

Human enhancement technologies and the arguments for cosmopolitanism*

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Abstract

According to *political minimalism*, a debate is considered political when it revolves around the question “What shall *we* do?” This account suggests that certain issues related to human enhancement technologies (HETs), which have traditionally been addressed in the realm of applied ethics, could be better approached from a political standpoint. However, this raises the question of who constitutes the “we” – the communities that face the political challenges posed by HETs. We argue that there is a global human community that directly faces at least some of these challenges, and this fact underscores the relevance of a cosmopolitan perspective. While some authors have already advocated for a cosmopolitan approach in addressing issues such as poverty or climate change, they often do so from a moral outlook, without adequately distinguishing between ethics and politics. In contrast, we assert that HETs present compelling arguments in favour of cosmopolitanism as a political stance. In support of this claim, we consider two cases: the pills that would allow people to eat at will without gaining weight, and the choice between different types of cognitive enhancers.

Keywords: human enhancement; political moralism; political minimalism; cosmopolitanism; cognitive enhancement; RCAN1 gene

Resum. *Les tecnologies de millora humana i els arguments a favor del cosmopolitisme*

Segons el minimalisme polític, un debat és polític quan intenta respondre en últim terme la pregunta «què fem?». Aquesta posició filosòfica explica per què seria més fructífer considerar des d'una perspectiva política algunes qüestions relacionades amb les tecnologies de millora humana que tradicionalment s'han tractat com a problemes d'ètica aplicada. Però llavors sorgeix la pregunta sobre qui és el «nosaltres» que s'interroga, és a dir, quines comunitats són les que afronten els reptes polítics provocats per les tecnologies de millora humana. Defensem que la comunitat humana global s'enfronta a alguns d'aquests reptes, la qual cosa dona lloc a una perspectiva cosmopolita. Alguns autors han defensat

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anteriorment la necessitat d'una aproximació cosmopolita a assumptes com la pobresa o el canvi climàtic; no obstant això, en no haver-hi una diferenciació adequada entre ètica i política, tendeixen a advocar pel cosmopolitisme amb arguments morals. Defensem que les tecnologies de millora humana proporcionen bones raons en suport del cosmopolitisme, entès com una postura política. En suport d'aquesta tesi, examinem dos casos: el de les píndoles que ens permetrien menjar sense engreixar-nos i el de l'elecció entre diferents tècniques de millora cognitiva.

Paraules clau: millora humana; moralisme polític; minimalisme polític; cosmopolitisme; millora cognitiva; gen RCAN1

Summary

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1. Political minimalism

A student who is deliberating whether to invest their savings in a hair implant to enhance their appearance or in a programming course that aligns with their goal of securing a well-paid job is engaging in what is commonly referred to as “prudential” reasoning. Individuals involved in prudential deliberation seek to clarify their own interests and determine how best to fulfil them. When engaged in prudential deliberation, individuals do not consider the goals of others, unless such goals impact the calculation of the most effective means to achieve their own ends.¹

In contrast, an individual living in a putative future society who is considering whether to spend their savings on a genetic modification aimed at enhancing the intelligence of their offspring or to contribute those funds to vaccination programmes in poor countries is grappling with a moral dilemma. In this case, they see the interests of others as legitimate ends that they consider alongside their own when making decisions.²

1. The characterisation of the prudential point of view and its differentiation from the moral perspective are classic themes of ethical theory. In this article we are not going to discuss the different proposals to define the prudential and to distinguish it from the moral, which can be found in the literature. Instead, we will use the definition that we have developed in other works (Bermejo-Luque and Rodríguez-Alcázar, forthcoming; Bermejo-Luque, forthcoming).
2. This way of characterising the realm of morality may recall certain conceptions of ethics in terms of impartiality (such as, for example, the ideal observer theory: cf. Firth, 1952; Hare, 1981: 44). However, our metaethical claim here is more modest: saying that the moral point of view must consider the interests of others is not the same as prescribing to what extent those interests must be taken into account, whether one must be completely impartial when

Let us remain in this future era. Now, envision a future parliament engaged in a debate on whether to pass legislation authorising genetic enhancement interventions such as the one described above. What kind of inquiry would this parliament be undertaking? It might be argued that it is facing, once again, moral questions: are not the members of this parliament contemplating decisions that could impact the interests of others? Yes, but we must differentiate between two types of questions that these MPs could explore in this context. On one hand, indeed, the MPs could pose moral questions to themselves. Such questions arise whenever an MP ponders what they should do personally in a situation like the one described: should the MP vote in accordance with their convictions or their interests? Should the MP adhere to the party's rules and vote with the majority, or should they break the voting discipline if the majority vote contradicts their conscience? These are questions that MPs can certainly ask themselves as individuals concerned with their own interests or as moral agents who take the interests of others into consideration. However, MPs, *as members of the parliament*, will also typically raise other types of questions, including:

