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Critical Psychology - 'Kritische Psychologie': Challenging environmental behaviour change strategies

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> *"If we don't liberate ourselves, freedom for us will remain without consequences."* (Weiss & Neugroschel, 2005: 226)

Abstract
Our aim in this paper is to critically discuss a dominant conceptualisation of the individual that informs much of Psychology where it is being applied to behaviour change strategies. Theories and concepts such as the selfish gene, or the tragedy of the commons, we argue, have underpinned much of this research. The underlying assumption of these particular theories is that individuals are independent monads, cut off from societal relations and act in their egocentric interest. We also discuss some of the most influential contributions of Critical Psychology and Environmental Sociology, which criticize such individualistic approaches, arguing that they do not go far enough in rethinking the concept of the individual as a sum of its social relations. The German version of Critical Psychology, Kritische Psychologie, we suggest, provides an alternative view of human beings, their actions and capabilities, which can serve as a starting point for thinking and acting differently to create transformative pro-environmental practices.

Keywords
environmental psychology, behaviour change, selfish individuals, tragedy of the commons, privatised individuals, cooperation, critical psychology, Kritische Psychologie, societal human nature, collective societal control

Introduction

As most researchers agree, attempts to change environmentally damaging behaviours into environmentally sound ones have not been overwhelmingly successful - at least not nearly as successful as they need to be if they are to halt the way in which human activity is destroying the natural bases of human life through climate change, environmental pollution, resource depletion and the reduction of biodiversity. Behaviour change strategies have traditionally taken various forms summarised by the title of one think-tank report '*Carrots, Sticks and Sermons*' (Collins, Thomas, Willis, & Wilsdon, 2003), but in recent years psychological models have become more sophisticated, focussing on issues of psychological processes such as identity (Murtagh, Gatersleben, & Uzzell, 2014; Whitmarsh & O'Neill, 2010), and social norms (Nigbur, Lyons, & Uzzell, 2010). However, the focus on the individual has never been far away (see for example, Clayton et al., 2015; Swim et al., 2009). Gifford has argued that there are seven classes of barriers to behaviour change: 'limited cognition about the problem, ideological worldviews that tend to preclude pro-environmental attitudes and behaviour, comparisons with key other people, sunk costs and behavioural momentum, discredence toward experts and authorities, perceived risks of change, and positive but inadequate behaviour change' (Gifford, 2011). One should not minimise the impact of some behaviour change strategies, but it might be argued that behaviour change strategies have largely been successful when they have focussed on what Stern (Stern, 2000) calls environmentally 'convenient' rather than environmentally 'significant' behaviours. These might include issues such as recycling where, providing facilities are available, it does not require much effort or sacrifice by the consumer, and provides instant feedback and thus satisfaction (i.e., reward in the form of giving the impression that the individual is 'doing their bit'). Such behaviours do not, however, address the root problem of consumption and arguably has little impact on GHG emissions and thus climate change. If one focusses on environmentally significant behaviours, the changes can be marked. For instance, Dietz, Gardner, Gilligan, Stern, & Vandenbergh (2009) suggest that scaling up the most effective non-regulatory interventions could reduce carbon emissions from household direct energy use by 20% in 10 years. But the focus of this paper, and where we take issue with much of the work in environmental psychology on behaviour change, is the theoretical bases on which empirical findings and behaviour change policies rely. We would like to challenge some key assumptions and suggest an alternative theoretical framework for future research and policies derived from *Kritische Psychologie* (KP). We use the German term to mark the difference between the Anglophone Critical Psychology (CP) and

Kritische Psychologie, which was developed initially in Berlin at the Department for Psychology (which does not exist anymore) but also in Austria and Scandinavia (Dreier, 2007;Egger & Hackl, 2010). While both approaches share some ideas and methods, they are also significantly different. Differences and commonalities will become clear through the argumentation in this paper. Our aim is to critically analyse the problematic ways in which the concept of the individual, developed, for instance, in the theories of the selfish gene (Dawkins, 2006) and the tragedy of the commons (Hardin, 1968)), underpin behaviour change research in Environmental Psychology. We argue that the conceptualisation of the individual developed in KP provides an alternative view of human beings, their actions and capabilities, which can serve as a starting point for thinking and acting differently to encourage pro-environmental practices[1].

Theoretical assumption: the selfish individual and the tragedy of the commons

There is much research which seeks to measure the values of individuals who are reluctant to engage in pro-environmental behaviours. They are seen to hold egocentric and materialist rather than altruistic or biospheric values (De Groot & Steg, 2008). One of the underlying assumptions of such value constructions is that humans are by genetic disposition selfish (Dawkins, 2006). Thus, in order to counter this – to work against the grain - they must be either seduced into social behaviours through incentives that satisfy their selfishness, or coerced into what is deemed appropriate behaviour by fines or regulations which hurt their self-interest and thus make it worthwhile for them to act in socially responsible ways. While not always articulated, the underlying rationale which has given oxygen to such an approach has been a theory that has become popular since the end of the sixties through an article by Garrett Hardin entitled, 'The Tragedy of the Commons'[2] (1968). In this text he argues that only private ownership can save common resources from overuse. Hardin saw the 'tragedy of the commons' as a rebuttal to the writings of Adam Smith and the workings of the 'invisible hand' in population control. Hardin drew on a pamphlet published in 1833 by the mathematician William Forster Lloyd, and interpreted the term 'tragedy' to mean 'inevitability' (after the philosopher Alfred North Whitehead, 2011). In Hardin's

[1] The debate behaviour vs. practices will be discussed in the section on Praxis Theory.
[2] According to Google Scholar, his article has been cited over 34 000 times and 259 versions of it are available. A search for research connecting the concepts of behaviour change and tragedy of the commons produces over 600 results in Google Scholar.

interpretation disaster is inevitable when the individual is locked into a system that compels him/her to seek limitless individual gain in a world of limits.

The concept was introduced in the context of the worldwide 'sixties movement' a portmanteau term for a group of movements (e.g., civil rights, students, anti-Vietnam War, feminist movement, gay rights, and environmental movements) which sought to challenge the assumptions and practices of the dominant order. Common to many of these movements was an underlying conviction that there was an alternative to the capitalist form of society, in which people would be able to live in more communal ways, care more for each other, organise their living and working collectively and transcend the egocentric, career oriented and war-producing national entities that Western societies had become. One could read Hardin's article as an answer to these world-wide movements, regardless of whether he intended it to be that or not. In this historical context, it was saying: the world is not in such a bad state because of specific historical developments and the specific make-up of our societies, but because humans are by nature disposed to selfishness and greed.

The notion of a 'selfish gene' and the idea of the tragedy of the commons, which constructs a dilemma between selfish behaviour and the necessity of acting according to the interest of the commons are related. Both draw on Darwin's theory of natural selection, which claims that species develop through a competition that leads to the 'survival of the fittest' (Darwin & Davidson, 2014)[3]. In their landmark book, *Environmental Problems and Human Behaviour* Gardner and Stern illustrate this point, writing, '*Imagine an individual animal, living long ago, that did not repeat behaviours that led to favourable immediate consequences for itself.*' (Gardner & Stern, 2002).

There are several problems with this image. First of all, it is problematic to deduce human behaviour from animal behaviour. Humans are part of nature and in this respect, also animals. However, as we will argue in greater detail in the section on *Kritische Psychologie*, since humans have built a 'second nature', human development differs from the development of its co-species. Moreover, newer ethological studies have shown that cooperation, not egoism is the basis of the survival of animals (Dugatkin, 2002)Finally, the argument that individual animals can illustrate human behaviour is circular. It projects individualistic human behaviours observed today into the animal world (while animals hardly live individually) and then uses this projection as a point of departure to naturalise something that is a specific, socially learned, present behaviour.

The primatologist Frans de Waal (2009) makes a similar point, when he criticises the notion of selfish behaviour:

[3] The term derives from Herbert Spencer but was regarded positively by Darwin, who included it into the fifth edition of his book, On the Origin of the Species.

