



# Self-Esteem and Technological Unemployment: Should We Halt AI to Protect Meaningful Work?

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## Abstract

Should we insulate humanity from AI development in an effort to preserve people's ability to form self-esteem and find meaning in their occupations? In this article, we take this possibility seriously and argue that technological insulation would ultimately fail in its aim. In doing so, we will consider two different scenarios: one in which we only halt the deployment of technology that would lead to our replacement as workers, and a second one in which we collectively deliberate to halt technological development as a whole. The former, we argue, fails to preserve our ability to form self-esteem, as we become aware that our role is contingent on a policy that artificially preserves our status as contributing members of our communities. The latter seems unfeasible and overly demanding considering the expected benefits of AI. We propose instead the life of play and the life of excellence in the context of collaborative work with machines as alternative sources of self-esteem to the life of work.

**Keywords** Meaningful work · self-esteem · AI ethics

## Introduction

More and more, we are witnessing everyday situations in which artificial intelligence (AI) takes over a variety of tasks that had hitherto been undertaken by humans. There are widespread concerns that increasing rates of AI development and adoption in our societies will entail a large number of job losses (Acemoglu, 2021; Hanson, 2016; Johnson & Acemoglu, 2023; Susskind, 2020). While such technological advancements may lead to alleviating the problem of scarcity of resources (setting aside worries about the limits of the natural world), potentially leading to policies that would allow us to have a rich life without the need to work (e.g., Universal Basic Income), there is a legitimate worry that the transition to a jobless society may substantively affect

people's ability to form and cultivate self-esteem on a large scale (Susskind, 2020).

The connection between work and self-esteem is documented in a large body of conceptual and empirical literature, masterly reviewed by Pierce & Gardner (2004), and more recently picked up by scholars who seek to emphasize how central meaningful work is in our lives (e.g., Allan et al., 2019; Bankins & Formosa, 2023; Lepisto & Pratt, 2017; Lysova et al., 2019, 2023; Malhotra, 2021; Michaelson et al., 2014) and how our societal structures are importantly based on it (e.g., Mejia, 2023; Susskind, 2023). Such a connection may prompt many to suggest that, although the AI promise of increased access to crucial public goods (e.g., justice, healthcare, etc.) is one to look forward to, there are pressing reasons to consider its costs in terms of potential losses in one's ability to cultivate self-esteem without meaningful work.

The fast-paced evolution of machine learning techniques and the increasing concerns around the possibility of catastrophic scenarios that might follow the development of the so-called AGI (Artificial General Intelligence) have prompted a few important people in the tech sector to seriously ponder halting or slowing down AI development to form a more comprehensive understanding of its dark sides (Forbes, 2023). In this paper, we aim to propose a thought

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experiment that takes that possibility seriously, though not with the aim of preventing or minimizing existential risks, but rather to understand whether insulating humanity from AI or any technology that would force us into unemployment would succeed in preserving our ability to form self-esteem and purpose in our work. If such a possibility exists, we suggest, it should be taken seriously.

In doing so, we identify four different, non-mutually exclusive, ways in which we form self-esteem in our occupations. Two *extrinsic*, in which work is seen as a mere means to pursue self-esteem in other realms; and two *intrinsic*, in which the pursuit of self-esteem is intimately linked to procedural aspects of our work or its direct and immediate consequences.

In this paper, we propose two alternative scenarios: one in which we collectively decide to halt AI development, and another in which we continue developing AI but choose not to deploy it where it may replace us to the extent that one's professional identity feels threatened. Both scenarios, we will argue, present insurmountable problems. The first is likely unfeasible: even if any one country banned AI, others would not. The leading forces in AI, the United States and China, are sufficiently at odds in this historical moment that an agreement to ban AI seems unrealistic. Moreover, such an option seems overly demanding as, in order to preserve our ability to form self-esteem, we would be forced to give up on various prospective benefits of AI that could alleviate suffering.

In the second scenario, we suggest that our awareness that a readily available technology would easily outperform us in work-related tasks would affect our ability to form self-esteem in different ways, depending on the intrinsic or extrinsic nature of how we cultivate self-esteem.

We consider two main potential objections to this second argument. First, one may suggest that while our awareness that AI would outperform us may take a toll on our ability to form self-esteem in our occupation, we could still take pride in having performed our tasks. Second, it may be argued that one would eventually form beliefs to support one's worth in their professional role even in the face of evidence that their role is contingent on a policy that addresses their well-being (i.e., in cases of self-serving bias). Both objections, we will attempt to show, are ultimately unsuccessful in justifying or providing reasons in support of halting the AI deployment to protect people's ability to cultivate self-esteem through their work.

We will conclude with some avenues forward to build a world in which AI and human beings' self-esteem can coexist.

This article is structured as follows: in the first section, we distinguish among four main ways in which we form self-esteem through work; in the second section, we show how artificial intelligence is set to affect the ways in which

we form self-esteem through work; in the third section, we reflect on two alternative scenarios about halting AI and argue that neither of them succeeds in justifying such policies; in the fourth section, we consider two plausible counterarguments. In the fifth section, we sketch two possible ways forward to attain self-esteem: the life of play and the life of excellence. We conclude by proposing a few caveats on the proposed way forward.

## Work and Self-Esteem

Work is a foundational practice upon which our societies are built: our individual and collective survival and prosperity depend on it, our sense of worth as actively contributing members of our community is also largely based on it, and much of our self-esteem comes more or less directly, though not exclusively, from our work experiences (Brockner, 1988; Elliott, 1996; Erikson, 1956; Jahoda, 1982; Krauss & Orth, 2022; McAllister & Bigley, 2002; Michaelson et al., 2014; Pierce & Gardner, 2004; Rosenberg et al., 1995).

