Think Outside the Bun:
Freedom-based Food Narratives and the Need for Global Dietary Changes

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Abstract. As highlighted by the latest IPCC report on climate change (IPCC 2022), in addition to mitigation strategies relying on technological innovation as well as national and international policies, a relevant way to deal with the climate crisis involves individual behavioural changes such as shifting to sustainable diets. Despite being described as a matter of *individual* choice, however, a global dietary change is hindered by some common narratives about food that have a relevant *social* dimension. Among them, the most entrenched and problematic are those related to the idea of "freedom of choice" (Kaplan, 2019) or "consumer autonomy" (Korthals, 2004), which have at their core the idea that humans should always be free to choose their foods. The shift from the current diets, which have an extremely high environmental impact, to more sustainable ones seems therefore to require an examination and readjustment of the collective stories we tell about food, especially those focused on "freedom".
In this paper, I first suggest that freedom narratives are misleading because they conflate the right to food choice with the right to adequate (quantity and quality of) food. Then, I show that freedom narratives are too narrow because they imply a limited view of human rights and lack contextual depth. Novel narratives about food should therefore be broader and should offer deeper knowledge about the relationships between humans, food and the environment. Within the framework of these expanded narratives about food, individual shifts toward sustainable lifestyles will be easier, potentially benefitting both climate change mitigation and adaptation.

Keywords: food; food narratives; climate storytelling; mitigation; right to food; human rights

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1. Introduction

For the first time, in 2022, the IPCC Report on Climate Change addressed the social aspects of mitigation, in addition to the technical and political ones, and recognised the importance of individual consumption choices and lifestyles in coping with global warming (IPCC 2022: WGIII, Box TS.11). This paper examines the food dimension and the role that certain food narratives based on the concept of freedom of choice play in mitigation processes.

In order to limit methane emissions – a highly polluting and often overlooked greenhouse gas –, a general change in dietary patterns is imperative. The goal is to shift from the current Western diets, which are very impactful and are spreading rapidly outside the West, to healthy and sustainable diets that not only limit pollution, but also bring considerable co-benefits in terms of public health.

Although eating behaviours are usually understood as individual behaviours, a closer analysis reveals that they are often automatic and heavily influenced by the social context. Individual behaviours, in other words, are embedded in broader social pre-understandings that can be referred to as "narratives" (Kaplan, 2019), i.e. clusters of meanings that emerge from and shape common sense, representing the lens through which the subject sees the world and defines her behaviours within it.

As far as food is concerned, a relevant narrative is the one that Kaplan related to freedom of choice. This narrative – or, rather, this family of narratives – is based on the idea that when it comes to food, individual freedom of choice is an inviolable right and that the individual should *always* be free to choose what to eat. In this framework, giving up beloved but environmentally impactful foods seems unfair because it goes against what is sometimes qualified as an inalienable individual right.

This freedom-based food narrative is a major obstacle to climate mitigation. The food industry can only be decarbonised to a modest extent (ruminants are not decarbonisable), and the only way to significantly limit methane emissions related to the agricultural and livestock industry seems to be to abstain from or decrease consumption of certain foods. It therefore seems necessary to dwell on the nature of freedom-based food narratives, in order to analyse their internal consistency and legitimacy.

In the following paragraphs, after a brief introduction aimed at reconstructing the current state of the climate crisis and mitigation, I will therefore look into freedom-based narratives. After examining their legitimacy and comparing the right to freedom of food choice with other recognised human rights, I will indicate how this short-sighted narrative can be integrated and expanded so as to provide a proper framework for the personal effort of shifting from current diets to the healthy and sustainable ones recommended by the IPCC and the World Health Organisation (WHO).

2. Global warming, fossil fuels, and land-use change

It is well known that greenhouse gases (GHGs) play a central role in the climate system. They absorb the radiation that lands and oceans emit after receiving the energy of the Sun, prevent some of this radiation from escaping into space, and maintain the planet's temperature at an

average of 15°C (Mathez & Smerdon, 2019). Without GHGs – carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and ozone (O_3) – the atmosphere of the Earth would be much colder (around -18°C) and life as we know it would probably have never evolved.

Since the industrial revolution,[2] however, the concentration of GHGs in the atmosphere has no longer followed its natural rhythms but has started to increase exponentially due to anthropogenic activities. The well-known consequence of this growth in CO_2 concentration is global warming, and the latest IPCC reports (e.g., IPCC 2017 and IPCC 2022) have unequivocally identified its main causes in fossil fuels and deforestation.

The extraction and use of fossil fuels lead to the release of a massive amount of carbon into the atmosphere, which would otherwise remain underground in the lithosphere. This massive use of fossil fuels is responsible for four-fifths of global CO_2 emissions.

The second main driver of global warming, the one responsible for the remaining fifth, is deforestation, encompassing forest degradation and land-use change (IPCC 2022, see Fig. 1). These activities have a twofold impact. First, plants capture CO_2, removing a substantial amount of it from the atmosphere. Every year, however, millions of hectares of forests are lost, resulting in the loss of their carbon-capturing ability. Second, plants act as carbon sinks: when forests are burnt or cleared, the carbon they store is released back into the atmosphere. Today, due to logging activities, the Amazon rainforest, for example, produces more CO_2 than it captures (Gatti *et al.*, 2021).