> Don't believe anyone who says that since nature is based on a struggle for life, we need to live like this as well. Many animals survive not by eliminating each other or by keeping everything for themselves, but by cooperating and sharing. This applies most definitely to pack hunters, such as wolves or killer whales, but also to our closest relatives, the primates. (…) If man is wolf to man, he is so in every sense, not just the negative one. We would not be where we are today had our ancestors been socially aloof. (…) What we need is a complete overhaul of assumptions about human nature. Too many economists and politicians model human society on the perpetual struggle they believe exists in nature, but which is a mere projection. Like magicians, they first throw their ideological prejudices into the hat of nature, then pull them out by their very ears to show how much nature agrees with them. It's a trick for which we have fallen for too long. Obviously, competition is part of the picture, but humans can't live by competition alone. (Waal, 2009: 6)

We do not propose to engage further in these discussions within biology and ethology since our concern is the way in which the notion of the selfish gene and its implication - the 'tragedy of the commons' - is guiding research in environmental psychology. As a first step, we undertake a critical analysis of the way in which the so-called commons dilemma is researched in some of the most influential texts in the area of environmental psychology (Gardner & Stern, 2002) Gifford and Hine, 1997a). While these are not the latest publications by the authors, their more recent, equally influential, work is based on the same theoretical framework (i.e. (Dietz et al., 2009; Carrico, A. R., Vandenbergh, M. P., Stern, P. C., & Gardner, G. T., 2011; Gifford, 2011). In a more recent review of the usefulness of environmental psychology, Robert Gifford (2014), arguably one of the most important scholars of environmental psychology, has acknowledged the necessity to

> 'widen and deepen the field's consideration of how society works in terms of the production and consumption of goods and services and how broader social and political influences contribute to the formation of values, attitudes, and behavior'
> and to recognise
> 'that the wider political and social context must be considered when interpreting the meaning of attitudes in places with different dominant political ideologies'. (Gifford 2014: 544)

While we consider this an important step towards an environmental psychology that recognises the societal relationships within which individuals develop their personalities, this acknowledgement has not led to a transformative reformulation

of the theoretical framework used in previous works. For instance, in the same year, Gifford and Nilsson (2014) published an article reviewing the 'personal and social factors that influence environmental behavior'. While 'social factors' like class and gender are discussed as influential for environmental awareness, their review does not discuss the wider societal formation (namely a society based on profit-oriented production), which does not only play an important (though not exclusive) part in shaping personalities, but also limits the goals and reach of individual behaviours and actions. Thus, the burden of environmental behaviour is still placed on the shoulders of individuals. It is this dominant theoretical framework of environmental psychology that we want to critically discuss in what follows.

Concentrating our discussion on several key texts allows us to analyse their theoretical assumptions in more detail. In a second step, we discuss research in environmental psychology, which has criticised individualistic approaches to behaviour change, including criticisms developed by 'practice theory' in sociology. We chose to discuss the latter because they have been taken up by new and critical work in environmental psychology, which departs from an analysis that centres only on the individual.

Our discussion of the theoretical approaches is based on a historical concept of the individual as developed in KP, which we will present in a third step. In a fourth step, we suggest some ideas of how the KP concept of the individual/the subject could be used for an alternative approach to the creation of environmentally sound practices.

The tragedy of the commons is the tragedy of privatised individuals. Or: how specific conditions become universalised as 'natural' human conditions.

In their influential paper, Robert Gifford and Donald W. Hine set out to investigate '... the existence, direction, and generality of tendencies that may occur in harvesters' thinking about (...) the harvest choices that they and others have made, and in their beliefs about the causes of and responsibilities for harvest choices in the commons.' (Gifford and Hine, 1997: 285). They draw on and test five known cognitive tendencies in their experiment. The discussion here, however, will be restricted to the assumptions that guided the design of the experiment.

> The problem: In commons dilemmas, individuals harvest valued resources from a shared, replenishable pool. Their own wealth is one concern;

> however, when the scenario is framed in environmental terms, the fate of the resource also becomes a concern. The dilemma is whether to harvest heavily, which enriches the self but endangers the resource, or to harvest lightly, **which helps preserve the resource but may lead to relative poverty and does not guarantee that other harvesters will not exhaust the resource.** In general, light harvesting in the context of the commons dilemma is a form of cooperation; heavy harvesting represents a lack of cooperation sometimes called defection. (ibid.: 257, emphasis added)

In this definition, the authors describe a dilemma between a selfish interest on the one hand and an interest for the commons on the other. It is this idea that individual interests and the interests of the commons are necessarily opposed to each other that we want to challenge.

What we find in the quote above as a formulation of a general problem describes a very specific set of conditions. There are several individuals who are harvesting from the same source but do not know each other and do not know what the others are doing. What is called the commons is not something that they know as a common resource, but something outside of their control. The only thing they control is their own action. Although the authors state that light harvesting would be a form of cooperation, while heavy harvesting would represent a lack of cooperation, it is hard to see how individuals could cooperate when they do not know of each other. The way the experiment is set up reinforces the privatisation of the individuals:

> Procedure. Each group of five or six subjects was met by the experimenter, who seated them in adjacent chairs that all faced the same way; participants were visually screened from one another by partitions. The partitions eliminated nonverbal interaction and the experimenter instructed the participants not to communicate with each other during the session. (ibid: 259)

> Participants where then told that there were two objects to the exercise: to obtain for yourself as many points (representing trees [from the rainforest] or fish) as possible from the shared resource pool, and to avoid draining the resource pool to 0. (ibid: 259)

Maybe many people do not consider this arrangement as questionable because it is modelled on the capitalist market, the system in which we live. They therefore regard these structures as natural and take them for granted. It is a system in which producers do not know each other, but harvest from the same source and serve the same market, knowing only in retrospect whether they have produced a socially useful (and/or profitable) product (i.e., one that is needed and thus

acquired by others)[4]. However 'natural' this situation may seem to us, if we take a step back and look at the arrangement with a fresh eye, we might be compelled to ask the following questions: How can people cooperate if they cannot communicate? How can people negotiate the way in which they want to use the resource to ensure that everybody can use it without destroying it, if they neither know about the effects of their own actions nor of those of others? How can people take care of a resource they do not control and about which they know little? For instance, they do not know how much time it needs for rainforest trees to grow, or for fish to reproduce themselves. How can people take care of a resource under conditions where they do not know and cannot learn how to share?

In the experimental design the authors have set up, the participants (just as the actors in a capitalist market society) cannot learn anything about how they are using the resource, since their own acts do not provide them the necessary feedback. This kind of information comes only from the person leading the experiment, who – as the authors describe – pretends to be taking notes and then presents the results 'on an official-looking scoring form' (ibid.: 260). In other words, power relations are also part of the arrangement. What is supposed to be 'common' is in fact controlled by a leader, who is 'in the game' but 'not of the game', who puts people into a specific position or relationship but cannot be controlled e.g. voted out by the participants. The experimental arrangement is a situation where neither cooperation nor democratic participation is possible.

What the experimental situation constructs, is therefore neither a 'tragedy of the commons' nor a conflict between individual interests and common interests, but, rather, the tragedy of *privatised* individuals having to survive on a common resource without being able to act as a community. In this sense, the term 'tragedy of the commons' is a misnomer, since there are no commons. Resources may be used by all, but they are not held in common.

We introduce the term 'privatised individuals' as opposed to merely talking about individuals, because we do not want to confuse a historically specific form of individuals and individual behaviour with individuals as such. This will be discussed more in detail in the section on *Kritische Psychologie*. The term privatised individuals refers to the original meaning of the word private, coming from the Latin '*privare*', to take away or to remove. This meaning is still present in the English word 'deprived'. Privatised individuals are individuals deprived of

[4] A globalized capitalist economy functions in a much more complex way with market research trying to know beforehand what customers will want and/or try to instill a desire in people for the goods they are producing.

their social relations[5]. They are deprived in the dual sense of being unable to develop horizontal relations between one another and deprived of the possibility to influence or remove the vertical power relations in which they are situated. But they are also deprived in a third sense, namely deprived of the ability to collectively control what they have to share, which is in essence the socio-natural conditions of their survival.

What the experimental design of Gifford and Hine (1997) reproduces and reinforces is an ideology of privatisation. What it shows, therefore, is only the way in which privatised individuals can act under such specific conditions, conditions which seem 'natural' to the reader and to the authors because they reproduce the dominant societal conditions under which individuals are 'pushed and pulled' into acting selfishly. In other words, the scenario presented is a familiar one to the reader as much as it is to the participants of the experiment. Under such conditions, one cannot realistically expect people to do anything but to seek to improve their own wealth, since this presents itself as the obvious and natural option. Surprisingly, and despite conditions that militate against socially responsible behaviour, the majority of participants in this experiment were, as the authors call it, 'light harvesters'; they tried not to use the resource in excess.

