

The Question of Technology in Hegel's Philosophy
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First thesis (Excerpt one): Hegel understands the Homeric world as a world in which *Techné*, as the objectification of the technicality of practices, belongs to the character of heroes, to the individuality of the individuals¹. In *Aesthetics*, we thus find a profound analysis of epic art and artistic representation of the archaic period in ancient Greece, which he calls the “heroic age” or “Homeric period”, in which *Techné* is a total knowledge of a total individual. In the Heroic age, *Techné* is a joyful conjunction of *Épistémé* and *Poiesis*.

The action is obeying purposes, but it is also giving purpose to oneself. In both cases, acting is using tools and in Hegelian philosophy, in strong contrast with the Heideggerian one, we will see that the tools Mankind gives to itself, became in some way more important than the purposes they follow. Practice and the technicality of action, can be understood as the insertion of the subjective into the objective, as the effective expression of subjectivity, as the embodiment of its identity, its imaginary activity and the natural individuality it really is. It can also be theorised as an adaptation to the resistance of the phenomenal world. This is the reason why all acting-in the world supposes an immanent technicality. The technicality can be objectified either from an aesthetic point of view as in art, which confers an expressive value to the technicality of the action, or from an instrumental point of view, as in the technical knowledge. This last one rationalizes it by decomposing and recomposing the technicality of the action.

The technicality of the action is linked to the realization of the "possible", to the real becoming of a possible end and to the fact that this becoming necessarily meets resistance, that of the Real of "being". The world's resistance to the operation of subjectivity calls on it - without immediately forcing it to think critically about the goals it sets for itself, the operations it carries out, the determinations it assumes to belong to the object as it appears on the horizon of the action and finally the instruments it uses. It encourages it, in the aftermath of the experience, to reflect on the aims of its action, i.e., to reflect ethically on the results of the action and to reflect theoretically, i.e., to reflect on the object taken in itself, regardless of the always contingent and particular intentions that guide its practical appropriation. We can say that the practical experience also contains a priori these dimensions. Indeed, the action by which

¹ *Techné* comes from the ancient verb *teuchô*, which means to manufacture, to produce or to build. From this verb also comes *teuchôs*, which refers to the instrument or tool and, in Homer's case, the privileged instrument of weapons. Very old, the word *Teuchô* first meant material production. However, in Homer already, there is a transition from this meaning to that of causing. Still synonymous with Homer, *teuchô* and *poieô* gradually separate at the same time as the term *techné* is used (for example in Herodotus) to designate the dimension of “know-how” in general. It is only in the classical period that the term takes on the more restricted meaning of art or craft. Thus, the etymological analysis confirms this first Hegelian and Heideggerian thesis: in the West, it is in the pre-Socratic period that the objectification of “know-how” as an immanent and universal dimension of the work of men and gods is first carried out. However, the etymology is insufficient to shed light on the particular and original way in which this objectification was carried out in the so-called “archaic period” of Greek history. For the etymology of the word *Techné*, see Cornelius Castoriadis, Entry *Techné*, in *Encyclopaedia Universalis* (2002)

subjectivity passes into the very objectivity of the world objectively manifests a “know-how”. This knowledge is a self-knowledge that is immediately at the same time knowledge of the world. If action is a synthesis of the ethical and cognitive dimensions of the experience, it now produces and reproduces this synthesis over time, practice or "action", which is always both singular and significant "action", is the objective expression of the totality of human subjectivity. It is the human Reason in act, real in this act by which it coincides in itself, and sometimes for itself, with the action on itself of the world despite the distance to itself that it establishes reflectively through the theoretical, ethical, aesthetic and technical dimensions of its experience.

