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# SUSTAINABILITY AND IMPOSSIBLE WORLDS

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## **Abstract**

This paper mobilises the idea of *impossible worlds* to conceptualise and explore inconsistent and illogical visions and ways of living sustainably. Specifically, the paper focuses on an understanding of sustainability based on classic Kantian universalistic ethics (suppose everyone did the same) and relative feelings of responsibility and guilt for the environment. By mobilising three vignettes, the paper argues that impossibility is present in current environmental thinking, and narratives of impossibility have an emotional and political role in shaping popular discourses concerning environmentalism and responsibility. It suggests that exploring *glitches*, impossibilities, contradictions and inconsistencies may contribute to understanding the role of personal guilt in sustainability narratives, and potentially trigger change.

## **Keywords**

Sustainability, impossibility, impossible worlds, guilt, glitch

## Introduction

This paper responds to the prompt provided by Pohl (2023) to engage with the geographies of the impossible. Particularly, it links sustainability to impossible worlds, variously intended as those which cannot be realised because of inner logical incoherence. As it will be discussed, impossible worlds in absolute terms will not be actualised, but they can be imagined. Within this framework, we develop theoretical reflections aimed at arguing that imagined impossible worlds play a role in getting rid of the sense of guilt which characterises ordinary life in an unsustainable society, or in removing the sense of loss of meaning, and loss of sense, which may be generated by the fear of the apocalypses which are taking form in our daily lives. In fact, for most people, including the two authors of this paper, it is difficult, or even impossible, to feel *truly* sustainable at the individual level, as every form of consumption bears relevant environmental impacts, and feelings of environmental guilt are common. On the other hand, the idea that the annihilation of the world as we know it is around the corner, makes it difficult to find a sense in individual efforts for sustainability. Imagining and living the impossible may be hence conceptualised as strategies for coping with these feelings.

By developing this line of reflection, this paper aims to unfold the potential of the concept of impossibility in human geography and to fuel discussions about sustainabilities. It will be argued that social imaginaries, utopian thinking and social visioning are shaped not only by what is potentially possible and can be actualised but also by what is not. Through this, we contribute to and expand upon existing geography scholarship on critical sustainability studies and the depoliticisation of sustainability (Anderson, 2023; Blühdorn, 2013; Nicoll, 2023; Pohl and Swyngedouw, 2023), to argue that the idea that we can be individually sustainable is only possible with radical collective change. Indeed, over the last couple of decades, social scientists in general, and geographers more specifically, have paid significant attention to the many challenges and contradictions posed by the ever-pressing – and seemingly unattainable – societal thrust towards sustainability. In this regard, the launch of the UN Sustainable Development Goals (SDGs) in 2016 – replacing the Millennium Development Goals (MDG) – has certainly marked a milestone. Akin to how the MDGs mirrored significant policy concerns around the turn of the millennium, the SDGs crystallised global concerns about sustainable progress and development. The inclusion of the term ‘sustainable’ is particularly important. On the one hand, it underlines the fact that our society needs to develop an ‘ability to sustain’ itself over time, something with which it is hard to disagree. On the other hand, it is unclear what it is that we actually want or

can 'sustain'. Does this perhaps refer to economic growth, or does it conceal a technomanerial framing that advances economic and technological fixes, rather than politically challenging the way in which we manage and consume the planet's natural resources (Temenos and McCann, 2012)? Sustainability, scholars have argued (Davidson, 2010; Swyngedouw, 2007), can be interpreted as an empty signifier, one that means 'everything and nothing' (Gunder and Hillier, 2009: 1). Against this backdrop, humanity is thus projected towards a fearful Anthropocene (Cook and Balayannis, 2015), finding itself stuck into an imaginary made of environmental disasters and collapse, something that Mike Davis (1998) appropriately called an 'ecology of fear'. All this leaves little room for manoeuvre to individuals, whose range of choices tends to boil down to their personal prerogatives as consumers, rather than to their ability to act as political subjects (Menga, 2024).

In this paper, we suggest that impossibilities may be framed as *glitches*, potentially opening perspectives for hacking conventional and hegemonic understandings of sustainability. To develop the argument, we propose three short vignettes describing impossible worlds and impossible framings of sustainability in the cases of veganism/vegetarianism, mobilities and fear of nuclear annihilation. Inspired by works in cultural geography (Rabbiosi and Vanolo, 2017; Rose, 2016; Vannini, 2015), we engaged with these vignettes to combine readings of the literature with personal experience, in order to emphasise the role of subjective perceptions and interpretations, and access to emotions and commitment. The three vignettes hence aim at emphasising the momentary, viscous, spirited, embodied dimensions of spatially and temporally lived experiences, ultimately 'making sense' of the world (Lorimer, 2009). The vignettes are explored through a mixture of first-hand personal experiences and existing literature reviews. The arguments and the cases presented in the vignettes must be considered in relation to our specific, privileged positionality of white, middle-class, Italian, male academics. This consideration is crucial for several reasons. First, we clearly experience feelings of shame and guilt connected to what has been named in the literature as 'inequality guilt' or 'anxiety of privilege': these are feelings variously connected to the rational or irrational idea that one's well-being and privilege implies unhappiness for others (Oakley et al., 2012; Sennett, 1991; Vanolo, 2021). When we write about how performing a sustainable lifestyle is considerably easier for certain privileged subjects and harder for others (such as poor people), or when we describe how rich people can greenwash environmental guilt and to enact 'impossible' forms of sustainability, for example by paying to compensate emissions, we are basically talking about us, about our daily experiences, and how we are dissatisfied and distant from an ideal position of

justice. This consideration has ethical implications: given our privileged position, are we allowed to describe, discuss and analyse social and environmental phenomena which, to a disproportionate degree, mainly afflict disempowered social groups we do not belong to? We tried to develop the arguments presented in the paper avoiding, as much as possible, forms of social, cultural or moral appropriation by acknowledging our privileged position and reflecting on our contradictory feelings, which include anxiety, fear, shame and guilt in our daily encounter with different forms of impossible sustainability. On the background of our arguments, we sense that feelings such as guilt and shame are not necessarily negative, as they can potentially trigger forms of empathy, altruism and ultimately impulse to care.

Finally, our positionalities surely inform our understanding of feelings and emotions. In the case of shame and guilt, for example, we implicitly refer to a Western reading, arguably influenced by our philosophical tradition and dominant forms of public discourse. There are indeed different ways of thinking, living and performing guilt and environmental guilt in different cultures, and further research in this sense is arguably much needed.

