Rationalising Irrationality: Examining Barriers for Sustainable Behaviour

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Abstract

There is mounting evidence that efforts to mitigate the adverse effects of human activity on climate and biodiversity have so far been unsuccessful. Explanations for this failure point to a number of factors discussed in this article. While acknowledging cognitive dissonance as a significant contributing factor to continuing unsustainable practices, this article seeks to explore hegemonic rationality of industrial expansion and economic growth and resulting politics of denial. These politics promote the economic rationale for exploitation of the environment, with the pursuit of material wealth seen as the most rational goal. Framed this way, this rationality is presented by political and corporate decision-makers as common sense and continuous environmentally destructive behavior is justified under the guise of consumer choices, hampering meaningful action for sustainable change. This article underlines forms of alternative rationality, namely, non-utilitarian and non-hierarchical worldview of environmental and human flourishing, that can advance sustainability.

Keywords: alternative rationality; cognitive dissonance; environmental sustainability

Introduction

The main drivers of unsustainability are over-production, over-consumption, and over-population (Rees 2010; Washington 2013). The human impact on the ecosphere is a product of population multiplied by average per capita consumption, or **I**mpact = **P**opulation × **A**ffluence × **T**echnology (Holdren and Ehrlich 1974). This impact is exacerbated by increasingly global desirability of perpetual economic growth propelled by continuous technological progress (Rees 2017). Despite the severity of environmental problems, ranging from climate change to biodiversity loss, the mounting evidence reported by the Millennium Ecosystem Assessment (MEA 2005) and the Intergovernmental Panel on Climate

Change (IPCC 2018) demonstrates that efforts to mitigate adverse effects of human activity on the environment have so far been ineffective.

One of the reasons for this failure is that the causes of environmental problems are deeply embedded in the socio-economic fabric of industrial neoliberal society. As Lidskog and Elander (2010) have argued in the case of climate change, the regulation of greenhouse gas emissions is closely linked to national energy and transport policy. Thus, Lidskog and Elander (2010:33) have noted, "we live in a paradoxical situation where society increasingly talks about the seriousness of climate change although concerted action is missing". As Robert Engelman (2013) spoke of *sustainababble*, a "cacophonous profusion of uses of the word *sustainable* to mean anything from environmentally better to cool". Sustainability then is discussed as a subjective, multi-faceted term that is often presented in terms of emotions or conventions rather than rationality.

Reflecting upon the failure of efforts to mitigate global climate change, Blühdorn (2007) has outlined the paradoxical simultaneity of, on one hand, the wide acceptance that rich consumer societies need to radically change their established values, lifestyles, and social practices, and on the other, a profound inability to implement such change, resulting in denial. Denial of the environmental crisis originates largely from (right wing) conservative 'think tanks' linked to industries (Jacques et al. 2008; Oreskes and Conway 2010; Goldie and Betts 2014; Dunlap and Brulle 2015; Kopnina and Washington 2016). Conceptualizing the "politics of unsustainability" (Blühdorn 2007), this article explores the everyday practices that illustrate how unsustainable behavior is understood as rational. This article focuses on one particular explanatory factor that is receiving too little attention: industrial, growth-centered, patriarchal ideology. Finally, it draws policy recommendations that take alternative rationality into account.

Environmental psychologists and social and environmental scientists have attributed unwillingness or inability to act to solve environmental problems to many factors including cognitive dissonance (Kantola et al 1984; Stern 2000; Kollmuss and Agyeman 2002; Thøgersen 2004). The term "cognitive dissonance" coined by Leon Festinger in 1957 explains the difference between knowledge about environmental problems and willingness to act (the so-called knowledge-behavior gap). Cognitive dissonance is defined in relation to an individual who undertakes an action that contradicts his personal beliefs, ideas, and values (Festinger 1957). Festinger (1950; 1957) has assumed that people seek internal psychological consistency in their attitudes, norms, beliefs, and values, in order to interact with others. Since the experience of internal inconsistency tends to make people psychologically uncomfortable, they are motivated to cope by accepting new contradictory information, causing mental discomfort. Alternatively, one seeks even more (possibly faulty) information confirming one's own position, or by

actively avoiding sources of contradictory information that are likely to increase the cognitive discomfort. The theory of cognitive dissonance has explained some variance in specific pro-environmental behaviors (Stern 2000).