Without a doubt, we will find a neighboring position in Heidegger; but it will be so without the insistence on the individuality of the knowledge. Like Hegel, Heidegger will insist on the fact that in the pre-Socratic world *Techné* belongs to the making into being, to the *poiesis* of the artisan, the artist or the god and makes him the rival of the power ordering the totality of the appearance of the being, the *Dike*. But he does not perceive the core factor of the social conditions of the emergence of the Homeric society. Hegel sustains, that epic art and artistic representation of the archaic period of ancient Greece, which he calls the “heroic age” or “Homeric period”, are precisely produced in the moment of the loosing of the precious way of living of the archaic times. As he himself points out, this representation is the one of an intermediate area, in which men are no longer content to simply reap the fruits of nature, but where they are not yet subject to the market economy and the technical division of labor. The hero's “know-how” is a total knowledge. It therefore refers to a willingness to exercise his power even in the manufacture of the objects he uses. In this context, the “know-how” is no longer only an inherited one, it is rather transmitted from generation to generation and linked to something like a caste affiliation, it is an inventive “know-how” linked to the individual's own character, his “Genie”, and the totality of his experience. It expresses the joy that comes from discoveries, the freshness of possession and the enjoyment that comes from it. If we follow Hegel here, we must admit that prior to any unilateral rationalization linked to the division of labor, there has been a first gesture of thought, which opposes the spontaneous making of *physis* to the making of the hero or the god. The dissociation between the “know-how” immanent to the productive act and the technicality of the act itself will remain problematic for all the future Greek philosophy.

After the darkness of post-Mycenaean Greece (from the 12th to the 9th centuries BC), Homer's century gave the impetus to Greek civilization itself. However, this birth must also be understood as a re-birth, in the memory of what they have been, in the memory of their oriental past to which they have remained powerfully bound by art, and poetry in particular, that the Greeks will give them an awareness, in itself unprecedented, to their community of culture, of their Hellenic being. But this movement by which they develop a cultural identity coincides with the establishment of the structural elements of the classical age of Greek history. It is this historical fold that has allowed the objectification of *Techne* under the particular figure given to it by pre-Socratic thought. On one hand, *Techne* appears as an essential dimension of unnatural action, this recognition expressing the political, technical, artistic and religious transformations that Homer's time sees taking place; on the other hand, it is conceived as a total and totalizing dimension of human experience, in accordance with the heroic experience to which it still refers. The ancient palatial civilization gone, the royalty defeated almost everywhere in the 8th century, the Oligarchic City is based on the urban grouping of the small

kings of the genius who now share the same power. They soon tend to form an urban aristocracy. They cease to be knights and simply become masters greedy for wealth, abandoning the activity linked to war in favor of a strictly urban life. We also see the emergence of a new category of artisans who now work in the city and are no longer attached to a palace or land. These Craftsmen, either free men or slaves, are in the position to introduce or invent new techniques (iron for example) and thus, to cut themselves off from the common culture by transmitting these new techniques according to a new division of labor. This implies not only the social division of labor but also, within the artisanal work itself, the technical complementarity of the productions, each producing only one product and having to rely on the other craftsmen to provide it with the necessary tools for its work. This general movement accelerated in the seventh and sixth centuries with the commercial revolution of antiquity, the introduction of money and so on. But this mutation is lived in the remainder of the heroic age to which Homer, and after him Herodotus, Pindar, tragedies and philosophers have all contributed in their own way. Thus, in pre-Socratic thought, the know-how as such appears undoubtedly in the know-how of the craftsman or artist; but first and foremost under the figure of the hero's know-how. However, the hero's know-how possesses precisely a dignity, a power, a magnitude unknown to the craftsman's or slave's know-how. For Homer the *teuchô*, to do it himself is no longer a primitive act founded by mythical participation in nature (*ergasthatai*), nor a constraint (*ponos*), nor already the *poiesis* of the classical age.