Although reduced in recent decades, deforestation is still occurring at an alarming rate (FAO2020) primarily due to agricultural and ranching expansion.[3] Forests, in other words, are being cleared to make way for farming and livestock grazing lands (Curtis *et al.*, 2018). This means that it's not just the area we inhabit, but also the land required for cultivating and producing our food, that is having a huge impact on the Earth's temperature.

3. Methane emissions and mitigation

While fossil fuels, deforestation, and land-use change are mainly associated with carbon dioxide emissions, the other major driver of climate change is methane (CH_4), which accounts for 18% of global anthropogenic emissions (IPCC 2022). Similarly to CO_2, methane concentration has increased substantially over the past 800,000 years, but these two greenhouse gasses have extremely different characteristics. On the one hand, methane, although less abundant, has a warming potential that is about 25 times greater than that of CO_2 (IPCC 2007); on the other hand, methane – unlike CO_2, which persists in the atmosphere for thousands of years – is a short-lived climate pollutant that degrades in about 10 years (IPCC 2018). A first reason to pay special attention to reducing methane emissions is therefore the following: given the speed at which methane disappears from the atmosphere, reducing its emissions is the most effective way to achieve the Paris Agreement's goal of limiting global warming to 2-1.5°C (Nisbet *et al.*, 2019; UNEP/CCAC 2021). Indeed, the benefits of such a reduction would be

[2] For many authors, this process already started with the spread of agriculture and domestication between 7000 and 4000 years ago (see Roosevelt *et al.*, 1996; Peters, 2000; Mathez & Smerdon, 2018).

[3] Other causes include wildfires, logging, mining, oil or gas extraction, and urbanisation (Curtis *et al.*, 2018).

evident in a decade or so, unlike what would happen with a corresponding reduction in CO_2 (IPCC 2018; Saunois *et al*., 2020).[4]

The abatement of methane emissions can be achieved by acting on many of its causes, but the main one is the food industry and, specifically, livestock farming, which is responsible for 32% of the total anthropogenic methane emissions (UNEP/CCAC 2021: 28).[5] Anthropogenic methane is largely produced by the digestive processes of domestic ruminants and their droppings (Tubiello, 2019). Each cow, for example, releases more than 200 litres of methane per day (Lyu *et al.*, 2018). Given the large number of domestic ruminants (1.5 billion cattle, 1 billion sheep, and about 1 billion goats), the amount of CH_4 that is emitted into the atmosphere in this way is therefore staggering.

It is essential to note, at this point, that livestock contributes to climate change in two ways: directly, through methane emissions, and indirectly through deforestation and land degradation (Asner *et al.*, 2004; Gerber *et al.*, 2013). Therefore, recognizing and taking action on this aspect of the production system is of paramount importance. A further reason to do so is the fact that unlike other sectors, the food industry can only be decarbonised to a reduced extent. It is possible, for example, to shorten and make the agri-food chain more sustainable by improving its infrastructure, logistics and transport (PNRR 2021), but the digestive processes of ruminants themselves cannot be decarbonised. Thus, the ecological transition for the livestock sector faces greater difficulties compared to sectors such as transport or energy.

It is within this framework, therefore, that the mitigation produced by individual commitment must be considered. Recently, it has been highlighted that individual actions such as living car-free, having fewer or no children, avoiding transatlantic flights and/or switching to a plant-based diet can be extremely effective in reducing collective GHG emissions (Wynes & Nicholas, 2017; van Vuuren *et al.*, 2018). Moreover, unlike the technological innovations required by energy transition or the implementation of international policies, behavioural changes can be rapid and inexpensive, if not cost-effective. Still, the difficulties associated with these personal initiatives are not negligible as they are linked to the sacrifices that current generations would have to make in order to protect communities distant from them in space and time. In essence, to secure a habitable planet for future generations, current generations would have to implement radical changes in their lifestyles, but the benefits of most of these changes will not be enjoyed by them, but rather by those who will come *after* them.

It should be noted at this point that technological, political and individual approaches are not mutually exclusive. Indeed, mitigation should not be understood as the search for *the* perfect strategy (singular), but as the individual and collective effort to embrace all possible strategies in order to best contain the climate crisis. So while this article focuses on mitigation strategies related to individual efforts, I am not suggesting that they are more effective than others. Rather, my wish is to emphasise how individuals themselves can act effectively and decisively,

[4] Methane pollution, moreover, has a strongly negative impact on both health and agriculture (Shindell *et al.* 2012 and 2017; UNEP/CCAC 2021, Ch. 3). It has been established that "the broad social cost of methane, i.e. the monetised social harm, including climate and air quality-related impacts, from a tonne of emissions is 50-100 times greater […] than the corresponding social cost of carbon dioxide" (UNEP, CCAC 2021: 18).

[5] The other main anthropogenic sources of CH_4 emissions are fossil fuel extraction and transportation (35 per cent), landfills and waste management (20 percent), and rice cultivation (8 percent) (UNEP/CCAC 2021: 28).

while waiting for governments and science to provide large-scale climate mitigation solutions (Liverani, 2010; Pongiglione, 2014).
Having said that, we can now focus on individual mitigation and examine one of the virtuous actions that the climate crisis seems to require: shifting from current diets, which have a very high environmental impact in most countries, to more sustainable diets. As we have seen, this transition can be helpful in reaching mitigation targets, limiting global warming and, consequently, curbing the effects of climate change.

