Technological Unemployment and Meaning in Life, a *Buen Vivir* Critique of the Virtual Utopia

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ABSTRACT

In this article, we address the problem of the potential crisis in people's life's meaning due to massive automation-driven technological unemployment. Assuming that the problem of (re)distribution of economic resources to the whole of society in such a scenario will be solved (e.g. through provision of a Universal Basic Income), the question arises concerning the meaning in people's lives in a world in which almost everyone does not have to (or even could not) work in order to live. Here, we side with many current proposals that paid work is not the only possible source of meaning and hence, that a meaningful life could indeed be led in a post-work society. We especially focus on one of the most developed accounts, Danaher's Virtual Utopia (Danaher, 2016, 2019, 2022). According to him, living immersed in playful virtual worlds where new, expanded and personalized possibilities of personal and collective experiences and actions, could not only be perfectly meaningful lives, but furthermore, "be the utopia we are looking for" (Danaher, 2019, p. 270). However, our analysis will suggest that although it is a very well thought and carefully articulated position, it suffers from various important problems. Our criticism will be based on an alternative framework to think about life's meaning and the conditions for leading a good life in general. This alternative is based on the philosophy of buen vivir ("good liv-

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Humana.Mente

ing"). This notion has its roots in common aspects of various Latin American indigenous cultures regarding a community-centered way of life where humans, society and nature are taken to be deeply interconnected and interdependent, and where the notions of respect, harmony and balance are at the core of this interrelationship (Gudynas, 2011; Acosta, 2008; Beling et al., 2021). *Buen vivir* has many facets, but we will focus on three: the importance of healthy human communities, the humannature relationship, and the intrinsic value of nature. Based on these, we argue that the Virtual Utopia is not a good candidate for human's post-work utopia because i) it unnecessarily augments the environmental damage that is already involved in massive labor automation; ii) it entails an unnecessary and detrimental dependence on technology for human relationships; and iii) increases the severance of the link between humanity and nature. We conclude that the *buen vivir* approach is a promising candidate for an alternative utopian project, but one that needs further construction.

1. Introduction

We are now living what some authors call the Fourth Industrial Revolution (Schwab, 2017; Xu, David and Kim, 2018). One of its main features is the massive development and implementation of automation technologies in virtually all areas of human society. This has the huge potential to realize what Keynes coined *technological unemployment* (Keynes, 1930), which means, in the present context, massive unemployment due to replacement of human labor by automation technologies, especially those based on robotics and AI (Floridi 2014; Danaher, 2016, 2019).

Importantly, technological unemployment brings about an economic, political and societal difficulty known as the *distributional problem*, which concerns the dissociation between satisfaction of humanity's basic needs and income due to paid work, such that people could live decently in circumstances of massive unemployment (Danaher, 2016). This problem may be solved by different mechanisms, one of the most discussed being the Universal Basic Income (UBI) (Van Parijs & Vanderborght, 2016; White 1997)¹. Although the fairness and feasibility of potential solutions to the distributional problem such as the

58

¹ In Philippe Van Parijs and Yannick Vanderborght's *Basic Income* (2016), for instance, it is argued that the UBI is economically and politically feasible and also ethically desirable.

UBI are currently subject to intense debate, they will not be the focus of the present article². We simply assume that it is at least practically *possible* to solve the distributional problem, and address a different problem that arises in future societies *if* the distributional problem is solved. It is what we may call *the meaning in life-without-work problem,* namely, the problem concerning the sources of meaning in people's lives in a world in which almost no one will have to (or even could) engage in paid work. As Susskind eloquently expresses,

a job is not simply a source of income but of meaning, purpose, and direction in life as well... In a world with less work, we will face a problem that has little to do with economics at all: how to find meaning in life when a major source of it disappears. (Susskind, 2020, p. 221).

In this regard, we side with many thinkers that paid work is not the only possible source of meaning and hence, that a meaningful life could indeed be led in a post-work society. We will focus especially on one of the most developed and daring accounts, Danaher's *Virtual Utopia* (Danaher, 2016, 2019, 2022), according to which a radically improved meaningful life can be realized in virtual realities in which we spend most of our time playing games and/or inhabiting diverse virtual worlds that could best materialize Nozick's meta-utopia (Nozick, 1974). According to Nozick, the utopia we should seek must make room for different utopias in which fundamental values are differentially prioritized. However, our approach to the Virtual Utopia will be highly critical, based on an alternative framework to think about life's meaning and the general conditions for leading a good life. This alternative is grounded on the philosophy of *buen vivir* ("good living"). This notion has its roots in common aspects of various Latin American indigenous cultures regarding a community-centered way of life where humans, society, and nature are conceived as deeply interconnected and

² There are other important, related topics that, due to space limitations and the more specific aim of our paper, we cannot address. Especially relevant is the question about whether a fully automated mode of production, massive unemployment, and the dissociation between income and labor, would entail or facilitate the end of capitalism. Evidently, we cannot give a satisfying answer to this thorny issue here, but we can mention that recently, there has been a surge of opinions that give an affirmative answer, both in the general press (Avent 2018, Xiang 2018), and in academic research, such as writers within the school of *post-operaismo* (Hardt & Negri 2009, 2017). According to the latter, widely interconnected information technologies that enable the emergence of an "immaterial" form of labor in the post-fordist era, allow workers to gain increasing autonomy from capital, such that the exploitation of workers and associated extraction of surplus value is progressively blocked. However, there are thinkers like Steinhoff (2021) that disagree. Thanks to one of the reviewers for bringing this issue to our attention.

interdependent and where respect, harmony, and balance are meant to be at the core of these interrelationships (Gudynas, 2011a; Acosta, 2008; Beling et al., 2021). *Buen vivir* has many facets, but we will focus on three: the importance of human communities, the human-nature relationship, and the intrinsic value of nature. Based on these, we argue that the Virtual Utopia is not a good candidate for human's post-work utopia because i) it unnecessarily augments the environmental damage that is already involved in massive labor automation; ii) it entails an unnecessary and detrimental dependence on technology for human relationships at the base of community-building; and iii) increases the severance of the link between humanity and nature.

Before proceeding, it is important to mention that although our paper is centered on the Virtual Utopia and *buen vivir* philosophy, there are also other proposals for a post-work utopian future that we will not address, such as the Utopia of Games (Suits, 2005), the Cyborg Utopia (Danaher, 2019), and what we may call a 'fully automated utopian socialism' (Srnicek and Williams, 2015). Besides being infeasible to give a detailed and fair treatment to all these proposals in one paper, we focus on the Virtual Utopia and buen vivir for several reasons. Concerning the Virtual Utopia, i) it is one of the most developed ethical accounts of a post-work utopian future, that is, furthermore, centered on the issue of meaning in life; ii) represents a philosophical articulation of an idea that is widely present in science fiction narratives, both in films and literature, and hence of potential interest to a wide audience beyond academic scholars; and, iii) is directly related to increasingly prominent discussions on the metaverse and its societal implications, both in general press (Manjoo, 2022; Nix & Schaffer, 2022) and academia (Dwivedi et al., 2022; Floridi, 2022). On the other hand, we focus on *buen vivir* because i) it is a novel postwork utopian alternative; ii) it is ethically relevant: it is aligned with many important ethical principles such as respect for the environment, social justice, reciprocity and equality, representing, at the same time, an alternative ethical paradigm centered not on the individual but on the social collective and the whole of nature; iii) by being elaborated mainly by latin american scholars and having its roots in indigenous thought and ways of life, it allows a culturally more inclusive debate on postwork utopias and meaning in life; and finally, iv) it is highly relevant given our current ecological crisis, favoring an approach to a post-work future that highlights sustainability and ecological diversity, among others.

