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A Conception of Sustainability

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Introduction

Since becoming aware of negative anthropogenic impacts on many aspects of the natural environment, the notion of a sustainable way of life has evolved through time. Starting as a merely economic concept, it is the idea of a good life with respect to contemporary and future generations. Besides the economic aspect of sustainable development, it is a sociocultural and thereby an ethical issue. Several concepts have evolved to theoretically explain a path towards sustainable development. These concepts outline crucial sustainability issues, e.g. what qualifies to be sustained, why it has to be sustained and how might we be able to sustain it. But these purely theoretical and scientific concepts have to be illustrated by practical content to fit into a practical world.

This paper aims to give an entry into the sustainable development discussion and an example of a guideline for developing a sustainable self-orientation. This is done by firstly giving a brief history of the sustainability concept. Further, I will discuss a favoured concept of sustainability which could be viable for developing a personal self-orientation. After describing this concept, I will discuss how far conviction and education might be able to go to being the main key for developing self-orientation in sustainable development, before I go on to illustrating the chosen concept into an everyday sustainability problem, namely food consumption. Lastly, I will conclude how education may contribute to improving individual sustainable actions in the discussed sector and how this conception may be extrapolated to other everyday decisions and onto a broader sense of sustainability.

A Brief History of Sustainability

Sustainability has been a well-known intuitional principle in the history of human life for centuries. It originated in forestry, first coined by Hannß Carl von Carlowitz in the "Sylvicultura Oeconomica". He explained, that forestry has to be managed to provide continued, durable and sustained use *(„Wird derhalben die größte Kunst […] darinnen beruhen, wie eine sothane Conservation und Anbau des Holtzes anzustellen, daß es eine continuirliche beständige und nachhaltende Nutzung gebe*", „It will therefore be the highest art relied upon, for how conservation and cultivation of wood has to be employed for a continuous, durable, and sustainable use", translation Holger

Burgardt). (Bendix (Hrsg 2009): Carlowitz, 1732 S. XI). Also Goethe had an idea of sustainable use, brought up in his novel "Wilhelm Meisters Lehrjahre" ("Wilhelm Meister's Apprenticeship" translation Holger Burgardt), where he described the notion of leaving something to allow it to continue on with natural processes; in this case seeds for growing crops again instead of milling them in the process of making flour, which is mentioned in the contract given to Wilhelm Meister after his apprenticeship (Goethe, 1795). Furthermore, Bosselmann quotes The Prince of Wales who pronounced that living sustainably within nature's limits is an "innate ability", which "reminds us of our co-evolution with life as a whole" (Bosselmann, 2008 S. 12). Concluding from these examples, sustainability deals with the anthropogenic use of natural resources and is a multidimensional term for ensuring the human species to live on. Although sounding quite logical, one cannot really say that sustainable use of resources is an intuitive action of human beings, even though it might be an innate ability. That is to say, it's not necessarily the human default mode of action in all circumstances. Even indigenous cultures may hunt for purely economic advantage: near their village, where food can be accessed more easily, and they may extend hunting duration if herd density decreases. The question of sustainability does not arise in this case however, because of the low destruction potential of small populations of indigenous cultures. On the other hand, some indigenous cultures and religions like in Shintoism, show respect for nature and opt for protection of the link between spirituality and nature.

In the 20th century, after World War II, Europe was reduced to ashes and reconstruction was the primary concern of the day. Afterwards, economic growth was in focus and sustainability never spilled over into other fields of economics. In 1969, environmental problems were taken into consideration by the UNESCO and different conferences and commissions were established. The most important success of these conferences might be the definition of "sustainable development" revealed by the World Commission on Environment and Development (WCED) in 1987: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (WCED, 1987). From this foundational principle of sustainability, different concepts arose as a theoretical framework for sustainable

development. In the following section I will introduce a concept of sustainability contributed by Voget-Kleschin et al., suitable for implementation into an individual conception of living in a sustainable way.