The vignettes presented in this paper have been developed first by writing first-person accounts. We then have examined, exchanged and collaboratively modified and analysed the vignettes by highlighting tensions, contradictions and related feelings of guilt. We therefore implemented references to existing literature in order to build a stronger understanding of these contradictions. Personal experiences are narrated using the first-person singular style.

The initial reason and rationale for writing this paper lies specifically in the sense of frustration and impossibility we constantly feel in thinking and writing about sustainability. Despite our privileged condition, our familiarity with sustainability studies and our political sensitivity towards the topic, we are fully aware of the fact that we are environmentally unsustainable at the individual level. This means that if everybody consumes and behaves like us – a philosophical position that will be discussed in the next pages – life on this planet will be impossible in the long run. With this awareness in mind, how can we teach and write about sustainability in our daily life, without genuinely feeling wrong, guilty or out of place? On a personal level, this paper explores geographical terrains that can potentially contribute to searching for positions and stances allowing conjugating such uncomfortable feelings and awareness.

As anticipated, the paper argues that the contradictions, impossibilities and senses of guilt emerging from the vignettes may be intended as kinds of glitches revealing things hidden just below the surface. The concept of glitch comes originally from technological discourses, being

mostly used as synonym of error or bug in software or hardware (for a genealogy of the term, see Russell, 2020). As discussed in the literature, glitches are not just errors, as they allow observing how the software (and technologies in general) work, and how systems may be hacked. The term has been recently mobilised in cultural and feminist discourses to describe general, system failures revealing power relations, anxieties, ghosts, logical fractures and possibilities for exploring hidden mechanisms, for example in the field of conventional understandings of gender, body and race (Russell, 2020). Such provocations recently nurtured geographical reflections, as testified by a recent issue of *Dialogues in Human Geography* (vol 12, n. 3; see particularly Leszczynski and Elwood, 2022) exploring the epistemological and political potential of the concept. The glitch is therefore mobilised in the concluding section of this paper as a metaphor to describe and interpret the subversive potential of the impossibilities which can be encountered in the interstices of the discourses presented in the vignettes.

The paper is organised as follows. The next section discusses individual and collective understandings of sustainability and introduces perspectives on environmental guilt. It is followed by a theoretical discussion on sustainability and impossible worlds, mostly influenced by philosophical literature. The next section develops the main argument by exploring the impossibility as a guilt-free individual and collective space in three vignettes concerning vegetarianism, mobilities and the fear of nuclear annihilation. Finally, the concluding remarks summarise key ideas and discuss potential applications of impossibility in geographical research.

### **Individual and collective sustainabilities**

Sustainability, variously defined, is a crucial collective challenge for contemporary societies. In order to develop the reflection on impossibility and guilt, we operate a rough distinction between collective and individual understandings of sustainability. Such binary distinction reflects a simplified vision of the distribution of agency in society; still, as it will be argued in the next pages, it allows exploring crucial aspects of ethics and guilt.

As a collective perspective and effort, sustainability is commonly applied at different geographical scales, such as cities, regions and countries, in different thematic settings, such as industries (e.g. the sustainability of the mining sector), or to different kinds of communities, including households and communities of interest. At the individual level, sustainability is framed

in relation to the body and behaviour of a single subject, which can be conceptualised, for example, as a citizen, consumer or worker. In this latter discursive and conceptual construction, being sustainable commonly means engaging with sustainable lifestyles and sustainable consumption patterns, a challenge which is embedded in social injustices: being sustainable is by far easier for members of the middle class who can access green products, healthy local food and eco-efficient solar panels, rather than for those struggling in their daily life for the access to ordinary consumption patterns and to satisfy their basic needs. Put differently, ideas of individual sustainability insist on neoliberal conceptualisations such as ecological responsibility, carbon footprints and the blaming of consumers for their environmental impact and their consumption (Huber, 2019). In this framework, the logic of the responsibilities of the individual develops through the mobilisation of complex emotional patterns, including – among others – diffuse feelings of shame and guilt for those who do not perform as sustainable citizens and consumers.

The two framings of sustainability – individual versus collective – are far from coherent, as society is more than a sum of individuals and agency is variously distributed. A sustainable city, country, society or even a sustainable world is not necessarily one where every individual is sustainable by limiting their environmental impact to their individual quota in a sort of zero-sum game. For example, it is possible to imagine collective sustainability in relation to ideas of radical systematic change which exceeds the possibilities of most individuals, as in the case of getting rid of capitalism, colonialism, patriarchy, sexism or racism. Or, to propose a different example, collective sustainability may be imagined in relation to optimistic ideas of environmental modernisation, assuming that technologies will fix our current and future problems.

Conceptualising collective sustainability as the sum of the multiple actions of a multitude of individuals (as well as through optimistic narratives of collective ecological modernisation inherent to technological progress, something that falls out of the interest of this paper) is coherent with the dictates of neoliberal capitalist culture, which is characterised by the well-known phenomena of responsabilisation of the self and faith in the regenerative capabilities of capitalism (Fisher, 2009; Rese, 1999; Shamir, 2008). In this paper, we will focus mainly on this individual framing of sustainability, implicitly assuming that to be sustainable, society must be composed of sustainable citizens, consumers and workers. Such understanding of sustainability mobilises very specific ethical perspectives, which create an order of the discourse which allows distinguishing the sustainable, moral, acceptable from the unsustainable, immoral, unacceptable.

The individual framing of sustainability discussed so far is coherent with one of the most common ethical frames, that is, the so-called Kantian ethical perspective, where rules of conduct may be tested in relation to their universalisability. It has to be mentioned that several debates explored Kant's moral philosophy in relation to nature and sustainability, emphasising its anthropocentric perspective and hostility to environmental concerns (Svoboda, 2015). For example, in his scheme, only humans or other rational agents can hold obligations, and hence Kant's moral philosophy cannot accommodate moral concern for non-human natural entities, such as non-human animals or flora (Nussbaum, 2004; Skidmore, 2001). On the other hand, some authors suggest that Kant's philosophy is not incompatible with duties regarding nature, as long as they are rooted in the duty to raise one's own moral perfection (Svoboda, 2015). In this paper, we do not aim to tackle Kant's relations with nature and sustainability by exploring duties, but rather rules of conduct.<sup>1</sup> Specifically, Kantian ethics suggests that rules of conduct are morally acceptable only if they have a universal form, or if they can without contradiction be thought and willed as universal laws. On a practical level, this means detecting the moral boundary of the maxim of what is ethically acceptable by asking ourselves: what if everyone did the same? This is a way to frame questions such as: 'what if every person on Earth consumes as an average American citizen? What if everybody moves by plane as much as I do?'. Most conventional understandings and discourses on sustainability are built out of this ethical rationality, which clearly leverages different forms of shame and guilt (Vanolo, 2021). The moral boundaries of everyday consumption practices coincide with the maximum tolerable level of per-capita emissions of greenhouse gases or the maximum level of per-capita consumption of resources. According to this logic, ethical behaviours may be defined, calculated and mapped through environmental accounting techniques, such as an individual's carbon footprint. Still, it is worth mentioning that there are alternatives to the Kantian ethical perspective. There is, for instance, a difference between thinking about the consequences of having everybody acting in the same way (i.e. exceeding or not a certain threshold of environmental impact) and thinking about the consequences of the *freedom* to act in a certain way: while it is unreasonable to think of a world where everybody is a professional football player or a rock star, it is ethically and practically different to think about the mere possibility, for everybody, to be that.