4. The need to shift to healthy and sustainable diets

As mentioned in the introductory paragraph, in addition to the technical and political aspects of climate mitigation, the 2022 IPCC Report addresses its *social* aspects as well. The report recognises five types of social actors able to influence global warming: individuals, groups and collectives, corporate actors, institutions, and infrastructure actors (IPCC22 WGIII, Box TS.11). The IPCC suggests that by giving due consideration to these novel actors, climate mitigation can become more effective, and social barriers and opportunities can be more easily recognised.
Focusing on individuals and groups, the IPCC report thus emphasises the relevance of personal and collective consumption choices, lifestyles, and habits, especially in relation to mobility and diet.[6] With regard to the latter, a shift to sustainable healthy diets is highly recommended because the current eating patterns prevalent in the West (and increasingly emulated in the rest of the world) are associated with high GHG emissions, biodiversity loss, water and land pollution and overuse, as well as a high risk of zoonoses, the COVID-19 pandemic being the most recent example. Moreover, these diets fail to ensure adequate nutrition for human beings: suffice it to say that "more than 820 million people remain undernourished, 151 million children are stunted, 51 million children are wasted, and more than 2 billion people are micronutrient deficient" (Willett *et al.*, 2019, p. 449). On the other hand, obesity has nearly tripled since 1975 and unhealthy diets led to more than 12 million deaths in 2018 (GNR21).
Shifting to healthy, sustainable diets is therefore accompanied by numerous co-benefits as they promote both human health and environmental preservation. They mostly involve reducing or, ideally, avoiding meat (especially ruminant meat), animals products, refined grains, processed food, added sugars and saturated fats, replacing them with abundant intakes of vegetables, fruits, whole grains, legumes, nuts, and unsaturated fats (Willett *et al.*, 2019).
As far as GHGs are concerned, shifting to a reducetarian,[7] vegetarian, or vegan diet represents an effective move against global warming. Meat, and especially ruminant meat, has a strong environmental footprint in terms of GHG emissions and land use (Poore & Nemecek, 2018), so a reduction in the consumption of meat and animal products would significantly reduce the

[6] See also Liverani (2010: 2): "Roughly 40 percent of OECD emissions result from decisions by individuals – travel, heating, and food purchases".
[7] A reducetarian diet is a diet with a low intake of meat and animal products.

impact of the food system on climate and the environment, regardless of how and where[8] they are produced.[9]

In summary, reducing demand for animal products would lead to decreased emissions and pollution; at the same time, less land, water, and energy would be needed for croplands and pastures; moreover, reforestation would be easier, and biodiversity less endangered (Stehfest *et al.*, 2009; Popp *et al.*, 2010; Tilman & Clark, 2014).

The question is how challenging it is to shift dietary patterns and why. In the following paragraphs, I will explore the reasons that hinder these changes and then focus on the relevance of freedom-based food narratives.

5. The challenges of changing diet and the power of narratives

Shifting to a sustainable diet is usually conceived as a *personal* change. It is the individual who chooses what groceries to buy, what to cook, and which dishes to order at the restaurant. These decisions appear to be personal choices, based on taste preferences, habits, personal needs, or private judgements. As highlighted by Claude Fischer (1979), while in the past dietary choices were determined by the availability of food and resources and by traditions and family ties, modernity allowed for a major freedom of choice. This circumstance, however, produced a shift from gastro*nomy* to what Fischer defined *gastro-anomie*, namely a general lack of rules or codes that generated "aberrant eating behaviours" due to "multiple and contraddictory pressures" (ibid., p. 206)[10]. Indeed, despite appearing personal and free, a closer examination of eating choices reveals that most food-related decisions are almost "automatic" and strongly determined by several contextual social factors identified by Fischer.

Automatic behaviors are "those that occur without awareness, are initiated without intention, tend to continue without control, and operate efficiently or with little effort" (Cohen & Farley, 2008; see Bargh, 1994). Indeed, as evidenced by many studies, the amount and type of food that an individual consumes is determined by several elements. Firstly, an important factor is belonging to certain religious, cultural, social, or ethnic groups. These groups are often characterized by their own foodways, whereby eating – or avoiding – certain foods reflects meanings related to the identity and history of the group (Anderson, 2004). As highlighted by Stano (2023, p. 309), "the inherently cultural and semiotic nature of food choices, habits, practices and rituals" allows to conceive of an "alimentary semiosphere" that can be defined as

[8] Eating local food is a common recommendation to reduce the carbon footprint, but transport and packaging actually have an extremely low impact on the environmental footprint of food (Poore & Nemecek 2018).

[9] A recent study on the average carbon footprint of typical European diets shows that meat, eggs and other animal products are responsible for 83% of greenhouse gas emissions from food (Sandström *et al.* 2018). Another study on the eating habits of British citizens showed that "greenhouse gas emissions in kilograms of carbon dioxide equivalents per day [...] were 7.19 [...] for large meat eaters (>=100 g/d), 5.63 [...] for medium meat eaters (50-99 g/d), 4.67 [...] for low meat eaters (<50 g/d), 3.91 [...] for fish eaters, 3.81 [...] for vegetarians and 2.89 [...] for vegans" (Scarborough *et al*. 2014: 179).

