the homo politicus. He does not simply pursue his own ideas of justice and common good, but engages in public debate with others who are also interested in these goals, and is prepared eventually to adjust his ideas such that finally a general consent is found. He might even be willing to give up his positions if he realises that others have better proposals.
3. The homo politicus is, therefore, characterised by certain abilities or—in the tradition of political philosophy—virtues which are prerequisites to reach his goals. These are a sense of justice and the courage or bravery to stand up for his words and own deeds. Further, the homo politicus needs the ability of judgement to decide what is constitutional and what is just. This means that he has to be able to assess correctly the concrete circumstances of each individual case and, in particular, the perspective of others in order to comprehend their interest and, thus, to be able to gain their consent and support. To this end, he has to reshape his own ideas according to general standards. It is for this reason that, in the words of Arendt (1985, p. 91), the activation of judgement ‘overcomes egoism’.

We now ask: Assuming that every human being is not only homo oeconomicus, but also homo politicus, is the concept of the homo politicus appropriate to serve the normative task of Eco-

⁸ Nyborg’s characteristics of *homo politicus* cover only points (i) and (iii), while (ii), which focuses on the ability of a political actor to achieve his political goals, is not addressed by her concept of homo politicus.

logical Economics? Is it possible to say that the homo politicus possesses an *effective* interest in sustainable development?

We have ascribed to homo politicus an interest in the common good as conceptualised above. This interest is at the same time an interest in the preservation of a just political community. For this community is established to exist permanently; it forms a world that outlasts the life of an individual. From the interest of the homo politicus in the preservation and duration of his political community, it follows that he naturally must also be interested in the preservation of the natural basis of this community, being a prerequisite of its existence. From these considerations we conclude that it is not necessary for the deduction of homo politicus' interest in a sustainable development to take recourse to biological dispositions of human beings, i.e. in altruistic feelings and inclinations towards others or towards nature, as does Siebenhüner (2000).

6. Empirical evidence for the concept of homo politicus

From what has been said, two questions arise. Whether (1) there exist patterns of action in politics which can be, or even have to be, attributed to the action of the homo politicus, and (2) given that such an action exists, whether it is effective and successful concerning its intended aims. The question of the empirical relevance of homo politicus is not easy to answer because *every* political action—no matter whether driven by private interests or a real interest in the common good—can be represented publicly in such a way that it pursues only the goals of justice and of the common good. Public Choice Theory (cf. e.g. Mueller, 1989) has deduced from this observation that there are always hidden and solely private interests behind all publicly proclaimed aims. However, the fact that such egoistic self-interests have to be completely hidden in public also demonstrates to what an extent the ideal of the homo politicus—pursuing solely *public* interests—determines the formation of public opinion. To examine whether real human beings act as

homo politicus we propose the investigation of the following three aspects.

- (i) Are justice and the common good determined according to generally accepted and recommendable principles, such as human rights and sustainability?
- (ii) Are the steps taken suitable to achieve the proclaimed aims?
- (iii) Is the observed political action of such a consistency that it is, or at least promises to be, successful?

7. Case study: environmental and governmental administration in Germany

Employing these three aspects, we have theoretically and empirically examined the environmental policy in Germany (Petersen and Faber, 2000a) in order to investigate: (1) Is homo politicus a meaningful concept, i.e. can political acting be observed in reality that matches the three aspects mentioned above? (2) Can we find conditions that facilitate that political actors behave as homo politicus? In this section, we shall discuss question 1, whereas Section 8 focuses on question 2.

In the case study (cf. Petersen and Faber, 2000a) we concentrated on the role of ministry officials in environmental policy, which was explored in extensive individual interviews with the actors. We attempted to find out the goals of the actors in these interviews. In a second step we examined whether their actual behaviour and actions in the past corresponded to their expressed goals. This was done by interviewing observers outside the ministerial bureaucracy and evaluating empirical studies (cf. Petersen and Faber, 2000a; Petersen et al., 1999).