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<sup>1</sup> The idea of the universality of moral principles is presented in Kant (1785). The philosophical preposition 'what if everyone did the same?' has been elaborated by several authors; in this paper we took inspiration from Midtgaard (2007).

As anticipated, a universalistic Kantian – or ‘distributive’ – understanding of the ethics of individual sustainability is difficult to accommodate for the average person, at least in advanced capitalist countries. In fact, ordinary daily acts in consumeristic societies, like travelling for work or tourism, are clearly unsustainable for the planet, if performed by more than 8 billion people, as testified by a number of empirical investigations (Dütschke et al., 2022; Gärling and Friman, 2015). Hence, the logical consequence is that an individual demand for reduction (or compensation) is ethically needed. This is the rationale of numerous apps aimed at monitoring our daily carbon footprints and prompting a reflection on the consequence of our ordinary actions, as in the case of *Aerial*, an app and online platform that not only allows individuals and enterprises to track their carbon footprint but it also provides possibilities for offsetting their emissions by donating money to reforestation funds or various, green-related research projects. *Aerial* originally focused on flights and travel, but it recently moved to the field of digital non-fungible tokens, highlighting the high amount of energy consumed by blockchain technologies. While the logic behind these apps is to raise awareness about environmental degradation and promote sustainable behaviours, they can also produce other emotional side effects, as in the case of ‘flight shame’ or ‘flygskam’ (cf. Pohl and Swyngedouw, 2023; Vanolo, 2021). As described in the literature (e.g. Cassegård and Thörn, 2018; Tschakert et al., 2023), the emotional labour involved in environmentalism is complex and far from linear, involving, for example, near-romantic future-oriented optimism, based on the belief that threats can be averted. A better and achievable future is possible, the negative vision of an unavoidable forthcoming catastrophe producing despair and resignation, or post-apocalyptic attitudes, assuming that the catastrophe is already upon us and that coming to grips with inevitable loss is an essential component of active salvage and recovery. Fear, rage, anger, hope, despair, sadness, disgust, enjoyment and tenderness are all examples of different emotions that can be mobilised. In this paper, we mostly focus on guilt, shame and frustration, due to the awareness of not performing well enough.

Guilt and shame<sup>2</sup> unfold both at the personal and individual level, as typically analysed in the psychoanalytical literature, and at the collective level, where the two levels are closely

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<sup>2</sup> The distinction from guilt and shame is complex and there are very different understandings in the literature.

Traditional understandings insist on the idea that guilt is a more personal emotion, while shame mostly relates to the social sphere, such as public exposure and disapproval of some frailty or failing. This dichotomist vision has been widely criticised, for example, by stressing a difference between emotions focused on the individual (I am wrong) or their actions (I did something wrong) (Lewis, 1971). The distinction between guilt and shame is not crucial for the

interconnected. They include and trigger a large set of emotions that include embarrassment, humiliation and related feelings such as shyness that originate in threats to the social bond. According to classic Freudian interpretations, guilt can unfold through distinct logics. On the one hand, guilt originates in rational, moral and juridical terms, for example, by offending a moral law. On the other hand, the 'sense of guilt' can be driven by the unconscious and has its source in psychic processes, such as the non-realisation of the ideal ego or the inequity/survivor guilt, based on an irrational belief that one's own success, happiness or well-being is a source of unhappiness for others (Vanolo, 2021).

Guilt and sense of guilt may originate from apparently innocent everyday actions, given that breathing, having a walk, drinking a beer or bringing a child to school by car<sup>3</sup> can produce relevant carbon footprints, ultimately harming the environment and society. Sustainability thus turns into a negotiation between the level of damage one feels ethically allowed to inflict on the environment and the satisfaction of their everyday needs, leaving potentially little space for genuinely guilt-free behaviours. By framing sustainability in terms of the responsibilities of the single individual, the best thing we can do for the environment as individuals is simply to stop living. Apps like *Aerial* offer some help to relieve this guilt by offering the possibility to pay to compensate for emissions and relieve a sense of shame and guilt. It is not a coincidence that the app mobilises the slogan 'sustainability as a service', confirming the hegemony of neoliberal understandings of problems and solutions. On this ground, the relation between offset payment schemes and environmental psychology has been largely explored in the specialised literature, evidencing many controversial and problematic aspects. These include social segmentation (a certain progressive middle class is keener to engage with compensation schemes), social distrust (the idea that 'others will not compensate' decrease the attitude towards compensation disproportionately), uncertainty in the magnitude of the effects and, more relevantly for the aims of this paper, environmental deresponsibilisation after the payment is done (see e.g. Bosehans et al., 2020; Burger et al., 2022; Günther et al., 2020).

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arguments of this paper, and the two terms will be basically coupled in the discussion, as it happens in a wide literature.

<sup>3</sup> The group Insulate Britain, for instance, has conducted a series of protests in the United Kingdom, setting up roadblocks and preventing SUV drivers to take their children to school: <https://www.theguardian.com/environment/2021/oct/19/video-shows-range-rover-pushing-insulate-britain-activist-at-sit-in>. All links reported in this article have been last accessed and checked in June 2023.