[10] See the complete passage: "It is in the breach of *anomie* that the multiple and contradictory pressures exerted on the modern eater proliferate: advertising, mass media, various suggestions and prescriptions, and above all, increasingly, medical warnings. Anomic "freedom" is also an anxious tug-of-war, and this anxiety in turn overdetermines aberrant eating behaviours" (Fischer 1979, p. 206).

a "foodsphere" (Stano 2015, p. 233)[11]. Foodspheres, in the past, were more local and independent from each other, but now, with tourism, immigration and the influence of social media, they became more global, intertwined and capable of producing phenomena of "translation across different food cultures" (Stano 2023, p. 310). Secondly, there are simple environmental cues influencing our food choices and habits that are often hard to recognise. For instance, the amount of eaten food increases when portions are bigger (Diliberti et al, 2004), when food is easier to obtain, when the meal lasts longer and the number of diners is higher than usual (Wansink, 2004). Eating in company also influences food choices as diners often replicate the food choices of others (Cohen & Farley, 2008). Finally, further elements that influence food choices are those studied by marketing researchers: branding, advertisements, discounts, shelf positioning, celebrity endorsements, product placements in movies or series, or, in general, trends.

All these social factors constrain individual food choices and make them less conscious and aware. Their power, however, is not individual. As the concept of foodsphere suggests, they are organised and structured into robust constellations of meanings that in this paper I choose to call "narratives"[12]. In David Kaplan's words:

> A narrative (or story) is like an interpretation but broader, more comprehensive, and geared toward representing things that have a historical dimension. Narratives can tell us more than descriptions or explanations simply because they can take a longer view, incorporate more perspectives, and cover more details. They can help us make sense of what would otherwise be a vast range of unrelated things, and they can also guide our actions (2019, p. 39).

[11] See also Volli (2015), p. xiv: "Every way of feeding tells us first of all something about the differential identity of the people choosing it. In this sense, nutrition is a self–oriented marker, and an identification device".

[12] I am using the concept of narrative because of its wide scope and its explicit connection to a pluralistic view of knowledge. However, very similar concepts exist in the literature about food. Besides the already introduced "foodsphere", the notions of "foodways" or "food ideologies" can be mentioned as well. Eleanor Eckstein offers a neat definitions of these ideas in her book *Food, Peole and Nutrition*:

"(a) *Foodways*—This is a genus term referring to internalized beliefs and customary patterns of activities associated with acquisition, preparation, serving, consumption, and storage of food. It includes all relevant factors in the food and people interaction—who, what, when, where, why, and how. […]

(c) *Food ideology*—This is a species term referring to the beliefs and attitudes people have that determine their personal definition of food and their activities in relation to food, e.g.,

-what people think about each of the different items that might be considered as food; the sorting factors

-what people think the effects of eating various "foods" might be on their health and well-being

-what kinds of "foods" people think are suitable for individuals and categories of people, e.g., old, infants, sick, pregnant, lactating

-what kinds of "foods" people think are suitable at certain times, e.g., one is not permitted to eat X from April to June; it is poisonous

-what kinds of "foods" people think are not suitable in certain conditions, e.g., pregnant women are not permitted to eat X or the baby will have symptoms Y, Z, and Q" (1980, p. 222).

On food ideology, see also Fieldhouse (1995), who highlights the connection between food ideologies, ethnocentrism, and food categorisation, and Joy (2020), who discuss about "carnism", a violent, invisible ideology – invisible because mainstream and entrenched, such as patriarchy – that makes the *choice* to eat meat a natural, irreflexive action. The concepts of ideology to which Stano, Eckstein and Fiedhouse refer seem to conform to Umberto Eco's general definition of ideology as "*the epistemic universe of the recipient and the group to which she belongs*, its systems of psychological expectations, its mental attitudes, its acquired experience, its moral principles (we might say its 'culture,' in the anthropological sense of the term, if culture so understood did not also include rhetorical systems)" (1968, pp. 93-94). My interpretation of narratives, which is similar to Kaplan's, conforms to this idea as well.

As Kaplan points out, a narrative is a broad interpretation of the world or parts of it. It emerges as a structured constellation of meanings with historical depth, a social complex structure, and a diachronic evolution. It involves the past, present, and future, as well as agents and motives. It incorporates certain dynamics and foresees some developments. Moreover, each narrative offers a type of knowledge that is interpretative, not exclusively based on objective facts, measurable data, and empirical evidence, but also on background assumptions, cultural structures, personal beliefs, values, fears, and desires. Narratives are prospective because they "are always told from someone's perspective" (Kaplan, 2019, p. 41), and are therefore partial because they are tied to specific points of view. Moreover, they do not provide neutral, objective knowledge, like that offered by science, but participatory and situated knowledge, with the knowing subject being an integral part of the narrative rather than a disconnected observer. This entails that the epistemic content provided by a narrative is very close to the individual and is salient from both a cognitive and an emotional point of view (Linde, 2001). Narratives rely more strongly on credibility than accuracy or truthfulness, and keeping in mind this fact is of paramount importance to understand how they work. Finally, it should be noted that narratives are interconnected with each other: food narratives often come with other narratives, such as gender narratives (see Derrida & Nancy, 1991; Adams, 1990; Counihan & Kaplan, 2003) or narratives about nature (Gergen, 2008; Treanor, 2014). Narratives, in other terms, form complex clusters of stories that refer to and reinforce each other.