A Normative Concept of Sustainability

Amongst various definitions of sustainability and differing concepts, the most convincing theories acknowledge duties towards contemporary and future humans, to be consistent in addressing both intra- and intergenerational justice (Voget-Kleschin, et al., to be published S. 2). Thus, the foundation of such a concept is the definition of sustainable development given by the WCED: present and future generations have to be able to live good, decent lives (WCED, 1987). In fulfilling this definition, direct and indirect claims for justice have to be considered.

Direct claims for justice encompass those that are linked to our direct interactional behaviour towards other people (Voget-Kleschin, et al., to be published). Direct claims for justice are stated by identifying "those beings that qualify as legitimate recipients of benefits and burdens (scope of justice)" (Voget-Kleschin, 2013b), which benefits and burdens are to be dispensed (pattern of justice), and how much of the defined pattern has to be distributed (metric of justice). Since direct claims deal with harms and benefits that apply directly to people, it is related to intra-generational justice. (Voget-Kleschin, 2013b S. 1107).

Indirect claims for justice covers "claims for a handling of social, real and natural capital that qualifies as not undermining contemporary and future humans' ability to live a decent human life." (Voget-Kleschin, 2013b S. 1108). To specify indirect claims for justice, one has to demarcate different forms of capital (e.g. natural, social or real capital) and afterwards define, "what qualifies as sustainable and unsustainable handling" (Voget-Kleschin, 2013b S. 1108) of the different illustrated forms of capital. Since indirect claims refer to a handling directive that ensures contemporary and future human beings to live decent human lives, and may be harmed for both, indirect claims of justice are linked to intra- and intergenerational justice (Voget-Kleschin, 2013b S. 1107).

To distinguish, whether an action is sustainable or not, one has to outline the impact of such an action on different forms of capital. Natural capital especially has to come

under close scrutiny since it has become scarce “as a result of throughput growth” (Daly, 2007). Two different points of views are held through the debate of sustainable development; one opts for weak sustainability, which is to keep the total sum of capital constant and assuming that each form of capital may be equivalently substituted by other forms. The other perspective refutes the ability to substitute natural capital by other forms of capital other than natural capital. The total amount of natural capital has to be kept constant, characterized as the constant natural capital rule (CNCR) (Ott, et al., 2011). One may argue in favour of strong sustainability referring to a “critique of the general economic framework on which the concept of weak sustainability relies” (Ott, et al., 2011), the precautionary principle and “a better compatibility with the argumentative framework of environmental ethics” (Ott, et al., 2011) (Voget-Kleschin, et al., to be published). According to the authors, these arguments in favour of strong sustainability cannot rely merely on empirical information but have to “draw on value judgements” (Voget-Kleschin, et al., to be published).

Before offering an application of this theoretical concept into a practical conception, I want to draw on the fact that in order for a conception to be successful, it is important for that concept to convince others, and education is the key to that conviction.

The Necessity of Conviction and Education

Developing a well-founded concept of sustainability is an incontrovertible necessity for effective sustainable development. It has to be consistent and realizable. In applying the chosen concept into practice, one answers the given questions of sustainability. But, how should we dispense the revealed conception so that sustainable development may take effect? One perspective of taking action is to put a tax on unsustainably produced goods, e.g. meat, to alter consumers’ buying patterns. Assuming a constant budget for buying goods and services, an increase in meat prices leaves two options for the consumer: maintain the amount of money spent on food or increase the amount of money spent on food (Voget-Kleschin, 2014). It is unlikely that people would maintain the expensed amount by reducing the quantity of expensively produced goods like meat in general, rather than opt for a cheaper alternative of the same good (meat). Even spending more money on food (meat) seems to be more likely than to relinquish it entirely. For instance, the German greening scheme of the tax system (also known as eco-tax) introduced in 1999, assigned a tax on fossil fuels among other things. The tax