Our paper is structured as follows. In section 2, we first offer a general overview of the main approaches in the meaning in life philosophical literature.

This gives the necessary theoretical context to talk about meaning in life and importantly, to understand where in this theoretical landscape Danaher's account and our proposal stand. Then, in section 3, drawing from arguments related to the anti-work movement, we will support the desirability and meaningfulness of a work-less leisure life. In section 4, we will detail Danaher's specific proposal concerning a post-work utopian society, namely his Virtual Utopia, which is the main target of criticism of our study. Then, in section 5, we will introduce the *buen vivir* philosophy, deepening into three of its aspects: the importance of human communities, human-nature relationship, and the intrinsic value of nature. Finally, in section 6, based on these elements of *buen vivir* discourse, we will present three arguments to the conclusion that the Virtual Utopia should be avoided. We conclude that the *buen vivir* approach is a promising candidate, but also one that is still under construction.

2. Meaning in life

We present now a brief overview of the philosophy of meaning in life³. Although many important philosophers throughout history have offered insightful reflections on what makes lives significant, in the English-speaking "analytic" academic landscape, only in recent decades have emerged truly systematic accounts and thorough debates (Metz, 2021). To start, there is the question of what is meant by "meaning in life", that is, what would be analytically true about the idea of a meaningful life that most philosophers would agree even if they disagree concerning many other "synthetic" issues such as whether typical human lives are in fact meaningful or not, whether that depends fundamentally on either subjective or objective features, etc. There seems to be a converging picture according to which talk of life's meaning is conceptually tied to the final or intrinsic value of a human person's intentional actions, paradigmatically exemplified in the realms of the Good (morality/love), the True (enquiry/wisdom) and the

³ There is a distinction between "meaning *of* life" and "meaning *in* life" (Metz 2021, 2022). The former refers to the meaningfulness of the life of the human species as a whole, while the latter refers to the meaning of a human person's life. We follow Metz and many others, including Danaher (2016, 2019, 2022), and focus on meaning *in* life.

Beautiful (creativity/arts); and characteristically absent in the lives of Sisyphus or inside Nozick's experience machine (Metz 2021, 2022)⁴.

Also, there seems to be a consensus on other important aspects. First, the meaningfulness of life is something good by itself. Second, it comes by degrees, i.e. is not all-or-nothing. Third, life's meaning is related to, but is different from the ideas of happiness and rightness (Metz, 2021). That means it is not the same thing to talk about what makes a person happy or morally right as talking about what makes her life meaningful. A clear example regarding happiness would be the one given by Nozick, who claims that somebody spending her life in an "experience machine" that constantly induces pleasurable experiences could enjoy happiness, but it would be difficult to accept that her life is also meaningful (Nozick, 1974). The same principle applies to rightness, as intuitively, there are ways to increase what makes a life meaningful without increasing its moral rightness, e.g. by creating valuable artwork.

Along those theoretical guidelines, several proposals try to land a more concrete picture concerning what exactly makes lives meaningful. Broadly, there are supernaturalistic and naturalistic approaches. According to the former, God or one's soul plays an essential role in conferring meaning to one's life. The latter views, in contrast, reject the appeal to supernatural entities (Metz, 2019, 2021). A naturalistic perspective on meaning embraces the possibility of finding meaning in life in a purely natural world as described by science. Within naturalistic approaches, there are two sets of views: subjectivism and objectivism. The former is a subject-centered approach according to which the source of meaning in life is not objective but can vary from person to person, depending on their mental or emotional states that give significance to activities and goals that are important to them. For instance, it may be the care and love that someone has regarding something or someone else that makes her life meaningful (Frankfurt, 1988), or the free, active and motivating engagement that someone has regarding some important project or activity (Belliotti, 2019).

However, subjectivist approaches to life's meaning suffer from defects. According to their critics, anything could be a source of meaning if subjects are the final authority. From an objectivist perspective, subjectivists unjustifiably

⁴ Nonetheless, Metz acknowledges that in recent years there have been compelling challenges to this "standard view" on the meaning of meaning in life. Especifically, that it may also apply to the lives of non-human animals and to the collective intentional actions of human sub-groups such as NGOs; and that there is probably an important distinction between everyday, mundane meaning, and a greater, ultimate meaning (Metz, 2022).

neglect the objectivity of central values that matter for meaning, and claim that subjective attitudes or states are insufficient for making lives meaningful (Taylor, 1989, 1997; Wolf, 2010, 2015). The common example is the case of Sisyphus, who, no matter what subjective mental states accompany his eternal job of rolling a stone up a hill, his life will never be meaningful (Camus, 1942). So objectivists think that certain conditions in the material world can confer meaning to life, not because they are meaningful from a subjective standpoint, but because they are inherently valuable. Paradigmatic instances of this approach are the Good (activities that involve some benefit to the world), the True (seeking knowledge and education), and the Beautiful (creativity, arts, and also, gardening) (Metz, 2010, 2021). However, many influential approaches are not purely objectivists, but regard both objective value and subjective attitudes as constituting meaning. In the words of Wolf's influential proposal, "meaning arises when subjective attraction meets objective attractiveness" (Wolf, 2015, p. 112).

Following this trend, Danaher (2016, 2019, 2022) favors a hybrid approach according to which

A meaningful life is one that satisfies a set of subjective and objective conditions of value... On the subjective side, the individual living the life must be satisfied and fulfilled by what they are doing.... and perceive that their actions have value...On the objective side, the individual must make some positive difference to the world around them... I assume that contributions to the good, the true and the beautiful are the obvious pathways to meaning (Danaher, 2022, p. 50)

In sum, Danaher believes that life's meaning would be tantamount to a relational perspective in which meaningfulness emerges from the fulfilling experience of being involved in actions that positively affect the physical world in the domains of the good, the true and the beautiful. However, this entails that there must be a causal connection between people and the positive outcomes in the world. But this connection would probably be severed in an era of highly technological advances where, for instance, scientific discoveries (the domain of the true) are massively achieved by AI systems. For instance, machine learning is currently at the top of cancer prognosis, defeating the human experts. Also, Alphafold, a deep learning algorithm, has been used to infer the 3-D structure of every known property. As Danaher writes, 'science is increasingly a 'big data' enterprise, reliant on algorithmic, and other forms of automated assistance' (2016, p. 17) in which the human's role may sooner or later become irrelevant. Also, in the domain of moral contributions (the Good), some algorithms can solve better

than humans the distributional problems associated with economic resources like the supply of food, wealth, and energy, and this probably extrapolates, sooner or later, to multiple other domains (Danaher, 2016, 2019).