Human beings are cultural as well as social animals, which means that they *inhabit* narratives. From narratives, humans receive not only information but elements to construct their very identity (MacIntyre, 1981; Taylor, 1992; Sugiman *et al.*, 2008). By repetition, these narratives transform into collective visions that assume a "pretheoretical" flavour (Swirski, 2007, p. 5). Despite appearing free, then, individuals are influenced, if not even constrained, by the narratives within which they live, and this implies that enacting individual change might be easier if the subject were accompanied and supported by a corresponding change in narratives (Somers and Gibson 1994). As highlighted by Haslanger, social structures are robust and limit the individual's "choice architecture" (2024, p. 57): "We are agents of constrained choice, navigating multiple factors: our biology, the local geography and climate, the background legal and religious strictures, economic limitations, cultural norms, and the interpretative and communicative resources available (and more)" (ibid., p. 60). Actions that conform to social norms and familiar narratives are intelligible, convenient, and conservative of the actual balance of powers and material conditions (ibid., pp. 61-62). Haslanger offers examples such as the relationships between parents and minor childs or teachers and students in universities and schools, but the same can be applied to food. For instance, at the Christmas family dinner, no one would question why are you still eating meat, while many would question why you quit eating it. Dietary changes are often unintelligible to others, especially if they involve sacrifices and if they do not stem from urgent reasons such as allergies or other medical conditions. In short, why would anyone want to give up something that is pleasant, socially acceptable, available (and often cheap), and symbolically associated with stenght and power, if not strictly necessary? Such questions anticipate the examination of the narratives surrounding food that are the topic of the next section.

6. Freedom-based food narratives

In section 3, I mentioned Claude Fischer's idea of *gastro-anomie* which is associated with what he calls "la « liberté » anomique", namely the "anomic" (i.e., unconstrained) freedom. In the context of climate mitigation, it might be identified a particularly relevant family of food narratives consistent with Fischer's view. In the aforementioned *Food Philosophy. An Introduction*, Kaplan discusses what he calls "freedom narrative," which he considers the "dominant story" about food (2019, p. 44). The narrative has at its core a simple idea, namely that humans should always be free to choose their foods. In Kaplan's words, "for any food issue, freedom to choose is always good and restrictions on choice are always bad" (*ibid.*, p. 42).

While especially powerful in the United States, where the notion of liberty underpins social and political ideology, freedom narratives about food are widespread, as human beings commonly believe that they have the right to live their lives freely, and choosing what to eat seems to fall under this right. Freedom-based narratives legitimise this belief and the belief, in turn, reinforces the narrative. A similar view can be found in Michiel Korthals' *Before Dinner. Philosophy and Ethics of Food* (2004), where the author describes a liberal approach to nutrition in which consumer autonomy is paramount. In this framework, it is the individual who decides for herself whether or not to eat meat, whether or not to buy genetically modified food, and what to choose between fast and organic food (2004, p. 29). Individuals, in short, have an "overriding authority" (*ibid.*, p. 31) in choosing what they eat, and this is because freedom narratives are based on the belief that the freedom of food choice is a human right, as fundamental as the rights to life, free speech, equality, and so on.

It is clear that the power of these narratives can seriously hinder the process of shifting to sustainable diets. In this framework, asking individuals to change their diet and give up unsustainable but beloved foods is seen as unjust, even if these sacrifices aim at a greater good, such as mitigating climate change and protecting both future generations and people living in less privileged countries. It is therefore important to analyse these narratives. A good case in point to start from is the raw milk debate that has been raging in the United States for the past few years.

Briefly, in all fifty states of America, consuming raw milk and other unpasteurized products is legal, but sales are mostly prohibited or limited to farms. At the federal level, however, interstate sale of raw milk is always illegal and all dairy products that are sold across states must meet the standards of the *US Pasteurized Milk Ordinance*.

Consumers and farmers, however, have been protesting these restrictions for a long time. One interesting case is the lawsuit filed by the Farm-to-Consumer Defence Fund against the US Department of Health and Human Services (HHS) and the Food and Drug Administration (FDA) in February 2010.[13]

The Fund accused the government for having sequestred and destroyed 110 gallons of raw milk which were transported from South Carolina to Georgia in 2009. In the complaint, the Fund states that it "defends and protects the right of farmers to directly provide, and for

[13] The documents about this and other lawsuits filed by the Fund are available at the following link: http://www.farmtoconsumer.org/litigation-FDA.htm#documents

consumers to directly obtain, unprocessed and processed farm foods" (Fund's complaint, in Rencher, 2011, p. 419). The Fund recognises, moreover, a *right* to consume the foods of choice and defines it as an "inalienable right" (*ibid.*). In response to the allegation, the HHS and the FDA state that "Plaintiff's assertion of a 'fundamental right to their own bodily and physical health, which includes what foods they do and do not choose to consume for themselves and their families' is […] unavailing because plaintiffs do not have a fundamental right to obtain any food they wish" (*ibid.*).
Now the question arises as to whether the right to choose food is fundamental, as claimed by the Fund, or not – as stated by the US government.

7. Are freedom-based food narratives legitimate?

In this paragraph, I would like to examine why it is problematic to claim that the right to food choice is fundamental. Indeed, freedom of food choice may be related to a similar established human right, namely the right to adequate food, but these two rights are not identical and the latter does not entail the former.
The right to food is included in the 1948 Universal Declaration of Human Rights,[14] the 1966 International Covenant on Economic, Social and Cultural Rights (ICESCR),[15] and many other international and national binding and non-binding instruments (Mechlem, 2004)[16]. A detailed description of the normative content of this right can be found in a General Comment to the ICESCR published in 1999, *The Right to Adequate Food*. Here, the right is said to imply: "The availability of food in a quantity and quality sufficient to satisfy the dietary needs of individuals, free from adverse substances, and acceptable within a given culture; the accessibility of such food in ways that are sustainable and that do not interfere with the enjoyment of other human rights" (CESCR, 1999, art. 8). The commentary thus refers to food which is (i) adequate in its nutritional and non-nutritional values ("cultural acceptability"), (ii) free from contamination, (iii) economically and physically accessible ("accessibility"), and (iv) available to "both present and future generations", hence "sustainable" (CESCR, 1999, art. 7). The term *sustainable* "incorporates the notion of long-term availability and accessibility" (*ibid.*), and it is this feature that allows the production and distribution of adequate food not to "interfere with the enjoyment of other human rights" (*ibid.*, art. 8).
At first glance, the right to adequate food does not seem to linearly entail the right to choose particular foods. However, an adequate diet does encompass nutritional adequacy and cultural acceptability, and these claims might reinforce the idea that the choice of particular foods should be safeguarded.