While, in the very long term, the development of AI might help alleviate the problem of scarcity, and substantially reduce or eliminate our need to work to sustain ourselves, serious concerns remain on how widespread AI adoption might prevent us from forming self-esteem in our occupation, and threaten our ability to live a meaningful life (Mejia, 2023).

In this paper, we focus specifically on work as a source of self-esteem. In doing so, we will consider work in its broader meaning, and we will not be distinguishing between paid and unpaid work, for two reasons: first, because we take AI to threaten both paid and unpaid work, though possibly to differing extents; second, because we believe that our ability to form self-esteem in our occupation, albeit also linked to monetary retribution, does not entirely rest on it. Moreover, as we will argue, AI mostly threatens our ability to form self-esteem in ways that are only partly linked to compensation.

Before we do so, though, it is useful to provide a brief account of what we mean by self-esteem. Such an account, we believe, has to be as broad as possible to encompass and accommodate for the various ways in which people extract self-esteem in their work. In this respect, we follow (Sachs, 1981) in defining self-esteem as one's ability to take pride in one's attainments or advantages. For instance, Betty could be said to form self-esteem by taking pride in having her paper accepted by 'The Journal of Business Ethics,' or in her talent to write something that is worthy of consideration from the same journal.

Taking pride in one's attainments or advantages, as we shall see, can happen in a variety of ways (e.g., through sense of recognition, status, etc.), and often leaves ample space for subjectivity. For instance, while Betty believes that having her paper published is a plausible ground to form

self-esteem, Bob might not think the same. Hence, unless Betty forms self-esteem largely by obtaining Bob's appreciation, Betty's self-esteem will increase as a result of her academic attainment, whereas Bob's esteem of Betty will be left unchanged. Hence, Betty's belief on what constitutes an apt ground to form self-esteem does not bind Bob. Similarly, one's esteem toward another person may plausibly change regardless of what the other believes. For instance, Betty may esteem Bob more after he publishes a paper in a good journal despite the fact that Bob does not regard that as a plausible ground for self-esteem. It follows that self-esteem leaves also space for subjectivity to the extent that one may exaggerate or unwarrantedly belittle attainments and advantages another might take pride in. For instance, Bob might take pride in being able to write excellent philosophy and regard this as a more compelling source of self-esteem than saving lives.

One may also suggest that self-esteem is not bound by reality constraints at all, as one might take pride in attainments or advantages that do not in fact exist. For instance, Bob might take pride in being able to write excellent novels despite the fact that he doesn't. This is certainly true in a variety of cases, and empirical research illustrates interesting patterns in our ability to foster a sense of self-worth despite contrary evidence (Mezulis et al., 2004). However, as we shall see later, reality constrains normatively our ability to cultivate self-esteem, if we take self-esteem to possess intrinsic value.

Following once again (Sachs, 1981), we would like to distinguish between self-esteem (taking pride) and self-respect (having pride), where the latter consists in one's wishes that their rights are 'acknowledged as fully as ever, and in resisting and resenting, as always, any attempts to use or manipulate, exploit, or degrade' them (Sachs, 1981, p. 357). As Sachs convincingly illustrates, self-esteem and self-respect exhibit important disanalogies and interact in limited and unexpected ways. For some people, though, self-esteem could be indirectly conducive to increases in self-respect. The link is indirect to the extent that, through self-esteem, one learns to appreciate how they should be respected and comes to resent the ways in which they were treated before, or the ways in which they thought it would be legitimate to be treated. Interestingly, increases in self-respect could be conducive to more self-esteem, as one may regard their ability to maintain self-respect as a plausible ground to form self-esteem.

Without the ambition of being exhaustive, we now turn to identifying four main different, albeit not mutually exclusive, ways in which we can form self-esteem through work. First, work provides us with an opportunity to sustain ourselves and our families, to satisfy our needs, and engage in leisure activities that may, in turn, be regarded as sources of self-esteem; second, sometimes we form self-esteem as a result

of the social status or social expectations attached to our occupation; third, we have reasons to take pride in our work because we are uniquely suited to perform it; fourth, we often form self-esteem to the extent that our work contributes to achieving other goods, which may or may not have public relevance.

As an instance of the first way, consider the following quote in which Tomasi (2012) picks up on Murray's (2009) description of how a man who works as a janitor can meaningfully cultivate self-esteem through their occupation:

Murray describes a man who holds down a janitorial job and thereby supports his family (we could as easily imagine a single mother taking on some difficult job). Such people, Murray suggests, are doing something genuinely important with their lives. Regarding the janitor, Murray states, "He should take deep satisfaction from that, and be praised by his community for doing so." If those same people lived under a system in which they were heavily insulated from economic risks, for example, by being assured that they and their children will be well provided for whether or not they themselves contribute, then that status goes away. "Taking the trouble out of the stuff of life strips people-has already stripped people-of major ways in which human beings look back on their lives and say, "I made a difference." (Tomasi, 2012, p. 80).

Tomasi and Murray emphasize how our ability to sustain ourselves and our families provides us with good reason to form a sense of worth through work. One may not find their occupation particularly enjoyable, as it might only entail repetitive and low knowledge-intensive tasks; or one's job may not come with the benefit of the sense of belonging to a category of high-skilled workers, or it may not consist in pursuing any higher or noble public good through their occupation. Yet, one has good reasons to take pride in the ability to provide for themselves and their loved ones.

This first way of cultivating self-esteem, we argue, is somewhat *extrinsic* to work, as it does not come directly from the constitutive features of one's occupation, but sees work in an instrumental fashion: it is through work that we can secure the necessary resources to do things that make us able to form self-esteem (e.g., sustain ourselves and our families, pursue hobbies, etc.). In other words, there is no special or intimate connection between one and their work, as any other occupation that would make one gather such resources would ultimately help to pursue self-esteem.