We found that the ministry officials in the sphere of environmental politics often act in a way consistent with our homo politicus concept. More specifically, we found that the governmental administration is not merely concerned with enforcement. This is because, in general, its members are better informed, possess superior knowledge of the subjects and have longer time horizons than the politicians. Ministry officials, therefore, often develop their own initiatives be-

cause of their superior knowledge, abilities, and qualifications.⁹ We found modern representatives of governmental administration to be no longer state officials who solely obey—correctly or incorrectly—the directives of their minister. Rather, they can be characterised as ‘political bureaucrats’ who develop their own political orientations and conceptions of justice and the common good, and who act according to them. This holds particularly for environmental policy, which is a very complex subject from a factual point of view and, in addition, concerns a multitude of diverging interests. Further, as experience shows, ministry officials control the complex system of decision structures in the German federal system. Hence, government administrators possess considerable political power and therefore are able significantly to influence environmental policy. This power does not consist of the fact that ministry officials have a great scope for action, but that they understand extremely well how to use their rather restricted power.

We found in our study that ministry officials exhibit a marked environmental engagement, a high degree of knowledge on the subject, as well as political competence (Petersen and Faber, 2000a, pp. 31–38). Government administrators have pursued long-term environmental goals in the areas of solid waste and sewage under very difficult conditions, which existed because of a great divergence of interests. They succeeded in achieving important steps towards sustainable waste and sewage management (Petersen et al., 2000, pp. 145–148). Specifically, they were successful in avoiding the predicted breakdown of the waste management system (Töpfer, 1988, cf. Michaelis, 1991, p. 1). Since they were able to assess correctly interests and willingness to cooperate with industry and commerce, they established a legal framework resulting in the development of a waste management system during the last decade. This has been a major change

in environmental policy, which has even been called revolutionary (SRU, 1998, p. 174).

In pursuing the goals of justice, the common good, and sustainability, a significant number of the interviewed ministry officials were prepared to accept personal disadvantages regarding their career paths. Hence, personal ambitions of the actors, although they certainly exist, are not the only motives for their engagement. In the case study we have, therefore, found action of *homo politicus* according to the three aspects mentioned in Section 6: strong orientation towards the common good and suitability as well as consistency of the steps taken with respect to these goals.

8. Conditions for the appearance of *homo politicus*

These findings cannot be generalised to say that all members of governmental administration, all ministry officials, or all actors in the area of environmental policy act as *homo politicus* in all circumstances. However, they show that certain actors of environmental policy act as *homo politicus* and that these actions exhibit intended results with respect to sustainable development. Hence, *homo politicus* has proved to be a meaningful concept in the sense that it describes a dimension of real human action.

Turning to question 2 (cf. Section 7) regarding conditions facilitating the appearance of *homo politicus*, the case study indicates that there exist favourable circumstances such that individuals actually behave as *homo politicus* and work for the promotion of sustainable development. These are:

- (i) the existence of a functioning public which is able to control the government, and forces all political actors to appear as advocates of justice and public interest, as well as to face public critique (Faber et al., 1997; Petersen and Faber, 2000a),
- (ii) the existence of individuals and groups within this public who persistently work towards the aim of public recognition of sustainable development, e.g. environmental non-governmental organisations,

⁹ Not all ministry officials concerned with environmental matters have ‘superior knowledge, abilities and qualifications’ to the same degree. There exists, of course, as in every actor category certain heterogeneity of qualifications.

- (iii) a decentralised structure of political decision making in which all relevant interests and actors are involved in the decision process. Such a decision structure forces the forming actors involved to gain an encompassing consent and, hence, to abstract from their private interests.¹⁰
- (iv) Further, the existence of an ethos of the actor who feels obliged to justice and the public interest is of importance.

Whereas we do not claim that conditions (i) to (iv) are *sufficient* for the appearance of homo politicus, we have found these conditions to be of great importance in our case study. We presume, however, that they are of general importance. At this point further research is needed.

9. Summary

In this paper we have argued that the concept of homo politicus is a meaningful and important concept and can contribute to achieving the normative task of Ecological Economics. We do not claim that homo politicus covers *all* characteristics which are required by a homo sustinens who is the upholder of sustainable development. However, we believe that the homo politicus is of central importance from a political point of view. We note that there may be other aspects of human action, which are of fundamental importance with respect to a sustainable development, such as a homo psychologicus (Jager et al., 2000) and a homo reciprocus (Gintis, 2000).

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¹⁰ In the case study this condition is fulfilled by German federalism.

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