[14] Art. 25.1: "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control."
[15] Art 11.1: "The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions. The States Parties will take appropriate steps to ensure the realization of this right, recognizing to this effect the essential importance of international co-operation based on free consent".
[16] The end of hunger and malnutrition is also one of the world Sustainable Development Goals (SDGs) adopted by the countries belonging to the United Nations in 2015. See UN 2015.

Indeed, in several cases, food choice is extremely important for health reasons or issues of religious and/or cultural identity. According to a report published by the WHO on 9 July 2021, for example, in 2016, 39% of the world's adult population was overweight and 13% were obese, and these conditions are associated with heart disease, stroke, diabetes and various cancers. Overweight and obesity, however, are preventable conditions and to reduce them the WHO recommends to "limit energy intake from total fats and sugars; increase consumption of fruit and vegetables, as well as legumes, whole grains and nuts; engage in regular physical activity […]" (WHO 2018). It can therefore be argued that an overweight or obese individual has a fundamental right to *healthy* food.

A similar argument can be made for religion, as many traditions view vegetarianism as mandatory or at least strongly preferable. Emblematic examples include Indian religions, but also Judaism (Labendz & Yanklowitz, 2019), with a relevant number of medieval and modern rabbis promoting a Jewish Vegetarianism or even Veganism (Labendz & Yanklowitz, 2019), and some Christian religions such as The Church of Jesus Christ of Latter-day Saints (the Mormons) or the Seventh-day Adventist Church, as well as many Catholic monastic orders (Franciscans, Trappists, Carthusians, Cistercians, and others). It can therefore be said that an individual who adheres to a particular faith has a fundamental right to access the foods *it recommends*.

Finally, as for cultural identity, which includes but is not limited to religious identity, food choice can be an expression of personal values and can become a political discourse against animal abuse, environmental degradation, intensive agriculture, waste of resources, or the unethical policies of multinational corporations. Again, therefore, it can be argued that an individual who embraces certain political or moral principles has a fundamental right to obtain or avoid certain foods that are *consistent with those principles*.

Food choices related to health, religion, and personal expression should be protected; therefore, the right to food choice, if not straightforwardly fundamental, certainly seems important. However, the brief analysis just concluded suggests that in all those contexts where the right to food choice is guaranteed because strongly related to other established fundamental rights, there is no conflict with the IPCC recommendations. In all these cases, in fact, while not mandating the consumption of specific foods, health authorities, religions, and moral principles recommend the consumption or avoidance of certain macro-categories of foods, and these recommendations are consistent with what is advised by the IPCC report in relation to sustainable diets.

The first conclusion we might come to, then, is that the right to arbitrarily choose any particular food is not fundamental or inalienable, and food narratives should be shaped accordingly. But there is more. The right to food choice is not only different from other established human rights: it *cannot* be seen as an instance of the latter, since its fulfilment for any group of individuals interferes with the human rights of the others and with those of future generations.[17]

As already pointed out, the current Western diet, which is becoming increasingly common in non-Western societies, exploits too many resources – water, land, and energy – and produces

[17] This echoes the distinction between luxury and subsistence emissions formulated by Shue (1993) and the issues of how the luxury emissions of some impact and endanger the lives and livelihoods of others. See also Holland 2015 and Shue 2019.

a massive amount of GHGs, especially methane. These facts are among the main causes of a very rapid global warming that is having huge consequences on the environment and human societies. Together with the energy system, which predominantly revolves around the use of fossil fuels, the food industry is directly responsible for the disasters caused by climate crisis, and the latter are already affecting geographically, economically and socially disadvantaged communities that have to face serious if not unprecedented famines, diseases, and losses of physical, human, and cultural assets (Islam & Winkel, 2017).
Some diets are simply not sustainable, and sustainability is one of the hallmarks of an adequate diet (CESCR, 1999). Freedom-based food narratives, which legitimise the current diet and the reluctance to change it, seem to suggest that any *desired* food is *ipso facto* an *adequate* food, but this is a dangerous idea that hinders the transition to sustainable diets and reinforces harmful behaviours contributing to global warming.

