2025 TheoLogica
An International Journal for Philosophy of Religion and Philosophical Theology
Published Online First: June 03, 2025
DOI: https://doi.org/10.14428/thl.v9i1.86003

Transhumanism vs. Theistic Ethics

ROBERTO DI CEGLIE
Pontifical Lateran University
robertodiceglie@gmail.com

Abstract: I argue that there are three limits to the transhumanist project of moral enhancement. They are "technological ignorance," "technological passivity" and "technological easiness." I argue that they make it unlikely that the enhancement in question will be achieved. I also argue that there are no similar limits in the context of theistic Christian ethics, although it may seem otherwise at first sight. Following Aquinas, I show that there is no "theological ignorance," "theological passivity" or "theological easiness" that may hinder moral progress via the Christian faith. In conclusion, Christian theistic ethics is more beneficial to us than transhumanist views of moral enhancement.

Keywords: Moral enhancement; Axiology of theism; Christian theism; Thomas Aquinas

1. Introduction

According to the proponents of the transhumanist perspective, contemporary technology can lead us to redefine human nature by overcoming its limitations, especially the biological and cognitive ones. The possibility of avoiding or preventing more or less curable diseases, as well as the possibility of increasing intellectual performance, including the creation of so-called artificial intelligence tools, seems to be of general interest.

Perhaps of less interest is the possibility of using genetic, pharmacological, cybernetic and even surgical means to overcome moral limitations and promote moral enhancement.

Whether or not it is true that moral enhancement is of less interest to the general public, the possibility of improving moral conduct, whether through technology or otherwise, is an issue of enormous importance. There are at least three reasons, which I will list in decreasing order of obviousness. First, given the history of pain inflicted on humanity by a seemingly ineradicable strain of evil,

it would be of extraordinary value to improve ourselves morally.[1] Second, every other kind of improvement, from the biological to the psychological and cognitive, would be even greater once we had secured the moral one. It is hard to deny that even an optimal physical and psychological state and an enviable cognitive level can have negative consequences if they are achieved in the absence of adequate moral education. Thirdly, while cognitive and biological improvement seems to be an actually achievable goal, so that the discussion about it is exclusively aimed at considering its value, potentiality and side effects, when it comes to moral enhancement, on the other hand, it seems that substantial problems make it hardly achievable.[2] I will call the problems in question "technological ignorance," "technological passivity" and "technological easiness."

In this article, I will argue that these problems, or rather their counterparts in theistic ethics, do not undermine the moral progress that can be made through theistic ethics. Showing this is an important achievement for at least two reasons. First, things like ignorance and passivity may seem, at least *prima facie*, more applicable to the domain of theistic ethics than to that of science and technology. After all, science and technology are something that human beings develop on the basis of their reason and effort. If, on the other hand, there is an omnipotent Creator of all things, then it is plausible to suppose that believers should be at least partly affected by ignorance and passivity before God's intervention in their lives. Second, one is naturally inclined to think that moral enhancement achieved through human effort is preferable to moral enhancement achieved through supernatural intervention. In the context of the Christian religion, to which I will confine myself here[3], the grace of God plays a crucial role in the attempts of human beings to make moral progress. Consequently, from a philosophical rather than a theological point of view, how can this be seen as preferable to moral enhancement, which transhumanists present as an achievement freely attained from all constraints, including religious ones? Shouldn't it be said that moral enhancement, even if hardly attainable, is based on the freedom and merit

[1] I. Persson and J. Savulescu, who were among the first to advocate biomedical moral enhancement (BME), argue that we need BME to avoid ultimate harm (2012). By ultimate harm, they mean the ability to make worthwhile life forever impossible, an ability we increasingly have because of technological progress.

[2] Not surprisingly, multiple forms of disagreement have emerged. There is disagreement about whether BME is possible or desirable (see L. Coyne & M. Hauskeller 2018). Against the thesis of Persson and Savulescu (see above, note 1), thinkers such as J. Harris (2016) argue that BME is not really possible and is a threat to human freedom. There is also disagreement about whether BME should be given to all or only some people, and whether it should regard ability or behaviour.

[3] It does not follow that my argument cannot apply, at least to some extent, to other theistic religions.

that ethics requires?[4] And shouldn't it be recognised that this does not apply to moral progress achieved through faith?

I intend to proceed in two steps. First, I show that there are three limits to moral enhancement through technology, which I call "technological ignorance," "technological passivity," and "technological easiness." Second, I argue that these limits, once transferred into the realm of theism, do not affect Christian ethics, and that this makes the latter preferable to moral enhancement through technology.[5] Also, I focus on one substantive objection, which I discuss in order to confirm my argument that theistic ethics is more beneficial to us than transhumanist views of moral enhancement.[6]

2. Three limits to moral enhancement through technology

In this section, I show that there are three substantial limits to the possibility of achieving moral improvement by technological means.

The first limit is what I call "technological ignorance." It is true that scientific and technological progress should be understood as an expression of human initiative and knowledge. But it is also true that very few are the active protagonists of scientific and technological progress.