Following Lukes (1967, 2000), the author of this article inquires: When I come across a set of beliefs in relation to environmental problems which appear *prima facie* irrational, what should be my attitude towards them? Should I adopt a critical attitude, taking it as a fact about the beliefs that they *are* irrational, and seek to explain how they came to be held, how they manage to survive unprofaned by rational criticism, what their consequences are? Should I treat such beliefs charitably: should I begin from the assumption that what appears to me to be irrational may be interpreted as rational when fully understood in its context? How does cognitive dissonance, a rational strategy of avoidance of cognitive discomfort, act in cases when the consequences of one's actions (or inactions) can be judged as irrational in daily practices in the context of sustainability? In addition to these questions and in pondering differences in attitudes towards nature and environmental protection, a number of questions arise. What does it mean to reject scientific evidence of, for example, climate change or biodiversity loss or, alternatively, to claim it as a professed belief? Likewise, how are various economic interests connected to professed beliefs? Why are "deniers" characterized by skepticism, contrarianism, or anti-intellectualism?

Little has been done to consider the situated meanings of environmental sustainability as a rational process in everyday life, considering that supposedly rational choices may, in fact, be manipulated or influenced by decision-makers. Much of the discourse concerning environmental denial has focused on lack of access to environmental education (e.g. Sitka-Sage et al 2017), public understanding of (climate change) science (e.g. Lidskog and Elander 2010), and refusal to acknowledge the key driving factors of unsustainability (e.g. Washington 2013; Rees 2017). While acknowledging all these as significant contributing factors, this article focuses on less explored topics of cognitive dissonance and alternative rationality.

This is a conceptual article that will discuss rationality before turning to examples in the case of environmental problems. The sections below will delve into examples of cases of (ir)rationality in conceiving and treating environmental problems. These examples are chosen to underline how both individuals but more significant social groups hold different beliefs in regard to issues such as climate change and biodiversity loss. It will be argued here that despite the diversity of worldviews in different groups, the majority may be influenced by self-selected information sources, as well, as significantly, by a hegemonic patriarchal ideology that influences the media. This article will lead to the discussion of this hegemonic rationality that is manipulated by political and corporate decision-makers, presenting the ideology of economic growth as the only rational pursuit. In discussion and conclusion, ways forward in

which some forms of alternative rationality – namely, non-utilitarian worldviews – are supported in order to advance sustainability.

Rationality

As this article aims to discuss "rationality" in relation to sustainability, we need to outline the multiple uses of the term. The term "rationality" commonly refers to weighing different options in favor of calculated self-gain, assuming that people are well-informed and thoughtful utility maximizers (Friedman 1953). "Alternative rationality" refers to Weber's understanding of rationality as multi-faceted social processes involving more than instrumental or "practical" rationality (Bolan 1999). In complex models of rationality, instrumentalism can be seen as dependent on multiple factors (Gigerenzer and Goldstein 1996; Rienstra and Hook 2006). Some behaviors can be seen as 'irrational' from one point of view (e.g. smoking is bad for one's health), but they can be seen as 'rational' from another (e.g. teenagers may smoke to appear cool among peers precisely because the activity is risky, harmful or prohibited). However, behavioral decision theorists such as Gigerenzer and Goldstein (1996) have argued that human behavior results from the application of simple learned rules adapted to the habitual situations without the need to resort to the complex calculation of utility. This implies that people are creatures of habit, even if these habits are not beneficial for one's own utility (e.g. riding a car increases harmful fumes in the air that harms one's health). Utility maximization can also be seen in connection to social norms and expectations, which can impede sustainable action when unsustainable behavior (e.g. encouraging consumption, as "shopping" is socially regarded as an enjoyable and positive activity) is seen as normative (Isenhour 2010).

Social and ethical concerns with conformity, equality, and fairness also form significant barriers to change (Isenhour 2010). These concerns can be said to be emotional and ethical, but not 'rational'. For example, people's moral judgment system is not suited for identifying climate change as an important ethical imperative (Markowitz and Shariff 2012), or for considering extinction as a great moral wrong (Cafaro and Primack 2014; Cafaro et al 2017). While it is considered moral to "feed" the growing number of people on this planet, and equitably divide natural resources, the implications of population growth *and* sharing of wealth, which in practice implies putting even more pressure on limited natural resources, are rarely discussed as immoral towards other living beings (Washington 2013).