should set incentives for more ecologically sustainable behaviour and simultaneously better the social pension fund (Feess). It was presumed, that Germans would drive cars less, because of rising prices. But in reality, though a tax was created and raw oil prices greatly increased until 2012 (with a crash in 2008 due to the bank crisis) (Tecson GmbH & Co. KG, 2015), neither of these factors decreased the amount of kilometres driven in Germany, which increased from 663 billion km in 2000 up to 725.7 billion km in 2013 (Statista, 2015). Although car engines became more efficient and produce less CO_2 today (Pötscher, 2013), some of the expected positive effects were counteracted by increased car travel and hence fuel consumption. One could argue that the tax on fossil fuels wasn't high enough to really set an incentive to forego car travel. But would a higher tax that generates such an incentive come into action? Within a democratic governmental system one has to doubt that. Political decisions are dependent on political majorities and generally speaking, political majorities are composed of people with similar perspectives. Thus, an efficient tax on unsustainable goods would only come into action, if enough people were convinced that the benefits and bearable burdens of such a tax would outweigh the negatives and produce more sustainable behaviour. But, if people were already convinced to behave sustainably, a tax would not be needed to motivate their behaviour. I have argued that trying to establish sustainable development simply through taxes will either not fulfil the defined goal because of not providing an incentive, or won't come into practice due to lack of support for it by the majority of the population. Thus, the major problem of bringing sustainability into practice is conviction. I regard it as the ultimate starting point for the transition towards a more sustainable lifestyle. To be convinced of something (in the sense of being well informed and enlightened) and to make decisions in favour of this conviction, a certain amount of input and knowledge is needed (Voget-Kleschin, 2014), which has to be processed and judged. However, this immense task with respect to sustainability cannot be done on one's own. Some of the knowledge could be applied by organic and fair trade labels (Voget-Kleschin, 2014) but as the number of labels increase, the meaning and rigor of those labels decreases. Due to confusion about the rigor behind these different labels, consumer confidence in them declines and the amount of knowledge gained about their significance is relatively low, as the applied label can only communicate little information of how it contributes to sustainable behaviour. Because of its far-ranging fields and the complexity, sustainability can't be simply a self-taught concept. Sustainability isn't only the sum total of people

doing sustainable things. For instance, it also deals with the negative economic effects such as rebound effects originating in foregoing a certain behaviour like consuming meat. The foregone behaviour will result in declining prices for that good, due to the declining demand. This will set an incentive to consume more of that good (meat) for those, who won't sacrifice consuming it. In the end, foregoing won't necessarily result in more sustainable development because of the correlation of demand and prices and the rebound effect connected to it. This example elucidates the complexity of sustainability and that self-education may not result in a sufficient amount of sustainable behaviour. Another perspective however, might be the inclusion of sustainability lessons into school classes. This could possibly be an effective way to improve knowledge about sustainability and set a starting point for a widespread notion of sustainable development. In addition to the education of our children, adult education may be a further key in convincing people about the virtues of sustainable development. This seems to be a more effective way to allow sustainable lifestyles to gain more ground than raising taxes. Of course, educating people is costly and will succeed only in the long term, but as sustainability is a long term issue, this might prove to hold more promise. Critics may argue, that striving, in this context educating, for strong sustainability may take into account the notion of the good life of only some people. This is true in so far that the growing evidence of the negative human effects on nature are indeed becoming more prolific, but this fact maybe still hasn't sunk into the minds of the majority. Since sustainable development isn't merely a belief but is founded on scientific research, the necessity of a sustainability lifestyle is clear. Nearly no mentally sane human being would want to destroy his or her livelihood and the livelihood of their children and will take precautions according to the threats (cf. precautionary principle) (Ott, et al., 2011), so strong sustainability isn't only a notion of some people but has to become a notion of the majority. Another problem might be that people feel lost in the dilemma of not being able to change anything on their own and therefore don't change anything, out of hopelessness. To capture this dilemma, the most pressing issue might be to transform ignorance or shiftlessness into knowledge and confidence. The most effective path to that goal might be again educating both adults and youth of their impacts. Whereas this might be implemented into school curricula for the youth, educating adults will at all times be on a voluntary basis and therefore problematic for adults who don't see the necessity of changing their lifestyles. In this case, this attitude

might have negative consequences on the successful education of youth, if their parents don't happen to share the belief that sustainability is important.