According to several critical geographers, a key ethical issue in framing sustainability as a responsabilisation of individual consumers is that it is based on a superorganic understanding of nature – that is, the assumption that humanity as an entity is separated and distinct from nature, a well-known and well-critiqued idea in human geography (see, e.g. Whatmore, 2002). As stressed by Swyngedouw (2007), conservative understandings of nature as a singular, ontologically stable and harmonious sphere which has to be preserved from human activities, necessarily lead to short-sighted approaches. These include strategies aimed at trying to ‘reduce’ the impact of humans on the planet by imagining a tamed form of capitalism that is ‘circular’ or, in line with the arguments proposed so far, populated by individual sustainable consumers. Rather than thinking about nature as an entity external to the human, according to numerous authors (Castree, 2013; Menga and Davies, 2020; Peluso, 2012; Swyngedouw, 2011; Williams, 1972) and in line with the perspective of several post-human geographers (Lorimer, 2012; Margulies and Bersaglio, 2018; Panelli, 2010), it is more productive to think about and to politicise *natures* (plural) by exploring and imagining different possibilities of living together with the other elements and entities populating this planet. Such a take on collective sustainability is coherent with our position as authors of this paper: we maintain that it is useful not to think of sustainability as a single, well-defined condition, one that implies a strict distinction between the two what is sustainable and what is unsustainable. Rather, sustainability may be framed as a variegated set of situations, goals, directions, scenarios and heterotopias – possible and impossible – where multiple and intersectional conceptions of justice can be accommodated. As a matter of fact, we can imagine a number of different forms of just, sustainable natures.

Such a way of thinking about sustainability<sup>4</sup> mobilises pluralistic and collective social imaginaries and can hardly be framed at the individual level. In other words, there seems to be little space for the agency of insulated humans in producing sustainable natures. As the *Aerial* app shows, individual efforts to change the world may be important, but they can also appear limited, desperate or pointless without meaningful systematic change and collective action, and this paper aims to reflect on that particular emotional area. There are several ways of realising, experiencing, feeling and interpreting the idea that, no matter what I do, *I am unsustainable*, or, put it differently, that sustainability is *impossible*. This paper suggests that impossibility is a fertile

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<sup>4</sup> It is just the case to mention that such an understanding of natures is far distant from the classical Kantian understanding of duties regarding nature mentioned previously in the paper, which is incardinated in an anthropocentric and superorganic perspective (Skidmore, 2001; Nussbaum, 2004).

ground for exploring the space of contact between perceived unsustainability, individualised understandings of environmental efforts, guilt and shame. It does not aim to formulate any universal claim about human emotions: there are several possible ways to frame, symbolise and experience unsustainability, and diversities in social positionalities surely play a crucial role. Rather, this paper maps how thinking of impossible worlds may be a strategic element in framing the problematic terrain of guilty unsustainability.

### **Impossible worlds**

The idea of possibility is central to many geographical debates. Its more intuitive application is the reflection on *possible worlds*, including alternatives, utopias and dystopias. The exercise concerns historical and geographical categories: writing about possible worlds is a strategy for exploring how things might have been or will be otherwise. This can be performed, for example, by engaging in fictional histories and ‘what if’ scenarios (Berto and Jago, 2019; Ryan, 2014). What if the Nazis won WWII? How would the world be today? But thinking about alternative worlds is also a pivotal element for building a critique of the existing world, fighting the hegemony of contemporary social structures (such as the idea that ‘there is no alternative’ to capitalism) and recognising the power of utopias and imagination (see e.g. Gibson-Graham, 2006; Harvey, 2000; Jameson, 2005): it is not a coincidence that the work of activists is commonly described in terms of ‘building possible worlds’ (Ruddick, 2004). Finally, the expression ‘possible worlds’ has also been used to explore alternative ways of interpreting and making sense of the geographical world: the history of geographical ideas, from this point of view, can be intended as a history of possible worlds (Martin, 2005), and it has been suggested that re-envisioning subjectivities and our understanding of the world is a crucial step in facing the ethical and ontological crisis related to the Anthropocene (Ruddick, 2017).

Reflections on possible worlds have been widely explored in philosophical terms. The basic idea is that reality can be conceived as the sum of the imaginable rather than the sum of what exists physically, and reality is composed of a universe of distinct worlds. The central element of reality is the actual or real world, but it is possible to imagine small or big changes, alternatives and non-actual possible worlds. For a world to be possible, it must be linked to the actual world by a relation of accessibility in terms of logical laws, most commonly in terms of non-contradiction

and excluded middle. The most intuitive understanding connects possibility with logical laws: every world that respects the principles of non-contradiction and the excluded middle is *possible* (Berto and Jago, 2019). More precisely, a proposition can be considered *necessary* if true in all worlds linked to the actual world (including the actual world itself), *possible* if true in only some of these worlds and *impossible* if it is false or contradictory in all of them. A crucial aspect of this philosophical scheme concerns the status of the actual world in a universe of possible worlds. At least two distinct philosophical perspectives can be mobilised. On the one hand, an absolutist view assumes that the *actual* world has an ontological status of autonomous existence, different from *possible* worlds, which are produced by activities such as dreaming, imagining, foretelling, promising or storytelling (Rescher, 1979). On the other hand, some authors intend actuality as an indexical notion with variable reference, in a way like expressions such as ‘I’, ‘you’, ‘here’ and ‘now’. (Lewis, 1973; Ryan, 2014). The *actual* world is hence the one where a subject is situated, and all possible worlds are actualised from the point of view of their inhabitants. This perspective, known as ‘modal realism’, implies a conceptual distinction between the *real* and the *actual*: all possible worlds are ‘real’, as they exist independently of the act of imagining them, but only one world can be ‘actual’ from a given point of view. Similar considerations are deeply geographical, as they have meaningful implications for theories of representation and knowledge. Pohl (2023), for example, distinguishes between impossibility in absolute and relative terms: the former is ontologically impossible, while the latter is only impossible from a particular standpoint and thus depends on particular epistemological criteria, i.e. the ‘parameters of a particular situation’. A relatively impossible phenomenon may be impossible at a particular time and place and not for others. Reflections on impossibility in relative terms overlap to some degrees with discussions on possible worlds; for example, the geographical literature on futurology, science fiction and other fictional genres as videogames reflects on the possibility of critiquing the present by extending and stretching the consequences of already-existing political and scientific problems and practices into socially unreal futures, or by imagining completely different futures in which the impossible could one day be possible, originating new social, spatial and identity arrangements (see e.g. Kitchin and Kneale, 2001).