- Is the increase of the IQ of a few individuals whose parents can afford gene editing beneficial for the whole community?
- Should the freedom of those parents wishing to increase the IQ of their offspring be limited, to prevent the growth of inequality within the political community?
- Should the state subsidise gene editing to increase the average IQ of the population?
- Should the state make this kind of gene edition compulsory for every couple intending to procreate?
- How would the state deal with the possibility that other countries authorise this gene editing if it is not allowed in ours?

These are political questions, and there exists a metapolitical perspective, namely *political minimalism*, that clarifies why we should perceive them as political.³ According to political minimalism, politics is a practice that seeks to address the question “What shall we do?” This question is approached as an exercise of prudential rationality, with the subject being a political community. As a result, politics, morality and individual prudential deliberation diverge as they seek to answer different questions. The questions above can be

judging the interests of others, or whether it is legitimate to prioritise the interests of certain people (for example, members of our own family or compatriots). These are questions that are to be answered by a normative ethical stance, not by a meta-ethical proposal like the one we take for granted here. In any case, it is not the aim of this article to provide arguments in favour of a certain characterisation of morality. Here we will take for granted the rough characterisation above, which we argue elsewhere (Bermejo-Luque and Rodríguez-Alcázar, forthcoming; Bermejo-Luque, forthcoming).

3. See Rodríguez-Alcázar (2017a) and Bermejo-Luque and Rodríguez-Alcázar (forthcoming).

interpreted as inquiries that individuals may pose when trying to determine the suitable course of action for a specific political community, such as a community comprised of state citizens.

The political community in our example, represented by the parliament, focuses on the aims of its members and considers the best means to coordinate the pursuit of those aims, rather than considering the interests of others. Thus, the parliament addresses a question resembling the one asked by the student. The difference lies in the fact that the parliamentary debate involves a group – a political community – that, through its representatives, deliberates on what actions to take. While the student seeks to provide a correct answer to the question “What shall *I* do?”, the MPs strive to find the appropriate answer to the question “What shall *we* do?” In other words, we have transitioned from individual prudential rationality to collective prudential rationality, which can be deemed “political” when the collective entity is a political community. Both perspectives differ from morality in that they consider the interests of the subject – be it an individual or a community – as ends, without considering the interests of others.

Some philosophers have conflated the political and moral perspectives by arguing that politics involves fulfilling the interests of others. This confusion is characteristic of what Williams (2005) referred to as “political moralism”. Political moralism is a metaphilosophical stance that asserts the legitimacy of political decisions and institutions based on their pursuit of certain moral values or adherence to moral constraints. According to Williams, the main fallacy of political moralism lies in attempting to impose moral aims or restrictions on politics, which, in fact, has its own distinct goal: “the securing of order, protection, safety, trust, and the conditions for cooperation” (Williams, 2005: 3). Yet, defenders of political minimalism have pointed out that proposing order as the essential goal of all political communities, past and future, as Williams and other realists do,⁴ is as arbitrary as proposing any moral end – such as liberty, wellbeing or virtue – as the permanent and supreme goal of all political communities (Rodríguez-Alcázar, 2017a).

In our view, the primary flaw of political moralism is not merely proposing a specific moral objective as the primary and enduring goal of politics (although that is indeed a mistake), but rather overlooking the existence of political communities. These communities are distinct from individual subjects who grapple with moral and prudential issues. It is important to distinguish between the perspective of MPs who, as individuals, contemplate their actions within a political context, and the perspective of an MP who, as a representative of a political community, ponders how best to coordinate the interests of the members of that community. For instance, the latter perspective may involve considering appropriate legislative measures regarding potential human enhancements through gene editing.

4. Those whom Rossi (2019) labels as “ordorealists”.

The confusion of these two perspectives surely responds to a political ontology according to which only individuals can be political subjects. But, even if it is true that only individuals can have political rights and duties, there are communities for which the question “What shall we do?” makes perfect sense, and we surmise that this is, precisely, the question that provides access to the realm of politics. This question is triggered by the type of coordination problems that communities face,⁵ and it can be formulated by a group of people (for example, a local council or an assembly), as well as an individual (for example, an MP, a mayor or an ordinary citizen), provided that they adopt the community’s perspective, which consists of the set of goals of all of its members and the resources at its disposal to achieve them.