Nevertheless, Danaher concedes that in the domain of creativity and arts (the Beautiful), it is less clear how new technologies can sever us from the link with the corresponding outcomes. Thus, according to Danaher's analysis, our possibilities of engaging in meaningful activities will be highly reduced in the domains of the True and the Good, but could remain in the realm of The Beautiful in a post-work society in which there is massive technological unemployment. These considerations drive Danaher to investigate how this reduced space of meaning could be enlarged or transformed. However, because in our society, meaningful projects and outcomes are often related very closely to our jobs and what we can achieve professionally, we think it is important, before entering fully into Danaher's Virtual Utopia, to first motivate the claim that meaning can indeed be realized without work. We turn to this now.

3. Why living without work may be desirable

Traditionally, it has been assumed that paid work, beyond providing an income for fulfilling our basic needs to survive, also provides a strong sense of purpose and meaning in human life. Some theorists claim that work provides people possibilities for flourishing and fulfillment and that, in a future without work, those virtues of working life would be absent (Weeks, 2011; Srnicek & Williams, 2015).

Is it truly this way? The anti-work movement developed an extensive critique of that idea, which Danaher (2016, 2019) exploits to develop his Virtual Utopia. We largely follow his analysis in this section. According to him, the anti-work arguments can be classified into two dominant positions: the *work-isbad argument* and the *opportunity-cost argument*. We start with the former. It is mainly based on John Black's claim that work is the source of human suffering, and if we want to stop suffering, we must stop working. Another referent is Russell (2014) who considers it an error to believe that work is virtuous and that, historically, the leisure classes have made most of the cultural and scientific contributions to humanity.

The specific properties that turn work bad are of two types (Danaher, 2016, 2019). First, there are *contingent* bad-making properties for work related to humiliating and degrading occupations, bullying and sexual harassment

in the workspace, and so forth. But these bad-making properties are sensitive to the objection that those harmful situations depend on the kind of job, and who gets the job, so they are contingent, not intrinsically bad-making properties of work itself. On the other hand, the second type of bad-making properties are *intrinsic* to work itself, at least in the way that work is conceived in the current political and economic structure. According to this, work is *compulsory* in nature (Levine, 1995); although we do not have the legal or physical obligation to work, we must do it for practical and economic reasons. Most of us do not enjoy the freedom to choose whether to work or not.

Being compulsory is bad because of two reasons. The first is that work entails an impoverished egalitarian system. That means that according to the principles of egalitarianism, the state must be neutral about the notion of good life that its citizens may want to pursue. Nevertheless, things appear pretty different because people are forced to work to satisfy their needs, so the state does not tolerate nor facilitate different conceptions of a good life. Things being like this, the core idea of the anti-work movement is to affirm that no-work is a model for human flourishing that states must promote.

The second reason is that compulsory work undermines the principles of democratic liberal states, which are autonomy and liberty. In this sense, work is bad because

- 1. It limits our decisions on the use of time,
- 2. It limits the authorship of our lives, and
- 3. The job offers are exploitative or coercive.

1. supposes that time is essential to self-ownership (Maskivker, 2010) because time is needed to develop skills and competencies. Under this consideration, Weeks (2011) points out that work monopolizes our time, which in Danaher's opinion, is more dramatic in the current ITC culture, where we are more available to the requirements of work, and our working hours increase. 2. is also tied to self-ownership, as we are obligated to work to survive. Thus, we do not have true authorship in our lives. But in a society free of work, we would be free to develop our own narratives. Finally, 3. is linked with the former items because although work could bring benefits, it does not treat workers like autonomous agents. True, anyone can choose to stop working, but in this scenario, she/he must suffer the consequences, like deprivation and social undermining.

Those considerations motivate Danaher to embrace technological unemployment. For a society in which machines take most forms of productive economic labor, the distributional problem (the 'economic problem' in Keynes (1930)) could be solved so that people are no more obligated to work for survival.

The second line of arguments against work are the *opportunity-cost ar-guments*, working could be good, but no-working is better. It supposes that job alternatives managed by the market reduce to what is economically viable, so there is no guarantee that labor markets allow people to spend time in satisfactory activities. Thus, if we break the link between time and income, we could use our time as we choose, especially in activities we may find more meaningful.

In sum, in a world where work is no longer necessary since machines do most of the productive economic labor, the door is open to find new sources of meaning. Harari, for instance, is very optimist regarding technological unemployment:

The end of work will not necessarily mean the end of meaning because meaning is generated by imagining rather than by working. Work is essential for meaning only according to some ideologies and lifestyles. Eighteenth-century English country squires, present-day ultra-orthodox Jews, and children in all cultures and eras have found a lot of interest and meaning in life even without working. (Harari, 2017, p. 5)

We turn now to Danaher's specific proposal concerning a meaningful and good life in a post-work automated society, the Virtual Utopia.

4. The Virtual Utopia

The question that we address now concerns what kind of life we should pursue in a massively automated abundant world. One prominent option that has been assessed both by science fiction and academic authors is the idea of immersing ourselves in virtual reality. Although commonly depicted as a dystopian future in which the planet and society is devastated and people escape to (or are unknowingly immersed in) an illusory world that hides the truth, recently, there has been a rise of several accounts according to which virtual worlds could be spaces to find meaning and value, and even build better societies and have more fulfilling lives than we have done to date. A prominent example is Ray Kurzweil who has been systematically optimistic regarding how technology, especially artificial intelligence, nanotechnology and virtual reality will improve our human condition and change dramatically, for the best, what we currently conceive of ourselves and the world. For instance, he claims that "there will be no distinction, post-Singularity, between human and machine or between physical and virtual reality" (Kurzweil, 2011, p.35). More recent thinkers that have manifested sympathy for the prospects of achieving meaningful and valuable lives in virtual reality are Harari (2014, 2016, 2017), Chalmers (2022) and Danaher (2016, 2019, 2022).

Here, we will focus on Danaher's proposal because it is philosophically well argued and articulated, and the one most focused on the issue of meaning in life, especially in his book *Automation and Utopia* (2019). He writes that in a highly automated world in which we do not have to work in order to meet our material needs, we could

Build a Virtual Utopia... we could retreat to "virtual" worlds that are created and sustained by the technological infrastructure that we have built. At first glance, this seems tantamount to giving up, but there are compelling philosophical and practical reasons for favoring this approach. (Danaher, 2019, p. 216)⁵

Before going into more detail concerning Danaher's account, we need to be clearer about the meaning of the concepts involved. First of all, there is the question about the meaning of "Utopia". In this regard, he follows Christopher Yorke (2018) and clarifies that by utopia he means "a prospective, rationally achievable society that represents a radical improvement over our current society" (Danaher, 2019, p. 155). First, by "prospective, rationally achievable society" he means a future society that is possible to achieve, not just a naive and purely imaginary but impossible scenario. Second, involving a "radical improvement" is an essential quality of the utopia. It can't just be a future society mildly or moderately better than our current situation, it needs to be radically better. In the present case, the radical improvement of the Virtual Utopia would consist, first of all, in its post-work and wealthy character. That is, in the fact that people will be free of the limitations and struggles that are characteristic of our current

⁵ Regarding the relationship between Danaher's Virtual Utopia and the capitalist mode of production, it seems plausible to infer that Danaher believes in the private ownership of technologies, rather than a public or state ownership, as part of the historical process that will lead to technological unemployment. Concerning the so-called immaterial labor in post-fordism, we think it may become irrelevant in a technological unemployment future *a lá* Danaher, because in such a scenario, *all* forms of human labor, including the so-called immaterial labor, will be replaced by AI and other kinds of advanced technologies.

wage-enslaved condition, and will be free to engage in all sorts of activities related to leisure, sport, art, entertainment, family, and so forth. Another condition for the Virtual Utopia to count as such is, of course, to enable and moreover, to enhance the prospects that people find meaning in their lives, which is the main target of our paper, as we will discuss soon.