A German philosopher, Jürgen Habermas, described communicative rationality as one in which individuals seek to reach a common understanding and to coordinate actions by reasoned argument, consensus, and cooperation rather than strategic action strictly in pursuit of egotistic goals. This theory is built upon the necessary possession of communicative rationality and requires individuals to have unfettered access to their own reasoning, possessing clear and defendable rationales for their values and beliefs. Festinger (1950) accepts a rational view of individuals, even though the cognitive dissonance processes demonstrate that the manner in which inconsistencies are solved is rather irrational.

In the case of climate change, for example, one can assume that as long as daily routines can be carried and the weather seems reasonable, no great danger to the individual occurs, and thus no action is needed. When confronted by evidence that supports the severity of climate change and the urgent need to act, one tends to minimize those sources of information or to resort to research supported by climate skeptics supported by industrial lobbying. In the case of biodiversity loss, one may turn to a more comforting idea that extinction is part of natural processes, or that it is not a morally significant issue (as anthropocentric ethics are assumed to be normative).

However, Habermas' theory of communicative action has been criticized as the 'actors' were found to be less rational in real-life contexts (Rienstra and Hook 2006). For example, some people drive a car to go to the gym and reward themselves with a snack after exercising. Driving, rather than biking, might be justified as time saver and snack is justified as a stimulant to exercise. To use another example, the recent prohibition of natural gas extraction in the Dutch Groningen province has led residents to celebrate not only victory of their protests against the extraction of natural gas, which caused earthquakes but also compensation rewards for damages. Multiple newspapers reported this as a triumph of sustainability (e.g. Straver 2018). The local population seems less aware of the environmental effects of the alternative form of energy - the cutting of hundred-year-old trees for biofuels production, although one protest group is active (https://bomenriddersgroningen.nl/). The use of trees to substitute for gas is rationalized by the appeal to social justice (property-damaging earth-quakes that resulted from natural gas extraction are stopped, the duped individuals are compensated, the province is profiting from its gas) as well as belief that biomass is 'green'.

Another example includes using air-conditioning in places that become hotter during summers, and artificial ice and snow in places that become warmer during winters. Yet, both air-conditioning and the making of artificial ice and snow contribute to emissions, which in turn cause further warming and the need for more cooling. The resulting environmental damage becomes part of the tragedy of the commons, shared by all, with no one responsible. This lack of responsibility can be explained by a number of factors. The scientific facts may not be found relevant by individuals due to lack of information and

motivation. Research has demonstrated that pro-environmental behaviors can be affected by the individually variable commitment and the perceived personal costs and benefits of particular actions as well as by a myriad of other beliefs and norms (Stern 2000). Currently, many of our behaviors are not perceived in terms of "new environmental ethics" but in terms of personal choices (Singer 2011). Rational choices are linked to dominant ethic – what is good to do, is what fulfills an individual consumer. For example, shopping is rationalized because shoppers are less conscious of the adverse effects of their consumption than of a "fun" and social element of shopping (Isenhour 2010).

A concomitant concern is that political and corporate leaders might encourage "consumer responsibility" and individuals' right to choose to avoid the need for radical change toward ecocentric values or eco-democracy (Lundmark 1998; Kopnina and Cherniak 2016). Political liberalism, in this case, might appear to support individual choices (e.g. to have to air-condition) but unwilling to address larger underlying causes of climate change. In assuming (or pretending to assume) that consumers are rational, decision-makers avoid the need to make substantial changes to socially and environmentally unsustainable practices, which might make them unpopular with their electorates (Isenhour 2010).

The fundamental bottom-up change that could potentially enable ecological democracy (Lundmark 1997) or new environmental ethic (Singer 2011) would indeed involve a change in values. This change needs to be underpinned by altruism (Dietz et al 2001) and recognition and rejection of dominant hegemony. Pragmatically, an alternative environmental ethic would regard every action that is harmful to the environment as ethically dubious (Singer 2011). Shopping would not merely be seen as a matter of taste or as a form of self-fulfillment or as an activity that re-enforces social bonds, as "shopping with the girls" but as plainly wrong when one has everything they need already. This implies that norms and institutions must facilitate the ability of individuals to move out of their role as narrowly self-interested rational actors (Habermas 1971, 1993) and abandon industrocentric ideology (Kidner 2014).