> Yet, interestingly, harvesters generally underestimate the number of others who intend to preserve the resource. The modal view is: "I intend to cooperate to preserve the commons, but I don't think you do" (hence the article's title). However, the actual harvest request patterns in this study reveal this to be an inaccurate view of others, at least in the present context. (ibid.: 263)

Given the assumption of the tragedy of the commons, namely that individuals care predominantly for themselves, it is surprising that, even when they are set in an experiment where it is hard to do anything else, most individuals still acted in an unselfish way. Interestingly, this does not lead the authors to question their assumptions. They do not try to understand why their participants did not act in line with the precepts of the *tragedy of the commons*. That the participants thought others would act selfishly reflects how the assumption of a 'selfish gene' is part of our common sense. This is not surprising, given that the rules of competition in our societies encourage selfish behaviour and mistrust of the other. However, it does not explain why the participants in the experiment acted responsibly, even when they thought resources were in danger of being drained

[5] In the Athenian Democracy, such people were called 'idiots' (*idiōtēs).* They were people lacking professional skills, self-centred, concerned only with their private as opposed to public affairs. In short, people, who had not been civilised. (Parker, Walter C, 2005)

by the irresponsibility of others. If people were innately selfish, their assumptions about selfish others should have motivated them to harvest as much as possible before the others could empty the resources.

We have discussed the design of this experiment in detail because it exemplifies the model of human behaviour, and of human beings in general, which lies at the heart of behaviour change strategies. The methods they invent fail to acknowledge that people act the way they do because they live in societal relations where it is difficult to act in anything but self-centred ways. Living in a society where everybody has to compete against everybody else to be successful, there are few opportunities to develop cooperative skills. As in the experiment, people are often both prevented from cooperating horizontally and deprived of the ability to control the vertical power relations within which common resources are placed and utilised. In the everyday world, the source is not common, but privately owned and therefore out of the control of individuals and their communities.

People may use too much energy and drive cars too often, but they are hardly in a position to decide how energy is produced, whether public transport is available, and where schools, workplaces, shopping centres, and places of leisure are situated in relation to their homes. Neither are they in a position to know how much others consume, so they cannot make a comparative judgement about their own consumption levels in the context of equity. They cannot evaluate the implications of their consumption for 'others' especially those who will be the victims of the harmful consequences of climate change (especially in the global south). Finally, they cannot strategize how to act in a more just and communal way. The rational consumer in possession of complete information on which to make rational decisions may exist in economic textbooks, but not on the streets of London, New York or Beijing.

We want to give one more recent example of behaviour change research and strategies to exemplify our critique.

The following example comes from a review of what one might term 'mainstream behaviour change theories'. They are presented in a UK government report for social science researchers and politicians in government. The aim of the report is stated in the introduction: 'In signposting readers through the theoretical and empirical literature, the Practical Guide provides a framework for developing interventions based on behavioural models. It also provides detailed support for research analysts and policy-makers in the task of selecting appropriate models' (Darnton, 2008).

Darnton summarises the theoretical basis of the behaviour change theories he will present:

> ‘Models relating to the behaviour of individuals are predominantly drawn from psychology and sociology, the disciplines which are most concerned with understanding the factors influencing human behaviour. These models build upon standard economic theory which uses the working assumption that individuals tend to behave rationally, with the aim of maximising the benefit to themselves (in psychological terms, such models are ‘expected utility’ models)’.

Equating rationality and the maximization of benefits to oneself is reminiscent of the ‘selfish gene’ theory. It is presented as a given basis for different kinds of behaviour models. Darnton proceeds to list a set of individual behaviour models based on attitudes, norms, agency, habit and emotions (the latter being used less frequently in behaviour models), including contextual factors. These are followed by models on a ‘higher level’, … called ‘societal models’. ‘These models are important to those developing policy since it is often necessary to work on the contextual factors that limit behavioural options directly; simply changing a person’s perceptions of these material factors (eg. cost) will not be sufficient to enable change’ (ibid.: 14). These behaviour change guidelines do take context and societal factors into account (the examples given are technology and the economy). The problem is the way in which these factors are conceptualised. They are grafted unproblematically onto a concept of the individual that is separate from society. Society is merely the container of a selfish individual, looking after her/his needs, not a process in which individuals are shaped by and shape societal structures.

In one influential model cited by Darnton (Vlek et. al.’s Needs Opportunities Abilities (NOA) Model,1997) the needs of individuals are defined as: ‘Relations, development, comfort, pleasure, work, health, privacy, money, status, safety, nature, freedom, leisure time, justice’ (ibid: 15). We can imagine this list being extended further, since it lacks a theory that understands individual needs from the point of view of a societal individual. Even though social relations are included into the model, the assumption remains that these are only needed for the private satisfaction of an individual. The idea that individuals create their world and that this can only happen in cooperation with others, is absent from such models. The specific power relations within which individuals have to act disappear as well. Communities, friends and neighbours come into the picture, but only as a ‘factor’ influencing individual behaviour. For instance, in her guide on behaviour change for climate change, Jane Genovese writes: ‘…many of us adopt environmentally responsible behaviours due to friends, family or colleagues introducing us to these behaviours. This process is called social diffusion’ (Jackson, 2005). As much as such models and theories of individual behaviour are elaborated and made more complex, we are left with an

image of a selfish individual at the centre to which ever-increasing numbers of influential 'factors' are added. This conceptualisation is not coincidental, since the aim of these theories and models is to find strategies to change the ways in which individuals behave. Consequently, the attention focuses on potential levers to the correction of individuals' errant behaviour by scientists and politicians who believe to have a clear knowledge of how individuals *should* behave. Their only problem is how to find the adequate instruments to change individuals who behave wrongly into individuals who behave correctly[6].

While the focus of behaviour change policies is on individuals and their supposedly selfish, irrational or wasteful actions, there is deafening silence with respect to the relationship between societal structures and the ways in which these shape the psychological fabric of individuals. While a number of factors are named that may influence individual behaviour, the supposed characteristics of the individual remain unquestioned and are constructed as 'natural', instead of being analysed as the result of specific, historically developed, characteristics of present-day societies.

The self-contradictory character of individualistic behaviour change strategies

If a specific kind of society encourages individuals to act selfishly in order to be successful and to survive within it, and if this is the kind of society we live in today, does it then not follow that strategies for behaviour change have to target this kind of individualistic selfish individuals? Surely, an experimental design that reproduces existing societal characteristics is entirely appropriate, since it aims to reproduce real world conditions? This may seem logical and even necessary, but there is a problem: behaviour strategies that draw on privatised individuals, who prioritise their immediate enrichment, perpetuate and reinforce these tendencies. They teach people – once again – that one should act only if one receives an incentive or under the pressure of coercion, or to fit into a community, or according to the instructions of someone in power. They reinforce the idea that people's interests and needs do not matter, that it is legitimate for a government to mould, if not coerce, behaviour change through regulations, incentives and nudging (or what is now sometimes pretentiously referred to as neuromarketing, or behavioural insight (Dolan, Hallsworth, Halpern, King, & Vlaev, 2010) – all in the name of 'the common good' – as defined by politicians.

[6] One might ask what kind of behaviour change strategies it would require to change this top-down behaviour of scientists and politicians.

Because such strategies reproduce the privatisation of individuals and build on what our society already rewards, behaviour change approaches may work to a certain degree. Some people may respond to the incentives provided, but many remain impervious to such entreaties because they have more pressing issues to which to attend (i.e., keeping their jobs, caring for their families, staying healthy, finding suitable housing). In other cases people may resist coercion through rules and regulations, either passively or directly through voting political parties out of office if they advocate policies they see as impinging on their freedom, such as by imposing green taxes, or regulating waste disposal (Uzzell & Räthzel, 2009). Paradoxically, behaviour change strategies which reinforce selfish behaviours, are especially self-defeating when they are efficient. They are a barrier to the kind of sea change that is required, namely for societies to learn living *with* as opposed to *against* nature.

