

Topic number 1

“We thought we might start a chain reaction that would destroy the entire world.

I believe we did.”

Robert. J. Oppenheimer’s final words dramatized in Christopher Nolan’s 2023 film *Oppenheimer*, encompass the feelings of power and realization in the aftermath of the 1945 Trinity Test- humanity’s first atomic detonation. While the first part of the journey of the father of the atomic bomb is characterized by the blind striving to surpass any previous limits to man’s scientific knowledge, the realization of the power that his team of scientists had unleashed forces Oppenheimer to reflect. The power he had created was no longer his, but the feeling of responsibility for the consequences still rested heavily on his shoulders. It is here that we can find a pressing question that must be affronted in modern ethics.

In order to develop this essay, it is necessary first of all to define a dichotomy, drawing a clear distinction between moral or ethical and instrumental use of reason. The former refers to one’s ability to self-legislate; one is free insofar he is able to act, not pushed by instinct or external forces but by the moral legislations of his own reason. The latter concerns the use of human reason detached from the ethicality of the ends it aims to meet. Instrumental reason pushes humanity forward. Ethical reason assures that these actions are compatible with the permanence of genuine human life.

It is here that we find the very paradox of reason I aim to discuss in this essay, the fragmentation of reason that leads to the above-described effect. Taking a starting point from Aristotle’s theories from the *Nicomachean Ethics*, or rather the concept that “The origin of action- its efficient, not its final cause- is choice”, I stand in defense of the Aristotelian thesis that choice cannot exist without reason, but I will also expand to consider the limitations of this thesis. I will progress this necessary division that must be made when considering reason within the ambit of ethics, underlying how, while reason is a necessary condition for freedom, but pure instrumental reason risks limiting or destroying this very freedom is had sought to obtain. Therefore, I will argue that the morally correct path forward is the employment of ethical reason to limit the actions of mere instrumental reason, and that both must develop together in order to stop the fragmentation of reason that is embodied within the figure of Oppenheimer. In order to maintain freedom, humanity has the necessity of limits.

Throughout this essay I will draw inspiration from the life of Oppenheimer, not in order to analyze the validity or invalidity of his political actions, but to ethically examine the role of reason within them, articulating four main sections:

- I. The necessity of reason for freedom,
- II. The universalization of this concept of freedom,
- III. The limits our reason must impose to assure freedom,
- IV. Conclusions.

I.

Let us first lay the foundations that are necessary both in order to understand the central concept of choice within this quotation and the reading of freedom that I will give when talking about this paradox of reason. It has long been established that reason is the very faculty that distinguishes humanity from brute animal force. Contrary to the common misconception therefore, freedom of choice is not simply 'doing whatever one wishes', but the realisation of this rational principle within each subject. One can be defined as free when he has the capacity to act in accordance with his reason, developing virtue, finding as Aristotle explains, the Golden Means. When one is able to cultivate the virtue of courage between the excess of recklessness and the defect of cowardice. We should also establish that this is not a static position, but rather a habitual practice that is cultivated through experience itself, that allows man to gradually move towards the state of *eudaimonia*, a state of flourishing. Therefore, for Aristotle reason is a necessary condition of freedom.

A further distinction can be made within Aristotle as for the products of the use of reason, technical wisdom and practical wisdom. If the former is the wisdom that is generally appreciated within society (the wisdom that leads to the proficient completion of a task), it is the latter that becomes relevant from a philosophical point of view. Also defined as *phronesis*, practical wisdom regards the ability of discernment, to understand when an action should or should not be completed. Freedom comes from the capacity to understand which choice is in accordance with the principles of reason.

This division is further embodied by the example of Oppenheimer. While his technical ability cannot be doubted, the splitting of the atom led to irreversible consequences. It could certainly be argued that his technical wisdom pushed humanity into a new world of scientific knowledge, therefore exercising a form of freedom. The freedom to research and develop. We have, however, defined through Aristotle that freedom of choice is not merely the state of infinite options, but the capacity to choose in accordance to reason.

Thus the question should move from 'Can it be done?' in the sense of technical wisdom, to the question of practical wisdom 'Should it be done?'. The definition of choice as "desire and reasoning with a view to an end" forces us to consider through the use of moral reason, as I have already anticipated, the ethicality of this end, highlighting the paradox of the destructive power of reason when it is used merely instrumentally. Reason is the condition of freedom of choice but reason must also be employed in the examination of this end. It is exactly in this perspective that the Kantian deontology presented in the *Critique of Practical Reason* becomes necessary.

II.