---

[4] In this article I will not consider moral progress simply in terms of promoting better behaviour, e.g. behaviour aimed at not harming others. Instead, I will consider *the virtuous process* that shapes desires and behaviours. This classical approach to moral improvement has recently been taken by B.A. Rath (2023, 221–237). To show the importance of recovering this perspective, F. Jotterand argues that "the misconceptualization of morality by proponents of moral bioenhancement is the result of the abandonment of a unified conception of moral agency grounded on an Aristotelian framework (virtue ethics)" (Jotterand 2022, 9). A. Benders also believes that becoming morally better people requires a free development of character traits. See A. Benders (2018, 308–318). I will say more about the importance of the virtues using the examples of Jane and James, and focusing on Aquinas' Christian ethics (see below, pp. 5f. and 13f.).

[5] This implies that human beings already have the means to progress morally. Psychotherapy is one of these means. For a comparison between BME and psychotherapy, see N. Paulo & J.C. Bublitz (2019, 95–109). Furthermore, these authors point out that moral improvement should not be thought of only as the result of interventions on the mind and brain. Social and environmental factors should also be considered.

[6] My interest is not to show that transhumanist projects should be rejected. I share S. Goundrey-Smith's view that Christians should neither accept transhumanist technologies uncritically nor respond with "knee-jerk rejection." As this author says, believers should offer a nuanced critique in the light of the experience of the so-called "therapeutic revolution" that occurred in the second half of the last century (2023, 9). Furthermore, my article can be seen as part of the 'axiology of theism', which is a recent trend in philosophical inquiry into the existence of God. Unlike traditional theism, which aims to establish whether God exists, axiology of theism explores what value implications, if any, God's existence has for our lives. For an overview, see K. Kraay (2018).

In this respect, it has been pointed out how unknown this progress is to the vast majority of people, arguing that transhumanist technology ends up recreating a kind of sacredness that is accessible to only a few. With regard to cyberspace, M.Y. Chaudhary speaks of a process of re-enchantment of the world and believes that it is taking us back to the sacred of the pre-modern world.[7] Modern technology has created a kind of "magical discourse" around some aspects of the ways in which we can intervene in reality, a discourse that the vast majority of us can barely comprehend.

We can therefore assume that, when it comes to forms of progress by technological means, we are characterised by ignorance. Technological ignorance can be seen as insufficient knowledge, albeit at different levels, of technological research, its benefits and its side effects. This ignorance, which is incompatible with freedom of choice and moral progress, ends up limiting even the active protagonists of a certain technological progress, from those who make certain discoveries to the experts who program their applications. In fact, the levels of complexity and specialisation in our time are such that it is very unlikely that some people will actually be able to know a given scientific and technological process in its entirety, from its causes to its consequences. Moreover, experts in the field are unable to determine exactly what the potential of transhumanist technology is. C. Deane-Drummond lists some impressive predictions of what technology might enable us to do, such as a "population greater than 1 trillion" and "more or less complete control over sensory inputs for the majority of people most of the time." The most impressive, however, is the last one she lists, "any change comparable to the above[8]," which clearly demonstrates the inability of experts to predict exactly what technology might end up doing. Finally, we should not forget the dominant role played by non-scientific factors in defining the goals of technological progress. There are factors that have nothing to do with scientific research and the desire to overcome the limitations that plague human nature. These are economic factors, since research in fields such as computer technology or nanotechnology is only possible on the basis of considerable financial investment. They are also political and even military factors, since progress in fields such as AI and robotics is often the result of competition—including warfare—between countries and blocs of countries around the world.

When all is said and done, it can be argued that, with the exception of a very few, people are not in a position to know what will happen to them if they decide to take advantage of the benefits that science and technology promise. This raises a serious question. How can ignorance be reconciled with moral progress? One might reply that we should distinguish the *will* to moral improvement from the *means* used.

[7] See M.Y. Chaudhary (2019, 461).

[8] Deane-Drummond (2011, 117f).

Consider two scenarios relating to Jane's greatest desire, which is to become an expert in the field of transhumanism. The first scenario is that, in a futuristic society, she can fulfil her wish by taking a pill or, more likely, by having a microchip implanted in her brain. The second scenario is that she is now required to take courses at university, begin to write papers on the subject, discuss them at conferences, publish them in journals, and continue to discuss them with colleagues. It seems to me that the difference between these two scenarios is not just a matter of *means*. In fact, the difference in means may have important connections with will and purpose. Struggling for years to achieve the desired result will allow Jane to understand and possibly confirm whether achieving this result is so important to her career and life choices. It will allow her to properly develop certain character traits such as patience, fortitude and humility. Patience, because she will have to work for years to achieve the desired results; fortitude, because she will have to face the many difficulties that will inevitably oppose her project during those years; humility, because in relation to others who, like her, are engaged in the same attempt to achieve certain results, she will be able to recognise the need to learn from them and to value their positions. Jane will also strengthen her will, which will be useful in other situations, and will be able to teach others how to become experts in transhumanism.

None of this would be possible if Jane simply took a pill or had a microchip implanted. However, it might be objected that the example in question is not about moral progress.

I then suggest the example of James, who wants to become more generous than he already is. Again, the two scenarios mentioned earlier are given. In the first scenario, James simply has to take the pill or have the microchip implanted. In the second scenario, he has to make an effort to practice what he thinks generosity is in all the circumstances in which James will find himself. In these circumstances, James might learn that there are factors that influence generosity. Firstly, the reactions of others. How does the gratitude or ingratitude of others affect generosity? In the face of these difficulties, does the person who wants to be generous not need to develop another virtue, such as fortitude? Secondly, the social conditions in which one acts generously. Should we be generous to those who ask us for money on the street in the service of criminal gangs? Wouldn't our generosity be in conflict with the virtue of justice, whereby we believe that those who contribute to crime, perhaps unintentionally, should not be helped? Thirdly, how do our moods affect our generosity? Should we be generous to everyone, even those towards whom we feel resentment and disgust? In other words, what is the relationship between generosity and temperance?