In this paper, we build on these sets of ideas, but we do not do so to focus on possible or relatively impossible worlds, but rather on *impossible* ones in *absolute* terms: those grounded in absolute impossibilities and where logic fails. There are surely many ways the world could have been, but not everything is possible, and in this sense, impossible worlds can be imagined as ways that things *could not have been*. Reflecting on impossible worlds in absolute terms may be

less futile than what it may seem at first sight. It means building on suppositions, assumptions or conditional antecedents which are not only false but impossible. This is a challenging task because it implies suspending our conventional logic and assumptions about non-contradiction and the excluded middle and trying to engage with non-classical logic. This also means abandoning the quest for explanations and possibilities and rather engaging with a world of impossibilities. As a matter of fact, reasoning in terms of would-be possibilities often turns out to be logically impossible, particularly if our beliefs are inconsistent. Exploring logically impossible worlds is surely disconcerting, as it requires extensive cognitive processing to make sense of them. Still, developing impossible story-worlds is diffused in fictional writing, as various postmodern authors play with intentional inconsistency, for example, by projecting mutually incompatible events, or by telling stories which do not conform with the principle of non-contradiction, as in Caryl Churchill's play *Traps* (Churchill, 1978; cf. Alber, 2009) or in Richard McGuire's *Here* (2014). Similar narratives transcend common notions of time and space, opening chaotic scenarios where mutually exclusive options take form at once, progression does not occur, and mutual acceptance of incompatible events takes form.

Impossible worlds have been mainly conceptualised and discussed in the field of philosophy of logic (see, e.g. Berto and Jago, 2019) and narratology (Alber, 2016), but, as recently discussed by Pohl (2023), they have not been fully mobilised in geographical research, and hence the idea that 'geographical thought and praxis should further explore the spatio-temporalities of the impossible as they suspend taken-for-granted facts, pave the way for new actors, function according to their

logics, and create extraordinary encounters' (Pohl, 2023: 4). In the following pages, we will then elaborate on understandings of sustainability related to logically impossible worlds. For example, a sample of simple but logically incompatible premises defining impossible worlds may include these ideas, which must be considered in toto, as some are not incompatible:

1. the world has a limited environmental capacity, for example, in terms of pressure and use of resources over a certain amount of time. In order to be sustainable, the world must not exceed that limit;
2. it is possible to calculate the per capita consumption limit simply as a ratio between the global limit and the amount of world population;

3. many of the inhabitants of the planet consume and behave beyond the individual limit, determining a global impact that exceeds the world limit previously defined, ultimately producing unsustainability;
4. the world will be sustainable, although we do not know how and when;
5. we are living in a climate crisis;
6. the climate crisis does not exist or is exaggerated.

These clashing statements sketch an impossible world. Still, it is relevant to notice that in most cases, these elements are not impossible per se: they define a space of impossibility as soon as they are put about one another. In fact, each of the conditions set in the list may be easily encountered in everyday discourses. At the same time, if we agree that the world is environmentally unsustainable, that we are experiencing an ongoing environmental global crisis and that individual behaviours are unsustainable, we can start understanding how impossible narratives are discursively actualised. In the next section, we will explore this conceptual, ethical and (il)logical by proposing three vignettes.

### **Sustainability, guilt and impossibility: Three vignettes**

#### *Vegetarianisms*

There are a number of different reasons for engaging with veganism and vegetarianism, including health reasons (red meat and eggs are, for instance, notorious for raising blood cholesterol levels), moral arguments (the pain inflicted on animals) and environmental perspectives (meat, and particularly beef, generates high emission of methane, a potent greenhouse gas). In all these cases, veganism/vegetarianism and meat consumption are commonly connected to strong moral emotions, such as anger, contempt, disgust, guilt and shame. Psychological research suggests that solid affective experiences, such as seeing animals slaughtered for purposes of consumption, can have powerful effects in terms of vegan moralisation. Still, they can be obtained as well through other means, such as reading books, looking at advertising or examining data on the impact of meat consumption on the future of the planet (Rozin et al., 1997).

It is complex to detect an amount of meat consumption that can be considered 'sustainable', as different kinds of meat have different impacts. A report by the EAT-Lancet Commission on Food, Planet, Health (Willett et al., 2019) explicitly posed the question of how to feed a future population of 10 billion people with a healthy diet within planetary boundaries. According to the report, the answer is the promotion of flexitarian diets, which are primarily plant-based but can optionally include modest amounts of fish, meat and dairy foods. To give a general idea, meat is supposed not to exceed 300 grams per week per person. At the moment, in the European Union (EU), about 1.5 kg of meat are consumed per capita every week, and figures are diminishing quite slowly.<sup>5</sup>

Put shortly; current meat consumption patterns are by far unsustainable; consumers have several potential reasons for feeling guilty, but still, meat consumption is high in many countries, and it is not difficult to find examples of celebration of 'meat cultures' (see the example in Figure 1). It is possible to conceptualise the phenomenon in at least, two different ways. On the one hand, many consumers cohabit with guilt. According to empirical research, if consumers feel guilty about eating meat, they do not necessarily eat less of it: consumers tend to compensate or justify their choice by opting for meat dishes prepared in a 'healthy' way or by mobilising arguments about the nutritional value and health benefits of meat (Kim and Yoon, 2021). This means that when our moral standards and self-serving desires come into conflict, the latter often wins at the level of individual choices. According to current facts and figures, the actual world is unsustainable, and it is hard to imagine an alternative one which is sustainable out of individual meat-consumption choices because psychologically, when people feel guilty about their behaviour, they tend to justify the behaviour rather than change it. On the other hand, consumers may discursively build, shape and inhabit an impossible world where eating meat is sustainable and morally acceptable.

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<sup>5</sup> <https://www.theguardian.com/environment/2022/jan/21/the-greens-want-to-take-our-meat-away-europeans-go-to-war-over-their-dinner>

Figure 1. Italian advertising on meat consumption.



Source: Photo by the authors, April 2023. Note: The ad, by an Italian association of breeders, reports with big letters, 'Meat is a legitimate component of men's [sic] diet'. The text with a smaller size refers to our ancestors' lifestyle and how *unnatural* a diet would be without meat.