8. Think outside the bun. Towards new food narratives compatible with climate mitigation

As noted in the fifth paragraph, according to Kaplan, narratives are broad interpretations of the world. Sometimes, however, they are not broad enough, and this may be the case with freedom-based food narratives as depicted by Kaplan and exemplified by the Farm-To-Consumer Defense Fund.
The narrowness of these narratives is exceptionally similar to that characterizing traditional ethics in Hans Jonas' *The Imperative of Responsibility* (1979). Here Jonas criticizes traditional ethical frameworks for failing to consider the long-term consequences of human actions and the spatial extent of their impact.[18] Traditional ethics, in other words, is a *neighbour* ethics, whose moral obligations merely regard the immediate and proximate effects of human agency, while ignoring not only the distant future (and its inhabitants) but also everything that is not included within the narrow boundaries of the human community of reference. In contrast to this view, Jonas argues that ecosystems, other vegetal and animal species, unborn generations, but also people living in underdeveloped countries must become the subjects and objects of a new ethics.
Jonas' approach can be applied to food narratives as well. Freedom-based food narratives are too narrow because they entail a narrow view of individual rights. The autonomy of the individual is seen as unlimited and arbitrary ("anomic" in Fischer's terms), and the right to build what one thinks is a good life seems to justify any choice or behaviour. In this framework, freedom seems unrestricted. This idea might be connected to the common view whereby the food dimension appears to be singularly detached from social reality. On the one hand, it is quite obvious that individuals living in social groups are constrained by social structures such as institutions or norms, so it is generally accepted that one's desires do not legitimate any kind of behaviour in society. Not paying taxes, for instance, would be desirable

[18] It should be noticed that *H. sapiens* greatly affected ecosystems even before the technological age (cf. e.g. Sandom et al. 2014; Boivin et al. 2016, Mottl 2021), but this does not seem to weaken Jonas' theory about the necessity of a new ethics. Rather, it probably underlines its urgency.

at an individual level, but people do (for the most part) pay taxes: first, because failure to do so can result in fines and penalties, and second because paying taxes allows societies to build and maintain infrastructures and offer better services. Not paying taxes patently affects welfare, social dynamics, and other members of society, who sometimes are asked to pay more than they should to cover for tax evaders. In this context, not being completely free (on how to spend money) is something that is widely accepted, for paying or not paying taxes is seen as a behaviour that clearly affects the functioning of societies. Personal food choices, on the other hand, are often not seen as equally relevant from a social or political point of view. Choosing a steak, a pizza, or a salad for lunch does not seem to have the same clear impact on society, whereas it does have an immediate impact on the individual who chooses. If food is a choice that affects nothing and nobody but ourselves, we should be free to eat what we want. But therein lies the narrowness of the freedom-based food narrative. Granted, choosing a steak, a pizza, or a salad for lunch does not immediately seem to harm our fellow citizens, who are included in the narrow horizon of the freedom narrative. However, in a broader perspective that takes into account the complexity and instability of the climate system (Broome, 2019), this choice *does* have an impact on the environment, a huge number of biological species and large communities of people living in areas where the effects of climate change are more severe.[19]

Freedom-based narratives, therefore, should be expanded, and in order to do so it may be necessary to think "outside the box" – or, as suggested by Taco Bell's famous slogan, "outside the bun". Novel narratives, in other words, should include the environment, the future, and the individuals that are – or will be – affected by present food choices. A good food narrative should also encompass a diachronic dimension, able to track the long-term effects of present actions. In such a food narrative, individuals will belong to a community with larger spatial and temporal boundaries, including other species in addition to *H. sapiens*. Freedom will remain the core value, but it will be freedom for all human beings (at least) and will therefore be equally distributed. Thus, the freedom of some will be limited to ensure the freedom of others (Spicker, 1985).

It is important to note that the IPCC recommendations on shifting to sustainable diets point exactly in this direction. To ensure adequate food for *all* human beings, both those living on the planet today and those who will inhabit it in the future, some freedoms will have to be restricted, and the freedom of food choice seems to be among them. Appropriate food narratives should therefore focus on the right to *adequate* food, rather than the right to freedom of choice *per se*. Each human being will have to be free to choose or avoid certain *categories* of food, rather than certain *specific* foods, and these choices will have to be consistent with the human right to adequate food.

Let us return again to the nature of these powerful epistemological tools we call narratives. As multidimensional interpretations of reality, they can indeed contribute to achieving the outcomes listed above. Narratives can create, as well as dissolve desires. They can define

[19] Not to mention the effects on *who* we are eating, in the case of steak. I would like to point out that although the arguments presented here to highlight the need to switch to more sustainable diets are mainly anthropocentric, they could be complemented and strengthened by non-anthropocentric arguments focused on animal exploitation. I have decided not to include these latter arguments, which are, however, consistent with the former, not out of any disinterest in animal rights, but to avoid making the discussion too dispersive.

needs, as well as reveal them as only apparent. They can fill gaps in our personal knowledge, as well as hide them as if they did not exist. They can teach us to behave and act in certain ways by illustrating those actions and their consequences. They can even prioritize certain values at the expenses of others: instead of emphasising the libertarian value of food choice, for instance, good food narratives might emphasise the value of food itself –including the resources that brought a product to our plate. A sustainable diet, for example, requires less land, energy, and water usage, while also having a very positive impact on health and, consequently, on public health costs. Consistently, within the framework of appropriate food narratives, health should be as important as pleasure, cooperation more desirable than individualism, and collective well-being as significant as individual well-being.

With regard to knowledge, instead of being limited to what could be called 'surface' knowledge about food – such as its taste, cost, and nutritional values[20] – a more comprehensive narrative could take into account the productive dimension. This would highlight the importance of the origins of food, the processes required for its production,[21] and its impact on the ecosystem and the global community. Given that consumers in the industrial age typically purchase food from shops and markets and rarely engage with food production and its environmental consequences, it is natural for Western food narratives to prioritize the first set of issues and overlook the second (Whit & Whipps, 2000). New, fresh stories told by different individuals living in different contexts, however, can reveal the hidden costs and production chains of food. These factors cannot be overlooked but must play a prominent role in the stories we tell about what we eat. How we relate to food is certainly important, but so is how food relates to the environment, and this knowledge must find its place within an appropriate food narrative.