In James' case, as in Jane's, ignorance of the means would imply ignorance of the ends. How can James be generous if he does not know what it means to be so in the different circumstances in which he will find himself?

Analogous scenarios have been described by K. Lebacqz while focusing on the contrasting views of the US President's Council of Bioethics and N. Bostrom. Lebacqz reflects on the achievement of *composure under stress* as follows:

> What if that composure is maintained because we took a pill such as Paxil? . . . Surely we want composure to be part of an *authentic* response. Does taking an "enhancement" pill make it less authentic? The President's Council on Bioethics would probably say yes. Bostrom says no; a capacity that is or becomes ours because we *chose* it is at least authentically ours as a capacity that we are simply "born with".[9]

As I have shown in the examples of Jane and James, I too believe that there is no reason to deny that their choice is as authentic as the capacities with which they were born. But the capacity with which one is born is not enough. Jane and James need to *know* how to *develop* that capacity in order to make it a sufficiently solid and satisfying reality.

It is now time to focus on another limit to moral enhancement, which I call "technological passivity." By "technological passivity" I mean the inability of those undergoing more or less futuristic genetic, surgical, pharmacological and cybernetic interventions to influence the way these interventions are carried out and to be certain of their outcome. Note that technological passivity should concern *everyone*. Active protagonists of technological progress are, in fact, technologically passive, while undergoing interventions in disciplinary fields other than their own. Moreover, even if an expert is subject to these interventions in her own field, technological passivity can occur for at least two reasons. First, because of the enormous limitations of technological knowledge resulting from the specialisation and sectorisation of scientific expertise. Secondly, because the person on whom the intervention is carried out may not be able to control it, even if she is the one who has developed the techniques used on her. Incidentally, this allows us to see that technological passivity is not only a consequence of technological ignorance. One may not be technologically ignorant but still be in a state of technological passivity.

Let us consider two consequences of technological passivity.

First, Jane and James have to trust the expert who uses certain techniques on them. It is true that their trust may be well placed. However, because the techniques in question are controlled by others, not by Jane or James, these techniques could be used for purposes other than those Jane or James want.[10]

[9] K. Lebacqz (2011, 53).

[10] In this connection, I would like to draw the reader's attention to P. Crutchfield, who has gone so far as to argue that since we have duties to future generations–first and foremost a duty not to harm them and a duty to protect them–*everyone* should be *covertly and compulsorily* given treatment for moral bioenhancement. Furthermore, appropriate policy should be shaped by

Given the myriad forms of oppression and injustice that have plagued and continue to plague human history, why should people trust the purity of intentions of those who know and control the consequences of certain technological processes? There is no guarantee that we will become morally better rather than morally worse, especially when we consider the economic, political and military interests that strongly influence scientific research and its technological applications.[11] Not surprisingly, there have been increasing attempts by various actors on the international political scene—governments, big tech giants, church representatives, etc.—to find ways to legally restrict and control science and its applications.

One might ask whether we should be equally suspicious of what doctors, dentists and mechanics do to us on a daily basis when we rely on them to cure us of an illness or repair our car. I think the answer is that we should distrust everyone equally. Indeed, we do not go to the doctor if we are afraid that he is going to operate on us for reasons that have nothing to do with our well-being. But in the case of the doctor, we can easily find out, for example from other patients, whether the doctor is trustworthy or not. (Things could be more complex, but for the sake of argument I will not go into that.) In the case of large companies involved in the production of instruments that might even go so far as to change human nature, it is enormously more difficult to know whether they can be trusted or not. It is hard to understand what interests are driving their initiatives and what consequences they might have for our societies and the future of humanity. This is why, as I have already said, the debates and attempts to regulate the use of the most advanced technologies, which could change human nature, are increasing every day.

Second, even if we were to trust the experts and all those who manage the various forms of technological progress economically, politically and militarily, how are we to deal with the unknown character of the post-human that I have already considered above?[12] In the face of ignorance about what we might become, the guarantee that the technology we rely on can make us better becomes even more tenuous. As T. Peters said, "even if evolution and progress will take us there, do we really want to get to this place? Before electing to travel this road,

public health officials (Crutchfield 2021). For a response, see L. Austin-Eames (2023, 16; 21, 1–13). The view that BME should be mandatory may also emerge from studies of specific tasks, such as space missions (see H. Huttunen – O. Sivula 2023, 1–9).

[11] "There is no warrant for thinking that the currently selfish human race will be able to transform itself into an altruistic or benevolent one. There is no warrant for thinking that we human beings with our history of economic injustice and ecologically unhealthy habits are willing or able, on our own, to eliminate poverty and protect the ecosphere." (T. Peters 2011, 82)

[12] As pointed out by R. Blackford, that "predictions about future technologies and how they will be incorporated into social practice are unreliable" is just one of the trite truths of technological progress (see R. Blackford 2011, 183).

one might want to pause to point out that once we get there, it might not be *we ourselves* who have arrived,"[13] and the very concept of "morally better" might simply become meaningless.