Consider now a second way in which we could form self-esteem through work, which consists of satisfying certain social expectations and obtaining social recognition. Let us look at the following quote from Ferrante's *The Story of a New Name* in which Elena (the protagonist and narrator) realizes how the decision to pursue her career as a writer,

and the effort she spent throughout her studies were largely motivated by her willingness to show her friend Lila how good she was. And when Lila fails to show any sympathy toward Elena's journey and achievements, Elena's sense of worth stemming from her work suddenly fades away:

I understood that I had arrived there full of pride and realized that—in good faith, certainly, with affection—I had made that whole journey mainly to show her what she had lost and what I had won. But she had known from the moment I appeared, and now, risking tensions with her workmates, and fines, she was explaining to me that I had won nothing, that in the world there is nothing to win, that her life was full of varied and foolish adventures as much as mine, and that time simply slipped away without any meaning, and it was good just to see each other every so often to hear the mad sound of the brain of one echo in the mad sound of the brain of the other (Ferrante, 2013, p. 466).

Once again, this second way seems extrinsic, as there is no need for some special connection between Elena and her occupation. All she desires is to show Lila how good she is and become the object of her appreciation and admiration. The pursuit of her studies toward the goal of becoming a writer, in this passage, reads like a mere means to receive the praises of someone else or to meet the expectations one has set for us. Gheaus & Herzog (2016) further suggest that social recognition can also come from one's position in a given work hierarchy. In this respect, one may form self-esteem by climbing a ladder in their occupation regardless of the nature of the work one performs. This is, for instance, the case of choosing career paths on the basis of how successful one can be in one's occupation rather than by looking at the social standing of a particular profession.

Let us look at a third way in which we cultivate self-esteem in our work, which we take to be linked to performing tasks or solving problems that we are uniquely suited to tackle. In this regard, consider the following quote from Conan Doyle's *The Sign of Four* about Sherlock Holmes's passion for solving mysteries:

"My mind rebels at stagnation. Give me problems, give me work, give me the most abstruse cryptogram or the most intricate analysis, and I am in my own proper atmosphere. I can dispense then with artificial stimulants. But I abhor the dull routine of existence. I crave for mental exaltation." (Doyle, 2000, chapter I).

The quote nicely encapsulates Holmes's satisfaction, enjoyment, and pride that comes with exercising his deductive abilities. Holmes doesn't indulge himself in solving mysteries for the sake of appearing clever to the public, or to secure means that would allow him to cultivate self-esteem in other realms of life, or to pursue some

greater good his work may be conducive to. Holmes takes *intrinsic* pride in solving mysteries, an activity which he is uniquely suited to perform. He cultivates self-esteem through the procedural aspects involved in his work.

In a similar fashion, we may cultivate self-esteem by attaining excellence in our work, not merely by putting our existing abilities into practice. In this respect, self-esteem may be the result of an aspirational process that culminates in becoming better at our work tasks.

Let us now consider a fourth way to form self-esteem in one's work, which is linked to pursuing some outer good one's job is conducive to. Perhaps, a good way to capture how one may cultivate self-esteem in pursuit of a greater good comes from the medical profession and is nicely captured by the amended version of the Hippocratic Oath as re-written in 1964 by Louis Lasagna:

I will respect the hard-won scientific gains of those physicians in whose steps I walk, and gladly share such knowledge as is mine with those who are to follow.

I will apply, for the benefit of the sick, all measures [that] are required, avoiding those twin traps of over-treatment and therapeutic nihilism.

[...]

I will respect the privacy of my patients, for their problems are not disclosed to me that the world may know. Most especially must I tread with care in matters of life and death. If it is given me to save a life and save life wherever possible within reason; this awesome responsibility must be faced with great humbleness and awareness of my own frailty. Above all, I must not play at God.

[...]

I will remember that I remain a member of society, with special obligations to all my fellow human beings, those sound of mind and body as well as the infirm.

If I do not violate this oath, may I enjoy life and art, respected while I live and remembered with affection thereafter. May I always act so as to preserve the finest traditions of my calling and may I long experience the joy of healing those who seek my help. (Lasagna 1964).

Alongside many professional duties, and a few instances of cultivating self-esteem in a procedural fashion (i.e., taking pride in sharing knowledge with students, or in taking the *awesome* responsibility associated with care in matters of life and death), various elements of this amended version of the oath point to cultivating self-esteem in the pursuit of some greater goods. For instance, there is the idea of cultivating self-esteem through the mission of saving as many lives as possible, or in working toward a society that prevents diseases as opposed to curing them.

We take such an approach to cultivating self-esteem as partly intrinsic to the extent that the good being pursued has a special connection with one's work. Medical professionals are uniquely suited to make decisions on matters of life and death or to work toward prevention rather than cure. In this respect, one cannot but pursue such goods, from which one cultivates self-esteem, through engaging with that particular kind of work. However, despite such a special connection, this route to cultivating self-esteem is partly extrinsic to the extent that the greater goal one wishes to pursue lies outside one's occupation and if such a goal ceases to exist, or is pursued through alternative routes, one loses the ability to form self-esteem.

It is important to note that we do not take these four ways of forming self-esteem as mutually exclusive. We often cultivate our self-esteem in both extrinsic and intrinsic manners, though to different extents. For instance, we may choose a particular profession both because we take pride in being uniquely suited to perform certain tasks, and because we hope to satisfy certain social expectations, while at the same time, cherishing the wealth that comes with it and pursuing a certain greater good that is intimately connected with our work.