2. Human enhancement technologies (HETs): moral and political questions

An issue in which it is common, as in many others, to conflate the ethical and the political perspectives is that of the debate about human enhancement.⁶ Following Cabrera (2012: 3), we understand human enhancement in a broad sense, as “any intervention or activity by which we improve or augment in any sense (e.g., performance, appearance) our abilities, bodies, minds and well-being.” Enhancement activities thus understood have accompanied humanity down the centuries, from the invention of clothing to the introduction of compulsory education. However, the widespread use of contemporary technologies has opened new possibilities for human enhancement and has accelerated the development and application of the required technologies. We will call those technologies that are necessary for the realisation of human enhancements, in the broad sense established above, human enhancement technologies (HETs).⁷

In some instances, these technologies already exist, such as cosmetic surgery and distance learning, while in other cases, their emergence is anticipated within the next few years or decades. Examples include moral enhancement through chemical means or gene therapies, and IQ enhancement through gene editing. Present-day societies, particularly the wealthier ones, allocate substantial economic and human resources to the development of HETs, through both public and private initiatives. This investment is expected to further increase in the future. Ethics rightly concerns itself with the moral questions that existing and future HETs may raise for individuals. However, it is equally important, if not more so, to address the diverse political debates that var-

5. By “coordination problems” we mean problems resulting from either the need to coordinate actions to achieve some common goal, or the need to resolve conflicts of interests among individuals or subgroups in the community.
6. On the drawbacks of adopting an exclusively moral perspective on HETs and the advantages of claiming an autonomous political perspective, see Rodríguez-Alcázar (2017b).
7. With the term “technology” we do not refer narrowly to artifacts or processes developed from scientific knowledge, but to networks and processes connecting human and non-human beings in social and legal environments (Latour, 2005).

ious communities will face regarding the authorisation, promotion, financing, design and utilisation of HETs. While the effective implementation of some of these HETs may still be several decades away, we should not only be concerned about the consequences of already fully developed technologies but also about the potential outcomes of those currently being designed or envisioned. Future technologies are influenced by present social decisions (Bijker, Hughes and Pinch, 1989), and their social and environmental impacts will vary depending on how they are shaped (Winner, 1986). Therefore, it is crucial for the affected political communities to anticipate the configuration processes of forthcoming HETs well in advance, and to take measures to prevent possible negative consequences arising from ill-conceived designs.⁸ According to the distinction between ethics and politics previously outlined, these are typically political tasks that require answering essentially political questions.

3. What political community?

We have emphasised the significance of political deliberation in guiding and regulating the design, development and utilisation of HETs and other technologies. As previously stated, political reasoning occurs when one contemplates the goals of the members of a community and determines the most effective means to attain them. Now the question arises: which communities are pertinent to the discourse surrounding HETs? In other words, which communities encounter the coordination problems triggered by HETs?

Until the end of the 19th century, it was usual in political theory to identify the sphere of politics with that of the state (Alexander, 2014). In this context, the political community *par excellence* was the one delimited by the borders of a nation-state. However, contemporary political theory often omits reference to the state when defining politics. There are at least two reasons for this exclusion. First, we now acknowledge the existence of political communities beyond the state, such as tribes, guilds, religious orders and others. Some of these communities predate the emergence of states, and many coexist alongside them. Second, certain political ideologies, like anarchism and communism, advocate for the establishment of stateless societies, demonstrating that politics without a state is a conceivable concept, regardless of the feasibility of these political projects. We argue that a comprehensive understanding of our perceptions regarding politics necessitates considering all possible communities that give rise to political questions, including various types of human groups such as university departments, chess clubs and neighbourhoods. These groups encounter coordination problems that cannot be

8. While all technologies are socially shaped, this social shaping is not always done in democratic or participatory ways. Although we are in favour of the involvement of political communities in the shaping of socially crucial technologies (by means such as consensus conferences and others), we shall not develop here our arguments for this stance. For a discussion on the importance of adopting a political perspective on the shaping of technologies, see Rodríguez-Alcázar, Bermejo-Luque and Molina-Pérez (2021).

resolved solely through personal interactions, and consequently enact some rules to tackle them.