One can object that ignorance about the future of the post-human does not concern the present. It should be replied that contemporary technological development is also characterised by uncertainty about *when* events such as the well-known "singularity" and the advent of "strong AI" might occur. In 2005, R. Kurzweil claimed that the arrival of the Singularity could be expected by 2045.[14] In 2014, N. Bostrom claimed that GAI (general artificial intelligence) would be available in 2022 with a 10% probability and in 2090 with a 90% probability.[15]

It is now time to consider what I call "technological easiness." By "technological easiness" I mean the possibility of certain operations becoming increasingly simple, their easiness being directly proportional to the complexity of the technology that makes them possible, and to the impact that these operations can have in the sphere of individual and social life. The easiness of a gesture such as entering an electronic address in an e-mail, perhaps automatically, corresponds to the irreversible sending of material that may be confidential to those who should not receive it. Obviously, it would be much more difficult to get these materials to their intended recipients—who may be on the other side of the world—without technological easiness. But it is precisely this effort—as opposed to technological easiness—that would make the operation enormously less risky. It would most likely be the actual recipients, and only they, who would receive the materials in question. In short, technological easiness can make any operation to which it is applied dangerous. Furthermore, while technological ignorance and passivity open up the possibility that technological operations may turn out to be harmful to us because others, not we, control them, in the case of technological easiness it is unintentional error that can play a decisive role. I could accidentally take the wrong pill. And that, in proportion to the power the pill can exert on the human body, would be more harmful than beneficial.

It could be objected that there are safeguards in place to prevent the mistake that one might make due to technological easiness and subsequent carelessness. If you accidentally send a *Whatsapp* message that you wrote but then decided not to send, there is a way to delete it. Similarly, when preparing for the final stage

[13] T. Peters (2011, 70).

[14] See R. Kurzweil (2005). See also his latest book *The Singularity is Nearer. When We Merge with Computers* (2024), in which Kurzweil confirms 2045 as the year by which "it will be possible to connect our brains with these AIs using invisibly small nanotechnologies. Our minds and theirs will merge, expanding our consciousness more profoundly than we can fully comprehend, unlocking possibilities we can barely imagine. This is the singularity." (34)

[15] See N. Bostrom (2014, 23).

of an essay submission process in the online system of a journal, you have to answer another question – "Are you sure you want to continue?" – aimed at preventing the author of the essay from completing the process and submitting the text without really being convinced. These are just two examples that seem to underline the fact that, on closer inspection, technological easiness is always accompanied by the necessary corrections.

My answer is that in the case of the *Whatsapp* message, we cannot be sure that the recipient will not read the message before we have a chance to delete it. In the case of submitting an article, it is true that a further step in the process can make us more aware of what we are doing. However, I think that even in this case, force of habit can lead to technological easiness. Typically, the more we repeat a certain operation, the more "easy" it becomes and the more carelessly we perform it. Moreover, it must be recognised that avoiding technological easiness by making certain procedures excessively complex and lengthy would run counter to the very purpose of technological invention, which is precisely to simplify these procedures, not to complicate them.

3. Why Christian Ethics Is Preferable to the Transhumanist View of Moral Enhancement

In this section I intend to show that the three limits that make moral enhancement through technology unlikely do not apply to moral progress via theistic ethics. However, before examining each of these limits, two points need to be made.

First, I have already said that by theistic ethics here I mean Christian ethics. But that is still an intolerable generalisation. I will focus on Thomas Aquinas' reflection on the Christian faith. The reason I restrict myself to this author is that Aquinas' view of faith is usually seen as offering an interpretation of faith that is convincing not only to Catholics, whose church proposes Aquinas' view as exemplary. This is confirmed by numerous scholars who, not being scholars of Aquinas, cannot be suspected of any partisanship towards his views. Let me limit myself to quoting J. Hick, according to whom Aquinas' reflection on faith should be seen as "the dominant Western tradition of thought on the subject," susceptible of being "accepted today by many both Catholic and Protestant Christians, as well as by the agnostic and atheist critics of Christianity."[16]

Second, I will be dealing with the Christian faith and not with arguments based on what everyone knows.[17] It may therefore be objected that, even if the

[16] J. Hick (1957 [2009], 12). See also R. Swinburne (2005, 138), G. Dawes (2015, 80) and W. J. Wood (2014, 37).

[17] The expression "what in principle everybody knows" was used by R. McInerny to emphasise the autonomy of philosophy from any influence of faith. See his "How I became a Christian philosopher" (1998, 145f).

theistic ethics I am going to outline turns out to be preferable to the transhumanist ethics, it remains true that the former, unlike the latter, does not offer convincing answers to those who are not Christian. This is an important objection to which I will respond at the end of this article. For now, let me simply alert the reader to the fact that I am aware of the objection in question and confident that it can be overcome.

Let me now begin to consider the counterpart of technological ignorance in the area of Christian ethics. I call it "theological ignorance," by which I mean the inadequate or absent knowledge of Christian ethics, knowledge that should lead believers to moral progress. Is the comparison with technological ignorance appropriate? Having said that technological ignorance affects the vast majority of those who seek to progress morally through technology, can it be said that, by analogy, theological ignorance affects the vast majority of those who seek to progress morally through faith?