But there is another reason not to base research and policies on traits that are the product of specific, socially deprived forms of living and working. If existing societal characteristics produce selfish behaviours, then it is those societal characteristics that must be addressed, not the individuals who are subject to societal forces and who need to act in certain ways in order to survive in given societies. In other words, we need social and psychological theories that do not take specific societal structures for granted and thereby 'naturalise' and operationalise them in such a way that the theoretical assumptions of the experiment (i.e., structures of privatisation) remain unchallenged. This only leads to a circularity in which an output becomes the privatised behaviour that has been the input. Trying to change something while at the same time preserving/reifying it, is indeed the 'uphill struggle' Gardner and Stern describe (2002).

Perhaps the most important argument against the idea of a dilemma between selfishness and the common interest is that, as we have seen in the experiment undertaken by Gifford and Hine (1997a), selfishness is not the whole story of human behaviour. The world, and even behaviour change research, is full of examples of people acting in socially responsible ways, as much as it is full of the opposite. If caring for the common good and responsible behaviours occur even under adverse conditions, they must have a basis somewhere in the societal fabric and in the fabric of the individual psyche. The opposite of selfish behaviour would be cooperative behaviour. In the next section, we look at the way in which cooperation has been conceptualised within environmental psychology.

On the enigma of cooperation

'This book is an inquiry into one of the great puzzles in the human sciences: the evolution of cooperation and altruism in the human species' (Henrich and Henrich, 2007: 3).

The notion of cooperation plays an important role in the work of Gardner and Stern (Gardner & Stern, 2002). In spite of their use of the 'individual animal' as the archetypical example of the behaviour of humans, cooperation is presented as a central universal feature of human life:

> There is little doubt, for instance, that human beings in all cultures are intensely social animals. Group living, cooperation with other group members, and division of labour appear to be culturally universal features of human life, not only across cultures, but also across history dating back to the Stone Age. … Note also that a division of labour (...) permits individuals to specialize in a subset of the tasks on which survival depends, gaining further advantages for groups. Finally, group living and cooperation greatly increase the ability of our species to survive, because group living made possible all the benefits of cultural evolution: the development of language, and the transmission from person to person and across generations of survival-enhancing information (culture)." (ibid.: 196)

All the elements necessary to develop a theory of human existence that is based on cooperation and group life are assembled here, yet they do not lead the authors to conclude that it is cooperation, the ensemble of social relations on which human development is based, not selfishness that governs development. Instead they ask, 'How is it possible to square the evidence of apparent altruism with the fact that natural selection favors individuals whose characteristics promote their *own* survival?' (ibid: 196).

If the ethological studies cited above are correct, there is no circle to square. Cooperating is not an altruistic activity in the sense in which Gardner and Stern define it, namely as an act 'that helps another individual survive and/or reproduce and that is performed at some cost to the helper's ability to survive and/or reproduce' (Gardner and Stern 2002: 196). The authors' definition begins from the point of view of a lonely individual helping another individual; that is, it conceptualises society as an agglomeration of private individuals. One private individual meets another private individual, which s/he can only help by sacrificing part of her/his own ability to survive. Ultimately this implies that survival is best achieved when it is attempted as a practice of 'me against the rest of the world'. The conceptual apparatus Gardner and Stern adopt does not allow

them to jump out of the box in which individuals are seen as Leibniz' monads acting against the rest of the world comprising other monads.

If we accept this argument, Robinson Crusoe, before he met his servant, should have had the best chance of survival, since he is not dependent on any other individual for the satisfaction of his needs. For the rest of humanity, cooperation is a must, since every individual depends upon other individuals to meet their needs. In this sense, cooperation is not an act of altruism where one individual helps another. Rather, even the most selfish of individuals can only constitute themselves and survive as individuals in relation to others and in acting together with others. It is not *against*, but *in* every individuals' existential interest to cooperate. This is the case even in the animal world. In her meticulous study of Atlantic Puffins, Roughgarden (Roughgarden, 2009) argues that cooperation is the acceptance of a team goal and working together to achieve that goal. In other words, cooperating does not mean to give up a goal but to attain it. Similarly, in their analysis of the 'prisoner's dilemma', Worden and Levin state, 'The widespread conflation of cooperation and altruism in the study of behavior reinforces a widely shared view of the world in which cooperation is a mysterious anomaly whose existence is difficult to explain because of the universal temptation to defect' (Worden & Levin, 2007). They go on to show that individuals learn that cooperation is in their best interest and, through this process, are able to overcome and nullify the prisoner's dilemma. In spite of these insights from ethology and evolutionary biology, environmental psychologists continue to define the 'factors' that allegedly influence human behaviours by opposing altruistic with egocentric values (De Groot & Steg, 2008; Bamberg, Rees, & Seebauer, 2015).

There are numerous studies that explore cooperative behaviours in experiments and through surveys. We do not discuss them here in further detail because they all share the same underpinning model of the individual as a monadic unit, as a personality who can cooperate either under certain conditions or because of certain 'personality traits'. In an overview of research on cooperation in social dilemmas, Biel and Thørgensen describe such experiments and surveys succinctly and approvingly: 'Finally, the behaviour of others is unknown to the participants. Hence, the intention to cooperate can, loosely speaking, be attributed to individual characteristics' (Biel & Thøgersen, 2007: 95). Our problem with such studies is not their specific methods nor their specific results, which will all be valuable within the context of their theoretical model of the individual. Our issue is with the theoretical model itself.[7] What we

[7] For other examples of such research on cooperation see, (Arnocky, Stroink, & DeCicco, 2007; Fowler & Christakis, 2010; Zelenski, Dopko, & Capaldi, 2015; Balliet, Parks, & Joireman, 2009; Nordlund & Garvill, 2003)

problematize is the way in which individuals are constructed as monads, sealed off from other individuals and only acting as a reflex to certain conditions or an effect of their personality traits. To formulate this with Holzkamp: 'The personality hypostases within psychological experiments only allow personality-related theoretical interpretations where the individuals are not conceivable as the origin of subjective-active contributions to determining the conditions of their lives, but merely as vehicles of some invariant personal "ontological determinations" allegedly allowing the "prediction" of their further behaviour from an external control standpoint' (Holzkamp 2013: 84).

In the next section, we discuss literature that has aimed to overcome this view of disconnected individuals.

Beyond the privatised individual

With few exceptions (Martin & Czellar, 2017), the growing literature on 'values' and the ways in which they do or do not influence environmental behaviour rarely asks where these values come from. When it is acknowledged that human beings are fundamentally social, the social is perceived on a micro-level of daily encounters, friendships, peers and influential people:

> We are fundamentally social creatures. We learn by example and model our behaviours on those we see around us. We learn most effectively from those who are attractive to us or influential for us, or from people who are simply 'like us'. Sometimes we learn by counter example. And we learn not to trust people who tell us one thing and do another. (Jackson, 2005: 5)

What is bracketed out of such accounts is the question about the kind of society we live in, what kind of values are produced through the way in which social relations are organised and shaped through relations of power, the economic structure of society, and the dominant ideologies and forms of politics that reproduce specific kinds of social relations and individual behaviours.

This is, in essence, the basis of a relational model of the person, as initially put forward by George Herbert Mead. Mead wrote: 'a self can arise only where there is a social process within which this self has its initiation. It arises within that process' (Mead, 1956). Within this model, Stringer writes: 'Man is not seen as a bundle of traits, or an individual simply responding to rewards and punishments, but as his social relations. Man is the sum of his social interactions through constant interactions with others, the self is constantly changing; interaction is fully reciprocal as neither the individual nor social processes are

given priority.' (Stringer, 1982). In terms of attitude formation, too, it is accepted that an individual's attitude towards some aspect of the environment is not formed in isolation, solely and uniquely within the head of the individual, but is a product of the interaction between their own cognitions and affect and their appraisal of the cognitions and affect they believe others to hold. As Nigbur et. al. describes, when our view of the world confronts another's, there are three options: we may accommodate the other's views and incorporate them into ours, we may completely reject them, or they may completely replace our own. More recently Nigbur et al., (2010) have shown how social norms can be an important factor in driving environmental change.