Political liberalism as dominant rationality

Perhaps human-centeredness is becoming the bedrock presupposition of the "Western mind," as even committed conservationists, urban designers and environmental educators tend to perpetuate instrumental views of nature (Bansel 2007; Kopnina 2012; Bonnett 2013; Sitka-Sage et al 2017). This "Western mind" can be perhaps more easily understood through the more familiar operational concept of political liberalism.

Critical scholars have noted that neoliberal politics are essentially opposed to sustainability action because this action requires an overall reduction of population and consumption, endangering economic growth (Bansel 2007; Washington 2013). Avoiding the need to make unpopular decisions, neoliberal governments have often relegated responsibility for sustainable choices to consumers (Isenhour 2010). Policy proposals relying on individual responsibility highlight the need for public knowledge of the causes of environmental problems such as climate change as well as the ability to reduce emissions (Whitmarsh et al 2011). However, the same policy proceeds to prioritize whatever makes economic sense in the short term and simultaneously makes politicians popular (Isenhour 2010). As Rees (2010:13) has expressed it, the modern society is "mired in a swamp of cognitive dissonance and collective denial seemingly dedicated to maintaining the status quo". This dominant economic rationality finds rich nourishment in political liberalism that on the one hand reifies pluralism and democratic participation, but on the other hand tends to re-assert its hegemonic influence (Kidner 2014).

Rawls (2001: 3) has argued that political liberalism begins with the assumption of reasonable pluralism or acceptance of sometimes "irreconcilable differences in citizens' reasonable comprehensive religious and philosophical conceptions of the world". This implies that we should not expect to work out an ethical theory of our proper relation to the environment on which everyone can agree but we can expect there to be many competing accounts in society (Bell 2006). While Rawls recognizes the possibility of a plurality of reasonable views in relation to environment and nonhumans, the influence of hegemonic rationale in a plural society is less discussed. This hegemony might be dictated and shared through carefully formulated policy and the media that support that dominant vision (Kopnina and Cherniak 2016). Political pluralism may be tolerant of irrational views or behaviors that harm the environment precisely because addressing environmental harm might require action that governments are unwilling or unable to undertake.

As Bansel (2007:284) suggested, emphasis on rationality, personal choice and freedom are "conflated within a market economy as freedom of choice". "Freedom of choice" in this context proposes an "autonomous rational economic agent who makes choices between competing goods and services based on price and value, cost and benefit" (Ibid: 284). However, Bansel (2007) warns these "acts of freedom through choice and consumption" (Ibid: 284), mapped onto other aspects of lived experience, reflect neoliberal patriarchal ideology dictated from above, and not individual freedom. Contrary to theories which link sustainable action to environmental awareness and rational decision-making, or explanations that portray "deniers" as ignorant, the lack of political and industrial responsibility has been identified as a key contributor to unsustainability (Isenhour 2010). Denial may draw from many alternative forms of rationality, including ignorance and indifference, nonetheless what fuels denial is

hegemonic industry-centric ideology (Kidner 2014), which brings into question sustainability policy that appeals to the rationality of generalized group of consumers.

However, denial is not just limited to right-wing politicians. For example, the economists are only being trained to look at financial aspects of well-being, while environmental specialists might be looking at environmental degradation without consultation with socio-economic processes that cause it. To illustrate how these differences can occur even within one single publication medium, authored by different experts, is *The Economist* journal.

The Economist journalists specialize in different fields of expertise but publish articles anonymously, "because it allows many writers to speak with a collective voice" assuming that "a belief that what is written is more important than who writes it" (*The Economist* 2013). While *The Economist* brands itself as "a political, literary and general newspaper", it also has a clear ideological focus. Established in 1843 *The Economist* remains true to the principles of its founder, James Wilson, a Scottish hatmaker who believed in free trade, internationalism and minimum interference in the market by the government.