It is true that believers often lack a thorough and well-founded knowledge of Christian ethics. But even if they are not all moral theologians, as believers they are familiar with the ethics in question, albeit at different levels of depth. They know what at least some of the basic tenets of the Christian life are. In the New Testament, Jesus exhorts everyone not to judge, for one will be judged with the same severity with which one has judged others.[18] To help his listeners understand that, when faced with the possibility of judging others, one should first look at oneself, Jesus tells them: "You hypocrite, first take the log out of your own eye, and then you will see clearly to take the speck out of your brother's eye."[19] Therefore, it can be said that believers as believers receive important teachings on how to achieve moral progress.

One might object that, according to Aquinas, to be a believer it is enough to know what the articles of the creed are and to believe them.[20] There could be believers who are not at all familiar with teachings such as the one I have just quoted from the Gospel of Matthew. Theological ignorance could therefore be considered as widespread as technological ignorance. In response, it must be said that in the same article Aquinas also speaks of "implicit faith." Because of implicit faith, even if the believer has never heard of certain propositions contained in divine revelation, she is ready to believe them as soon as she hears of them.[21]

Note that, according to Aquinas, the readiness to believe is due to charity, which is the love of God that God himself gives to believers. This allows us to see that Aquinas' Christian ethics is not primarily rule-based—simply knowing what to do in order to progress morally is not enough. Rather, Christian ethics is based

[18] See Mt 7: 1–2.

[19] Mt 7: 3–5 (NRSV).

[20] See Aquinas, *Summa theologiae* (1920 [hereafter: ST]), II–II, q. 2, a. 5.

[21] See ST, II–II, q. 2, a. 5.

on a second-person relationship with God. God not only allows potential believers to become familiar with certain revealed truths. He also grants them charity, which is love for him, and allows them to trust him and be ready to believe whatever he has revealed.

I will be expanding on charity and the relationship with God later in this section. For now, let me consider again the distinction between knowledge of the *end* and knowledge of the *means* of moral progress. I said that those who seek moral enhancement through technology are expected to have knowledge of the end, i.e. to become more patient, more humble, more unselfish, more generous, etc. But they are not expected to have comparable knowledge of the means. And it is in relation to the means that their (technological) ignorance comes to the fore. They do not know how exactly taking a pill or implanting neurotransmitters will make them morally better. When it comes to Christian believers, it can be said that they too are expected to know what the end of their moral progress should be. They are aware that their end is to be eternal union with Christ through a change of behaviour, which is mainly granted by grace. As for the means, their condition is at least partly similar to that of those who undergo moral enhancement techniques. Few believers can claim to be experts in moral theology. However, as I have shown above, unlike the technologically ignorant, believers must have heard and believed at least some basic propositions of Christian doctrine; moreover, because of implicit faith and the abovementioned second-person relationship with God, they are ready to increasingly hear and believe revealed propositions.

To reinforce the difference between those who suffer from technological ignorance and believers, let me now dwell, albeit briefly, on some crucial statements by Aquinas about the nature of faith and how believers enter into a relationship with God.

According to Aquinas, faith is "an act of the intellect assenting to the Divine Truth at the command of the will moved by the grace of God."[22] This definition implies three dimensions, and not just the intellectual. Faith is not only an act of the intellect (this is its *intellectual* dimension). Indeed, the intellect is moved by the human will to assent to divine revelation, understood as good in itself (this can be understood as the *moral* dimension of faith), which in turn is moved by divine grace, which enables the believer to love and trust in God (this can be understood as the *religious* dimension of faith). Thus charity, which is the love of God that God himself bestows on believers, moves the will, which in turn moves the intellect to assent. As I said above, for Aquinas charity "makes the will ready to believe."[23] Put another way, God causes believers to love him, trust him, and

[22] ST, II–II, q. 2, a. 9. For more on Aquinas's view on faith and how it can be related to charity and reason, see R. Di Ceglie 2022.

[23] ST, II–II, q. 2, a. 10, ad 2.

believe whatever he has revealed. Moreover, since Aquinas, in line with a long tradition,[24] argues that there are different levels of intensity at which believers can experience faith,[25] one could say that the more one loves and trusts God, the more one will be willing to believe his revelation. It is charity, then, that makes faith firm, and those who have charity believe in a paradigmatic way.

Faith, then, is an intellectual act of assent that is ultimately caused by the love of God—charity—that God Himself bestows on human creatures. Faith and charity are directly proportional. Those who are firm in faith are also firm in love of God, where God is understood as the greatest good. The more believers believe, the more they are expected to love the greatest good. But what does this have to do with theological ignorance? Can the relationship between faith and charity reinforce the difference between those who suffer from technological ignorance and believers?

Before answering this question, two clarifications are necessary. First, I have so far insisted on the crucial role of charity in the experience of faith. But Aquinas also refers to the possibility of believers having an "unformed' faith, that is, lacking charity.[26] The answer to this remark is that one lacks charity because of mortal sin, which is "contrary to charity."[27] Believers typically lose charity because of mortal sin, and yet they do not lose the possibility of being granted charity again. Therefore, unformed faith can be seen as potentially formed.[28]

Second, it should be clarified why the intellect needs the will, and ultimately charity, to give assent to divine revelation. The answer is that faith, unlike knowledge, does not have *full* evidence of its object. Its object, i.e. what believers are to believe, is not *conclusively* evident, which is why it cannot cause the intellect to give firm assent, either by intuition or by demonstration. Consequently, "faith implies assent of the intellect to that which is believed,"[29] but the intellect can only assent "through an act of choice."[30]

I can now answer the question posed above: can the fact that faith is related to charity increase the difference between the technologically ignorant and the faithful? My answer is in the affirmative. Charity not only perfects faith. It shapes the acts of *all the other virtues*. As Aquinas says, "charity is called the form of the other virtues,"[31] and "it directs all other virtues to its own end."[32] Just as charity

[24] It can be traced back to the Scriptures. See Mc 10:43; Fil 2:3.