In this section I argued in favour of enlightenment, education and conviction in the eventual achievement of sustainability. I discussed the relative efficacy of taxing unsustainable goods and opted for convincing people of adopting a sustainable lifestyle. In the next section, I will give an example, how a conception on more sustainable food consumption might be constructed.

A Conception of Sustainable Food Consumption

The International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD) states in its North America and Europe Report (NAE) that, besides greenhouse gas emissions through transportation, "the application of AKST [agricultural knowledge, science and technology] in NAE has led to habitat transformation, loss of biodiversity, declining quantities of fresh water and increasing competition for what remains, degradation of the quality of groundwater and surface water, and impacts on soil quality. […] AKST can also improve environmental quality, through practices such as […] sustainable management of cultural landscapes" (IAASTD, 2009 S. 19). This statement underlines the multi-layered impacts of unsustainable agriculture but also claims the ability of AKST to be more sustainable. Food production and food consumption "are inextricably linked" (Voget-Kleschin, 2014). Economically speaking, the demand of goods affects the supply of goods. Thus, further demand of unsustainably produced food that impacts the environment as described by the IAASTD, fosters the supply of such goods. But how can the consumer identify sustainably produced products? This might be a starting point for political decisions. If products were identified by a clearly defined label, consumers could choose their products more wisely. But as reality shows, a downright jungle of labels has evolved, leaving the consumer in total confusion and a quagmire of labels to navigate through. In addition, trustworthy household names like the eco-seal of the EU were designed to be less rigorous to reach consensus with food manufacturers who wish to carry the label to make their products more marketable to an organic product-hungry public. Nevertheless, these seals point in the right direction (Voget-Kleschin, 2014) and give consumers a starting point for goods produced with more ecological responsibility. The notion of a "sustainable management of cultural landscapes" (IAASTD, 2009)

relates only to the sustainable quality of agricultural goods. However, also the quantity of food production has to be reduced, in order to produce in a sustainable way (Voget-Kleschin, 2014). Looking back to the idea that the demand of goods biases the supply, it's again up to the consumer to make the change. By choosing more sustainably produced products, the consumer could direct markets towards more sustainable production. Assuming that a critical mass would opt for sustainable agriculture, this way of production might become unsustainable due to the lower yield per area and therefore needing more space to produce (Voget-Kleschin, 2014). Hence, it is imperative to change individual food consumption as well to become more sustainable. At first glance, this sounds like an overall reduction of food consumption, but reduction of the total calorie intake might be exaggerated. Like VOGET-KLESCHIN citing PARFITT et al., I believe that a reduction of food waste and valuing food might have effects on over-production. In addition, the reduction of animal-based food reduces the impact on the environment since animal-based food demands space and resources for the livestock and for producing the fodder for the livestock.

One way to change individual behaviour towards producing less food waste and lower consumption of animal-based food might be to educate about sustainable lifestyles in school classes by illustrating the unsustainability of our consumption. Although costly and time consuming, the positive outcomes may be generally more sustainable behaviour through conviction, lessening pressure on the environment and thus reducing the costs of environmental reparation.

Conclusion

In this paper, I argued in favour of educating for sustainability to let it become a widespread notion and therefore lessening the negative human impact on the environment. This was done by recounting the history of the term and presenting a theoretical concept of sustainability. Further on, I drew on the necessity of education to convince people of a sustainable lifestyle and the possible superior success of this over putting a tax on unsustainable goods. Afterwards, I elucidated on unsustainability in the example of food consumption and presented education as a way to transform food consumption towards more sustainability. I admitted that education is costly and time consuming but in the end might yield fruit in the form of a more widespread notion of sustainability instead of being forced to pay sustainability taxes without fundamental

changes in a society's outlook. Ergo, "sustainable lifestyles are not only individual lifestyle decisions […but…] need institutional backup" (Voget-Kleschin, 2014), hence I opt for helping people to get an idea of the necessity for sustainability instead of punishing and forcing them by taxes. Finally, sustainability is a process towards a better future, better justice towards contemporary and future generations and therefore the continuance of the human species. This is a process, not an issue that can be resolved at once.

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