Thus, one might argue that we are knocking on open doors with our critique of the concept of privatised individuals because Critical Psychology (i.e., the Anglophone tradition) has long denounced the notion of the individual as a monad and acknowledged the profoundly social character of individuals. There are also environmental psychologists who draw on critical psychology (Adams, 2016; Batel & Adams, 2016; Uzzell & Räthzel, 2009). In addition, some environmental sociologists such as Elizabeth Shove have challenged what they see as individual reductionism in environmental psychology, and argued for going beyond what she terms the ABC (Attitudes, Behaviour, Choice) strategy of behaviour change (Shove, 2010). In this strategy, responsibility for climate change is thought to lie with individuals who are able to make choices, which, in turn, will make a difference. ABC is not simply a value-free way of collecting data. Such approaches have a framing effect in that theories of change inform and impact upon modes of governance. As Shove writes: 'ABC is a political and not just a theoretical position in that it obscures the extent to which governments sustain unsustainable economic institutions and ways of life, and the extent to which they have a hand in structuring options and possibilities" (ibid, 1274). Shove goes on to ask: "Could it be that the ABC is generated and sustained not by psychologists and economists but by the policy makers they serve, and could it be that this vocabulary is required in order to keep a very particular understanding of governance in place? (ibid.: 1283). It is clear from a reading of the research literature cited how a critical environmental psychology approach has been influenced by environmental sociology and, in particular, practice theory.

Practice theory

To understand how people act and how social orders are produced, researchers under the broad label of the 'practice turn' in the social sciences suggest the

notion of practice. It goes beyond the idea of the lone individual engaging in specific behaviours, as well as remaining below macro-level explanations that see external and economic forces at work. Practices are seen as an 'active integration of elements, including meanings, competences and materials'. (Shove & Spurling, 2012): 4) Practice theories have thus equipped the individual with a body (Schatzki, Knorr-Cetina, & Savigny, 2001) and with the ability to create meanings, have skills and the materials needed to realise their actions. Instead of selfish individuals endangering the commons, we have individuals involved in bundles of practices, or as Shove and others put it, individuals as 'carriers of practices.' However, in this conceptualisation, we seem to lose individuals and their needs altogether. We can assume that, since the 'goal is one of reconfiguring the practices that people reproduce' (Shove, 2014), individuals are seen as determined by those configurations of practices (for similar critiques see also (Sayer, 2012) and Adams (2014)). At the end of the day, the goal of the practice approach does not differ so much from the goal of the behaviour change approach, namely to change what people do and how they do it, in order to create sustainable societies. What is different is that practice theory does not address the individual consumer, but asks politicians and industry (whom they address as the agents of change) to alter the configurations of practices, in order for new, sustainable ones to be developed by individuals. Of course, it is sensible for instance to change the infrastructures such that people can choose public transport, or to build cities in a way that enables people to walk instead of driving their car for several miles to do their shopping, etc. It becomes more problematic when governments are supposed to change the meanings of practices. How is that then different from trying to raise environmental awareness? In some respects, it could be argued that in the hands of governments, changing practices is not much different from changing behaviours. It has some of the same manipulative qualities of 'nudge' (Thaler & Sunstein, 2008) that lie within a philosophy of libertarian paternalism which argues that people should be encouraged to engage in behaviours that enable them to live longer, healthier and better through the provision of choice architectures. There is a danger that practice theory (against its intentions) could be seen to be an instrumental device such as 'nudge'. An instrument that is supposed to change the way in which people act without the latter noticing it (Behavioural Insights Team, 2011).

The problem we see is that the practice approaches do not have an explicit model of how and why human beings act and how they become the way they are, how they are shaped and shape the societies they live in.

In *Sustainable Practices, Social Theory and Climate Change,* the editors (Shove and Spurling 2012) have collected works by a range of practice theorists in addition to some that are critical of its concepts. Sayer's critique points to the

absence of the concept of power and the absence of business practices in the accounts of practice theorists (ibid., 173). We agree with this and suggest that the main reason why practice theories remain entangled in everyday practices of consumption without engaging in everyday practices of work and production, is that the questions they ask, such as 'what is energy for?' (Shove & Walker, 2014) are, while important, incompletely formulated and mainly framed around the consumer. Expanding the question *what is energy for* to *what is energy for for whom*? would allow us to see that energy is not only used for consumption practices (showering, watering the plants, watching TV, etc.) but that it is also used, namely produced, for making profits. If profit were not the driver, and if things were produced in order to satisfy people's needs within the concept of socially useful products (Cooley, 1987; N. Räthzel, Uzzell, & Elliott, 2010), we would not have climate change that threatens human existence.

Thus, while we agree with practice theories in terms of the emphasis on practices and their elements, namely meanings, skills, and materials, in *Kritische Psychologie* these elements are arranged and conceptualised differently, as we will show below.

Societal/social context

In his insightful plea for a critical social psychology to take on the issue of human – non-human relationships, Adams argues:

> The potential of critical social psychology here is to critically engage with perspectives outside of mainstream psychology (…) particularly in terms of the role of human activities in ecological degradation, that reflects its commitment to address the role of social context and interaction in shaping individual experience, behaviour and the collective production of reality. (Adams, 2014)

Later in the text, Adams suggests that Critical Social Psychology is well equipped to demand '… an emphasis on the social context in which individual experience and behaviour occurs, and to attendant forms of power, inequality, injustice and oppression that are central to that context (ibid. 259), but less well positioned to 'address the broader context of the human–nonhuman interrelationship, as it has historically steered clear of ascribing any extra discursive qualities to 'nature' that we, human and nonhuman alike are mutually grounded in, shaped by, or responsible to' (ibid.: 259).

As much as we agree with Adams here, we want to reflect, through the lens of *Kritische Psychologie,* in more detail on the notion of context and the idea that

individuals develop ‘in’ those contexts. In order to illustrate our reflections, we draw on the empirical research undertaken by Barr and Prillwitz (Barr & Prillwitz, 2014) on environmentally sustainable mobility. This can be taken as a representative example because the authors criticise the individualistic approach of behaviour change strategies and refer simultaneously to practice theory and the notion of individuals being embedded in ‘social contexts’ (ibid.: 13) as a solution to its limitations:

> In this way, social practices are more broadly conceived than habits in that they place current individual routinised behaviours into both a social and a historical context, thus recognising how apparently individual choices are framed by contemporary trends and the development of such trends over time and space. Using such an approach, we argue for an engagement with research (…) that has applied a practices approach … (ibid.: 7)

Consequently, in their analysis of the focus group conversations they undertook with residents of five electoral wards around Exeter, the authors discuss how their respondents describe the contexts within which they make their travel decisions, i.e., the needs created by the specificity of their jobs and their everyday tasks, the physical layout of the landscape (shopping malls that can only be reached by car), the contradictory policies of the UK government, but also the changing social relations (individualisation) and the dominance of corporations:

> When we were not such an insulated society, for example, people who worked at Dagenham, (…) they ran car clubs, because they all worked at the same place and they all started at the same time, (…) the cars were then loaded with guys—‘it’s your turn to drive’, that doesn’t work. More people today live alone. Now young people your age who have their own house are not part of anything like that, they have their own transport, they do everything on the Internet. So there’s no society as it was like that. No nuclear family, or in large family people don’t work like that anymore. That’s the big change” (Thomas, Cullompton). - Far more individualism isn’t there, yes (Tim, Cullompton). - There is too much individualism (Thomas, Cullompton). - If you just look at the way it’s going, *we are governed by basically fossil fuels, and if we could find another source of energy it would make things easier* (Thomas, Cullompton). - *I was going to say … that the petrol companies will never let you do it* [develop a compressed air engine] (Keith, Crediton). (ibid.: 11/12, emphasis added)

Barr and Prillwitz interpret these statements as descriptions of ‘changes in mobility practices’ which, in their view, respondents ‘considered part of a wider

physical and political-economic structure that had engendered an individualistic approach towards everyday living and brought about changes in both the need for travel and shifts in mobility practices.' (ibid.: 11).

From our perspective, there are two stories in these quotes. One is picked up by the authors, namely the societal changes which have, as the respondents see it, destroyed the possibility for cooperative practices and engendered individualism. However, there is a second story here: the critique of the overwhelming power exercised by fossil fuel and petrol companies deciding about what is produced and how. The authors interpret this as 'political apathy' and 'political fatalism'. One can see it that way, but one can also understand this critique as representing the reality of economic power relations overriding political power. Moreover, identifying economic power relations and the loss of more collective forms of life as hindrances for societal and individual change can also be understood as a way for respondents to articulate their desire for collective control of their lives and living conditions. It is a separate question why the respondents do not act to create new forms of cooperation, challenge or undermine the power of petrol companies, but contend themselves with a critique. One can call this political apathy. But by judging and labelling people in this way, we are again putting the blame solely on individuals without analysing in more depth why they are not taking action to overcome their powerlessness.