[25] See ST, II–II, q. 5, a. 4.

[26] See ST, II–II, q. 4, a. 4.

[27] As Aquinas says, "every mortal sin consists in aversion from God," which is why "every mortal sin is contrary to charity" (ST, II–II, q. 24, a. 12, ad 5).

[28] Faith is "formed" when it is perfected by charity (see ST, II–II, q. 4, a. 3).

[29] ST, II–II, q. 1, a. 4.

[30] Ibid.

[31] ST, II–II, q. 23, a. 8, ad 1.

[32] ST, II–II, q. 23, a. 8, ad 3.

shapes faith and brings it to perfection, so it shapes other virtues such as patience, courage, justice, and many others. That is why, while defining the virtues, Aquinas says that they are good qualities of the mind "which God works in us, without us."[33] Those who perfect faith through charity, that is, through grace, also perfect the moral virtues and thus progress morally. To the extent that the second person relationship with God is characterised by charity, all the virtues can be improved and moral progress becomes possible.

Three further points need to be clarified.

First, if believers also improve morally by means of the abovementioned second-person relationship with God that God Himself gives them, then they do not progress simply because they know the means. (I do not mention the end because I am now concentrating only on the means.) John loves God and is quite strong in his faith. He believes certain things and knows how to behave in order to improve morally. And yet part of his moral progress is due to the fact that, by grace, he finds himself able to act selflessly, to be patient with the weakness of others, to courageously defend those in need, and so on. John does not know how he arrived at this. Thus this may imply that there is theological ignorance on his part, and this would make his experience similar to that of those who suffer from technological ignorance. But it remains true that, in contrast to them, John also has some knowledge of the means of moral progress, however limited this knowledge may be.

Secondly, it could be argued that John's partial knowledge of the mechanisms by which he became able to love his neighbour leads to passivity.

Discussing this view allows me to address the issue of "theological passivity." By "theological passivity" I mean the supposed passivity of the believer who is moved by God to moral progress. John may be an example of such a passivity, to the extent in that his will seems to be moved by God's grace. In reality, according to Aquinas, divine grace in no way implies passivity on the part of human creatures. Although "man can do nothing unless moved by God"[34] and "free-will can only be turned to God, when God turns it,"[35] it must also be said that "man's turning to God is *by free-will*."[36] Aquinas goes so far as to offer his definition of faith, which he insists is primarily due to divine grace, precisely when he claims that faith is meritorious. He first points out when an act is meritorious, saying that "our actions are meritorious in so far as they proceed

[33] See ST, I–II, q. 55, a. 4. Obviously, the reference to God's intervention has nothing to do with the Aristotelian view of the virtues. As A. Pinsent points out, this reference emphasizes the fact that Aquinas is speaking of 'infused virtues' and not of infused *and* acquired virtues. (see Pinsent 2012, 13).

[34] ST, I–II, q. 109, a. 6, ad 2.

[35] ST, I–II, q. 109, a. 6, ad 1.

[36] Ibid. (my emphasis).

from the free-will moved with grace by God." Then he shows that faith is exemplarily meritorious, since "it is subject to the free-will in relation to God; and consequently the act of faith can be meritorious."[37] In sum, Aquinas maintains that when a person believes in God with her free will, this is also done with the grace of God. Those who disagree with him can object that what human beings do by their own free will cannot at the same time be seen as the result of divine grace.[38] Aquinas replies that "it is the part of man to prepare his soul, since he does this by his free-will. And yet he does not do this without the help of God moving him, and drawing him to Himself."[39]

Two attempts to better explain Aquinas' view have been made by as many outstanding scholars of him. According to F. Bauerschmidt, "God can move the will without compromising human freedom."[40] Bauerschmidt refers to Aquinas' treatment of grace, in which grace is seen as both "operating," attributable to God, and "cooperating," attributable to the human being. For Aquinas, "God does not justify us without ourselves, because whilst we are being justified we consent to God's justification by a movement of our free will. Nevertheless, this movement is not the cause of grace, but the effect."[41] In this connection, Fergus Kerr argues that

> when Thomas speaks of 'co-operation' between creatures and God, he almost always rules out the picture of two rival agents on a level playing field. … there is nothing to stop us from thinking that the same effect is produced by a lower agent and by God – by both, unmediately, of course in different ways.[42]

Third, when I discussed technological passivity, I showed that one of the reasons why it constitutes a limit to moral enhancement is that, because of the experience of evil and injustice that characterises our history, we have no reason to trust those who, unlike us, control the technological operations to which we are subject. The same cannot be said of those who wish to progress morally also through divine grace. If they believe in God, they trust Him, whom they consider to be perfectly loving. Therefore, they have no reason not to trust God.