Articles that include reflections on the threats of climate change (*The Economist* 2016b), pollution (*The Economist* 2014b), and species extinction (*The Economist* 2016c) are written by sustainability or biological conservation and science journalists. Other columns are written by "mainstream" journalists that particularly supporting the neoliberal economy. Some articles in *The Economist* indicate that conservation has become intertwined strongly with economic interests, at times expressing concern with intrinsic values of disappearing species (e.g. *The Economist* 2009a, 2012d, 2014, 2015a, 2016a, b, c, d, 2017a). Since 2009, *The Economist* has had a number of special issues fully devoted to the subject of climate change (*The Economist* 2009b; 2015b). In "covering" the subject of sustainability, *The Economist* notes hopeful signs in Western cities: vegan hipsters and urban foraging (*The Economist* 2014a), support of renewable energy (*The Economist* 2016a), and more attention to animal welfare (e.g. *The Economist* 2017b).

In practically every issue, explicitly and implicitly, the journal praises growing economy and sees an increase in global consumption as positive, stressing financial disadvantages of switching from fossil fuels (e.g. *The Economist* 2018), framing population growth as a positive demographic dividend (e.g. *The Economist* 2012a, 2012b, 2012c). While *The Economist* seems to exhibit a split personality disorder in its articles expressing concern with climate change and biodiversity loss on the one hand and praising some of the key mechanisms responsible for them, such "diversity of opinion" typically reflects how alternative rationalities can exist within the same media outlet. It appears that despite what the (anonymous) journal editors write, the authorship does matter and so does the overarching ideology that influences the majority

of journalists' opinions. Not only do *The Economist* example show how alternative rationalities exist within the same media outlet, the fact that most articles in the largest sections of the economist, devoted to politics, economics and business, privilege economic growth, demonstrate that 'alternatives' (focus on the need to address climate change, biodiversity loss, etc.) are subordinated to a dominant narrative. *The Economist*'s commitment to the classical 19th-century Liberal ideals conveniently coincides with presently popular neoliberal economic thinking that privileges economic growth.

Cultural relativity and rationality in relation to environmental problems

Habermas' view of rationality rests on assumptions that are tied to Western rationalism and tends to disregard cultural differences in worldviews in the context of deeply divided or culturally diverse societies (Delanty 1997). Some forms of alternative rationality originate from socio-cultural contexts (Bolan 1999). The idea of cultural relativity that instructs rationality is also relevant for the understanding of how (ir)rational behavior can be understood (Evans-Pritchard 1937, 1965; Lukes 1967, 2000). For example, one can argue that in pre-colonial times, indigenous peoples lived in an enchanted world, one of "spirits, good and bad, witches, demons, fairies to which they may ascribe their fortunes and misfortunes, their good luck, or disease, seeking to please or placate these spirits with rituals and taboos" (Rolston 2017:277). Yet, modern indigenous peoples might be influenced by Western industrial thinking (Sponsel 2011), in some cases favoring commercial activities instead of wildlife and biodiversity conservation (Teel et al 2007), at times resisting environmental regulation. Yet, it might be too simplistic to call these communities anti-environmental, especially in cases where their communities are powerless to resist the dominant influences.

In her ethnographic study, Shoreman-Ouimet (2010) has explored commodity farmers in the Yazoo-Mississippi Delta that engaged in intensive farming practices that have injured the environment and local residents have opposed environmentalist intervention. She has argued that it is overly simplistic to dub any community as anti-environmentalist before determining the historical basis for their motivations and beliefs. Her research indicates that the community actions are rooted not in anti-environmental beliefs, but rather in a historical opposition to the federal regulation of agriculture. Analyses of historic relationships of these communities with the land and with outsiders indicate that the farmers are not opposed to the preservation of the environment but rather to the intrusion of outsiders into their agricultural and economic practices.

In a different part of the world, Visser (2016) has explored the local resistance to the building of

wind farms in The Netherlands, pointing out that the "not in my backyard" (NIMBY) is associated with the local people's irritation with the top-down directives. In a different context related to environmental attitudes in The Netherlands, nature appreciation and recreation is still a very "white" activity as non-Western immigrants hardly ever visit non-urban green areas (Buijs et al 2009). Immigrants from Islamic countries and the native Dutch appear to have different landscape preferences, with immigrants showing lower preferences for non-urban or wild and unmanaged landscapes, like marshes and dunes. These perceptions, however, might be influenced by the fact that the migrants are not relating to the landscapes in their countries of origin and tend to prioritize aspects of the new host country that might have stimulated their decision to move – security and economic opportunities.