The hero's act is the act of a warrior (a future master) who has not yet abandoned himself to idleness by bending the slave into the service of his desires. It is the total act, of a total god-man, who manufactures his weapons or his plough, his helmet and his shield. It is the doing, half-divine, half-human, of the one who deceives with matter as with the enemy and who enjoys finding the expression of his power in his works. The hero's act is a totalizing dimension of his experience and escapes the limits set by the division of tasks. It is first of all by doing so, that *Techne* is the know-how and the pre-Socratic concept of *Techne* will keep the echo of this origin. First empowered in the epic narrative, as the human and divine disposition of the hero, the "know-how" is immanent to the making and producing and must be considered as a total and totalizing disposition of the experience. But soon referred only to the condition of mortals, technic ceases to constitute total knowledge, even if it remains a totalizing dimension, even if, in it, for pre-Socratic thought, the synthesis of mortal experience continues to take place. However, it can also be added that in Sophocles *Techne* and the knowledge in general, as mortal knowledge, appear essentially limited. It is in this context that the desire for knowledge now conceals the tragic essence of the condition of mortals: since knowledge cannot be a completed knowledge of doing or acting, it never exhausts the consequences of acts and the will to know pushed beyond the natural limits of what is accessible to mortals leads to blind wandering.

The second thesis (Excerpt two): Hegel sustains the idea that the knowledge of means is essential to Mankind and that, somehow, the means are more important than the ends. The argument invokes the stability and cumulativeness of technical knowledge with regard to the fluctuating nature of human purposes. By contrast, Heidegger will sustain that it is only as knowledge (*Épistémê*) revealing the being, since *Techné* imitates and so unveils the mode in which Being produces beings, that *Techné* is also, secondarily, knowledge of the means of achieving an end.

Here, we witness a total reversion of the traditional insistence on the human goals. We can say that, here, Hegel is really anticipating the Marxian use of the notion of Productive forces. In the same time, on this point, Heidegger seems perfectly traditionalist. For *Heidegger* it is only as knowledge revealing the being that *Techné* is also, secondarily, knowledge of the means of achieving an end. Heidegger explicitly introduces his thesis in order to go beyond the traditional thesis which, while encompassing pre-Socratic *Techne* within the general framework of a theory of technic, defines technical knowledge as an instrumental knowledge of the means of achieving a subjective end. Heidegger does not dispute the accuracy - in his view, very superficial - of the traditional thesis, but tries to make apparent the specificity of the pre-Socratic period. But in fact, the these about the mimesis is a classical one; for example, you find it in Xenophon, in the *Memorabilia*; We also find this thesis about imitation in Heraclite, Democritus, and Plato². The same idea remained alive until Aristotle. Because it mimics the power to produce a being, *Techne* is *episteme*. Aristotle adopts this position but points that there is something more about technic because in many case the Craftsmen does not only imitate *Physis* but completes the work of nature³.

Let me linger on the heideggerian thesis. Heidegger wonders that the traditional thesis dissolves the specificity of the pre-Socratic age of *Techne*. His claim marks the limit: before being knowledge of operations and instruments, the pre-Socratic technique is a knowledge of being, a revelation of its truth. This is the reason why, says Heidegger, *Techne* is, up to Socrates and Plato, assimilated to *Épistémé* and Mimesis, and conversely, the episteme still restricted to *Techné*: the techne-episteme knowledge (*epitasthai*) is a way of revealing the being. But why does Heidegger now oppose *Techne* as unveiling, to *Techné* as knowledge of the means of achieving a subjective end? This opposition corresponds to the one introduced in "Being and Time" to distinguish the authentic experience from the inauthentic experience. The first presupposes a knowledge that reveals the being of the beings; the second, an instrumental knowledge that makes each being under the hand a means of achieving an end and therefore fails to grasp its being: the being of the being that is taken as a means always exceeds in fact its functional being. But this is still a Hegelian thesis. Here we can see how Heidegger decomposed and recomposed the Hegelian thesis to obtain a thesis which is strictly the inversion of the Hegelian one. For Hegel the ontological knowledge of being is more worthy than the knowledge of the means. We can see how Heidegger prejudges the true ontological significance of instrumental knowledge. At the same time, his determination of the essence of pre-Socratic *Techné* as revealing the being, as episteme, remains relatively abstract, insofar as it is separated from this other implicitly recognized determination: techne as knowledge of the means. In itself - and everything indicates that the pre-Socratics have also grasped it in this way - the knowledge of the means is not only an inessential knowledge. This last knowledge is unveiling what is in power in the being taken as an instrument; and even if this virtual cannot yet be confused with the necessary, even if one can never deduce from an end the use of a means and explain why any means is precisely this being, the knowledge of the means is already in itself a knowledge of being.