Having shown that the believer is not affected by theological passivity, let us move on to consider "theological easiness," which is the counterpart of

[37] ST, II–II, q. 2, a. 9.

[38] ST, I–II, q. 109, a. 6, arg. 4.

[39] ST, I–II, q. 109, a. 6, ad 4. See also what Aquinas says about the infused virtues: "Infused virtue is caused in us by God without any action on our part, but not without our consent…As to those things which are done by us, God causes them in us, yet not without action on our part, for he works in every will and in every nature" (ST, I–II, q. 55, a. 4, ad 6).

[40] F. Bauerschmidt (2013, 147).

[41] ST, I–II, q. 111, a. 2, ad 2.

[42] F. Kerr (2002, 143).

technological easiness in the theological realm. I have said that technological easiness consists in the possibility of performing, with simple gestures, operations that presuppose very complicated techniques and produce extremely sophisticated effects. I also said that technological easiness is a limit to moral enhancement because, among its various consequences, the possibility of making mistakes increases exponentially.[43] But is there really such a thing as *theological* easiness? I answer in the negative. The believer progresses morally through numerous efforts to develop virtues and strengthen character in the face of the harshness of experience. The intervention of divine grace in nothing limits the commitment and effort of those who wish to progress morally. It should therefore be said that there is no theological easiness. However, it could be noted that religious experience can be characterised by theological easiness to the extent that it takes on the characteristics of magic. (Given technological easiness, it is not surprising that magic can be applied to technology, as I said in the previous section.) And yet magic certainly does not concern the Christian theistic perspective as presented by Aquinas. Therefore, no theological easiness concerns this perspective.

It could still be argued that even if Christian ethics is immune to theological easiness, there is a consequence of such easiness, namely uncertainty about the possibilities of moral progress. Moral progress—the objection might go on—depends on the believer's capacities, which may be very limited. It also depends on others, i.e. on God. Consequently, the believer may fear that she will not be able to progress. My answer is that those who have the faith described by Aquinas do not suffer from the uncertainty under consideration here. The answer can be given in three steps. In the first place, those who, by their own free will, make efforts to develop virtues and strengthen their character are already making moral progress. Second, the fact that the believer also depends on God for her moral progress should encourage her rather than discourage her. For she trusts in God, understood as the perfectly good and wholly loving Creator. Third, the believer should also be encouraged about her own limited capacities. If she trusts in the perfectly good God, she can also plausibly expect that God will intervene to make up for her shortcomings. As Aquinas says, "virtue is praised because of the will, not because of the ability."[44] Those who have at least the *will* to progress morally can be put in a position to pursue that progress, even if their capacities are very limited.

Let me now consider a substantial objection that I anticipated at the beginning of this section. This objection can be raised against my thesis that since Christians,

[43] At first glance, it would seem that easiness prevents errors. However, it also happens that easiness is proportional to the carelessness with which certain operations are carried out, and carelessness often causes errors.

[44] ST, II–II, q. 81, a. 6, ad 1.

unlike transhumanists who pursue moral enhancement, are not afflicted by ignorance, passivity and easiness, it can be concluded that Christian ethics is more beneficial to us and therefore preferable to the transhumanist project of moral enhancement. The objector might point out that the transhumanist project is based on what everyone knows, whereas Christian ethics is also based on truths that only believers hold. Consequently, only believers can accept that the latter is preferable to the transhumanist project.

My answer is that, while it is true that the reasons for Christian ethics turn out to be acceptable only to believers, it is also true that much of the moral progress that follows from them can be seen and appreciated by everyone, and therefore not only by believers.

To illustrate all this, let me refer to a well-known dialogue between Mother Teresa and a television commentator. Speaking of Mother Teresa's work in the midst of sickness and suffering in Calcutta, the journalist said to her, "I wouldn't do that for all the money in the world". She replied, "Neither would I." Mother Teresa's interviewer appreciated her work in helping others. It is true that, unlike her, the journalist may not have understood the *reasons* why Mother Teresa devoted her life to helping those in need. In fact, these reasons had to do with her faith. However, based on what everyone knows, the journalist clearly saw and appreciated the *value* of what Mother Teresa was able to do. It is true that the journalist may have believed that others could carry out work like Mother Teresa's for reasons other than the Christian faith. But what I wanted to show is not whether Mother Teresa's work is possible only because of the Christian faith, but whether it—the work in question—is appreciated by everyone, even if not everyone accepts and appreciates Mother Teresa's faith-based reasons.

4. Conclusion

In this essay, I have first shown that there are three limits that affect moral enhancement through technology, limits which I call "technological ignorance," "technological passivity," and "technological easiness." Because of technological ignorance, virtually all those who attempt moral enhancement through technological means do not know the means by which the enhancement is to take place. Because of technological passivity, they have no control over what others will do to them. Consequently, they must trust those who are in control, which can be risky. Because of technological easiness, there is a high degree of uncertainty about the real outcomes of technological endeavours. As a result, moral enhancement via technology is unlikely. I have then shown that the above limits, once transferred to the realm of theism, do not affect Christian ethics. I have also rejected the objection that, since my argument implies acceptance of Christian revelation by faith, it can only be accepted by believers, whereas the

transhumanist project of moral enhancement can be understood by all. While it is true that the *reasons* for moral progress through faith can only be seen by believers, its *effects*—which consist in the moral progress under consideration here—can be seen and appreciated by all, not just believers.