All political communities have a beginning, undergo changes, and eventually may cease to exist. Associations are established for specific purposes but they may dissolve over time. Similarly, states are formed and undergo alterations in their borders and internal structures; and based on historical induction, we may conclude that no state will endure indefinitely. Even the institution of the state itself may eventually disappear. The cohesion of a political community is based on its members sharing common interests and goals, and their collective pursuit of them. However, these interests and goals can differ among different political communities. Some communities may have a singular purpose, such as organising a biannual conference or supporting a football team. In contrast, other communities encompass a multitude of goals. For example, modern democratic states are expected to promote welfare, safeguard rights and freedoms, uphold justice, maintain order and security, protect external borders, and more. Nonetheless, none of these goals serves as the defining purpose of politics, despite the common mistake of associating the latter with a typical state function.⁹ We maintain that the constitutive aim of politics is to respond adequately to the question “What shall we do?” Moreover, we assert that effective policymaking entails understanding the true objectives of a political community and determining the most suitable methods to attain them. While the goals may be explicit in certain political communities, such as an association formed to safeguard the interests of espadrille manufacturers in the region of Murcia, they may be ambiguous in other instances. Nonetheless, the challenge of identifying goals does not invalidate the assertion that politics aims to address the question “What shall we do?” through collective prudential rationality. The primary criterion for assessing the appropriateness of a political community’s decisions is their efficacy in serving the community’s aims.

We propose the following definition: a political community is a group of people whose coordination depends on the possibility of enacting rules. Granted, it is not always easy to establish the limits of a given political community or determine what the interests of its members are. Members of specific communities, such as a philatelic society or the citizens of a nation-state, need to coordinate themselves to achieve their goals. This also applies to the members of the global political community. These various communities can coexist and overlap with one another. Certain issues are clearly relevant to a particular political community due to its unique goals and available resources. For instance, the manufacturers of espadrilles in Murcia may discuss the implications of the withdrawal of European subsidies for esparto grass cultivation, while the members of the Cordoba Society for the Advancement of Ancient Philosophy may focus on selecting suitable venues for their next congress on the thought of Seneca. However, these communities may also share concerns

9. Thus, for Kant the end of politics in general, and particularly of the state, was freedom; for utilitarians it is well-being; for realists, order and security (Rodríguez-Alcázar, 2017a).

that bring them together. For instance, both societies might collaborate to address a hypothetical decision by the Spanish Government to impose an annual tax on all Spanish associations.

To which political communities do the political debates surrounding HETs correspond? Undoubtedly, these debates involve numerous communities, varying in type and scale, ranging from professional and consumer associations to nation-states. However, we contend that certain debates, which are currently dominated by states, necessitate adopting the perspective of a broader political community – humankind. If this holds true, we aim to demonstrate that HETs, like other contemporary technologies, provide an argument in favour of cosmopolitanism. Specifically, our contention is that the global community indeed faces coordination problems arising from HETs, and that responses to this challenge that benefit the global community will also benefit other communities, provided they must coexist with one another.

4. Cosmopolitanism

Cosmopolitanism can be defined as the claim that all human beings “are (or can and should be) citizens in a single community” (Kleingeld and Brown, 2019), and indeed the word “cosmopolitan” derives from a Greek word meaning “citizen of the world”. We contend that the typical association of cosmopolitanism with the concept of global citizenship renders it a political stance, rooted in the presumption of a global “us”, rather than a moral view. Consequently, the community invoked by this definition would be a political community, and the notion of a global community would serve as a response to the political inquiry regarding the identity of the “we” in the question “What shall we do?” Furthermore, if we incorporate our definition of a political community, it follows that, according to cosmopolitanism, certain facets of policymaking pertain to all human beings and necessitate global coordination and shared rules.

It makes sense to assert, then, that cosmopolitanism is a political standpoint that may be defended on political grounds. Nevertheless, it is customary to distinguish various forms of cosmopolitanism and to argue for them with arguments that are not always of a political kind. For instance, Kleingeld and Brown (2019) distinguish between moral, political, economic and cultural varieties of cosmopolitanism, while Pogge (1992) distinguishes between ethical and legal cosmopolitanism, and several varieties within ethical cosmopolitanism. What Pogge (1993) calls “ethical cosmopolitanism”, and Pogge (1992) simply “cosmopolitanism”, would include three components: (1) the thesis that persons are the ultimate units of concern (*individualism*); (2) the claim that the status of ultimate unit of concern attaches to every person equally (*universality*); and (3) the conviction that persons are ultimate units of concern for everyone, and not only for their compatriots, etc. (*generality*) (Pogge, 1992: 48-49; Pogge, 1993: 316; in this latter work, the *universality* criterion is split into two: *impartiality* and *all-inclusiveness*). But we