Regarding the "virtual" character of Danaher's utopia, he distinguishes between a *stereotypical view* of virtual reality (Danaher, 2016), later called the technological vision (Danaher, 2022), and the counterintuitive view (Danaher, 2016), subsequently called the anthropocentric vision (Danaher, 2022). According to the former, virtual reality should be understood as an essentially technology-based reality, worlds that are not physical in the intuitive sense of everyday chairs, trees and bodies, but are computer-simulations. In contrast, according to the counterintuitive or anthropocentric view, virtual realities are neither essentially technology-based, nor necessarily computer-simulations, but the product of the symbolic and imaginative powers of the human mind and culture. In this latter sense, we have probably lived in virtual worlds for millennia, projecting into the physical world and incorporating into our ways of living things that upon scrutiny seem to belong only to our (collective) minds, from divine entities and codes of conduct to governments and money. This view of the virtual has been championed by Harari (2014, 2016, 2017), who gives the examples of religions and consumerism as virtual realities that are not computer-generated and provide meaning to an otherwise meaningless physical world:

As religions show us, virtual reality need not be encased inside an isolated box. Rather, it can be superimposed on the physical reality. In the past this was done with the human imagination and with sacred books, and in the 21st century it can be done with smartphones (Harari, 2017, p. 3)

In sum, Danaher suggests that the nature of the virtual in the Virtual Utopia should be understood with the broader, counterintuitive/anthropocentric sense in mind, which includes the sense in which computer-generated worlds are virtual but also the sense in which much of our lives have been virtual long before computers were invented.

Then, Danaher claims that a plausible vision of the Virtual Utopia will include the following three characteristics: a *triviality* condition, a *knowledge* condition, and a *technological agnosticism* condition. The former refers to the condition of people undertaking activities that are pursued for somewhat irrelevant purposes, in the sense that they will not be activities in which survival will be at stake, or in which great contributions to the Good, the True and the Beautiful will be made. The knowledge condition simply asserts that this will be known by the people in the Virtual utopian world. Regarding the technological agnosticism condition, it means that the Virtual Utopia does not depend on any particular technology. Instead, we can remain agnostic concerning its specific technical details, an even more, given the broader, counterintuitive/anthropocentric sense of the virtual, it is conceptually possible that it may be realized without technology at all:

Computer generated simulations, that we immersively participate in, are an obvious means of creating a Virtual Utopia... these technologies may enable more elaborate and exciting versions of the Virtual Utopia. Nevertheless, they are not, strictly speaking, necessary for it. Game-like environments in the physical world–devoid of all technological frills–can also count as part of the Virtual Utopia. (Danaher, 2019, pp. 230-1)

Here we find that Danaher's Virtual Utopia becomes too unconstrained to be a sufficiently meaningful, distinct proposal. If the technological agnosticism condition is taken in this utterly strong sense in which the Virtual Utopia could be realized even without any technology at all, then, Danaher's proposal collapses into what could be understood as a default view that could simply be called a "Leisure Utopia", a future condition in which most of labor is automated and society is free to engage in whatever activity is desired, where all these activities would be leisure activities because they are neither aimed, nor needed to produce economic or financial goods, nor needed for survival. In this situation, the issue that arises and that, to a great extent, determines whether this could in fact be a utopian future, or in contrast, a dystopian one, is the *problem of leisure* occupation (Floridi, 2014). This problem was anticipated by Keynes in 1930, when he pointed out that in a future, abundant society with massive technological unemployment, "man will be faced with his real, his permanent problemhow to use his freedom from pressing economic cares, how to occupy the leisure" (Keynes, 1930).

Now, for Danaher's proposal to be a distinct, meaningful alternative to cope with the problem of leisure occupation, his Virtual Utopia must add something to what we are calling a Leisure Utopia, but also to Suits' utopia of games (2005), which Danaher uses as an argument for his own Virtual Utopia (2019). According to Suits, in a utopian future in which machines could satisfy for us any material desire with a blink of an eye, we will play games; a situation that would represent the ideal endpoint of human existence. Given that Danaher is explicit that Suits' utopian games is an important element of his Virtual Utopia, the reasons he offers for the plausibility of the utopia of games are at the same time, reasons for his own Virtual utopia. In a nutshell, he claims that a world of games is an utopian future because we will be able to i) develop autonomy and agency; ii) (as a society) find a pluralistic balance between stability and dynamism; iii) achieve arbitrarily high levels of achievement in the process of playing games, more than in the outcomes, and; iv) pursue a lifestyle of craftsmanship.

However, irrespective of the (im)plausibility of a utopia of games as described by Suits and further supported by Danaher, for the Virtual Utopia to be more than just a defense of Suits' proposal (or a sum of it plus Nozick's Meta-Utopia, as we will see), it must differentiate itself from Suits' utopia. We may call this *the problem of indistinctness* of Danaher's Virtual Utopia. The obvious solution is to further constrain the technological agnosticism condition, such that we remain agnostic concerning the specific technologies that will support the Virtual Utopia, but become committed to technology. In other words, it would be better to drop the extremely loose counterintuitive/anthropocentric sense of the virtual and stick to the technological one, such that the Virtual Utopia really means a retirement to "worlds that are created and sustained by the technological infrastructure that we have built (in the future)" (Danaher, 2019, p. 216).

Moreover, this would be far more consistent with Danaher's second argument for his Virtual Utopia (2019). He argues that it would be a more practical and probable way of realizing Nozick's Meta Utopia (Nozick, 1974). In contrast to the former argument based on Suits utopian games, this time, Danaher is quite explicit that he is using "virtual" in the sense of technologically supported virtual realities that could host the pluralism of utopian worlds that is central to Nozick's proposal. We claim that this stance towards the virtual should be the one unambiguously advocated by Danaher if his Virtual Utopia is to be an appealing, distinct alternative, i.e. to overcome what we have called the *problem of indistinctness*.

To this end, a more rigorous conceptual analysis of the technologybased concept of "virtual reality" would be beneficial. In this regard, Chalmers' recent proposal is especially helpful. Building on previous technical treatments and current usage, he defines virtual reality as "an *immersive, interactive*, and *computer-generated* space" (Chalmers, 2022, p. 189). Along the same lines, but more general in scope, Hartz defines the adjective "virtual" as *interactive computer simulations* (Hartz, 2011). Then, we can distinguish two versions of Danaher's Virtual Utopia. The first, which he defends in his 2019 book, is a utopia in which "virtual" is so loosely defined such that it is compatible both with a computationally-simulated, immersive, and interactive implementation of Nozick's Meta-Utopia, but also with a utopia of games not supported by any technology at all. We argued that this version suffers from indistinctness or vacuousness but can be overcome by a second version of the Virtual Utopia in which "virtual" is a more constrained and precise notion: it becomes a utopia in which we live in computationally-simulated, interactive and ideally, fully-immersive worlds that can host the plurality of worlds needed to make room to the natural differences in values between people, including those that are completely gameful.