By emphasising social context and employing a concept of practices, in which individuals are shaped by this context and solely the carriers of practices, Barr and Prillwitz do not only discard the privatised individual of the behaviour change paradigm, but the individual altogether. This is why they do not perceive the desire for collective control that comes through in the statements of their respondents, but dismiss them as an example of fatalism. The authors heard the social contexts described in the statements of the respondents, but they dismissed their interpretations of these contexts, the ways they feel and think about them. Thus, while hearing their respondents, they have not listened to them. One can argue with Holzkamp that this is an example where '… subjects are merely one-sidedly considered as living under conditions but not as creators and shapers of the societal conditions of their lives … ' (Holzkamp 2013, 84f).

Granted, it is difficult to consider individuals as creators and shapers of societal conditions, when all one hears from them are their complaints about why they are not able to be creators and shapers. However, this is where the challenge for a critical environmental psychology lies: to listen more closely (Back, 2007), to find, in the way in which people frame their personal troubles, the desires and needs that they articulate for another society and to take those seriously.

The conclusions Barr and Prillwitz draw from their analyses, namely that looking 'beyond the individual as a frame of reference to consider the (more

radical) options policy could adopt for making substantial changes to travel practices and indeed other forms of environmentally related practices' (ibid.: 14) are reasonable enough. However, by going 'beyond the individual', we suggest they have thrown the baby out with the bathwater and left individuals as social actors behind. Consequently, they then have nobody else to turn to for 'radical options' but policy makers. Asking policy makers to adopt radical options to 'tackle the underlying social and economic contexts for current practices' (ibid.: 15) is a bit like asking an oil company to dissolve itself and turn into a worker-owned cooperative producing renewable energy. True, Barr and Prillwitz suggest asking for new ways of 'conceptualising the role of citizens and the state' (ibid.:16), but they end up with the 'policy community' as the agent of social change. Neither equipping individuals with a body, meanings, and materials, nor situating them in social contexts as carriers of practices seems to liberate individuals from the perceived need to be changed by the acts of others, by politicians and/or companies, and ultimately by social scientists like us. We then only need to convince politicians that we can show them how they can influence individuals to consume whatever others decide to produce in a sustainable way. This immediately begs the question why politicians and social scientists should be in any way different from those individuals out there, whom they want to change?

In our view, what is needed in order to transform the top-down approaches of policy makers (and social scientists), in which individuals become the recipients of political interventions rather than their architects, is not just to situate the individual of behaviour change strategies in a context of practices and societal conditions, but to develop a different understanding of the individual altogether. It is to this task that we now turn, by putting forward a concept of the human being as it has been developed by *Kritische Psychologie*.

'Collective control' and 'societal action competence' – a historical approach to a theory of the characteristics of human beings

To many it may come as a surprise that a psychological approach, which defines itself as Marxist would describe itself as a 'psychology from the point of view of the subject' (Holzkamp, 2013). However, in their *Communist Manifesto*, Marx and Engels envisioned a society without class contradictions as one in which 'the free development of each is the condition for the free development of all' (Communist Manifesto, p. 27). Similarly, *Kritische Psychologie* aims to develop concepts in which the individual, the subject, constitutes the point of departure for the formulation of a psychological theory.

KP stresses the need to develop a psychological theory based on a historical investigation of the development of the human species. This is not specifically new as, for instance, (Gardner & Stern, 2002) present a host of theories which base their account of human selfishness on historical approaches to human nature. We have argued above that their argumentation is problematic because they project, in a circular way, present day behaviour into the past in order to then use this projection to explain and legitimate, through naturalising them, present behaviours. Practice theorists also stress the need for an historical approach: 'Taking a slightly broader view the total range of practices that constitute social life has also changed: what is normal today has not always been so and, as such, there is no reason to suppose that currently familiar arrangements will stay the same for very long. It is reasonable to expect transitions in the array of practices that constitute social life and the resources they require.' (Shove/Spurling, 2012: 2). An historical approach is necessary to broaden our perspectives and to understand that what we experience as normal practices or characteristics of individuals today are not human practices or human nature *per se*, but specific results of specific historical developments. Moreover, we need a historical approach to understand *how* the behaviours we see today came into being. This helps us to understand, which kind of societal relations have led to which kinds of practices and human characteristics and therefore, which are the societal relations we need to change. Finally, a historical perspective also helps us understand how humans emerged as a specific species and thus, what constitutes – through the historical changes - the specificity of humans as opposed to other animals[8].

Like other theories that try to understand the specificity of humans, KP goes back to the '*Tier-Mensch-Übergangsfeld'* (Holzkamp, 2013; Osterkamp, 1982), to the 'transitional space' within which certain animals became a different species of animals, namely humans. What they define as the decisive step of transition is the ability of humans, to make tools not just in order to produce their means of living, but to make tools for a 'generalised purpose', for an activity that lies in the future, that may not be conceivable yet, but is expected to be necessary at some point. Animals make tools, too. Apes may prepare a branch to get bananas from high up in the trees, but they usually do this for an immediate action. Sometimes they carry this stick with them for a while. However, humans go a step further: they make tools to make tools in order to produce their means

[8] For instance, if we know that cooperation has been essential for developing the world and human capabilities, and how individualism came into being through the destruction of the common good and common ownership, we can discuss how we need to develop new ways of common ownership - because we cannot just go back to how it was - and new ways of cooperative, communal working together in order to overcome the present form of privatised individualism.

of survival. Second, in producing tools that can produce tools, which are ultimately used to produce the means of survival, there must be a conscious division of work, where tool makers must be sure that they will have access to food, shelter and clothing, even if they do not produce these means of survival themselves. This means that the foundation for the human way of producing and reproducing is a societal context, where each individual knows how his/her work will contribute to the general survival of the group and can therefore be sure that he/she will get her/his fair share of what the group collectively produces. A simple example is described by Holzkamp in the act of hunting. In the hunting process, there are those who kill the animal and those who chase the animal into the direction where the hunters are. The latter, although they need the food, have to chase the carrier of the food away from themselves, that is, they need to act contrary to their immediate needs. In order to do so, they need to be sure that they will get their share of the food, which they helped to catch. One might argue that the same is true for a hunting pack of, say, wolves. However, as far as we know, wolves do not sit together after the hunt and decide how much of the meat should be distributed to whom, including those who have not been part of the hunt themselves, but have produced the weapons used for hunting or have been responsible for bringing up the hunters.

Kritische Psychologie argues that, deriving from the historical study of the emergence of humans and the role of cooperative collective production in their development, we can reconstruct several characteristics that define a specifically human way of living and producing:

- First, it is characterised by foresight and a constant learning process. Tools are produced for an opportunity yet to come, not simply for the immediate moment. They are saved, maintained, and improved as a result of the generalised knowledge that results from the experience of using them in specific conditions.
- Second, human existence is necessarily socially mediated. Humans cannot exist as lone individuals in nature (this they have in common with animals). The social character of humans has been emphasised by many researchers. However, there is something specific about the social character of human life, as opposed to the social life of animals: in principal, the ever-increasing complexity of the division of labour makes it necessary for humans to know and take part in controlling the societal living conditions at large, since they constitute the condition of their own individual life. Where this collective control is not possible, humans need to create imaginary forms of control to overcome the anxiety that comes with the impossibility of controlling the conditions of their lives collectively. These can take the form of controlling others, of withdrawing

into individualistic, privatised lives with the consequences discussed above, or of 'political apathy'. Between the human needing food and the food itself lies a very complex set of societal relations, a complicated division of labour that involves the production and distribution of food - along with a myriad of cultural attitudes and practices (Tolman & Maiers, 1991). Feminists have pointed out that, opposed to other animals, humans also need support when giving birth. Thus, not only the production of the means of life, but also the reproduction of the species is based and depends on cooperation and social mediation[9].

- Third, due to the specific human way of re-production (production of the means of life and of life itself), which includes tool making in ever-more sophisticated and mediated ways, the basis of human development changes fundamentally: it is no longer dependent on genetic make-up alone (instincts for instance) , but rather on the accumulated knowledge that is materialised in technical artefacts, the technological basis of human existence at any given time and space, together with the accumulated knowledge materialised in cultural artefacts. Tolman and Maiers argue:

> Individuals produce for themselves by participating in the social arrangements we call society. It is in fact society that mediates each individual's relationship to the material world, which is no longer 'natural' in the strict sense of the word. Furthermore, our effectiveness in dealing with the world is no longer governed by natural, biologically determined abilities. It is governed rather by the stage of our society's development and the effectiveness with which we have individually and collectively appropriated the skills necessary for participation in societal existence. ... Categories of psychology like learning, emotion, motivation, and cognition cannot fail to be significantly altered by the fact of our existence's societal mediatedness (Tolman and Maiers 1991: 14).