² Plato, *Laws* X, 899 a ff.

³ For all these references see Parry, Richard, "Episteme and Techne", *The Stanford Encyclopedia of Philosophy* (Fall 2014 Edition), Edward N. Zalta (ed.), URL = [<https://plato.stanford.edu/archives/fall2014/entries/episteme-techne/>](https://plato.stanford.edu/archives/fall2014/entries/episteme-techne/).

Third thesis (Third excerpt): As knowledge of the means, the technique has an eminent function even in the artistic production itself. For Hegel, because Art is the realization of an idea in the sensitive reality, in each art there is a crucial dimension of technique. For Heidegger, the work of art is the finished form of the product of technic. It is such a thing because it retains in itself, as a work, the disposition to unveil a world and it does so in the very way in which the Being reveals itself, combining withdrawal and openness.

Reflection on the work of art leads to prolonging and, in a way, reversing the initial point of view. With Kant, we know that the work of art attracts man's attention by the fact that it cannot be reduced to his instrumental being. The work of art is not reduced to the sum of the determinations of its emergence but has in itself the capacity to bring forth a world, to order a partition of meaning and reality. For pre-Socratics, and this will still be true for the classical period, the work of art realizes and completes *Techné* because it carries to its extreme its enigma: the power to produce a world is transferred not only from nature to the poiesis of man but also to the product of human art itself; like the physis, the work of art carries within itself the power to make a world flourish. For Heidegger, Art is still the finished form of technology for another reason. Art creates something new, invents itself: it institutes new ways of being. Consequently, artistic production, through its result, the work, reproduces in an original way the very movement of the Being in the appearance of the Being and reflects this amazing possibility of the Being itself: to produce an unpublished appearance. The Heideggerian thesis on art as a finished form of technology (pre-Socratic) thus leads to a global ontological perspective: art makes it possible to think of being in the mode of the event, arising from a new mode of being. In general, this thesis on the work of art is correct; its only limit resides in the very limit of Heideggerian ontology and the understanding of the being it promotes. In contrast Heidegger insists only on this point: "All that is essential is to state the view that, even if the talent and genius of the artist has in it a natural element, yet this element essentially requires development by thought, reflection on the mode of its productivity, and practice and skill in producing. For, apart from anything else, a main feature of artistic production is external workmanship, since the work of art has a purely technical side which extends into handicraft, especially in architecture and sculpture, less so in painting and music, least of all in poetry. Skill in technique is not helped by any inspiration, but only by reflection, industry, and practice. But such skill the artist is compelled to have in order to master his external material and not be thwarted by its intractability. (p.27)"⁴

Fourth thesis (Fourth Excerpt): Heidegger sustains that Metaphysics is the essence of the technic and the real mover of its deployment. Metaphysics has emerged as an autonomous and separate theoretical project in the dissolution of the pre-Socratic conception of *poiesis*. For Hegel, it is the slave's struggle against nature which forms the very crucial aspect of the becoming of technics. This becoming itself appears to be a consequence of political domination. So, political domination is in fact the mover of the becoming of technique and technology, but in return, as in Marx, the becoming and the stabilization of technical knowledge modifies profoundly political relations.