In the remainder of the paper we will critically address this second, more coherent, distinct and daring proposal which reflects more faithfully the radical picture that other thinkers such as Ray Kurzweil have wished and predicted for our future society, and that could dramatically enhance what technology already enables us to do, namely, "stop doing what we do not like... to do better what we already do... and to do for the first time what we otherwise would not have been able to do" (Floridi, 2022, p. 6), for instance, having the experience of visiting unreachable alien worlds, keeping in touch with those we have lost, or even living forever without the limitations of a single, corruptible, physical body (if "mind uploading" is ever realized). Now, before we give our criticism, we are going to present the perspective from which those criticisms will be based and inspired, the philosophy of *buen vivir*.

5. The *buen vivir* approach.

In this section, we are going to present first the main aspects of the philosophy of *buen vivir* (good living), focusing then on some of its main components: the central role of communities, the reconception of the relationship between humanity and nature, and the intrinsic, non-instrumental, value of the latter. Then, in section 6, we are going to apply this framework to critically assess the Virtual Utopia.

5.1. Introducing the notion of *buen vivir*

The concept of *buen vivir* (good living) arises as a Latin-American intellectual construct meant as a cultural, social, economic, political and ethical alternative

to the western, colonialist, capitalist view of humanity that has been centered on concepts of "development" and "progress" tied to the goal of unlimited economic growth, environmental exploitation, consumerism, materialism, etc. *Buen vivir* has its roots in core shared aspects of various Latin American indigenous cultures regarding a community-centered way of life where the well-being, purpose and meaning of individual human's lives, society and nature are taken to be deeply interconnected and interdependent, and where the notions of respect, harmony and balance are at the center of these interrelationships (Gudynas, 2011a, 2011b; Acosta, 2003, 2015; Beling et al., 2021; Houtart, 2011; Artaraz et al., 2021)⁶. For instance, in the case of the mapuche people from the south Chile, a man "lives in harmony with himself, with his family, his community, the environment and the spiritual beings in which he believes, the complete balance between these elements allows a state of "küme mogñen" or good life" (Hasen & Cortez, 2012, p. 583, our translation)

Now, in order to arrive at a view of *buen vivir* that could be as precise as possible and at the same time, as broad and encompassing as possible, given the multiplicity of nuances and differences in the myriad of Latin-American indigenous cultures, a recent systematic review of Cubillo-Guevara et al. (2016) will be especially useful and enlightening. They define *buen vivir* simply as a "way of life in harmony with oneself, with society and with nature" (Cubillo-Guevara et al., 2016, p. 7)⁷. However, this definition can be unpacked. The first element (harmony with oneself) is deeply tied to the concept of identity, which in the Latin American context of 500 years of extermination, massive assimilation and colonization of indigenous people amounts to the political aims of plurination-ality, decolonization, self-determination and interculturality. In the second,

⁶ Some indigenous words for *buen vivir* are *sumak kawsay(kichwa), suma qamaña(aymara)*, küme mongen/mogñen (mapuche), among others.

⁷ It is very important to notice that *buen vivir* is neither a monolithic, nor complete, nor immutable philosophical discourse that would be intended as a universal ethical recipe. On the contrary, it has diverse origins due to the embodied and situated nature of the multiplicity of ways of life and modes of thinking that characterize Latin American indigenous cultures. Moreover, it has been articulated discursively by Latin American intellectuals with different nuances and in connection to different global trends of environmental, social and political ideas (e.g. deep ecology, degrowth, postcapitalism, etc.). Indeed, Beling et al., (2021) identify three distinguishable strands in current *buen vivir* discourse: indigenist, socialist and ecologist/post-developmentalist that nonetheless share the core that we emphasize in the present paper. Hence, it is to be expected that *buen vivir* discourse will continue to evolve and be enriched with the particularities of the various contexts in which it will be further articulated.

social sphere of *buen vivir*, many accounts converge into the pursuit of social justice and equity, which translates into different proposals of post-capitalist economic and societal organization. Finally, in the third sphere of our relationship with nature, a key notion is a strong form of sustainability akin to that of deep ecology (Naess 1973), that comprises the recognition of the whole of nature not as an aggregate of natural resources for the development of human civilization, but as having intrinsic value and deserving to be treated as a subject of moral and legal rights⁸, e.g. the right to be restored when damaged, on what could be understood as a form of *biocentrism* (Taylor, 1986).

Now, given the purposes of this article, we are not going to focus on *buen vivir* as a whole critique of the western economic developmental paradigm, but more narrowly as an alternative ethical framework to find meaning and value on a potential future of abundance devoid of the obligation to perform paid work. More specifically, we are interested in elements of *buen vivir* discourse that could be used to evaluate the Virtual Utopia presented in section 4. To that end, we are going to focus on *buen vivir*'s view of human communities, the relationship between human communities and nature, and the intrinsic value of the latter.

5.2. Human Communities

The importance of harmonious communities is at the center of *buen vivir* philosophy. Indeed, Beling et al. (2021) characterize *buen vivir* as a "community-oriented cultural paradigm" (p. 1), that is, a way of living according to which the individual and the community are deeply interdependent such that what happens to the former affects the latter, and vice versa. Moreover, this could be seen as an instance of a more general view that Acosta calls "the indigenous principle of relationality: everything has to do with everything, at all points and in all circumstances" (2015, p. 15, our translation). This implies that the meaning and well-being of an individual's life, is not something that could be pursued and achieved in isolation, but embraces the whole web of inter-relationships in which the individual is immersed, and of which a key part is the social fabric that supports and is supported by the actions of the individual.

⁸ In the Political Constitution of Ecuador (2008), for instance, nature has been recognized as a subject of legal rights.

Humana.Mente

The importance of healthy, good and beautiful social relations and the communities they constitute to achieve both a collective and individual *buen* vivir is eloquently analyzed by Albó (2009), who investigates the communitycentered organization of avmaras and guaraníes in Bolivia. Based on the central place that these and other indigenous people give to communal life, but also based on the linguistic analysis of the aymara word for *buen vivir*, i.e. *suma* qamaña, he argues that buen vivir should be properly called buen convivir, that is, good *coexistence* or good living with others. More precisely, *qamaña*, according to Albó, should be interpreted as "to live, well, rest, shelter and care for others" (Albó, 2009, p. 2, italics added, our translation). The same spirit is expressed by an avmara that Albó quotes, who asserts that "suma gamaña is not really 'living well' but 'knowing how to live together and support each other" (Albó, 2009, p. 4, our translation). A related principle in human relationships (and the relationship between human communities with the rest of nature) is the practice of reciprocity or *avni*, which is considered a key regulatory principle that guarantees harmony and balance in the relations between people and within nature in general.

This community-centered aspect of buen (con)vivir is exemplified in the aymara notion and practice of *thakhi* or "communal path". It is an integral aspect of the social organization of aymara people and consists in each individual, throughout their lives, having to hold positions of increasing responsibility and social recognition related to the welfare of the community, e.g. from providing help in the school, being secretary at meetings, to leading a ceremonial dance group or offering a large banquet for the whole community. Now, beyond the question about the extent to which this form of social organization indeed accomplishes the harmony, stability and prosperity of the community, what we want to emphasize is the way in which this community-centered way of life configures the purpose and meaning of each individual. In Albó's words, "the whole life of each individual is conceived as walking, in a growing maturity expressed especially in the greater service to the community" (2009, p. 6, our translation). This central place that the community has in the wellbeing, purpose and meaning of each person's life is in sharp contrast to the more individualistic orientation that is more common in western, modern, capitalist societies.