think that calling this cluster of thesis “cosmopolitanism”, or even “ethical cosmopolitanism”, is misleading. While it makes sense to characterise cosmopolitanism as a political stance, this “ethical cosmopolitanism” is nothing but a widespread moral stance whose components can be spelled out in the usual vocabulary of metaethics and normative ethics. For instance, when Peter Singer (2016) defends a “global ethics” (very close to Pogge’s ethical cosmopolitanism as far as the general goals of the stance and its justification are concerned), he appeals to the principle of impartiality (see chapter 4), common to many ethical traditions, and to usual arguments against moral relativism. On these grounds, he can claim that individuals, regardless of their wealth, age, gender, abilities or skin colour, have a right to equal consideration of their interests (Singer, 2009). The assertion that we have the same moral obligations towards every starving individual, irrespective of their nationality, can be supported on these grounds, as Singer does, as a specific application of the same overarching principles, without relying on the concept of cosmopolitanism.¹⁰

Therefore, we argue that it is analytically beneficial to view cosmopolitanism as a political doctrine that can be justified on political grounds. This perspective is evident in the works of certain prominent proponents of cosmopolitanism, such as Cloots (1792); although in the case of others, such as Kant (1795), it is less clear whether cosmopolitanism should be understood as a political or moral position. The ambiguity arises from the prevalent acceptance of political moralism, a metaphilosophical standpoint that, as discussed earlier, blurs the distinction between politics and morality. From a moral outlook, we would inquire about our obligations towards individuals living in other countries (as Beitz (1979), Pogge (2008) and Singer (2009) do), or about the obligations of certain societies towards others (as Rawls (1999) does). When Rawls considers the duties between societies, he adopts the perspective of societies demarcated by the boundaries of the nation-state and concludes that the obligations of well-ordered societies towards burdened

10. Similarly, we could easily dispense with the terms “cultural cosmopolitanism” and “economic cosmopolitanism”, if both are to be understood as labels for two varieties of a general kind, cosmopolitanism, of which political and moral cosmopolitanism would be other variants. On the one hand, what Kleingeld and Brown (2019) call “cultural cosmopolitanism” encompasses a cluster of theses ranging from cultural anti-relativism to the political defence of the right of individuals to build their own cultural identity independently of the country where they are born. Some of these theses can be seen as loosely related to cosmopolitanism, understood as a political stance, while others belong to ethics or anthropology, and can be labelled using well-known terms from these fields. On the other hand, “economic cosmopolitanism” is defined as the defence of “a single global economic market with free trade and minimal political involvement”, a stance favoured by some politicians and economic theorists that “tends to be criticised rather than advanced by philosophical cosmopolitans”, as Kleingeld and Brown acknowledge. This is not surprising, since this “economic cosmopolitanism” is notably at odds with the main theses commonly associated with cosmopolitanism, especially if understood as a political stance. Consequently, it sounds strange to call “cosmopolitan” this defence of free trade and economic globalisation, accompanied by a weakening of political (global or local) regulation.

societies are limited to a duty of assistance aimed at facilitating the latter's transition to becoming well-ordered societies:

The role of the duty of assistance is to assist burdened societies to become full members of the Society of Peoples and to be able to determine the path of their own future for themselves. It is a principle of transition. (Rawls, 1999: 118)

According to Rawls, peoples' obligations do not extend to ensuring that the residents of other societies have their basic needs met. In essence, Rawls rejects the idea of a principle mandating permanent distributive justice among societies. Contrastingly, Beitz, Pogge and Singer's moral positions assert that both affluent individuals and affluent communities have a responsibility to assist citizens of less privileged societies who live in extreme poverty.

However, both perspectives – ethical cosmopolitanism and Rawls's anti-cosmopolitan internationalism – address the question of the type and extent of obligations we have towards others. In doing so, they overlook a genuinely political approach.

Let us now shift towards what Pogge calls “legal cosmopolitanism”, which amounts to the thesis that humanity should be governed by a single global state. One paradigmatic defender of this stance was Anacharsis Cloots (1792), who proposed a global republic that would eliminate interstate struggles. This proposal aroused in Kant (1795) and in Rawls (1999: 36) the fear of a global despotic state, an entity that would be more fearsome than any smaller despotic state, because in the case of the latter the possibility of escaping to another country is at least conceivable.¹¹

Legal cosmopolitanism is not, though, the only possible version of cosmopolitanism, understood as a political stance. At least, it is not the only form of cosmopolitanism we are doomed to if we previously adopt political minimalism as our framework for understanding the relationship between ethics and politics. The reason is this: political minimalism accounts for the existence of a plurality of political communities that are not mutually exclusive. In particular, the defence of a global political community, encompassing humanity, is not necessarily incompatible with the existence of national political communities or other political communities of various kinds, and this would weaken some of the fears traditionally invoked by legal cosmopolitanism. Cosmopolitanism, as we understand it, entails that *some* aspects of policymaking concern all human beings, so it makes sense to admit the existence of a global community, but it does not require us to believe either that *all* political questions are to be solved by this global community, or that this global community is the only existing political community, and even less that a global community necessarily calls for a global state.