[9] The fact that the human way of life is always mediated is salient for understanding what the needs for individuals today are, who want to lead an environmentally sound life. Ideally, what one would need to know is where every element of the products used comes from and how and by whom they have been produced through the whole global value chain. To be sure that one's contribution to the well-functioning of the earth's production has the desired effect, individuals would also need to collectively control the production and distribution processes. Though much more complex and complicated than before, the way in which the living conditions of each individual depend on the living conditions of individuals across the globe has never been as knowable. The living conditions of every individual depend on the ways in which societies across the world live and impact on the environment. It is less realistic than ever to survive by just tending one's own garden. The whole world is everybody's garden and there is a need to tend it collectively.

In other words, the 'essence' of what is human does not lie 'within' humans, neither in our genes nor in our inward feelings and cognitions; it lies 'outside', in the societal relations and the accumulated societal artefacts that represent the level of human knowledge (and ignorance) at a specific point in time and space. In other words, as humans we continuously re-produce nature and with it our second nature.[10]

If we understand human development as based not on the Darwinist model of the 'survival of the fittest model' and thus on genetic changes, but as based on our societal relations and accumulated knowledge, we can define 'human nature' in a significantly different way than it is normally understood. While it is usually conceptualised as something static, which has to be dealt with as a given (i.e. a selfish gene, (Dawkins, 2006), we can now understand 'human nature' as something that is simultaneously consistent and consistently changing as society and our social relations change. The need for cooperation, by means of participating in the societal control of our living conditions, the mediation of human activity through material and social relations and the logic of development based on a socially produced second nature (accumulated artefacts and knowledge) are constants that define the specificity of human existence. However, the character of these constants consists in their continuous change and thus differ for different people across time and space. In other words, the nature of human nature is a *societal nature*. Thus, constructing individuals as carriers of practices, as acting within specific societal contexts, tells us only part of the story. Such constructions do not account for the profound way in which each individual's existence is mediated through social relations. Practices and contexts do not only change constantly, but also who individuals are, what they experience as necessary, what they value, how they deal with power relations, to whom they subordinate themselves and if, when, and how they resist. Thus, what needs to be overcome is not just an individualistic reductionism of psychological concepts, concepts in which individuals are reduced to privatised monads, but also concepts in which they disappear in social relations and material practices. What KP aims to overcome is the dualism between the individual and society.

The concept of a societal human nature, defined through the need of individuals to collectively control their living conditions, is not a descriptive concept. It does not describe the way in which individuals act at any given moment. It is a heuristic concept which helps to understand, for instance, why people feel powerless and anxious, when they can only change their immediate practices but do not see how this can change the environmental crisis in general (Barr & Prillwitz, 2014; Kenis & Mathijs, 2012). It enables an analysis of the problems, conflicts and contradictions that people experience within today's

[10]For the development of this term see also (Smith, 2008) and (Castree & Braun, 2001)

societal relations, when the needs of cooperation and collective control are not realised. The perspective it offers is to find ways to develop what it calls *societal action competence*, that is the capability to collectively change the conditions of one's existence and thereby change oneself and develop individual capabilities to act cooperatively.

Analysing the harvesting example at the beginning of our paper, KP would define the conditions under which people were required to act as conditions in which cooperation and a collective control of these conditions did not exist and thus, the tensions defined in the 'tragedy of the commons' were inevitable because people were not able to know and negotiate each other's contribution. The fact that most people acted in a socially responsible way and that the idea of selfishness was reduced to people thinking the other participants in the experiment would act selfishly, could be explained in terms of the specifically human capability of perceiving one's own contribution as part and parcel of a broader process, even under advert conditions. In other words, collective and cooperative capabilities exist and are developed even under conditions of competition because without them, people could not survive. Under specific conditions these capabilities may be subordinated to egoistic behaviours, but that does not mean that they disappear completely. If they did, social life and human survival would be impossible.

What the behaviour change paradigm sees as individual's selfishness overriding socially responsible behaviour can be understood through KP as a behaviour that reflects the impossibility of individuals to collectively control their living conditions because they do not live in socially meaningful relations and are subordinated under relations of power not of their making. The personal considerations and traits can, through the lens of KP, be analysed as a result of such societal relations, not as general personality characteristics. For instance, what Barr and Prillwitz (2014) define as political apathy and behaviour change theorists as a lack of a sense of efficacy, or perceived behavioural control would be analysed as a realistic insight into the dominant power relations, which hamper the ability of individuals to collectively become the owners of their fate and participants in its possibilities. Furthermore, practices that aim predominantly at self-enrichment can be analysed as the way in which the behaviour of individuals is mediated through the goals that are dominant within Western capitalist societies. While individual enrichment is rewarded, socially responsible behaviour can become dangerous for the individual as it endangers their ability to be successful at work and brings them in conflict with authorities at the workplace and in society at large.

KP also challenges the validity and reliability of psychological studies that, in assuming that selfishness and self-interest is an innate human trait (i.e.,

essentialist and universalist), undertake cross-cultural research (employing, for example, the theories and methodologies developed in Western/US-European psychology) in cultures where social relations are different. Concepts studying the behaviour and practices of individuals need to be derived from specific societal relations within which people are acting. These specificities can only be understood if the historical processes through which they evolved are analysed. The human capabilities to flourish and to develop societal action competences are universal, but the ways in which they are restricted or enabled are specific to time and space.

Collective societal control of socially owned resources

Gardner and Stern (2002) describe several instances in which 'community control' of natural resources has survived over centuries and has allowed people not only to preserve their resources, but also to prosper as individuals and as a community. Thus, as they conclude, 'community control' is the best method to ensure that a community will not deplete its resources, even when this means reducing their consumption of these resources. What the authors also show is that under conditions where a community is in control of their own resources, the oppositions of individual interests and group interests, or of cooperation and egoism, do not hold. However, Gardner and Stern (2002) do not explain their results in this way. Instead, they explain that the success of commonly owned and controlled resources is due to people having learned that in the long run self-sacrifice benefits all. But if individuals and their resources thrive, where do the authors see the sacrifice? The sacrifice is, they argue, that nobody transformed their 'assets' (e.g., sheep, cows,) into capital, that is into a means to produce not just a commodity (i.e., milk, meat), but to produce profit. This definition of sacrifice shows how an unhistorical view of society naturalises the specific historical characteristic in which scientific analyses take place. Producing for profit is a very recent way of producing, not a natural human need. Only if producing for profit is naturalised can a community, which enjoys well-being and prosperity, be described as a community of self-sacrificing individuals because they are *not* producing profit. If we assume instead that *production for consumption* is the 'normality', and that production for profit is the exception (since production for profit is only possible for a small minority of producers), then there is nothing altruistic or self-sacrificing about these communities. They are only an example of the fact that there are pockets in our capitalist world where the principle of infinite self-enrichment has not conquered the hearts and minds of individuals. We can thus interpret the findings of Gardner and Stern

(Gardner & Stern, 2002) and of Ostrom (1990), on whom they draw, differently. They show that production that is not oriented towards making profit, but towards satisfying needs, can do both, i.e., secure the resources upon which production depends and promote the well-being of the individuals that constitute the community. As Maslow and Honigmann report, drawing on a comparative investigation of different societies by Ruth Benedict, 'the conclusion that arises is that societies where non-aggression is conspicuous have social orders in which the individual by the same act and at the same time serves his own advantage and that of the group' (Maslow, Honigmann, & Mead, 1970).

Conclusions

What can the KP model of the human being, the concept of a societal human nature, which sees individuals as cooperative beings in need of collectively controlling their living conditions, contribute to an understanding of environmental behaviour and thus to strategies for behaviour change? Gardner and Stern (2002), having argued that community management depends on the control by close-knit communities of a local resource, suggest: 'What may be desirable is becoming less and less possible, and it may be that in the present era, making community management into a useful strategy for the world's great environmental problems would require nothing short of a social revolution.' (ibid.: 150) As long as we do not think of a social revolution as the storming of the Winter Palace, but as a profound, cultural, political, and economic transformation which can develop and strengthen the collective forces and cooperative capabilities of individuals, the authors are correct. We do need a social revolution. One of the many places where it can start is at the intersection of the social fabric and the societal formation that constantly re-produces environmentally damaging behaviours.