In urban multi-ethnic societies, socio-economic and ethnic background plays a large role in exposure to environmental risks and to forming perceptions of nature. Social justice researchers show that the poor are unequally exposed to environmental risks such as degraded environment, deforestation, and in urban contexts, pollution (e.g. Low and Gleeson 1998). An 'environmental justice' movement has been inspired by concerns with the combating of environmental racism – the distribution of environmental benefits (e.g. access to natural resources) and risks (e.g. pollution) in ways which unfairly impinge upon particular racial groupings (Low and Gleeson 1998). The poor urban communities, such as Afro-Americans, for example, suffer more asthma due to lack of green spaces and high exposure to urban pollution (O'Neill et al 2003; Neidell 2004). The developing countries' poor people face the highest risk of flooding as for example is the case in Bangladesh (Brouwer et al 2007). A salient detail is that both communities studied – the farmers in Mississippi Delta and the Dutch coastal area villagers, are worst affected by climate change because of droughts and rising sea level, respectively. What is at stake here is not cases of cognitive dissonance, but rather 'alternative rationalities' based on class and culture.

Despite the unequal exposure of vulnerable communities to environmental risks, research also shows that environmental concern in the most vulnerable groups does not necessarily correspond to the severity of these risks. While the relationship between environmental risk, poverty, and vulnerability is complex, paradoxically those that face the highest risk of being exposed are the least well prepared, and least aware of the effects (Brouwer et al 2007). African Americans, who often live in polluted urban areas, are somewhat less concerned about environmental issues (Dolin 1988; Sheppard 1995; Van Velsor 2005). While the lack of environmental concern and understanding of risks can be seen as 'irrational', it can be also seen as alternative rationality (Vaughan and Nordenstam 1991). Sheppard (1995) has hypothesized that the differences between perceptions of environmental risk and environmental valuation arise not from the lack of environmental concern but due to the experience of oppression and the resulting lack of awareness through education. Summarising the work of anthropologists that attempts to uncover underlying instruments of denial in communities studied, the panel "Class, Creed, and Climate Change

Denial" at the annual meeting of the American Anthropological Association sought to problematize class roots and hidden injuries of belief and creed of "climate change deniers" who reject the labels of the science class (Yarrington 2018).

Simultaneously, research shows that it is actually the poor and oppressed groups that exhibit more altruist attitudes (Dietz et al 2001). Altruism may be seen as a form of alternative rationality that values those members of society – including animals or even the environment as a whole - that are similarly oppressed. Environmental altruism research suggests that the structurally disadvantaged in a society (e.g. the poor, minorities, women) may be more likely to shun narrow self-interest in favor of positions that take account of the situation of others (Stern et al 1993). In the United States, according to one survey, women and ethnic minorities exhibit more altruistic values than do majority males (Dietz et al 2001). There is also evidence that poor people actually care more about pollution or deforestation precisely because it affects their immediate livelihood (Dunlap and York 2008). Unlike post-material values theory that supposes that only the wealthy can "afford" to care about environment or nonhumans, some marginal communities buy animal-friendly products because of empathy with the disadvantaged or vulnerable situation of others (Deemer 2015). These attitudes stand in contrast to the dominant economic rationality as an example of alternative rationality and altruism, as well as a form of resistance.

Generally, research and theory on environmental issues the in relation to race, ethnicity, education and income levels, suggest that each of these demographic and cultural factors can independently and systematically shape people's attitudes and beliefs, as well as motivations to address it (Pearson et al 2017). However, what complicates the issue is that while the "economic contingency" hypothesis predicts that the economically deprived will disproportionately withdraw support for environmental protection during poor economic conditions, the broad sociological analysis failed to lend any clear support for this hypothesis (Jones and Dunlap 1992). The results of international surveys suggest that citizens' environmental concern is not dependent on national affluence or on income-based post-materialist values (Dunlap and York 2008). However, there is also evidence that citizens' perceptions and preferences in regard to the environment, while superficially plural, are conditioned by top-down hegemonies (Habermas 1971; Kidner 2014). Thus, we can speak of *manipulated* rationality. This manipulation involves the rendering of "nature" or "environment" as a mere economic resource and the means of rational pursuit of human purpose. This purpose seems to be endless material prosperity, and it becomes possible when other rational considerations having to do with the survival of humanity on the planet of limited resources (in Habermas' formulation, recognizing that the ecological balance designates an absolute limit to growth) becomes subservient to the rationality of the capital.