As for Aristotle, freedom for Kant is not the presence of limitless opportunities, but the capacity of a rational will to morally regulate for itself. This forces us to expand upon the singular acting in accordance to reason of Aristotle to consider a wider universal moral law, that is the same for all mankind. It is here that Kant also highlights the central role of reason as the common structure of the mind that unites all phenomenal subjects, allowing for the creation of a universal moral law. Reason indicates to man in each moment the criteria to identify morality, as expressed by the first formulation of the categorical imperative, "Act only according to that maxim whereby you can at the same time will that it should become a universal law". An agent is free therefore, when it acts from

the moral law it has imposed itself and not from the heteronomous law imposed by an external factor. The legislation that one follows must come from pure reason alone, therefore giving weight not to the outcomes of the action, but to the accordance or not with the universal principle.

In an interview successive to the Trinity Test, Oppenheimer famously recalls having thought of lines from the Hindu scripture, the Bhagavad Gita. "Now I am become death, destroyer of worlds". The line contains the feeling of responsibility that would plague Oppenheimer for the rest of his life, demonstrating the moment of the fracture of reason. In moments before the test, we saw the prevailing of instrumental reason finalised towards technical advancement, while in successive moments the emergence of ethical reason, too late however to pre-empt the consequences. The key problem is not reason itself, but the fragmentation of it. Technological advancement progressed faster than ethical reason, striving for the ends without considering their moral legitimacy.

In fact, subjecting his actions to Kant's categorical imperative, we can find the explanation for this sense of responsibility, in that his actions do not align with the laws imposed by reason. If the case of Oppenheimer can be condensed into the following maxim 'I will employ the use of atomic weapons to accelerate the war', no rational agent would be morally able to follow it, without putting humanity's freedom at risk. Furthermore, the same conclusion can be reached considering the second formulation for which man should never treat humanity as a mere means to an end but always at the same time as an end. The reduction of tens of thousands of lives to geopolitical instruments is not compatible with the universal maxim that asks us to treat human life with dignity.

Thus, we can summarise that the role of reason goes further than the permitting of freedom through the capacity of discernment, as it is also necessary for the universalization of moral legislations. Within the ambit of ethics therefore, there is a need for reason to impose limits upon itself, in order to obey the contents of the universal maxims and guarantee the conditions of freedom that man seeks.

III.

Sapere aude- dare to know. The motto employed by the illuminist movement of the 18th century encompasses perhaps the opposite of what I have thus far proposed within the essay, so it is now necessary to consider the possible counterargument. The movement based itself on the liberation of man from all previous limits, from the dogma and tradition that had previously defined the life of mankind. Following the light of reason, man is able to surpass the limits imposed upon him and reach true freedom finding the truth. In fact, it could be sustained that the very notion of limiting asks us to go against the intrinsic human nature, the constant desire to know, critique and improve. Man is often defined as the limited creature that has no limits, as at the very moment we become aware of our limits we are able to find a way to surpass them. To use the allegory of Latin poet Lucretius, the limits of the human intellect are like the limits of the universe. If we assume the universe is infinite, the arrow naturally flies on, but even in the case where we assume it is finite and the arrow is blocked, we must still concede that there is something behind the limits that impedes the arrows path. Therefore in both cases, limits, like those of human knowledge, are constantly surpassed.

Considering this counter argument, an ulterior distinction becomes necessary. The question is not whether or not human advancement should occur, but *how* it should occur. The necessity for limits does not stand in a theoretical sense, but in a practical sense that returns once more to the concept of *phronesis* – the practical wisdom of discernment. The faster mankind is able to surpass material

limits, the more pressing the need for limits imposed by ethical reason that force us to ask *should* something be realized.

In section II, I drew upon the works of Immanuel Kant, but a key difference must be considered when we aim to apply his theory of universal morality to our world today. Traditional ethics evolved in a time where actions were judged on proximity and the direct possession of rights, but the technological advancements of the past century force us to enlarge these two concepts. This is exactly the problem affronted by Hans Jonas in his *The Imperative of Responsibility*, or rather the finding of a delicate balance between progress and conservation of human life. Jonas sustains we must go further than simply considering the effects of our choice *hic et nunc* (here and now), recognising the rights of the future generations that come after us. Events like the creation of the first atomic bomb force us to employ ethical reason in thinking about future consequences, updating Kant's categorical imperative to a formulation such as 'act so that the effects of your actions are compatible with the permanence of genuine human life'. Self-imposed limits that force us to act according to a universal maxim considering the effects of our actions on human life allow man to live in the state of freedom that derives from reason.

IV.

The case of Oppenheimer that I have examined throughout this essay is the embodiment of the paradox of reason. While Aristotle considers reason simply as the condition to freedom, I have demonstrated that a netter distinction must be made between how we employ the use of our reason. Reason is, at the same time, both the necessary condition for our freedom of choice and, when reduced to pure instrumentality, the power that puts our freedom at risk. Technological advancements of the 21st century force us to acknowledge as a necessity self-imposed limits through reason.

When reason was used purely instrumentality detached from ethics, a chain reaction was set off. Limits *are* necessary to stop the creation of a new chain reaction that could destroy the entire world.