5.3. Human-nature relationship

Another aspect in which the buen vivir perspective contrasts with our modern, mainstream view, concerns the relationship between humanity and nature. Instead of the biblical privileged position of human beings as having a supernatural, spiritual essence that positions us at the top of creation and gives us the purported right to dominate all nature and living beings; echoed later in the scientific pursuit to explain, predict, control and modify nature through objective inquiry and technological development (White, 1967), the buen vivir approach conceives of humanity as organically intermeshed within the whole of nature, as "children of nature", not separated from it. Moreover, it mandates humanity to contribute to nature's balance and wellbeing, instead of seeing it as a repository of resources and commodities instrumental to human progress. All this can be seen more generally as expressions of the view about the deep interdependence and interrelation between human societies and natural ecosystems (Acosta, 2013; Gudynas, 2011a, 2011b; Houtart, 2011). In the words of Gudynas, buen vivir "covers different ways of dissolving the duality that separates society from Nature, and repositions the human being as a member of the web of life" (2011a, p. 16, our translation).

As could be seen, there is an important similitude between the buen vivir view of the human-nature relationship and the views of authors such as Capra (1997, Capra and Luisi 2014), Kay (1997, 2000) or Naess (1995, 1973). A basic tenet is that human beings and societies should be understood as part and parcel of wider ecosystems whose equilibrium preservation is not only part of human responsibility but a requisite if humanity is going to survive, something that has come to the fore in recent decades with the climate crisis. However, the buen vivir approach and similar perspectives to the human-nature relationship like deep ecology go further and claim that a full self-realization and finding of life's meaning requires that humanity cultivates a relationship not only of respect, reciprocity and admiration for nature, but achieves also the first-personal experiential realization that we are nature, that we are not severed from it (Huanacuni, 2010). In the domain of environmental psychology this view is nicely echoed in what has been called *nature connectedness*, i.e. the extent to which a person feels identified or connected with nature; which has been found to correlate with the person's overall well-being and disposition to care and protect the environment (Shultz, 2002). It is also closely related to a recent proposal within the philosophy of meaning in life according to which nature can provide much of the meaning we seek in our lives:

Humana.Mente

The natural world can be an important part of what people regard as 'home', i.e. a connection to place that can ground their sense of who they are, where they came from, or where they belong... nature can provide human lives with meaning in that it can provide a sense of purpose, of being 'part of something larger than oneself'...It might make theorists more likely to regard the ways that we relate to the world as organisms, or as animals... as opposed to thinking that meaning must be related to our 'rational nature'. (McShane 2022, p. 326)

As eloquently highlighted by McShane, nature not only can be central to life's meaning, but also, helps us realize that we are not just rational beings in search for an intellectual solution to our problem of meaning, but that we are living organisms seeking to come back home to the larger whole to which we belong.

5.4. The intrinsic value of nature

As we saw in the previous section, the *buen vivir* approach gives nature a different status from the standard views of Western thought's tradition. Recalling Gudynas' quote, the buen vivir" covers different ways of dissolving the duality that separates society from Nature" (2011, p. 16, our translation). That means not only that society and nature are parts of an integrated socio-ecosystem, but also that nature has its dignity by itself (Gudynas, 2011a, 2011b). Gudynas address this topic under the label of different ontological perspectives that converge in a new ethic; "identifying intrinsic values in the non-human is one of the most important elements that differentiate this posture from the Western Modernity" (Gudynas, 2011a, p. 463). In other words, according to buen vivir discourse, both nature as a whole and individual natural entities not only have instrumental value but, more importantly, also non-instrumental, intrinsic value, they matter in themselves irrespective of human purposes and interests. This means that the buen vivir perspective emphatically rejects the anthropocentric view of most traditional ethical frameworks, resonating instead with Routley's (1973) argumentation that traditional western ethical frameworks, when applied to environmental issues, are unsatisfactory forms of "human chauvinism", and that consequently, new ethical foundations are required. Relatedly, buen vivir implies that the dualistic conception that separates subject (human) and object (nature) should be rejected by a monistic view of the world in which all natural entities are considered subjects of intrinsic value and meaning; a view that resembles Katz (1997) proposal of "nature as subject".

76

Under that perspective, humans are no more the only subjects of value. Instead, animals, trees, rivers, and hills must be conceived as sources of value and meaning on their own, not only because an external human subject attributes them. In this sense, *buen vivir* is compatible with all the previously mentioned relational perspectives, insofar includes non-human beings in its conception of community. Furthermore, as we have seen, that is what Gudynas has in mind when he states that nature must have the same status as persons; "when it is said that Nature becomes a subject of value, what have had taken place is a radical change in front of the prevalent Western Ethics where all that surrounds us is an object of value and only the persons, as conscious beings can articulate valuations" (Gudynas, 2011a, p. 14, our translation)

We can appreciate in more detail those considerations in the Ecuadorian Constitution of 2008, which establishes that the rights of nature must be protected and promoted. Those rights are those suggested by the word 'Pachamama' to refer to nature (which means 'mother land' in the language of the Andean cultures). They seek to respect its existence, structure, and all its evolutionary and vital processes (Gudynas, 2011a). In the case of Bolivia, there is no such legal insurance of Nature's rights in its Constitution since the emphasis is on the rights of Communities. Nevertheless, in the economic structure, the Bolivian Constitution moves from the primarization of resources to encouraging investments in the industrial sector and the production of technology and sciences. This last point is critical regarding nature since Latin American economies are historically sustained through large-scale exportation of primary materials.

Thus, we can appreciate that Nature has an entirely new status according to the *buen vivir* philosophy, which extends beyond mere rhetoric and is concretely applied in the legal sphere, as in the case of Ecuador's Constitution, and to economic practices, like the Bolivian case. In this context, the New Ethic highlighted by Gudynas (2011a, 2011b) constitutes a theoretical and practical guideline for political, legal, and moral concerns inspired by the indigenous cultures of South America that allows us to expand our view and see us as part and parcel of something larger that is inherently valuable.

Humana.Mente

6. Arguments against the Virtual Utopia from a buen vivir perspective

Having presented both the Virtual Utopia (section 4) and the buen vivir philosophy (section 5), in this section we are going to offer three arguments against the former that naturally arise from the perspective of the latter. Importantly, for limitations of space and given our current purposes, we are not going to argue for the plausibility of the buen vivir discourse. We restrict ourselves to the description we made of it and assume its plausibility, and now highlight some problems of the Virtual Utopia if the *buen vivir* approach is correct on certain points. In the best case, our arguments would show that the Virtual Utopia suffers from important problems that should recommend its rejection. However, even if this is not convincing for everyone because of potential weaknesses of the buen vivir approach, we expect to show, at least, some important points of contradiction or incompatibility between the Virtual Utopia and *buen vivir*, that may encourage further discussion. That said, in this section we argue that, from a buen vivir perspective, the Virtual Utopia is not a good candidate for human's post-work utopia because i) it unnecessarily augments the environmental damage that is already involved in massive labor automation; ii) it entails an unnecessary and detrimental dependence on technology for human relationships; and iii) increases the severance of the link between humanity and nature. We turn to each of these arguments now.