Assuming that rationality is not some pure impartial capacity or process of intellectual cognition

and distanced rational scrutiny (Bonnett 2013), it is the basic rationality that connects human beings to their natural environment that is fundamentally endangered by industrial and political processes. Indeed, while awareness of environmental issues and science behind issues such as climate change or biodiversity loss might be less developed in socio-economically disadvantages groups the wealthier consumers are not necessarily more pro-environmental (Dunlap and York 2008).

Studies have indicated that low relative importance that people give to biodiversity loss or climate change reflects a widespread perception amongst the public that the issues are spatially and temporally remote, affecting future generations and other countries (McKinney 2002; Novacek 2008; Whitmarsh et al 2011). While it is considered socially relevant, most individuals do not feel climate change poses a personal threat (Whitmarsh et al 2011), or that biodiversity loss threatens human survival (McKinney 2002; Novacek 2008). Even the well-educated and conscientious consumers encounter the seemingly insurmountable challenge of decoupling personal lifestyle, social standing, and expectations from the necessity to address the environmental challenge (Isenhour 2010).

Reflection and discussion

This article has discussed cognitive dissonance, a term designating a situation when an individual is confronted with new information that contradicts existing beliefs, ideas, and values, resulting in alternative rationality or denial. Yet, instead of single-pronged explanations in case of situations when people are asked to address environmental problems, we have problematized our understanding of "irrationality". It was argued that populations embody overlapping articulations of identities that have a bearing on the expression of their creeds and logic. We have also noted that structurally weak social groups may be mistrustful of authority and present an array of alternative rationalities, as well as resistance to dominant hegemonies. However, this resistance is limited by the structurally weak position of minority groups, as well as, possibly, their desire (in spite of inability) to follow the dominant ideology (e.g. "from rags to riches" is a success narrative shared in the weaker strata of society). This dominant ideology was discussed in relation to industrialism and political liberalism that while on the surface appearing to support pluralism, it re-asserts its hegemonic influence through democratic mandate (Kidner 2014).

Some of the competing accounts will be formed in part by competing visions of what constitutes reasonable assumptions in different racial, ethnic, social class, etc. settings but also, significantly, strongly

influenced by either cultural or tacitly spread "top-down" assumptions. Thus, while local understandings of environmental problems and (mis)trust of authority that can lead to resistance, deeper understanding of this alternative rationality is helpful for formulating a more sensitive environmental policy.

Considering that no group – minorities, or the socio-economically privileged segments of society at the moment seem to fully realize the pragmatic (sustainability-related) and ethical implications of environmental destruction and collective responsibility, the political inertia in dealing with the unsustainability conundrum becomes apparent (Rees 2010). What individuals hear and pay attention to (or ignore) can thus be understood only within the context of both accepted social norms – that are not necessarily "rational", and the broader political-economic environment that perpetuates unsustainable practices (Ibid). This perpetuation of a political and economic ideology that presents economic logic as the only rational way of dealing with nature (e.g. in terms of natural resources) becomes possible through the media and education that establishes economic rationality as normative (Bansel 2007). As Bonnett (2013) has reflected, the "considerable weight placed on the rationality of teachers and pupils as a source of discernment and wisdom". Yet, it is the 'non-rational factors' that can override rationality that often avoids critical (rational) scrutiny. Essentially, as Bonnett (2013) emphasizes, the concern is not that rationality needs to be alert to and employed to expel or curtail non-rational factors – but rather that rationality itself has always been partial in pursuing particular goals. These goals, at present, revolve around control and exploitation rather than appreciation of and protection of the natural world.