A final matter to ponder is that narratives, as already pointed out, offer knowledge that is *participatory* and thus more salient than the objective and sometimes distant knowledge provided by scientists and experts. Creating a new cultural framework able to support individual change is therefore not the exclusive task of these actors. Scientists analyse facts and offer data, but these data are often ignored if they conflict with the subject's previously accepted narrative. Narratives, in other words, are mental structures that incorporate new information as it becomes available, but this incorporation is only successful if there is some consistency between the pre-existing structure and the new information received: if this is not the case, the new information is questioned, rejected or disregarded (Nickerson, 1998). The process that leads to the modification of a narrative, therefore, is not limited to the accumulation of new knowledge, but to the restructuring of the constellation of meanings that makes up the narrative in the first place. For these reasons, the agents that can reshape a narrative are multiple

[20] See Scrinis' analysis of the paradigm or ideology that he calls *nutritionism*: "Nutrition scientists, dieticians, and public health authorities—the nutrition industry, for short—have implicitly or explicitly encouraged us to think about foods in terms of their nutrient composition, to make the connection between particular nutrients and bodily health, and to construct 'nutritionally balanced' diets on this basis. After several decades of nutrition education campaigns, it is primarily this general approach to food that the public has taken on board—that is, the understanding of food in terms of nutrients […]" (Scrinis 2008, p. 39). Stano defines nutritionism as "a reductionist process based on the de–contextualisation, simplification and exaggeration of the role of nutrients" (2023, p. 312)

[21] See Fischer (1979), p. 200: "Avec l'évolution de la production et de la distribution agro-alimentaires, nous perdons progressivement tout contact avec le cycle productif de nos aliments. Une partie de plus en plus grande de la chaîne des opérations qui conduisent les produits du sol à notre table nous échappe. Nous perdons à vrai dire souvent toute notion même de leur origine réelle, des procédés et des techniques utilisés pour leur production, leur expédition, leur traitement : la société agro-industrielle et la ville ont fait de nous des « consommateurs purs »".

and include communicators, educators, artists, the cultural system and industry, the press, mass media and social media, Internet platforms with their algorithms, companies with their communication strategies, and all those who contribute to defining the public discourse and debate. To conclude in a positive note: recently, new emerging narratives offered by this vast array of "influencers" are gradually gaining traction and significance. These narratives introduce novel perspectives and ideas on different scales. Besides several best-selling books about food and climate such as Paul Hawken's *Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming* (2017), Jonathan Safran Foer's *We Are the Weather. Saving the Planet Begins at Breakfast* (2019), or Paul Greenberg's *The Climate Diet: 50 Simple Ways to Trim Your Carbon Footprint* (2021), we should also take into consideration the growing abundance of documentaries and films that scrutinize the consequences and significance of our dietary decisions. Some examples are *Our Daily Bread* (Geyrhalter 2005), *Food, Inc.* (Kenner 2008), *The End of the Line* (2009), *Cowspiracy: The Sustainability Secret* (Andersen, Kuhn 2014), *Wasted! The Story of Food Waste* (Chai, Kye 2017), *The Biggest Little Farm* (Chester 2018), *The Need to Grow* (Herring, Wirick 2018), *Seaspiracy* (Tabrizi 2021), and *Eating Our Way to Extinction* (2021). Many of these productions have managed to capture broad audiences, establishing themselves prominently within the media landscape, and their role was relevant in shaping new forms of awareness and encouraging new practices and dietary changes. The same goes for celebrities standing for vegan or vegetarian lifestyle. On a less institutionalized, but perhaps more pervasive scale, millions of individuals are affected on a daily basis by food bloggers and influencers promoting new understandings and approaches to alimentation on social media such as Instagram or YouTube. Accounts such as those owned by Tabitha Brown (@iamtabithabrown), Maya Leinenbach (@fitgreenmind), Carlotta Perego (@cucinabotanica), Alfie Steiner (@alfiecooks_), Michaela Vais (@elavegan), Nisha Vora (@rainbowplantlife), and many others present colorful and detailed recipes, strategies for preparing meals in advance (the so-called "meal prepping"), endorsing of new sustainable products, zero waste advices, and so on[22]. While the films and documentaries mentioned above often highlight the massive issues of the food industry as well as its dreadful impacts on the environment and global health, these accounts play an essential role in encouraging social change because they offer positive views of dietary changes that are presented as joyful and self-developing opportunities rather than sacrifeces that needs to be faced to save a doomed environment.

To conclude, *how* precisely to intervene on food narratives is a complex and multidimensional issue that goes beyond the scope of this article. *That* these narratives need to be studied and reformulated is instead something that I hope is now evident. Elaborating new food narratives can be a powerful strategy for climate mitigation, one that can be effective on multiple levels: by providing a framework for personal engagement, by facilitating the adoption of individual pro-environmental behaviour (Kollmuss & Agyeman, 2002), and by encouraging – through the demands of citizens who have become more aware and engaged – the implementation of sustainable development policies for our communities.

[22] Many of these influencers published best-selling cookbooks. See Vora 2019 and 2024, Perego 2020 and 2021, Leinenbach 2021, Brown 2022, Vais 2023.

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