Thus, the scope of singling out the four different ways in which we may form self-esteem through our work is not to suggest that people have separate ways to form self-esteem, or that different jobs call for either extrinsic or intrinsic ways, but rather to advance our understanding of how technological unemployment may impact singularly our ways of forming self-esteem, in an effort to figure out which of the various ways is most threatened by technological unemployment.

### Technological Unemployment and Self-Esteem

For the purposes of this paper, we will assume that the development of AI will result in job losses, even though that assumption is far from certain. If future technological advancements have the power to overtake a wide variety of tasks, displacing many of us from our jobs, what would happen to our ability to form and cultivate self-esteem? In this section, we attempt to speculate on the effects of technological unemployment on both extrinsic and intrinsic ways of forming self-esteem.

The first and obvious intuition we would like to spell out is that technological unemployment would compromise our extrinsic and intrinsic ways of forming self-esteem quite differently and perhaps asymmetrically.

To begin, let us consider Murray's case of the janitor. His ability to cultivate self-esteem is not contingent on the possibility of performing the tasks that are associated with the job; we may indeed suppose that the janitor would be able to form self-esteem in a wide variety of different

jobs as long as he is able to provide for himself and his family. What happens, however, if the need to provide for his loved ones is gone as it is now satisfied by a universal basic income policy?

This route to forming self-esteem is compromised by taking away from us the extrinsic goal we aim to pursue with the resources that we obtain through our occupation. If providing for our loved ones is not a need anymore, that route to self-esteem is simply not available. In a similar fashion, routes to cultivate self-esteem by means of obtaining social recognition or appreciation for one's work are compromised by taking away from work the very possibility of such recognition. Arguably, if AI does it better, the societal appreciation for a particular profession has little scope to exist, and our ability to form self-esteem through that route is now undermined.

Consider, for instance, the case of Elena in Ferrante's novel. Her motivations for pursuing a career as a writer are shaped by exogenous factors: it is not so much her love for writing but rather the willingness to emancipate herself from the Rione (her neighborhood) and to attract Lila's appreciation for her accomplishments. Yet, these exogenous factors are inextricably linked to the prestige that the profession of writing carries with it. A prestige that arguably arises from being part of a very small pool of talented people who are able to succeed in an overly competitive market. What happens, however, if AI manages to get consistently better than humans at writing novels? One possibility is that the prestige attached to the profession will fade away, leaving those who write for the sake of social recognition without a route to form self-esteem.

One problem that may arise with the case of Elena is that there is no obvious way in which a novel is better than another in the same way in which one can optimize janitorial tasks. In this respect, in an AI-powered future, one may suggest that we might prefer human-generated writing precisely because it is human-generated. If this is the case, the profession would not lose the special recognition that comes attached with it, regardless of AI's capabilities. However, when we consider jobs and tasks that can be intuitively optimized (i.e., cases in which the desired output is clearly spelled out), it is reasonable to speculate that AI's capabilities overtaking human abilities would come at a cost in terms of the special status attached to a particular profession.

For instance, consider the case of a lawyer who is consistently outperformed by an algorithm in predicting the decisions of the European Court of Human Rights (Aletras et al., 2016). It seems reasonable to assume that the special status that is attached to the profession, which is a function of the unique skills that lawyers have in anticipating judicial reasoning, might be threatened, and so is the possibility of cultivating self-esteem through such privileged status.

Intrinsic routes to forming self-esteem, on the other hand, seem less vulnerable to technological unemployment. Consider, for instance, the case of Sherlock Holmes: it seems implausible that the simple fact of a machine outperforming Holmes in his problem-solving activities would entirely undermine the pleasure he gets from engaging with them. The mountaineer still gets satisfaction from climbing a mountain, even if she could reach the top in a helicopter. Or consider the case of an artist who enjoys the act of creation, perhaps as a form of self-discovery. She might gain as much satisfaction from her work as ever, irrespective of whether people prefer to get their art from AI. Before AI, the artist might have earned her money through her art; after AI, the artist might still create art but earn money through a universal basic income. Those whose work provides them with self-esteem in intrinsic ways will be better sheltered from the threat of meaninglessness when AI threatens to replace them.

Yet, there is a sense in which technological development partly undermines such a route, and it is by showing us that we are not uniquely suited anymore to perform certain tasks and that no matter how good we might become, our professional judgment will always be sub-optimal compared to non-human decision-making.

Consider now the case of a radiologist who forms pride through the challenge of providing early diagnoses of breast cancer: how might she react to the news that a machine learning algorithm can now consistently outperform her? She might still cultivate self-esteem by exercising her impressive skills and by constantly improving herself, but she loses the perception of being uniquely suited to perform diagnoses, of being part of an exceptional pool of people who have such rare abilities. This example becomes particularly compelling when we realize that the radiologist would also partly form her self-esteem by pursuing a greater goal intimately linked to her profession such as reducing societal suffering by preventing deadly diseases. The simple fact of realizing that a machine can outperform her, thus also improving the possibility of pursuing her greater goal, does *ipso facto* compromise the route to cultivating self-esteem in her profession.

In this respect, while technological unemployment seems to compromise more the extrinsic routes to forming self-esteem in one's work, it also affects our ability to form self-esteem in intrinsic ways, especially when a greater goal that we pursue through our work can be better attained by developing and deploying technologies that are ultimately more effective than us at our work-related tasks.

## Two Scenarios

In the face of such potential loss of sources of self-esteem, two obvious options, alternative to the status quo, present

themselves: one in which we continue developing AI but choose not to deploy it where it may replace us to the extent that one's work-related identity feels threatened, another in which we decide to halt the development of AI altogether. Let's analyze these in turn.