11. Contemporary advocates of legal cosmopolitanism include Cabrera (2004), Tännsjö (2008) and Wendt (2011).

Political minimalism and cosmopolitanism are theses located at different levels. Political minimalism is a metapolitical thesis. It characterises political value in terms of constitutive criteria to assess politics, hence accounting for the possibility of an autonomous political normativity. Contrastingly, cosmopolitanism is a normative political proposal. In other words, it is an ideology. Consequently, it might be possible to accept political minimalism without accepting cosmopolitanism, and vice versa. However, political minimalism may favour a certain understanding of cosmopolitanism that might avoid the problems of others, and in doing so it may lend greater credibility to cosmopolitanism. Indeed, by broadening the notion of political community to groups other than those that coincide with the limits of the state, political minimalism prevents the cosmopolitan/anti-cosmopolitan debate from being reduced to the choice between a global state and the nation-states of the modern world.

Next, we will argue that the foreseeable advancement of certain HETs provides compelling reasons to acknowledge the existence of a cosmopolitan political community, because the use of these HETs may have positive or negative impacts on the shared interests of the community's members. Similar arguments can be made regarding other technologies, such as those related to climate change production and mitigation. However, focusing on HETs is particularly interesting as these are often scrutinised within the realm of bioethics. Perhaps more than in other domains, it is necessary to revive the political perspective in this area and pave the way for explicitly political discussions. Among these discussions, one prominent issue revolves around determining which aspects of HET regulation should be entrusted to states (or even smaller political entities), which should concern supranational entities such as the European Union, and which should be regulated and enforced by global institutions.

5. HETs and the arguments for cosmopolitanism

Above, we propose that certain decisions related to HETs should be taken by the global political community. What specific types of decisions are we referring to? Kamm (2009: 127-128) highlights key debates surrounding HETs, including the relative prioritisation of human enhancements in resource-constrained societies and the equitable distribution of benefits and risks associated with HETs. In both cases, these issues are inherently political. It is easy to envision the necessity for states to implement measures aimed at achieving optimal allocation of scarce resources for HET research and the societal utilisation of HETs. Similarly, states should monitor the distribution of benefits and risks stemming from HETs and rectify potential imbalances through legislative actions. Moreover, we can contemplate reasonable measures within these domains that could be more easily justified from the perspective of a global political community than from the perspectives of national-level political communities.

Below, we provide two examples to illustrate this point. The first demonstrates how certain HETs, which may be perceived as improvements from an

individual standpoint or may even receive positive evaluation within a national political community, could give rise to more problems than benefits on a global scale. Consequently, both the national community and the global political community (i.e., humanity) would have strong grounds to establish legal frameworks to prohibit such HETs. The second illustrates how the perspective of the global community may necessitate different priorities for resource allocation in relation to HETs compared to those dictated by smaller political communities. Consequently, it would be prudent for those smaller political communities to consider the global perspective and incorporate it into their decision-making processes.

5.1. The wonder pills enabling you to eat as much as you wish without gaining weight

Research has shown that deletion of the RCAN1 gene in mice results in them being able to maintain their weight despite increasing their fat intake (Rotter et al., 2018). These studies suggest the potential for managing obesity in humans through gene-inhibiting pills. These pills would allow individuals to consume high-calorie foods without concern for the negative health and aesthetic impacts of obesity. If these pills were commercially available, it is foreseeable that many individuals, particularly those who are overweight or at risk of obesity, would have compelling reasons to purchase and utilise them. By doing so, they could avoid obesity while still indulging in their desired foods without restrictions and without the need for extensive physical exercise. Consequently, it is likely that a significant number of individuals, when considering the prudential implications, would readily choose to take these pills without much hesitation.

If these individuals were to consider the possibility of using such HETs from a moral standpoint, they would likely have more reservations. Various ethical theories would assign different priorities to criteria such as individual autonomy, overall well-being, and the potential implications of nutrient misuse on food scarcity. Some individuals who would be unwavering from a prudential perspective might deem it immoral to take the pills. Others might perceive themselves morally justified in using them, arguing that while the personal benefits to their health and well-being are evident, the impact of their individual actions on global food prices and availability would be minimal. Although the discussion on determining the morally correct response to these ethical questions is highly engaging, it falls beyond the scope of this article.