Without domination, man does not "fight" against nature but lives by it in an "animal" way, by simply picking its fruits. It is because he is subject to the master's will that the slave "works"

⁴ Aesthetics, p. 27

in the strong sense of the term. In the fourth chapter of *The Phenomenology of Spirit*, Hegel wants to show us that it is precisely through "work" that the slave will be able to reverse the relationship of domination. The "fear of the master" which synthesizes the fear (and therefore the knowledge) of death and the recognition of the master as an effective freedom, which at the same time expresses the "existential choice" of the slave, makes the latter a free being in himself but not for himself. It is through the mediation of the so-called Hegel work that the transition from one to the other is accomplished. Why does work play this role? Why at this level? Hegel will explain the role of work in the transformation of slavish consciousness from two fundamental dimensions, a positive and a negative one. Let's start with the first one. The slave's work is the way the master refers to the thing and the way he refers to the slave. In the same time work is also the means the slave refers to the thing and refers to the master. It then seems that, since the master reserves the right to enjoy the thing for himself, the slave's work has no essential role to play. And this appearance is first and foremost true for both the slave and the master. But in fact, work, this inessential aspect of the relation of the humans beings to the thing from the point of view of ideological representation, is fundamental. It allows the transformation of nature and, technical knowledge contains in germs theoretical knowledge that is also a "knowledge of oneself" of the slave: work allows the transformation of the servile consciousness while the idleness of the master is his conviction not to change. This is what Hegel explains: the master has reserved enjoyment for himself and "this satisfaction is itself only a disappearing state, because it lacks the objective side or subsistence. The master's enjoyment is therefore, like animal enjoyment, subject to the necessity of its reproduction without allowing any transformation of the master. "Work, on the contrary, is suppressed desire, delayed disposition: work forms." Work implies the immediate repression of satisfaction. The slave does not enjoy the object; he suspends the moment of satisfaction. In this way domination is the condition for the possibility of the appearance of work as such, insofar as it is only the repression of immediate satisfaction that forces man to work and which, in the long run, can allow the elaboration of a theoretical dimension of nature's knowledge. Work not only forms and shapes the object, giving it a stability and permanence that it does not have in enjoyment, giving it a purely human meaning, but it also forms the one who works because the one who works, the slave, sees his own operating freedom embodied in the object, realized in the object and thus stabilized.

The object resists the slave's operation, but by transforming the object, the slave sees his operation as independent, in the independent thing, and his consciousness of the independence of the thing becomes consciousness of his own independence. The purely instrumental relationship to nature thus gives the servile consciousness the consciousness of its own "autonomy". Work allows a cumulativeness of experience that is "technical"; but moreover, the subject's operation is something other than the "already objectified work"; it has its own independence, its own subjective thickness that is the foundation of the slave's consciousness of his independence. But work is the mediation by which slavish consciousness becomes for itself for another reason. This other "liberating" dimension of work is "negative" insofar as it allows the slave to deny the fear that is fear of the master and finally to deny the mastery itself. The slave was afraid of death, and so remained a slave; the slave was afraid of the master, and made himself a worker. But in work, not only does he deny the natural object, not only does he acquire the certainty of his freedom, but he also rejects the figure of the "power" and the "freedom" of the master. He discovers his own "power" over the world, as stable, permanent, effective power; the servile consciousness discovers its "being-for-himself" and this allows it

to deny the "foreign" being-for-itself; thus, the instrumental-technical relationship to nature is in truth still a political relationship since it transforms the class relationship and this "negative" dimension necessarily accompanies the "positive" dimension of work.

Fifth thesis (Excerpt five): Hegel sustains that *Techné* is a kind of violence on the objects which serve as means and purposes. Because the purpose is always subjective but must have a correlate in the objectivity of the world, in a state of things or an object, there is a first misuse of its own being; there is a second one with the misappropriation of the thing used as a means. In Hegel, the violence is linked to the cunning of reason, and the slavish way of confronting the exteriority. Relying on the Platonic interpretation of the myth of Epimetheus, Heidegger will partly take up this thesis and will add that, for the mortals, this violence responds to the violence they experience from *Diké*.