The underlying idea of this first scenario is that AI can take over a variety of tasks only insofar as it does not threaten the more substantive aspects of our jobs that define our work-related identity.

In this respect, one crucial question is whether we would get as much self-esteem from doing work that we know could be done (possibly better, and certainly faster) by a machine. It might be that a significant source of self-esteem in work comes from the belief that we are more valuable as workers than alternatives. The anthropologist David Graeber defines "bullshit jobs" as employment without meaning or purpose, work that should be automated but is not on account of bureaucracy, status, or inertia (Graeber, 2018). The more AI becomes capable of replacing people at tasks, the more jobs will tend toward becoming bullshit jobs. In other words, if AI were capable of adequately replacing human beings, human jobs would be meaningless because they would not fulfill a higher purpose; they would be jobs for the sake of jobs.

Our intuition is that insulating workers from AI, by delimiting the perimeter of application to tasks that do not undermine their work-related identity, won't in itself preserve their ability to cultivate self-esteem, whether they cultivate it in either extrinsic or intrinsic ways. However, if one genuinely enjoys performing a task for the sake of it, and is able to extract self-esteem by simply engaging in such an activity, they would still be able to do so regardless of the ability of a machine to outperform them.

Knowing that a machine will outperform his problem-solving skills may take a toll on Sherlock Holmes's ability to cultivate self-esteem, as he is not uniquely suited anymore to serve others through his remarkable qualities. However, he may not cease to enjoy problem-solving activities, taking pride in his abilities that are rare among fellow humans and that he can further refine. The attainment of mastery at something is fulfilling, regardless of whether others (machines or humans) can be better than us.

If, on the other hand, one derives self-esteem in their occupation by means of external goals—goals that can now be attained by AI and public policy—the scope for insulating humans from AI is in principle eliminated. Take, for instance, Murray's case of the janitor and imagine that he is outperformed by a machine in carrying out his activities. Assume further that the State in which the janitor lives issues a basic income that is supposed to respond to the job losses following the mass adoption of AI.

In such a case, it seems that the scope for insulating the janitor from AI, once again, does not exist. The janitor is

aware that AI does a better job in performing the daily tasks required by his occupation, and he is also aware that through the massive increase in productivity generated by AI adoption, the State would be able to provide a universal basic income for those who will be left jobless. Thus, the janitor knows that he is not essential nor required to provide for his loved ones, and insulating him from AI won't change that belief as he'll perceive the relevance of his role as ultimately artificially engineered.

Similarly, consider the case of Elena. What would happen in the case that AI becomes consistently better at novel writing? As we have pointed out earlier, it is plausible to assume that the privileged status and recognition that is assigned to writers would fade away. The same social status that makes it attractive for Elena to pursue her career as a writer, in an attempt to gather the admiration of her friend Lila. If AI can consistently outperform writers, there is no reason to regard such a category as uniquely suited to entertain, inspire, or move the general public through their storytelling abilities. In this regard, Elena's reasons to pursue a career as a writer cease to exist when she simply realizes that there is no special status attached to the profession anymore.

The possibility of insulating humans from AI deployment becomes even more problematic when we consider individuals who cultivate self-esteem by means of pursuing a greater goal that is inextricably linked to their occupation. In order to illustrate this point, we can refer again to the example of the radiologist who becomes aware of the existence of a machine that can perform better diagnoses for a fraction of the costs. Would she be able to cultivate self-esteem by continuing to perform her daily tasks while deliberately insulating herself from technology? Our intuition is that this is hardly the case, especially considering that her self-esteem is inextricably linked to the pursuit of greater societal goals that would be better attained through the deployment of AI. One may even argue that if the radiologist strongly identifies herself with the pursuit of greater goals, she would feel an obligation to lobby for the introduction of the machine that would put her out of employment.

A second possibility is to halt the development of AI as a whole. This would avoid reaching the stage at which AI becomes visibly better than us at most tasks, leaving us with a legitimate epistemic uncertainty about the possibility of it happening in a counterfactual world in which AI is still being developed. The idea behind such a scenario is that, since we cannot be sure that AI would have outperformed us, we can legitimately cultivate self-esteem in our occupation. In fact, there is still a legitimate disagreement among AI experts on whether AI will eventually replace us in highly knowledge-intensive tasks.

However, the possibility of collectively halting AI development presents numerous insurmountable

challenges. The first one is that it seems unfeasible. Neither countries nor companies have enough of an incentive to halt AI development. In the context of capital and arms races, profit might trump worries about the self-esteem of workers. Even if we could somehow convince the international community to halt AI for the benefit of people's self-esteem, there are reasons above and beyond self-esteem not to want to.

Even if we were to focus solely on the well-being of workers, we have reason to develop AI. According to a 2017 Gallup Poll, about 85 % of people do not feel engaged with their jobs, and many tend to hate their jobs (Gallup, 2017). Even if work is providing people with self-esteem, for the majority, it's doing so at the cost of other kinds of well-being. Work lives are often unpleasant (Danaher, 2019), requiring one to dress in uncomfortable clothes, to wake up earlier than they might want to, to do boring tasks (e.g., email, bureaucracy, meetings), and, above all, to subject themselves to a hierarchy that can be oppressive.

Autonomy—the ability and right of adult human beings to self-govern according to their values—is one of the most important tenets of liberal democracies. And yet, work is an activity that continually interferes with people's autonomy. While workers have the autonomy to choose a job, during work hours, they largely cannot pursue their own life objectives, instead having to prioritize those of the institution for which they work (Anderson, 2017).

If we could find ways of cultivating self-esteem that are independent of work, work that most people don't like, that would be desirable. Other things being equal, if AI could do the work that we hate, and deal with the boss that we hate instead of us, the world would be a better place.