In addition to the prudential and moral judgment on certain HETs, the political assessment of that same technology is also important, and this assessment may vary depending on the political community that produces it. A prosperous country, whose main problem is not the malnutrition of its inhabitants but their obesity, could perhaps consider it appropriate not only to allow the manufacture and sale of these pills, but even to use public funds to finance the research leading to their development. On the other hand, if the

global political community could legislate on these same issues, it would surely have good reasons to ban the design of these technologies. Indeed, an increase in food intake by people who do not need this extra supply could have one of the following effects, or perhaps both simultaneously: (i) diminished accessibility to food by people in need (because food prices would soar and the supply would diminish as the demand for food from the wealthy increases); (ii) escalation in global food production, leading to negative effects on the environment.¹²

We do believe that even an affluent community may have good reasons to limit or even prohibit the development and use of this HET. After all, that affluent community will also suffer the effects of global warming and other negative environmental effects of unnecessary food production. Furthermore, it may be profitable for that affluent community to allocate resources to fighting famine, rather than overfeeding those who are already sufficiently fed, to avert political instability in poorer regions and prevent the forced and unplanned migration of millions of hungry people. Given the relative volatility of national public opinion and the negative effects that the authorisation of this HET in a single country might have for the rest, it can be considered in the interests of a national community to transfer the legislative capacity on this type of technology to the global political community. Hence, the mere possibility of developing HETs with global consequences provides a plausible argument to attest the need for a cosmopolitan perspective that responds to the question “What shall we do?” regarding the regulation of these technologies from the point of view of the global community.

5.2. Cognitive enhancement. What cognitive enhancement?

Our second example pertains to cognitive enhancement and the development of HETs specifically designed for this purpose, known as cognitive enhancers. Bostrom and Roache (2011: 138) define cognitive enhancement as “the amplification or extension of core capacities of the mind through improvement or augmentation of internal or external information-processing systems.” When it comes to cognitive enhancers, a distinction is commonly made between “conventional” and “unconventional” enhancers (Sandberg and Savulescu, 2011: 94). While the former (such as education, mental techniques and epistemic institutions) are generally accepted without controversy, there is greater

12. According to the Food and Agriculture Organization of the United Nations (2019), around 30% of the food produced worldwide is wasted every year. In turn, this wasted food accounts for 8-10% of global greenhouse gas emissions (United Nations Environment Programme, 2021). The food consumed by users of weight loss pills might not be considered “wasted food”, because these users would eat it. But, just like wasted food, it would be food that, while not contributing to alleviating hunger in the world or improving the quality of nutrition for human beings, is nevertheless produced at very high environmental costs (besides greenhouse gas emissions, other impacts would have to be added, such as land use and water waste). Therefore, there could be just as good reasons to avoid unnecessary food consumption due to the use of pills as there are to avoid food waste.

distrust towards the latter (which include drugs, implants and gene editing). Some authors attribute this distrust to our unfamiliarity with these technologies (Bostrom and Roache, 2011: 148), while others caution against potential undesirable side effects (Colzato, Hommel and Beste, 2020). As with other HETs and technologies in general, we argue that it is necessary to address questions of a purely political nature concerning cognitive enhancers, while also acknowledging the importance of moral reflection. Furthermore, we contend that adopting this political perspective on cognitive enhancers reinforces a cosmopolitan outlook.

Advocates of unconventional cognitive enhancers usually recognise their social dimension and the right of the political community to limit their use considering possible risks. (On some of these risks, see, for example, Sharif et al., 2021). Besides, some authors point out that society may prioritise certain enhancers over others when designing its policies (Blank, 2016). However, the justification of political interventions usually invokes moral reasons, and this fact reveals an underlying political moralism. Specifically, some proponents of novel cognitive enhancers commonly argue that individuals should have the freedom to assess the trade-offs between risks and benefits, with limited paternalistic intervention from the state to safeguard against grave dangers (Bostrom and Roache, 2011: 144; Sandberg and Savulescu, 2011: 107). This perspective aligns with a broadly liberal moral tradition that allows for moderate constraints imposed by the state on individual liberties, which may be justified by utilitarian considerations, among others. However, it is not evident that the political regulation of cognitive enhancers should be guided by this ethical framework, as there are numerous alternative frameworks that propose different limits on individual agency. A non-moralistic political perspective such as ours would approach this issue differently. According to our view, it should not be assumed that the primary role of the state is to safeguard individual freedom, or any other moral value emphasised by moral philosophers. Rather, the aim of a political community, be it the state or any other, is to advance the diverse goals of that community, including the well-being and liberty of its members, while prioritising certain aims over others to best serve the overall interests of the community. Therefore, determining the appropriate level of paternalism within a political community cannot be solely based on ethical arguments but should consider both the moral and non-moral goals of the community, including its desire for autonomy.