6.1. The argument from unnecessary environmental damage

Our first argument can be expressed as follows,

- 1) The environmental damage produced by massive labor automation (i.e. technological unemployment) is X
- 2) The environmental damage produced by the Virtual Utopia is necessarily X + Y.
- 3) Environmental damage should always be minimized.

Therefore,

4) We should avoid the Virtual Utopia

Concerning premise 1), a future of technological unemployment depends on progress on AI, robotics and other technological infrastructure that require natural resources and imply damage to the environment. As Crawford points out, "artificial intelligence is both embodied and material, made from natural resources, fuel... infrastructures" (Crawford, 2021, p. 8). Even though the concepts behind the AI progress (e.g. artificial, cloud computing, algorithm, etc.) may sound ethereal, they are strongly linked to the material world. These abstract concepts are nothing without the natural resources needed to build the actual products. So, technological unemployment, dependent on AI progress, has an environmental impact attached to it (X)(Premise 1).

Now, to secure a Virtual Utopia, in addition to the negative environmental impact implied by the massive automation required to achieve technological unemployment, we will have to create, provide and sustain more technological infrastructure destined to support virtual realities and its access to all people. These will have attached an additional environmental impact (Y) (Premise 2). The Virtual Utopia is strongly linked to computation and data storage: all the technologies that would sustain it need computational power. Creating virtual worlds requires loads of computational power; rendering 3d images to photorealistic graphics are dependent on this. These computations are done in the "Cloud". This is a big improvement from an engineering perspective (compared to local computation) but it implies extra costs. Computations require electricity. In the words of Hu: "the cloud is a resource-intensive, extractive technology that converts water and electricity into computational power, leaving a sizable amount of environmental damage that it then displaces from sight." (Hu, 2015, p. 146). On the other hand, the data centers in which these processes occur are also contributors to pollution. One of the key needs of the data centers is low temperatures, that is why big companies are installing these warehouses near the arctic, but still these places require "grid electricity in the form of coal, gas, nuclear, or renewable energy." (Crawford, 2021, p. 43).

Concerning premise 3) (i.e. Environmental damage should always be minimized), here we appeal to the *buen vivir* approach. If nature has intrinsic value (section 5.4) and the human-nature relationship is essential for human's life' meaning and well-being (section 5.3), then damage to nature should always be minimized (premise 3). If nature does not have instrumental value alone, but it also matters intrinsically and has the right to be protected and preserved for its own sake, then, ideally, nature should never be deteriorated, polluted, harmed, etc., in the name of human progress; analogously to the way in which no human

being should be harmed, abused, etc., for the benefit of other human beings⁹. Now, given that in practice, it seems very improbable (even if it is desirable) to avoid absolutely all damage to nature deriving from human activities, we prefer to stipulate premise three in terms of minimization.¹⁰

Finally, although the implications of *buen vivir* concerning the desirability of technological unemployment would need to be fully addressed on a separate study (see footnote 10), for the purposes of this paper, if we assume that it is going to happen anyway (see section 1), then our main claim is that we better try to benefit from it and create a non-virtual utopia. In so far it is utopian¹¹, it will be better than the virtual one if it entails less environmental damage. A non-virtual utopia of games, for instance, may be a good candidate.

6.2. The argument from technological-dependency of human relationships

Our second argument against the Virtual Utopia is the following:

- 1) Interpersonal relationships are fundamental to life's meaning and wellbeing.
- 2) The Virtual Utopia entails the promotion of computationally-mediated interpersonal relationships over unmediated, face-to-face interpersonal relationships.

⁹ Here we are assuming the implausibility of utilitarian views according to which harming people or nature can be justified if the overall net utility over a larger group turns out to be positive, outweighting the damage.

¹⁰ Of course, the same premise (i.e. environmental damage should always be minimized) can be used to argue against the desirability of massive labor automation in the first place. However, because the *buen vivir* perspective is not just an ecological view but concerns also the well-being of human communities, given the possibility that being free from *de facto* mandatory paid work could radically enhance the human condition (section 2), the implications from *buen vivir* to massive labor-automation need to be examined in greater detail than we are allowed here for limitations of space. However, it is clear that at least, *buen vivir* would mandate that the transition to and maintenance of massive automation must be implemented with strong sustainability constraints and social justice.

¹¹ Recall Danaher's definition of a utopia: "a prospective, rationally achievable society that represents a radical improvement over our current society" (Danaher, 2019, p. 155). Promotion of computationally-mediated interpersonal relationships over unmediated, face-to-face interpersonal relationships should be avoided

Therefore,

4) The Virtual Utopia should be avoided

Premise 1) derives from *buen vivir* perspective, especially the importance of collectively building and sustaining healthy communities, as discussed in section 5.2. Importantly, this is also shared by Danaher (2019, 2022) and others like Chalmers (2022), who acknowledge that friendship and other kinds of close human relationships are essential for a good life and claim that they are perfectly possible in shared virtual worlds like those already existing and even more in future, fully realistic and interactive platforms. Now, as expressed in Premise 2), by the very nature of the "virtual" that is at stake (i.e. the technology-based conception), these virtual relationships will be necessarily computationally-mediated. So, even though the Virtual Utopia is certainly compatible with the existence of face-to-face, technologically unmediated relationships, given that it assigns virtual realities a central place in the project of a fulfilling, valuable life, it entails the promotion of computationally-mediated relationships over unmediated ones.

However, and here is the crux of our argument, we claim that, *ceteris paribus*, unmediated relationships should be preferred over computationallymediated ones. This is what underlies our Premise 3). Although current research suggests that close, subjectively meaningful and valuable human relationships can indeed take place in virtual environments, especially in social virtual reality (Social VR) platforms like VR Chat, AltspaceVR, and Rec (Freeman and Acena 2022; Maloney and Freeman 2020); computationally-mediated relationships entail a set of shortcomings that make unmediated ones preferable. Our main point is that by being computationally-mediated, they are necessarily technology-dependent, and we should avoid this for the following reasons.

First, technological dependence obviously entails susceptibility to technological failures. Technology is fragile, and arguably, even in a future of super-advanced technological development, it cannot be reduced to zero. The fragility includes potential malfunctioning of the complex infrastructure needed to support participation in social virtual worlds, which includes local components like personal computers and complementary VR devices that are evidently fragile, but also a globally distributed infrastructure, that is susceptible to worldwide natural, economic, social and political instabilities. Technological fragility is also entailed by potential power-supply failures, and environmental conditions, especially in the current context of a progressively worsening environmental and energetic crisis. Very importantly, technological fragility also takes the form of potential informatic attacks both to individual users and to the main platforms that run the virtual environments.

Second, technology has an economic cost, and is mostly developed by private companies seeking profit. Hence, in one or another degree and form, technological dependence of human relationships entails segregation due to financial reasons¹². In other words, access to the necessary technology will most probably be mediated by unequal distribution of financial capacities¹³, entailing unequal access to Social VRs, both in terms of whether some people will be able to access at all, and the quality and possibilities of experiences and interactions within social VRs¹⁴. In contrast, unmediated relationships are free to all.