Indeed, in the relationship with nature, discovering the means of achieving an end is to make natural processes fight among themselves: by discovering that a stone is an instrument of my strike or that a lever increases the power of my arm tenfold, I substitute for my direct confrontation with nature the one of a natural process with another. For the wear and tear of my hand or my strength, I substitute the wear and tear of the instrument; to exercise the technique is to divert the fundamental violence from the relationship to the being by diverting it from its own destiny being taken as a means, by doing violence to it and thus to show deception (mixed race). However, it is precisely this trick that makes knowledge of the means something more than forgetting to be. With Hegel, it must be said that this oblivion is in a way an appearance: the cunning or metis (which is the authentic essence of pre-Socratic technology) is only in appearance an oblivion of being and this oblivion is itself a trick of reason. Why? Because, by fighting natural processes, the knowledge of the means establishes the possible space for autonomous generalization and conceptualization (*theoria*) by precisely delimiting new systems of relationships and revealing the logic that governs the confrontation of blind natural processes. By making it possible, through submission to this logic, to effectively control the being, the trick is that *Techné* is to know how to be and how to know the means

In Hegel, the violence results from the cunningness of the reason, which is in itself necessary. It is still linked to the slavish way of confronting the exteriority. Relying on the Platonic interpretation of the myth of Epimetheus⁵, Heidegger will partly take up this thesis and will add that, for the mortals, this violence responds to the violence they experience from *Diké*. *Techné* is an act of violence that, in mortals, responds to the violence they experience from *Diké*. It expresses the pathos and ethos of mortals, their own ways of being affected by it and of staying within it. Heidegger undoubtedly grasps very well the general context of pre-Socratic thought by defining *techné* as an act of violence. Divine, *techné* is the power of Zeus who, having fire, has the most powerful *Techné*, if not all-powerful. Possessed by mortals, *Techné* is the act of violence which responds to the violence they undergo from *Diké*, from the order of being in its totality. However, Heidegger insists little on this last ethical dimension recognized to *Techné* by pre-Socratic thought and that, in the fight of *Techné* against *Diké*, not only do the existential condition of man manifests itself as being open to death but also those virtues proper to him which are audacity, ingenuity and prudence. It is this prudence (*Phronesis*) that the pre-Socratics demand above all from the man with the technology. In the pre-Socratic sense of the term - which will also be the one Aristotle will find again - prudence

⁵ Hegel on *Epimetheus* and the manner that Plato told the story Protagoras(320-323), *Aesthetics*, Vol 1, p.460

(*Phronesis*) is the virtue of seizing the opportune opportunity for action. Thus *Techne* not only reveals the pathos of man, his own way of being affected, nor only his mortal condition, but it also reveals his own virtues, his ethos, his way of staying in the midst of being. It reveals what he must be, the virtue that his power, born of artifice, now requires of him and for which he is the debtor. In fact, Heidegger isolates technology as ontological knowledge from technology as knowledge from the means of technology as a duty of prudence, from technology as a trick. He refuses any systematization of the analysis he proceeds with, a systematization that leads precisely to the recognition that pre-Socratics have already understood the technology within the transcendental divisions of human experience, without reifying these different dimensions. The *techne-epistémé*, the *techne-phronésis* and the *techne-métis* form the fundamental dimensions of the pre Socratic *Techne*. They will only appear autonomous with the classical period and this at the cost of the separate rationalization of each one.

Seventh thesis: Hegel is ambivalent in front of modern technology. He recognized in the system of machines the triumph of mechanical and abstract labor; and in the same time, he saw a chance but also a risk in the substitution of men by machines.

For Hegel, as for Marx, the apparition of modern technic is linked to the progress of the division of labor, the process of innovation and the rationalisation which goes with the application of science to industry. For Heidegger, Modern technology is still a metaphysical mode of unveiling, but which, as modern, concerns now the foundation of being, nature, as a fund to be exploited and a reserve of energy. This is how the theory of reality that submits this real calculation, modern science, finds its foundation in the essence of technology. The essence of technology appeals the birth of modern science.