On the other hand, identifying the political community that faces a particular coordination problem is crucial in evaluating the effectiveness of a proposed response to the question “What shall we do?” In the context of cognitive enhancers, we argue that there are compelling reasons to assert that, in many instances, the relevant political community is the entirety of living human beings. Given the global implications of the use or inadequate application of cognitive enhancers, it is desirable that policies in this domain be formulated with the interests of the global political community in mind. For instance, significant disparities in educational opportunities between different

regions of the world have adverse effects not only on the most disadvantaged individuals but also worldwide. Consequently, there are strong justifications for developing global policies aimed at promoting the dissemination of the most beneficial cognitive enhancers. This line of reasoning aligns with the initiatives of international organisations such as UNESCO, which advocate for global education, and it corresponds with the inclusion of universal primary education as the second of the Millennium Development Goals established by the United Nations in 2000 (United Nations, 2015).

A factor to consider by any political community (including, of course, the global political community) is the principle of diminishing marginal utility (Stigler, 1972). By virtue of this, the utility of cognitively enhancing (for example, through transcranial magnetic stimulation or nootropic drugs) those who have already enjoyed cognitive enhancements throughout their lives (for example, by having fulfilled all the educational levels) will normally be lesser than the utility of enhancing those who have had little previous contact with cognitive enhancers. Therefore, from the perspective of the global community, it is sensible to ensure that the most effective cognitive enhancers are provided to the entire population before allocating resources to cognitively enhancing those who are already cognitively enhanced to a high degree.

Another reason to consider that the coordination challenges arising from cognitive enhancers impact the global community is their potential to exacerbate economic inequality among different regions of the planet. For it seems plausible that the average cognitive enhancement of the wealthiest peoples, who would be able to invest more resources in the use of HETs, would further increase the gap between the wealth of those peoples and that of the poorest, among whom the use of HETs would be less widespread. Given that this inequality is frequently linked to detrimental social, economic and ecological consequences that impact all communities, adopting a cosmopolitan perspective becomes preferable as a means of addressing this challenge.

Of course, the question of which cognitive enhancers should be prioritised by the global community, which should merely be allowed, and whether some should even be discouraged or banned is an empirical question, depending on considerations such as their efficacy and cost. Cosmopolitan public policies on cognitive enhancers cannot, therefore, be solely based on philosophical arguments. We dare, however, to venture a final observation that may be closer to the concerns of philosophers: we are struck by the emphasis that some authors place on the increase in IQ as a measure of the efficacy of cognitive enhancers (Sandberg and Savulescu, 2011: 97-98). It is true that these same authors usually recognise that the extension of education is one of the most effective ways to improve the IQ of individuals and the average IQ of entire societies (Sandberg and Savulescu, 2011: 94). To this recognition is sometimes added, however, the observation that when the balance of pros and cons between the various forms of social enhancement (including education) and biological enhancement procedures favour the latter, then these should be preferred (Sandberg and Savulescu, 2011: 105). Bostrom and Roache (2011: 139), for

their part, ask us to consider “the cost-benefit ratio of a cheap, safe, cognition-enhancing pill compared to that of years of extra education.” Although the discussion here concerns public policies, including those at a global level, it is inevitable to detect a certain individualistic and moralistic bias in the judgments of the mentioned authors. On the other hand, if we accept, with Cabrera (2012: xiv-xv; 85), a paradigm of social improvement that incorporates a relational conception of the individual, the result could be the prioritisation of interventions aimed at society, among which education and other forms of social cognitive enhancement would stand out. Indeed, universal education is not only valuable because it increases the IQ of individuals. Societies need to build shared projects, train individuals for group work, foster the debate on its goals as a political community and, in general, pursue the best means to achieve the goals of the community. Formal education, which includes processes of interaction with teachers and classmates, contributes to all these goals in ways that drugs or gene editing cannot. While acknowledging the need for a wide range of cognitive enhancers, both conventional and unconventional, it would be misguided to prioritise their potential for increasing individuals’ IQ as the primary criterion when evaluating their authorisation, regulation and financing.

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