Third, the quality of the communication between people in virtual worlds, which is an essential aspect of creating and sustaining good relationships, is and will also be susceptible to various pitfalls. Normal, everyday face-to-face human communication is richly multimodal, including, besides the content of the information transmitted either by voice or text, facial expressions, bodily posture and movements, the rhythm, intonation and volume of the voice, as well as social context cues such as perceived age, gender, race, class, etc. (Lee, 2008). Also, there is growing research showing the key importance of affective touch as a basic human need and fundamental ingredient in creating bonds in human relationships (Schirmer & McGlone, 2022). However, as pointed out by Lee (2008), "compared to FtF [face-to-face] interaction, CMC

 $^{^{12}}$ Head-mounted display technology, for instance, the Meta Quest 2 set costs about \$500. To that one will have to add a stable internet connection.

¹³ This is compatible with the assumption that the "distributional problem" (Danaher, 2016, 2019) or "economic problem" (Keynes, 1930) will be solved. We made the weak assumption that policies will be implemented such that most people will be able to live decently without having to work. However, by no means, this entails that all people will have equal financial access to leisure or entertainment devices.

¹⁴ For instance, some people will be able to access only free social VRs or free worlds within a given social VR, while other will be able to access paid ones; some people will be able to have only audio-visual experiences and interactions, while others will have the access to full-blown multi-modal immersion and communication, etc.

[computer-mediated communication] typically lacks social context cues... reduced social presence renders CMC less effective and appropriate than FtF for socio-emotional communication" (Lee, 2008, p. 1). A similar point is made by Cocking (2021), who claims that current social media such as Instagram, Twitter or Facebook reduces considerably the wide spectrum of ways in which faceto-face communication normally operates, distorting our interactions. In other words, computer-mediated communication, either in the form of social media or even as Social VR, offers a narrower and weaker communicative power compared to typical face-to-face interaction, due to the technical infeasibility of simulating the rich and complex multidimensionality of communication in everyday interactions. Now, even if the improbable case that all or some of the most relevant technical limitations are overcome, for instance with regard to virtual touch (Callace and Cirondini 2022), or emotional facial expressions (Hart et al., 2018), then the quality of the interpersonal communication would nonetheless remain susceptible to the pitfalls of technological dependence that we previously discussed (i.e. fragility and socioeconomic segregation).

Finally, we claim that the threats to privacy in social media that are already a matter of preoccupation, and probably will continue, are detrimental to virtual relationships. For instance, "social media companies have the capability to distinguish their users' social, political, religious, and consumer affiliations, and use or exchange that information to enable selectively targeted information dissemination" (Steel et al., 2010, p. 7). Those privacy threats are especially critical for friendship since one of its essential conditions of possibility, which is intimacy (Helm, 2021), arguably cannot occur without privacy. Following Thomas (1987, 2013) we should understand "intimacy" in terms of mutual self-disclosure, which points to the confidence people have concerning a close friend and vice versa so that they can develop a bond of trust. However, with the massive vigilance that we are exposed to in digital platforms that undermine our information privacy (Laurie et al., 2010), it is hard to imagine a world in which that candid confidence between friends can flourish without constraints. Moreover, in the last years, concerns about mental privacy¹⁵ in the context of neurotechnologies have motivated hot discussions in both the academic and political fields since those technologies have the potential to access more critical, private information of individuals, such as mental states, feelings, and emotions. Hence,

¹⁵ Following Wajnerman-Paz (2022), a standard definition of mental privacy would be "the idea that we should have control over informational access to our mental/neural states" (2021, p. 4).

the flourishing of true friendship is strongly hindered in a world where social VRs are constantly susceptible to massive vigilance by the government, private corporations seeking profits, or hackers.¹⁶

6.3. The argument from humanity-nature severance.

Our final argument can be expressed as follows.

- 1) The Virtual Utopia entails a radical severance between humans and nature
- 2) We should avoid any radical severance between humans and nature

Therefore,

3) We should avoid the Virtual Utopia.

Premise 1) follows almost straightforwardly from how we have characterized the version of the Virtual Utopia that overcomes what we called the problem of in*distinctness*, that is, the version of the Virtual Utopia that commits itself to the technologically-based notion of the virtual (section 4). Then, given that the Virtual Utopia necessarily entails that humans give central place in their lives to virtual realities that by definition are computer-generated (Chalmers, 2022; Hartz, 2011), the direct contact and interaction between humans and natural environments that is evidently needed to cultivate the human-nature connection will be dramatically hampered and hence the connection severed. But, if we follow buen vivir, we must avoid this disconnection and isolation from nature (premise 2, presented in section 5.3). Therefore, we should avoid the Virtual Utopia. In other words, instead of being immersed in computer-simulated interactive worlds as the Virtual Utopia recommends, we should pursue immersion in interactive natural environments with others. According to buen vivir philosophy, and also recent accounts in philosophy of meaning in life (McShane, 2022), environmental psychology (Shultz, 2002) and deep ecology (Naess, 1973), this direct contact and experience is essential for cultivating a richer awareness that is not only deeply beneficial for our own life's meaning but also

84

¹⁶ For the sake of clarity, we do not think that private friendship and emergent technologies are incompatible *per se*. However, for a Virtual Utopia to ensure privacy to their users a great amount of legal protection must be pursued and even so, there is no guarantee that future regulation will protect them from spyware and other illegal digital threats.

for our personal and societal well-being and continuation. Especially considering today's urgent, but also probably future, need for inspiration and motivation to effectively engage in collective efforts to protect and restore our home planet.

7. Conclusions

We presented one of the most carefully developed proposals for facing the loss of meaning in life due to the displacement of workers in a highly automated future: Danaher's Virtual Utopia. We first argued that the "counterintuitive" or "anthropocentric" understanding of "virtual" was inadequate because it leads to the problem of indistinctness, i.e. collapsing the Virtual Utopia into other proposals like Suits' utopia of games or into a default "leisure utopia". To avoid that, we argued that the meaning of "virtual" in the Virtual Utopia should be fixed to the technology-based conception, such that it is essentially related to computationally-simulated, fully immersive, interactive spaces. Then we introduced the philosophy of buen vivir highlighting the importance of human communities, the human-nature relationship, and the intrinsic value of nature. Based on these, we offered three arguments for rejecting the Virtual Utopia: the argument from unnecessary environmental damage, the argument from technological-dependency of human relationships and the argument from humanitynature severance. Overall, our opinion is that non-virtual utopian alternatives should be looked for, and buen vivir is an alternative worth exploring. Buen vivir may offer, in our opinion, not only novel sources of value and meaning for individuals in a post-work society but a whole new ethic that changes the paradigm from the traditional, anthropocentric vision in which all that ultimately matters are humans' values and well-being to a view centered on the interdependence between humanity and nature, the collective nature of life's meaning and a radical reconception and revalorization of nature. That is consistent with the efforts that many international organizations have made in the last period concerning protection of the environment and human rights, such as the United Nations and its master sustainable development plan. Moreover, buen vivir may also serve as the foundation for new ethical guidelines for AI, an ethic that does not put only the well-being of human society at its center, but the well-being of nature, humanity included. We believe this may help us to seize the utopian opportunities that future massive automation may bring, without transforming our world into a dystopia.

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Technological Unemployment and Meaning in Life

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