Discussing the role of psychology in alleviating the impacts of climate change, Robert Gifford argues:

> Each person on the planet, whether as an individual or as part of an organisation, curates a stream of natural resources that are converted into products; the conversion process often creates greenhouse gases. Thus, as psychologists have long recognised, the fundamental unit of analysis for the human-caused portion of climate change is the person (…). Thus, ultimately, amelioration of that part of environmental problems such as climate change over which we have some potential control occurs at the individual level (…). (Gifford, 2008)

We would agree with Gifford that the unit of analysis for environmental psychologists is the person. But what is a person? From a KP perspective, we understand the person as the totality of his/her social relations. Thus, to tackle climate change at the individual level without addressing the totality of the social, economic, political, and cultural relations that encourage specific kinds of (egoistic) behaviours and discourage other kinds of (cooperative) behaviours, change strategies will not be successful. Individuals cannot change without changing the totality of their social relations. This is where, in our view, practice theories do not go far enough because they do not address the totality of those relations. Theories investigating the contexts of practices at times lose sight of the individuals, who shape these contexts. In order to be able to tackle those social relations it is necessary to understand how they have come into existence and how they shape individual behaviours, values, and practices, and are shaped by the practices of individuals. It is not sufficient to simply shift the focus from one side of the equation (the person, the individual) to the other (social relations). The sentence that people are the totality of their social relations includes the necessity for individuals to change as well:

> The materialist doctrine concerning the changing of circumstances and of education forgets that circumstances are changed by people and that it is essential to educate the educators. (...) The simultaneity of changing the circumstances and of the human activity or self-changing can be conceived and rationally understood only as revolutionary practice. (Marx & Engels, 2010)

The decisive word here is *simultaneity*. Changing the circumstances and changing the self is one and the same process. In other words, for a 'social revolution' to develop, persuading people to change by means of awareness-raising, and attitude and behaviour change programmes (e.g., using incentives, coercion or even subtle nudges), or by restructuring their practices and changing contexts may be a desirable and necessary pre-condition, but it is not sufficient. The character of these top-down methods only serve to reinforce the social relations which encourage selfish behaviours and leave individuals powerless to transform their societal relations and themselves. 'Yes, but we have evidence that they work', behaviour change scientists might claim. There may be one-off and discrete occasions where some individuals do change their 'behaviour' some of the time, but psychologists rarely examine (ironically) how sustainable that change is. For example, is it maintained over time? Is it generalised to other behaviours?[11] Are their new practices taken up by other people because they can

[11] There is work in this area that comes under the heading of spillover, but the evidence

see the transformation benefits in terms of their social relations and environmental conditions? Do people feel empowered by the ways they have changed and have they created new social relations and new societal conditions that sustain changed behaviours? Neither is it sufficient to change the circumstances within which people act, since this again, reinforces structures of passivity, where people themselves are not in control of these situations and settings. If one wants to change the unsustainable way in which we live today it is necessary to enable and support people to change the conditions that sustain and encourage environmentally (and socially) damaging behaviours, in a way that initiates processes in which people can also change themselves.

The role of a Critical Environmental Psychology could be to provide people with concepts that enable them to participate in such processes of change and self-change. First, the concept of agency as *collective control of societal conditions* could help people to understand their frustrations and their lack of effectiveness in managing and having some influence and/or control over the commons. They could then see that this is not the result of some kind of inadequacy on their part but a result of the conditions in which they live, which deny them the possibility of cooperation and collective control of those commons. For instance, *maybe* change would have been initiated if Barr and Prillwitz had taken the complaints of their respondents about the overpowering domination of governments and companies seriously and had discussed with them the possibilities to confront such powers collectively – what are the barriers to change, what resources do they need?

Second, an historical perspective which deconstructs the present as a naturally given necessity and instead points to its human-made and therefore changeable 'nature', can encourage people to search for alternatives that break through the limitations of their present living conditions.

Third, the idea that societal human nature is defined by openness and the ability and/or necessity to learn and to change in cooperation with others avoids reifying behaviour. It can open up the horizon of possibilities in a direction towards which people's capacity to act can be broadened.

Fourth, instead of telling people how to solve the environmental crisis, psychology should develop concepts that enable people to find and realise their own solutions. Psychology, after all, should be well-positioned to encourage strategies that have enabled individuals, communities, and societies not just to endure, but to lead flourishing and environmentally sustainable lives (Seligman & Csikszentmihalyi, 2000). One might argue that this is idealistic as the clock is ticking and what is 'desirable becomes less and less possible' (Gardner and Stern

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for its efficacy is limited (Austin, Cox, Barnett, & Thomas, 2011; Thøgersen & Crompton, 2009).

2002: 150). Gardner and Stern see the conditions for community management vanishing with increasing globalisation, decreasing control over local resources and increasing (climate-induced) migration. This implies that fewer groups have the knowledge to manage such resources (ibid.: 150) and control is in the hands of a relatively small group of people who are more and more remote from the environments about which decisions are being made. But if it is true that the main condition for community management is not only close-knit communities managing a resource that is close to the place where they live, but the control people in general need to have over resource use, production, and consumption, then more possibilities for 'community management' or collective control are opened up. We need not think of communities as only being spatial.

For example, workers in a transnational corporation are in an occupational, if not spatial, community. If, together with other social movements, they demand control of the ways in which resources are used by the corporation which employs them this could have a major impact on the corporation' practices. Since TNC's operate across the global north and the global south, they provide a space in which workers from the two political hemispheres could work together.

The International Trade Union Confederation has strengthened their commitment to environmental issues and sustainability over the past years (Räthzel & Uzzell, 2013; Rossman, 2013). Unions all over the world are asking for democratic control of energy (http://unionsforenergydemocracy.org). This opens up exciting possibilities for collective and cooperative action. However, change is not straightforward. Workers and trade unions often show more loyalty to their company than to the environment, since they tend to see the former, and not the latter, as the condition for their survival (Räthzel & Uzzell, 2009; Uzzell & Räthzel, 2013; Barca, 2014; Snell & Fairbrother, 2010; Stevis & Felli, 2015). Nevertheless, there is potential and even a necessity here, because without workers, combating climate change will be impossible. Psychologists could align themselves with environmentally conscious workers' movements and support them in developing the necessary concepts and practices that facilitate collective action. Worldwide solidarity is a chance and possibility for community influence, if not control, that would exceed the control local communities can exercise over their immediate resources.

Finally, instead of devising behaviour change strategies from above, it would be useful to identify already existing practices in which people are changing their circumstances and themselves, in order to support, broaden and generalise them. We are obviously not the first people to argue that change can only happen as a process from below in which people take control over their living conditions and thereby begin a process of changing their circumstances and changing themselves. What we suggest is a different theory of the individual,

in which it is neither conceptualised as a monad, a privatised individual, nor disappears in practices and societal contexts. We think that *Kritische Psychologie* and its theory of a societal human nature, of the need and capacity for collective control of living conditions can be a point of departure to develop new concepts and device different kinds of strategies that might be more difficult to realise, but probably more successful than what we have seen so far. As Holzkamp (2013) argues, 'This (…) amounts to elaborating (for each question at stake) the real possibility of jointly creating (however slowly) conditions where there is no need for conducting a life at the expense of others – with the comprehensive historical perspective of social relations "where the free development of each is the condition for the free development of all"' (ibid.: 85/86). To avoid misunderstandings, we are not arguing that the perspective of *Kritische Psychologie* is a safe and guaranteed road to societal and individual transformation. Our argument is only that *without* recognizing and engaging the capacities of individuals for cooperation and a collective control of their living conditions a socially and environmentally sustainable world will not be possible.

To connect *Kritische Psychologie* with other strands of Psychology, it is appropriate to end with the words of an eminent psychologist, George Miller, whose suggestions point in a similar direction:

> Our responsibility is less to assume the role of experts and try to apply psychology ourselves than to give it away to the people who really need it— and that includes everyone. The practice of valid psychology by non-psychologists will inevitably change people's conception of themselves and what they can do. When we have accomplished that, we will really have caused a psychological revolution. (Miller, 1969)

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