The central issue with is not just that the broader public is ignorant of the science of biodiversity loss and climate change or unmotivated to act due to self-interest (not willing to give up overconsumption to limit emissions, for example) – the denial of responsibility for environmental destruction might be condoned from "above". As Rees (2010:14) has observed, no government or agency is willing to openly contemplate, let alone articulate in public, the revolutionary policy responses, actually condoning or possibly stimulating cognitive dissonance in public. In exploring the everyday practices, we note that the (ir)rational beliefs or assumptions underpinning action is more complex than the rational weighing of environmental threats against one's interests. As Kidner (2014) expressed it, manipulation of our rationality occurs at the system level, with the system being the ideology of industrocentrism. Today, while our exploitive relationship with the environment is denied and rationalized, we have even less awareness that the industrial system that takes over the natural world also shapes our theoretical and conceptual views.

Kidner (2014) distinguishes two aspects of industrialism: firstly, the way it operates materially in presenting humanity and nature as 'capital', and secondly, the manner in which it manipulates reason in order to facilitate this commodification. While the first facet of industrialism transforms the world into an

economically defined set of industrialist materials, processes, and products, the second presents this process so as to make it appear consistent with human interests, thus ensuring our cooperation. Yet, as Kidner argues, as we are molded towards being the rational, self-interested consumer, the qualities that are consistent with the corporate world, the system defeats both nature and human interests in the long term.

Anthropocentric and economy-centered ideology is essentially opposed to sustainability action because this action requires economic sacrifices and an overall reduction of growth (Bansel 2007; Washington 2013). Thus, a wider conception of rationality that explicitly acknowledges social and cultural norms in decision-making can be helpful in refocusing of research for a richer understanding of rational action (Bolan 1999).

Conclusion

Habermas' theory, sensitive to change in worldviews influenced by industrial development, engages with structural forms that facilitate or inhibit discursive rationality around environmental problems (Dietz et al 2001). In order to draw recommendations for policy that takes alternative rationality into account, one needs to acknowledge not only the multitude of factors that structure decision-making in any given situation, including the level of awareness and the hierarchy of importance of issues for individuals but also the hidden objectives. Individual action toward sustainable practice can be enacted only if the general public but also – significantly - those in power and the media see the benefits of sustainable action in the long perspective (Semenza et al 2008). However, while the media could help advance both behavioral and policy changes, the media is self-selected (e.g. readers that do not believe in climate change tend to read newspapers that are climate-skeptic), compartmentalized (e.g. in the case of *The Economist* journal), or misleading due to hegemonic ideology (e.g. supporting economic growth as intrinsic good).

Adjustment of lifestyles can be maximized only with legislative and regulatory measures support such actions (Semenza et al 2008; Isenhour 2010). Ultimately, behavioral changes cannot be expected to merely emerge "from the bottom" (Semenza et al 2008) – at best a minority of responsible individuals will adopt sustainable lifestyles (Isenhour 2010). To engage the majority, the top-down rationality of growth needs to be countered. The public cannot be expected to be well informed and well motivated in the situation when economic growth is presented as a panacea for all societal problems.

Research into minority or marginal communities has implications as to how the environment and environmental problems are perceived and acted on in complex industrial societies. First, this research suggests that understanding of causes of environmental problems, as outlined by the MEA or IPCC, but also issues associated with the ethical side of sustainability, e.g. interest in animal rights and welfare, is recognized by a portion of the population. In some cases, the lack of interest or engagement in less advantaged groups may pint not so much to the lack of education or interest in these problems but a structural position of oppression. However, some research indicates that these groups offer most resistance to the dominant hegemony of economic rationality, and in fact exhibit altruistic attitudes and care towards the environment. Minority nationalities are often opposed to authoritarian top-down interventions, as in the case of Mississippi Delta's farmers (Shoreman-Ouimet 2010) or Dutch NIMBYs (Visser 2016). The protesters against windmills or environmental regulation of agriculture mistrusted politicians whom they perceived as remote and authoritarian.

Potentially, these "rebellious" local communities can be allies to environmentalists as they are mistrustful of hegemonies top-down regulation. Assuming that the environmentalists themselves come from different strata of society but can be united by common interests contrasting to those of power-holders and decision-makers, alternative rationality, in this case, would unite distrust of hegemonic power-holders and concern with environmental problems. The bottom-up alternative rationality – namely, non-hegemonic and non-utilitarian worldviews of culturally diverse or minority perspectives - can advance sustainability. Non-economic rationality that connects people and planet may just be the "right" alternative to promote the world of abundance and not greed.

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