One important worry is that this scenario might be unfeasible. Hoping that AI will take care of the unpleasant tasks and leave us with the more stimulating activities might be wishful thinking. The history of the Industrial Revolution suggests that, more often than not, machines do not adapt to the needs of workers, but rather, workers adapt to the needs of machines, as illustrated by assembly lines. We are already seeing that pattern playing out with AI. Amazon warehouses and workers, for instance, are adapting to robots, and not the other way around (Knight, 2023).

Beyond the concern for the well-being of workers, the worry is that AI promises all kinds of advancements that could, in theory, improve living conditions for all of humanity and substantially reduce unnecessary suffering. In this respect, halting the AI development as a whole seems overly demanding. However, since promises about reducing suffering are hypothetical, and since it is enough to show that there are reasons related to workers' well-being to develop AI, we will not expand upon this topic further.

## Two Counter-Arguments

One may reasonably object that our arguments against the first scenario don't take into account that, while knowing that a machine would outperform humans may be off-putting, once we have insulated ourselves from AI, we are still performing our tasks, and this is what ultimately allows us to cultivate self-esteem. For instance, while the janitor knows that his job could be automated, he still performs it, and this is what ultimately provides for his family.<sup>1</sup>

A second objection could point out that, qua humans, we might form beliefs to support our worth in professional roles in spite of evidence that such a role is contingent on a policy that addresses our well-being. The underlying idea behind this objection is that by insulating humanity from AI we would effectively protect people's ability to cultivate self-esteem through work via self-serving bias (Blaine & Crocker, 1993).

Note that these two objections are quite different: in the former, one is able to form self-esteem by virtue of simply performing a job while knowing and believing that one's role is contingent on a policy that insulates them from AI; in the latter, one forms self-esteem through false self-serving beliefs about their worth vis-à-vis AI.

Both objections, we argue, fail on authenticity grounds. Let us start with the first. Although there is a sense in which, in a world insulated from AI, the janitor still performs his tasks and provides for his family, knowing that his job is held up by a social safety net rather than his own merit or contributions could induce a sense of inauthenticity. The janitor might feel like he is living in a simulation where his actions, while real, have lost their meaning because they are preserved as a "favor" rather than out of necessity. This is not merely a shift in perception but a fundamental change in the nature of his relationship to his work. For him, his job once represented his agency and his ability to contribute something necessary to society and provide for his family. If he understands that the role is now a construct to support him rather than a genuine need, his self-esteem may suffer because the authenticity of his impact has been compromised.

This dependency can be humiliating, even if it's well-intentioned. It subtly implies that he is no longer capable of being "needed" in a traditional sense, fostering a potential resentment or, alternatively, a sense of helplessness. He might struggle to derive self-esteem from a role that he now feels he occupies out of charity rather than genuine contribution, leading to a subtle but pervasive sense of loss.

Let us now consider the second objection. In the case of the radiologist, we speculated that simply knowing that a machine outperforms her would be off-putting and take away much of the meaning and self-esteem she might derive from continuing to perform her job. These aspects are exacerbated by the fact that the radiologist would normally pursue a greater societal good through her occupation, such as reducing human suffering. In fact, an outperforming machine wouldn't simply be off-putting by means of showing her that she is not uniquely suited anymore to tackle complex diagnostic tasks, but also by revealing that she is not actively contributing to the pursuit of societal goods from which she derives part of her self-esteem.

However, the radiologist could still cultivate self-esteem by forming self-serving beliefs when insulated from AI. For instance, she might form false beliefs underplaying machines' accuracy and overestimating her diagnostic abilities; or she might overplay the relevance of other qualities in the delivery of her services (e.g., empathy with patients) that are precluded to the machine; or she might form false beliefs about the fact that human patients would largely refuse to be diagnosed by a machine on matters of life and death; etc.

There is one main reason why protecting one's ability to cultivate self-esteem through self-serving bias doesn't strike us as a plausible defense of the first scenario, and it is that cultivating self-esteem in one's occupation by means of forming false beliefs about one's worth seems to take a toll on the normative significance of self-esteem altogether, and may end up being self-defeating. The underlying intuition behind this argument is that self-esteem has intrinsic value only insofar as it is based on truth-tracking beliefs, and that any attempt to deviate from truth-tracking beliefs treats self-esteem as having merely instrumental value.

In order to illustrate this point, let us borrow Nozick's thought experiment of the experience machine. Nozick (1990) invites us to contemplate the possibility of plugging ourselves into a machine that can simulate all sorts of experiences and asks whether we would be willing to trade off our real life for a simulated and extremely pleasurable one. Nozick uses the thought experiment as an objection to utilitarianism, in an effort to show that no matter how much utility one could garner via the simulated experiences provided by the machine, one would still be drawn to living one's real life due to the lack of authenticity of the simulation, which seems to take a toll on the significance of the pleasure obtained through the experience machine.

Although one might question how successful Nozick's argument ultimately is in undermining utilitarianism, the strength of the thought experiment is much more pronounced when we consider self-esteem in place of utility. Would we be keen on cultivating self-esteem in a simulated scenario? Would one plug themselves into a machine that provides them with the experience of being uniquely

<sup>1</sup> We would like to thank an anonymous reviewer for pressing on this particular point.

suited to tackle a complex work challenge, to be needed in order to provide for one's family, or to be essential for the pursuit of a greater societal good? That doesn't seem to be the case: a simulation might provide us with the enjoyment of specific experiences but cannot meaningfully make us gain self-esteem, as this is inextricably linked with our authentic life.