Bibliography

Aquinas. 1920. *Summa theologiae*. Translated by Fathers of the English Dominican Province. London: Oates and Washbourne.

Austin-Eames, L. 2023. « Should Moral Bioenhancement Be Covert? A Response to Crutchfield ». *Neuroethics* 16 (21): 1–13. https://doi.org/10.1007/s12152-023-09529-y.

Bauerschmidt, F. 2013. *Thomas Aquinas: Faith, Reason, and Following Christ*. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199213146.001.0001.

Benders, A. 2018. « Genetic Moral Enhancement? Yes. Holiness? No ». *Theology and Science* 16: 308–318. https://doi.org/10.1080/14746700.2018.1488521.

Blackford, R. 2011. « Trite Truths about Technology: A Reply to Ted Peters ». In *Transhumanism and its Critics*, edited by G.R. Hansell and W. Grassie, 175–191. Philadelphia: Metanexus Institute.

Bostrom, N. 2014. *Superintelligence: Paths, Dangers, Strategies*. New York: Oxford University Press.

Chaudhary, M.Y. 2019. « Augmented Reality, Artificial Intelligence, and the Re-Enchantment of the World ». *Zygon* 54: 461–476. https://doi.org/10.1111/zygo.12521.

Coyne, L., et M. Hauskeller. 2018. *Moral Enhancement: Critical Perspectives*. Cambridge: Cambridge University Press.

Crutchfield, P. 2021. *Moral Enhancement and the Public Good*. New York: Routledge. https://doi.org/10.4324/9781003181798.

Dawes, G. 2015. « The Act of Faith: Aquinas and the Moderns ». In *Oxford Studies in Philosophy of Religion*, vol. 6, edited by J. Kvanvig, 78–99. New York: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780198722335.003.0003.

Deane-Drummond, C. 2011. « Taking Leave of the Animal? The Theological and Ethical Implications of Transhuman Projects ». In *Transhumanism and Transcendence: Christian Hope in an Age of Technological Enhancement*, edited by R. Cole-Turner, 39–52. Washington DC: Georgetown University Press.

Di Ceglie, R. 2022. *Aquinas on Faith, Reason, and Charity*. New York: Routledge. https://doi.org/10.4324/9781003259015.

Goundrey-Smith, S. 2023. *Transhumanism, Ethics, and the Therapeutic Revolution: Agents of Change*. New York: Routledge. https://doi.org/10.4324/9781003290421.

Harris, J. 2016. *How to be Good: The Possibility of Moral Enhancement*. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780198707592.001.0001.

Hick, J. 2009. *Faith and Knowledge: A Modern Introduction to the Problem of Religious Knowledge*. Eugene: Wipf & Stock.

Huttunen, H., et O. Sivula. 2023. « Moral Adherence Enhancement and the Case of Long-Distance Space Missions ». *Technology in Society* 74: 1–9. https://doi.org/10.1016/j.techsoc.2023.102278.

Jotterand, F. 2022. *The Unfit Brain and the Limits of Moral Bioenhancement*. Singapore: Springer. https://doi.org/10.1007/978-981-16-9693-0.

Kerr, F. 2002. *After Aquinas: Versions of Thomism*. Oxford: Blackwell Publishing. https://doi.org/10.1002/9780470775738.

Kraay, K. 2018. *Does God Matter? Essays on the Axiological Consequences of Theism*. London: Routledge. https://doi.org/10.4324/9781315210995.

Kurzweil, R. 2005. *The Singularity is Near: When Humans Transcend Biology*. New York: Viking Press.

Kurzweil, R. 2024. *The Singularity is Nearer: When We Merge with AI*. New York: Random House Large Print.

Lebacqz, K. 2011. « Dignity and Enhancement in the Holy City ». In *Transhumanism and Transcendence: Christian Hope in an Age of Technological Enhancement*, edited by R. Cole-Turner, 53–65. Washington DC: Georgetown University Press.

Paulo, N., et J.C. Bublitz. 2019. « How (Not) to Argue for Moral Enhancement: Reflections on a Decade of Debate ». *Topoi* 38: 95–109. https://doi.org/10.1007/s11245-017-9492-6.

Persson, I., et J. Savulescu. 2012. *Unfit for the Future: The Need for Moral Enhancement*. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199653645.001.0001.

Peters, T. 2011. « Progress and Provolution: Will Transhumanism Leave Sin Behind? ». In *Transhumanism and Transcendence: Christian Hope in an Age of Technological Enhancement*, edited by R. Cole-Turner, 82–98. Washington DC: Georgetown University Press.

Pinsent, A. 2012. *The Second-Person Perspective in Aquinas's Ethics: Virtues and Gifts*. New York: Routledge. https://doi.org/10.4324/9780203133453.

Rath, B.A. 2023. « Are There Any True Moral Enhancements? Aristotelian and Thomistic Perspectives ». *Philosophy, Theology and Sciences* 10: 221–237. https://doi.org/10.1628/ptsc-2023-0022.

Swinburne, R. 2005. *Faith and Reason*. Oxford: Oxford University Press. *(Note : La mention ", 138)" après l'année a été supprimée.)*

Wood, W. J. 2014. « Faith's Intellectual Rewards ». In *Religious Faith and Intellectual Virtue*, edited by L. F. Callahan et T. O'Connor, 37–53. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199672158.003.0002.