As an illustrative vignette, we recently explored the popular online Quora forum, where a discussion on meat consumption and guilt unfolds, over the course of a few months, out of a simple question by a user: ‘I quit being a vegetarian. How do I get over the guilt?’.<sup>6</sup> A large number of replies allows us to map some of the mechanisms by which many ordinary consumers build impossible narratives:

*‘God said we have dominion over the animals; we can eat them, providing we farm them sustainably. Don’t think of old sheep with bad teeth unable to feed themselves dying, they would starve to death, or predators would rip them apart; think of new lambs being born that would never have seen life. I worked in a supermarket, and I saw halves of pigs and sheep come into the warehouse, ready for the butchers upstairs. Their brains were walnut-sized; they didn’t feel pain like us or think like us’.*

*‘Get over the guilt by realising that vegetarianism and veganism aren’t as good for the environment and animals as many like to believe. Many vegetarian and vegan products have just as bad, or sometimes even worse, of an eco-footprint than the non-vegan/vego counterpart that vegans and vegos like to insist is worse. Not only is not actually always better for the environment, it is also not actually cruelty free, to animals or humans’.*

*‘There is no need to feel guilty! You’re not the one who is slaughtering animals for people to eat. The animals are already dead. That’s not to say it’s right, but if the animals are already dead, it would be a waste to not eat it’.*

As the above suggests, it is rather easy to come up with justifications for meat consumption. These range from a transfer of responsibility (‘You’re not the one who is slaughtering animals’), the affirmation of the superiority of humans over other animals, and the relativisation of the environmental effects of meat consumption as opposed to the ‘claimed’ benefits of a vegan/vegetarian lifestyle. This last aspect, in particular, has gained traction in the previous decade, and it is now commonly used by those who get upset about veganism. This is evident both in the popular discourse and in the political one. Atkins and Menga (2022) have illustrated how the Italian party *Lega Nord* maintains that eating meat is beneficial for the environment since the environment is best protected if the Italian meat sector (worth over €30 billion per year) is also protected.

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<sup>6</sup> <https://www.quora.com/I-quit-being-a-vegetarian-How-do-I-get-over-guilt>

Finally, it is worth mentioning that other consumers opt for guilt-free consumption patterns by fully engaging with vegan or vegetarian diets. An interesting landscape of apps may be worth mentioning, including *Gonutts* (basically a database searching for vegetarian alternatives to ordinary non-veggie products), *Vegan Amino* and *Vegan Recipe Club* (for sharing vegan experiences and recipes), *Happy Cow* and *Vanilla Bean* (GIS-based search engines for veggie restaurants) or *Quit Meat* (which presents motivational statistics on how many animals you have saved by avoiding meat and dairy).

### *Mobility and unsustainable research*

A large and growing number of apps help individuals track their consumption and, more generally, lifestyle, and these apps can also be used to track emissions produced while at work or in the midst of a research project. Indeed, in recent years, all those who apply for funding through the Marie Skłodowska-Curie Actions (MSCA) – the EU’s flagship programme for the mobility and training of researchers – have to think about creative ways to limit their carbon emissions, and if necessary, offset them. This is laid out in the MSCA Green Charter, a 2021 document that outlines principles and objectives to promote the sustainable implementation of research activities in line with the European Green Deal, the United Nations’ 2030 Agenda, and the SDGs (EU, 2021). There is much to commend in this initiative, and for that matter, in most actions aimed at promoting the mainstreaming of environmental issues when planning research activities. And yet, this can also lead to paradoxes and even unintended discrimination. One of the critical principles behind MSCA’s actions is that of mobility. Throughout their projects, MSCA fellows are encouraged to be ‘mobile’, and one eligibility criterion to apply for an MSCA postdoctoral fellowship is to abide by the mobility rule.<sup>7</sup> This same mobility is, however, challenged, in a way, by the MSCA Green Charter. ‘While physical mobility remains a central component of the MSCA’, the Charter explains, researchers and participating organisations are encouraged ‘to take the lead in avoiding unnecessary travel, in the creative use of teleconferencing tools, and in reducing their carbon emissions in a way that sets a positive example to others within the research community’ (EU, 2021: 5). Thus, on the one hand,

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<sup>7</sup> The researcher must not have resided or carried out his/her main activity (work, studies, etc.) in the host organisation’s country for more than 12 months in the three years immediately prior to the call deadline.

researchers are asked to prevent or minimise the production of harmful emissions and prioritise low carbon forms of transportation for all project-related travel. On the other hand, researchers also have to move abroad; they should possibly engage in short-term secondments in a third country and may receive additional support to carry out the placement of up to six months in a non-academic organisation based in another country. In addition, consider the challenges that this may pose to those who live and work on an island – and there are many large islands within the EU – and who cannot prioritise low-carbon forms of transportation: for them, planes are often the only means to travel overseas within a reasonable time frame. The Erasmus + Programme – the EU’s scheme in support of mobility and cooperation opportunities in education, training and sport in Europe – poses a similar challenge to islanders. Also, in this case, the EU pushes for green travel (i.e. ‘travel that uses low-emissions means of transport for the main part of the travel, such as bus, train or car-pooling’<sup>8</sup>), and to do so, it provides more funding to those who opt for the greener choice. Indeed, those who are able to check the ‘Sustainable Means of Transport’ flag in the EU online system see the duration of their funded travel automatically increased from 2 to 6 days. As a schoolteacher from Sardinia explained to us:

*‘The EU gives more money to those who travel by train or with other green means of transport. We are in Sardinia and cannot take advantage of this, as we must take planes or the ferry. We are disadvantaged by this. If you live in Rome and take the train to Paris, you can access a larger pot of money than if you live in Sardinia, from where you cannot reach Paris by train. But that doesn’t mean that we don’t care about sustainability’.*

There is a tension between promoting sustainable behaviours and implementing the ‘leave no one behind’ principle that underpins the 2030 Agenda for Sustainable Development, a declaration that the EU is committed to achieving. Can research practices become more sustainable for everyone, or do we inevitably have to allow and consider a certain degree of unsustainability determined by structural conditions rather than individual behaviours? And can travelling for research – or for that matter, also for leisure – be guilt-free, and if so, at what conditions? When it comes to feeling guilty, and in our times, this can happen when carbon emissions cannot be avoided, the MSCA Green Charter asks institutions to support using carbon offsetting. The Charter’s guidance material<sup>9</sup> lists a wide range of best practices aimed at limiting

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<sup>8</sup> <https://erasmus-plus.ec.europa.eu/erasmus-programme-guide>

<sup>9</sup> [https://marie-skłodowska-curie-actions.ec.europa.eu/sites/default/files/2021-09/20210907\\_MSCA-Green-Charter\\_Guidance-PDF.pdf](https://marie-skłodowska-curie-actions.ec.europa.eu/sites/default/files/2021-09/20210907_MSCA-Green-Charter_Guidance-PDF.pdf)

carbon emissions while also making informed decisions based on the carbon footprint of specific activities (hotels can be booked based on their carbon footprint and certifications). To this end, the European Commission prompts researchers to use its Consumer Footprint Calculator. This online tool allows EU citizens to ‘calculate the environmental impacts of their consumption patterns and to evaluate how changes in their lifestyle may affect their personal footprint’. Researchers–consumers are also encouraged to offset their carbon emissions following the example set by KU Leuven. This Belgian university requires its staff members to pay a CO2 compensation (€40 per tonne of CO2 emitted) when they travel by air for work-related trips. However, the correlation between carbon offsetting and permanent carbon reductions remains unclear, and carbon offsetting can also be interpreted as a means to eliminate the sense of guilt that comes from carbon emission through monetary payment. In any case, the importance of mobility-related guilt goes beyond research-related activities. Indeed, a common tactic among climate activists consists of gluing themselves to roads to block rush-hour traffic and pressuring their governments to do more about climate change (examples include Just Stop Oil in Britain or *Letzte Generation* in Germany). In 2022, activists from *Ultima Generazione* disrupted commuter traffic toward Rome.<sup>10</sup> Their action enraged drivers, mainly when it was clear that the activists were also preventing an ambulance from reaching its destination and a cancer patient from receiving chemotherapy. In the public outcry that followed, both activists and motorists maintained that there was an emergency: respectively, the climate crisis and someone needing medical attention. In their way, both were right. And yet, we might ask, would any of the two sides see the actions of the other as sustainable?