We can plausibly experience pleasure in a simulation that sees us winning a Grand Slam final, or succeeding in performing a surgery that saves someone's life, and, within the simulation, we may be able to extract self-esteem as we are not aware of being in a simulated reality. However, the choice of entering the simulation, as well as that of insulating ourselves from AI to keep cultivating self-esteem in our occupation, is a conscious one and takes place before deviating from truth-tracking beliefs. In this respect, when we choose to enter a simulation to garner self-esteem, we seem to imply that self-esteem has only instrumental value: we want to experience a sense of self-worth in our occupation merely because it is conducive to happiness.

The problem with such an approach is that, by neglecting the intrinsic value of self-esteem, it misses its normative significance. Self-esteem can be aptly seen as a form of 'appraisal' that is not automatically owed to ourselves, as it may not be merited (Darwall, 1977). Learning to appropriately value ourselves under this dimension performs one key function, which is to hold ourselves to standards of worthiness to try and live a life that we consider worth living (Dillon, 2022). In this regard, moving away from truth-tracking beliefs about one's worth leaves us without this important source of normative direction.

One may object that there is a substantive difference between Nozick's experience machine and the AI insulation scenario. In the former, one would cultivate self-esteem by entirely relinquishing agency; in the latter, one still performs their job and thus might meaningfully cultivate self-esteem through their occupation. The problem, once again, is that self-esteem is often not cultivated by merely performing a task, but rather through a bundle of beliefs that come with performing a task such as being uniquely suited to tackle a particular challenge, to sustain ourselves and provide for those we care about, to pursue a noble goal, etc.

A second and accessory argument against cultivating self-esteem via self-serving bias concerns the possibility of creating or reinforcing existing inequalities. There is overwhelming evidence of unequal ability to foster a sense of self-worth via self-serving attributional bias (Mezulis et al., 2004), which is significantly shaped by culture (with Asian samples exhibiting less attributional bias than Western subjects). In this regard, insulating humanity from AI may only protect part of the world population's ability to cultivate self-esteem in their occupation.

## Three Ways Forward

If halting AI or limiting the purview of AI when it comes to work tasks doesn't seem promising, what other ways are there forward? We will explore three options here: Machine-human collaborations, the life of play, and the life of excellence. These options are not mutually exclusive, and perhaps work at their best when they are combined into one: the life of play and excellence in the context of collaborative work with machines.

### Machine–Human Collaborations

No technology is inevitable, and every technology could be designed in a different way. One option is to design AI not with a view to replace human beings, but rather to enhance our abilities. Human intelligence and machine intelligence might be so different from one another that they might not be in competition (De Cremer & Kasparov, 2021). Many of the mistakes that arise out of the use of AI are the result of how humans interact with AI. In one study, radiologists performed worse with input from AI because it made them more confident in their wrong predictions (Agarwal et al., 2023). In another case, judges tended to make more racist decisions as a result of having as input a risk score calculated by an AI (Simonite, 2019). Whereas they would have previously shown leniency to people with difficult backgrounds, the risk score made them more averse to releasing someone who might be dangerous. But perhaps these kinds of mistakes would be minimized if we designed AI with the explicit purpose of being used in collaboration with human beings.

If the jobs of human beings were not displaced but merely morphed to collaborate with machines, then the self-esteem we derive from work would remain safe. Our abilities would have to change from, say, writing a report, to mastering the right prompts to get an AI to write a report.

One challenge for AI to develop in this direction is that the incentive for profit pushes companies to want to replace human beings because it is the cheapest option. This may be a tragedy of the commons type of situation. While society as a whole might be better off with machines that work with human beings (it would be more fulfilling, and potentially cheaper), for any one company it would be cheaper to do without human beings. Machines don't complain to their bosses, they don't ask for breaks or vacations, much less for rights to be respected.

Whether AI develops to replace or complement human beings, the other two alternatives we consider in what follows still stand. The life of play and the life of excellence reign supreme over the life of work.

## The Life of Play

In *The Grasshopper: Games, Life and Utopia*, Bernard Suits explores the philosophical concept of play and its relation to human life and utopian ideals. Suits argues that the defining characteristic of games is "the voluntary attempt to overcome unnecessary obstacles" (Suits, 2014) which sets them apart from work. He presents the idea that a meaningful life can be seen as a game in which individuals pursue self-chosen goals through freely accepted, but unnecessary, constraints, akin to playing a game for its own sake rather than for any external rewards. Suits envisions a utopian society where people embrace a playful and purposeful existence, finding fulfillment in the pursuit of their chosen endeavors and the challenges they willingly embrace.

Games are, in many ways, the antithesis of work. While jobs for the sake of jobs are meaningless, games for the sake of games are meaningful. In the words of Hurka: "When you play a game for its own sake you do something good and do it from a motive that fixes on its good-making property" (2016). To play a game for reasons other than for its own sake is not doing it right. If you play a game to impress someone, for instance, you are missing out on the good-making properties of the game.

Suits argues that what constitutes game playing is threefold. First, there must be a goal. For golf, it's about getting a ball into a hole. For a race, it's about crossing the finish line. For chess, it's about checkmate.

Second, there are constitutive rules that may forbid the most efficient means of achieving the goal. You could drop a golf ball into the hole with your hand, but you wouldn't be playing golf. You could use a bicycle to be faster than your fellow runners, but you wouldn't be winning the race. Or you could place your adversary in checkmate by placing the pieces in that position disregarding the rules of how you can only move a piece at a time, and in a certain manner, but you wouldn't be playing chess.

Third, there is a playful attitude which involves accepting the constitutive rules because they make the game possible. If players of games could change the rules arbitrarily, they wouldn't be playing, because it wouldn't be a game.

According to Hurka, there are two intrinsic values at the core of game playing: first, there is the achievement involved. Games invite you to do something difficult: get somewhere very high or very far on time, go through a maze, amass points, etc. Second, there is the desire to pursue an activity for the features that make it good (i.e., its difficulty). Playing a game, then, has an external goal one aims at, but the specifics of the goal are irrelevant to the value of the game (i.e., we could change the goal of the game and the game would still have value). The value of games lies in the process, rather than the product; the journey, and not the destination (Hurka, 2016).

If AI took over our jobs, games would still be possible, and, arguably, games could be much more fulfilling than work. Work is designed to produce, or sometimes to create the impression of productivity, and in producing and giving off the impression of producing lie many disagreeable tasks, like long meetings. Games are designed to be fun, and if you don't find one game fun, there's always another one you could try.

Like work, games provide the possibility of developing abilities and gaining mastery that can provide self-esteem. Finding the game that you are particularly well suited to perform would be intrinsically as fulfilling as any job, as evidenced by those who play for work (e.g., football players).

However, leading a life that is entirely dominated by games might feel somewhat empty. As social beings, producing public goods and helping others may be the most important source of self-esteem, which leads us to the life of excellence.

## The Life of Excellence

According to Aristotle, the good life is based on the pursuit of eudaimonia, which can be translated as "flourishing" or "well-being." Achieving a life of eudaimonia, argues Aristotle, involves developing and practicing virtues, such as courage, temperance, and wisdom, the ultimate virtue. Unlike other ethical theories that focus on rules or consequences, Aristotle's ethics centers on character development and the cultivation of excellence in all aspects of life to attain the ultimate goal of human flourishing.

In contrast to the modern notion (very much in line with the life of play) that there can be value in the process, irrespective of the objective, Aristotle's account is teleological from the Greek term *telos*, meaning purpose or end. Aristotle believed that everything in nature, including human beings, has a natural purpose or end to fulfill. The purpose of human beings is to practice the virtues and become excellent in the different spheres of life, thereby attaining eudaimonia.

Human beings should strive to be excellent family members, excellent friends, and excellent citizens, among other important roles we can play. One of the current challenges democracy faces is that citizens do not have the time to inform themselves well enough to be more active citizens. Most citizens limit their democratic duties to voting in elections, at best. At worst, not even that. With work out of the way, we could have more time for citizens' assemblies, organizing social movements, and more.

Former President of the United States Barack Obama (2023) has argued that

"We need more experimentation with Citizens' Assemblies, in the U.S. and across borders. We live in a time when people feel distant from government in many

ways, where voting isn't enough, and we can create more direct forms of democracy that allow people to practice self-government, to debate and deliberate and make decisions. This would make politics more engaging and considered."

In a similar vein, political scientist H el ene (Landemore, 2020) proposes citizens' assemblies to reinvent democracy in the 21st century. Many of the most important challenges we face are social, not technological, to be solved with better governance. If we can meet most of our technological needs, we can focus on investing in becoming excellent human beings and developing good governance.

Another area in which AI is unlikely to be a competitor is in different forms of human contact and support. While some people might prefer at times the company of an AI to the company of a human being, it is likely that most people will still crave the company of other human beings for at least two reasons. First, there is a shared experience with another human being that will be lacking with an AI. An AI, for instance, is unlikely to understand just how good Italian food is, or just how painful a breakup can feel, and those shared experiences bind us. Second, other things being equal, human beings tend to find it fulfilling to help one another. Will human beings stop rearing their children, forming romantic relationships, or cultivating friendships on account of AI? Unlikely. To be there for a friend who needs company, and to have a friend be there for you, is the kind of fulfilling experience that most of us would not want to miss out on.

The life of excellence provides us with the chance to emotionally satisfy our needs and those of our loved ones; it can provide self-esteem through the social status that attaches to someone who is virtuous; it can give us pleasure in attaining mastery of becoming better persons; and it achieves other goods, like helping others and sustaining a healthy democracy. It is therefore as good a provider of self-esteem as the life of work.

But perhaps the most balanced life is one that combines the life of excellence with the life of play, the importance of the destination with the pleasure of the journey.

## Conclusion

Although a world in which AI forces a significant portion of the population into unemployment is at the present stage only a possibility, in this article we have tried to show that insulation from technological development and deployment is not a plausible solution. Not only would this undermine the hypothetical benefits stemming from AI, but it would also fail in the aim to protect our ability to cultivate self-esteem through our occupations.

However, concerns about losses in self-esteem due to AI replacing us in some of the work tasks that shape our identity and give substantive meaning to our lives are well grounded. In this respect, we have highlighted two main ways forward to cope with the potential sense of displacement and lack of self-worth that might take place in the case of large-scale AI adoption: the life of play and the life of excellence.

However, there are at least three reasons why such lives might not be possible for the bulk of the population. First, climate change and the ecological limits of natural resources might mean that AI does not solve the problem of scarcity of resources. This worry is beyond the scope of this paper but of urgent importance. Second, the lives of play and excellence might never come to fruition for the majority of the population if we don't tackle inequality. So far, AI seems to have worsened inequality (Forbes, 2021). If we continue down this path, a life of unrest is more likely. We have to make sure that women and minorities don't remain the caregivers of humanity while those in a position of power adopt the life of play. And we have to make sure that either we collectively own AI, or that those who don't own AI enjoy as many or more resources as they would enjoy without AI, and enough resources to be able to develop lives of play and excellence. Third, it may be that the most likely outcome is the worst possible combination: one in which the more meaningful aspects of work get automated and the most dreary parts are not because they are technically harder.

In this respect, our reflections pave the way for a thorough policy discussion aimed at creating a fertile soil for the cultivation of self-esteem in a world in which AI may dramatically change our work-related identities.

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## Declarations

**Conflict of interest** The authors declare no Conflict of interest.

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