### *Nuclear anxiety and the annihilation of everything*

The dramatic events that took place in Ukraine in 2022 are undoubtedly geopolitical but can also be related to sustainability and impossibility. Consider the fear of nuclear annihilation, which started circulating in media all over the world, for example, during the Russian strike on the Zaporozhian atomic plant in March 2022, after the missile strike in Poland in November 2022, or

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<sup>10</sup> <https://www.ilgiornale.it/news/cronache/vergogna-degli-ambientalisti-roma-nemmeno-supplica-chemio-li-2075799.html>

following the insurrection of the Wagner group which took place on 24 June 2023.<sup>11</sup> Of course, Russia possesses nuclear weapons, while Ukraine has not only an atomic plant but also dams, fuel deposits or chemical, industrial and mining sites that provoke environmental disasters when damaged. And yet, it is the nuclear disasters that bear specific apocalyptic imaginaries. At the same time, the ecological disaster in Ukraine is not potential but already actual and real, as the war produces enormous effects that will probably last for centuries.<sup>12</sup> The nuclear fear, or nucleomitophobia, is political not only because it is connected to war and international conflicts but also because it can be framed as a dispositive of depoliticisation, staging a universal threat to the survival of humankind, announcing the premature termination of ‘our’ civilisation and of our ‘proper’ political destinies (Pohl, 2021; Swyngedouw, 2013). Such ‘universal we’ is, of course, an unrealistic discursive construction. First, the fear of annihilation is socially uneven. It is geographically concentrated in cities close to the conflict or considered strategic sites. Secondly, as already emphasised many decades ago during the Cold War,<sup>13</sup> wealthy classes have a stronger tendency to suffer from nuclear anxiety as they are exposed to fewer discriminatory or material concerns. Those struggling for everyday survival tend to be less preoccupied with nuclear threats.

One of the effects of the Ukraine war in wealthy countries, for example, has been a massive rise in demand for iodine tablets, which can provide partial protection against radioactivity in the event of a nuclear accident. In September 2022, Poland established distribution points for free iodine tablets throughout the country. Differently, in March 2022, the Italian Association of Pharmacists asked to stop public hysteria and to stop buying, advertising or assuming iodine tablets without a medical prescription.<sup>14</sup>

Fear of annihilation can produce feelings and attitudes related to desperation, withdrawal and the idea that ‘we can not do anything with it’. There is little space for life, sustainability, responsibility or guilt in such a scenario. In the case of the Russia–Ukraine conflict, global politics look ineffective and controversial, and it is difficult to imagine any individual or collective agency.

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<sup>11</sup> See <https://www.cnn.com/2022/03/04/ukraine-nuclear-russian-troops-seize-control-of-zaporizhzhya-plant.html>; <https://www.theguardian.com/commentisfree/2022/nov/16/missile-strike-poland-nato-allies>; <https://www.aljazeera.com/news/2023/6/23/zelenskyy-urges-world-to-heed-ukraines-terror-attack-warning>

<sup>12</sup> <https://www.politico.eu/article/ukraine-war-russia-nuclear-power-plant-map-zaporizhzhia-nightmare-environment/>

<sup>13</sup> <https://www.nytimes.com/1985/12/08/magazine/children-and-the-bomb.html>

<sup>14</sup> <https://federfarma.it/Edicola/Filodiretto/VediNotizia.aspx?id=23571>

Nuclear anxiety looks to a certain degree as the only option. Such stress may also undermine environmental guilt: why bother about sustainability and CO2 emissions if the world faces a different kind of annihilation?

The scary perspective that destruction is behind the corner can generate a range of feelings beyond the anger/paralysis dichotomy (Pohl and Swyngedouw, 2023). One option is, for example, vitalism: as reported by international media, about 15,000 Ukrainians have responded to nuclear fear by organising massive sex parties.<sup>15</sup> According to Žižek, in a time of extreme grief and anxiety, an orgy can be a life-affirming project. On a collective level, one of the paradoxical effects of nuclear fear is to push Europe and many countries to reconsider their energy sources, including a new gaze over atomic potential. Since reducing energy dependency on Russia has become a priority, they consider nuclear energy a serious possibility. The impossible world taking form is one where the nuclear is denuclearised, much like coffee without caffeine. It is impossible to be based on contradictory premises, where nuclear is both the problem (and source of anxiety) and the solution.

The above paradox extends far beyond the threat of a nuclear catastrophe and encompasses the broader environmental concerns arising from the Anthropocene, which often culminate in predictions of an imminent apocalypse. A notable example is the Climate Clock, an artistic installation and online stopwatch found in various cities worldwide. Displaying a countdown set to conclude in early 2028, the Climate Clock serves as a stark reminder that unless human societies significantly reduce their CO2 emissions to keep global warming below the 1.5°C threshold, ‘famine, drought, floods, displacement, conflict, suffering, and disaster’ will become unavoidable.<sup>16</sup> The clock’s persistent ticking is intended to emphasise that the ‘Earth has a deadline’, leveraging its emotional impact by evoking the same anxieties that circulated before the year 2000 countdown. Such understanding of the ‘deadline’ carries a distinctively neoliberal and managerial connotation, emphasising linear progress and an inflexible forward trajectory, together with a sense of immanent, unclear catastrophe, suggesting that you don’t know you’re living in the before until there is an after. The Doomsday Clock, which shows how close we are to destroying our world with dangerous technologies, is conceptually similar, and due to the danger of nuclear annihilation, it has never been so close to the deadline, called ‘midnight’, as it

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<sup>15</sup> <https://www.project-syndicate.org/commentary/ukraine-sex-parties-more-civilized-than-russian-atrocities-by-slavoj-zizek-2022-10>

<sup>16</sup> For further information refer to the Climate Clock website: <https://climateclock.world>

is today.<sup>17</sup> The notion of the deadline, separating the actual from the dystopian possible, is echoed in various policy and advocacy platforms across the political spectrum.

Indeed, for the majority of individuals, the deterioration of the environment and the escalation of global warming, which are outcomes and reminders of humanity's failure to control pollution and decrease carbon emissions, serve as harbingers of an impending catastrophe that will undoubtedly diminish, if not devastate, the quality of life for future generations. This apprehension of impending disasters, aptly termed an 'ecology of fear' by Mike Davis, is increasingly reflected in urgent warnings about the perils of 'dangerous climate change' and a comprehensive securitisation of the environment (Grove, 2010). Using apocalyptic imagery to discuss global warming, a phenomenon fundamentally driven by economic growth and consumption, or nuclear annihilation, which is caused by international and global policy, is evidence of the inseparable connection between power, capitalism and its perpetual state of emotional crisis (Tschakert et al., 2023). As the prevalence of apocalyptic narratives leads to the social and cultural normalisation of the environmental apocalypse, it becomes normalised within our social and cultural fabric, resulting in the environment being irreversibly transformed into a predicament that necessitates management through various technical solutions. This discourse effectively depoliticises environmental action and disregards the fact that, for many individuals, the predicted crisis is already unfolding (Menga and Swyngedouw, 2018). For many, the only emotional response is disavowal: one may be aware of the problem and still act as if one does not know (Pohl, 2023; Swyngedouw, 2022).

By its very definition, a crisis implies a temporary situation, a critical moment and an unstable or pivotal state of affairs in which a significant change is imminent. However, the current socio-ecological and sociopolitical crisis is far from temporary, and there is no decisive change on the horizon, regardless of our individual efforts. An impossible predicament arises when a structural crisis is treated as extraordinary. In a cultural scenario where utopias are widely assumed as practically impossible, dystopias do not just look more probable. Still, they have become actual and real, leaving no space for any individual sense of sustainability.

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<sup>17</sup> <https://thebulletin.org/doomsday-clock/current-time>

### **Concluding remark: Politicising the impossible and the environmental guilt**

The heterogeneous examples and anecdotes presented in the previous pages describe not just possible but real environmental and ethical problems in the everyday life of many persons. The three vignettes allow us to map examples of contradictions in popular understandings and discursive constructions of environmentalism: consuming meat and supporting the related industry without feeling guilty; travelling all over Europe while compensating its negative effects; experiencing the everyday fear for world nuclear annihilation without giving up any sense of joy while considering atomic energy as a solution to current energetic problems.

The thesis suggested in this paper is that these contradictions compose impossible worlds, as they often set premises which cannot be logically chained together. At the same time, a hypothesis suggested in this paper is that both the impossibilities and the senses of guilt may be intended as glitches. Glitches allow unravelling the inconsistencies of a search for sustainability entirely based on a Kantian individualistic understanding of sustainability. Hacking this logic may mean, for example, asking for systemic change, getting out of a logic of guilt, frustration, individualism and impossibility.

This is particularly visible in the tension between individual and universal conceptions of sustainability. The vignettes presented in this paper exemplify the practical consequences of the belief that we can be individually sustainable without radical collective change, disregarding the fact that current practices of everyday life cannot possibly be accommodated in the here and now of the actually existing world. Still, these possibilities can be unpacked and explored by embracing the idea of the impossible, which helps tease out the boundaries between the potentially possible and imaginable and the actually impossible. From this point of view, the three vignettes build different worlds of impossibility.

As the first vignette illustrates, it is logically possible and imaginable to have a sustainable world where inhabitants consume a limited amount of meat and fish. Still, it is impossible to think of consuming meat without feeling guilty about the animals or the environment, as suggested, for example, by those arguing that eating meat is *positive* for the environment because it supports local productions and traditional lifestyles. Even more: by thinking that it is suitable and appropriate to consume meat, the logic of impossible sustainability made it pointless to limit consumption. In this impossible world, there is no environmental sense in veganism and vegetarianism, and hence those who engage in such practices disturb this narrative while keeping together the pieces of this impossible world.

The case of mobility is somehow similar. The public discourses analysed in the vignette describe an actually impossible world: with the currently available technologies, there is no way to maintain current mobility patterns, a perspective that is at odds with the dictates of globalisation and cosmopolitanism, which also unfold in the daily life of academics. The logical consequence is to turn the impossible into possible through compensations or by hacking mobilities, as in the case of the activists mentioned in the vignette.

Finally, the case of fear of nuclear annihilation, which is gaining new momentum in relation to the upscaling of the Russia–Ukraine conflict, builds other impossible worlds: living everyday life forgetting the fear of the apocalypse; embracing nuclear power to avoid energy dependency on Russia; and investing in new weapons in order to maintain peace. As suggested, the fear of annihilation, including the annihilation due to the climate crisis, makes it impossible to imagine any possible space of individual agency and any idea of possible sustainability. At the same time, these examples suggest that we are discursively and imaginatively living impossible worlds from many points of view.

The glitch in the discursive construction of the relationship between individual and collective framings of sustainability is hence evident: distributive understandings of justice – what we refer to as Kantian understandings of justice – are hard to accommodate in a feeling of responsibility for the environment, originating negative emotions such as guilt and shame. It can even be argued that guilt itself may be interpreted as a systemic glitch, given the fact that society makes it almost impossible to behave ethically in environmental terms. The metaphor of the glitch hence allows posing a number of questions: is it really possible to change individual lifestyles driven just by these negative feelings? Is it possible to think about a joyful, guilt-free drive for individual and collective sustainability? There is probably not a singular answer to this question, but the hypothesis at the basis of this paper is that recognising the glitch, including exploring the impossible worlds we are living and inhabiting, may offer analytical perspectives, new insights and ultimately fuel the desire for a collective systemic change.

## Highlights

- The paper mobilises a Kantian ethical perspective by considering the consequences of everybody behaving in the same way. This allows consideration of the tension between individual and collective understandings of sustainability.
- In the Kantian environmental perspective, individual sustainability is currently impossible for most people, causing feelings of frustration, guilt and shame.
- In impossible worlds, logic fails because their premises are based on internal contradictions; they are imaginative worlds where things could not have been.
- The examples of vegetarianism, mobility and nuclear anxiety sketch different ways in which the impossible is imagined and produced discursively.
- Exploring narratives, imaginaries and *glitches* of impossibility may open spaces of reflection and analysis in environmental thinking.

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