Eighth thesis: Hegel never really caught the fact that science was able to be the mover of the evolution of technic and its transformation in technology. It makes the major difference with Marx who, in the *Grundrisse* in 1857-1858, spoke of the *Scientific Power* to signify the source of the progress of productivity. We can say it is also on this point that lays the major difference with Heidegger.

Because it depends on the application of science to industry, and therefore on technological innovation, labour productivity growth that is relevant to the Marxian issue always requires a prior increase in the composition in terms of capital value. Marx always poses that this last one necessarily provokes her in return. In all his successive research, he acknowledges that crisis suddenly realize the decline of the profit rate, while providing the conditions for a new expansion of capital. Finally, although the details and conclusions of the analysis concerning them in the *Grundrisse* and *Hauptmanuskript* are quite different, it always identifies counter-trends that act as a counterweight. For Marx, the main effect of productivity growth linked to technological progress is always to reduce the "necessary time", the time spent by employees to produce the equivalent in value of the goods and services they consume. It pushes up the rate of overwork and the rate of surplus value, which is its translation into the sphere of traffic. Thus, in the context of the Marx problem, labour productivity growth is accompanied by an increase in the composition in value of capital and both are always parallel to the increase in the rate of capital appreciation.

Appendix 1: On the ontological question in Heidegger

Heidegger's thinking of technique thus passes through the critique of metaphysics. According to him, metaphysics commits a double ontological fault against the meaning of Being. On the one hand, the being of the being is grasped as the logic of being (it is implicit in Parmenides and perfectly explicit in Hegel). On the other hand, metaphysics is also about thinking of the totality of being as the Being and seeking the being that founds it: it is a search for the *Theos* that founds being in its totality and tends, already in Plato and Aristotle, to confuse it with the principle of being itself hypostasied and transcendentalized. Each time in a given form, the unthought of the ontological difference present in metaphysical thought will come to found the division of the beings and the principles of being of the being to give them a theological meaning. Already well established in pagan philosophy, with neoplatonism, which itself explicitly presents its ontological analysis as a theology, this movement will be accentuated with the constitution of Christian theology based on revelation. The onto-theology of metaphysics takes on a new form with modernity: the reinteriorization of transcendence under the figure of the absolute subject frees the technical power that, from the beginning, metaphysics had put in reserve action in the onto-theological grasp of the being's being. With Nietzsche on the one hand and Hegel on the other, the metaphysics of the absolute subject ends in the understanding of being as absolute knowledge and willingness, as subjective certainty of ego and willingness to be powerful. It is in this setting up of the subject at the foundation of the being of the being that Heidegger can see in the metaphysics of modernity the liberation from the possibility of the reign of technology. In general, the critique of metaphysics in the name of the unthinking of ontological difference is in fact based on the concomitant decision not to think of it on one's own account in order to effectively reduce it. Heidegger does not want to answer the ontological question; he wants to preserve it as a question and as a mystery. The guard of the mystery of the Being that the young Heidegger set as his objective in his confrontation with Hegelian philosophy, will remain at the foundation of his thinking: the beyond of philosophy is the step backwards which consists in challenging the dialectical solution of a conceptual antinomy while taking advantage, so to speak, of his way of setting the antinomy to fix it in a realistic and tragic dualism. Heidegger confines himself to an abstract opposition between being and being, preventing any conceptual solution of the relationship of differentiation and identification to which thought is constrained. If being is being of being and if, at the same time as it reveals itself, it withdraws from being, it is because it is precisely the relationship to oneself of being, and that this relationship to oneself is just as well and at the same time a relationship to other beings. And the being overcomes this contradiction only by maintaining itself for itself in the relationship with another being: by having a subject-object relationship with another being. Thus, the being in relation to the being is the relationship to oneself of the being itself and the sense of being that is realized in the becoming of this relationship. Heidegger does in a way determine the meaning of being as being in relation and becoming of this relationship; but he rejects any dialectical interpretation of this determination by fixing it as onto-theological - which it is undeniably assuming also, but wrongly this time, that it is and can only be such. Heidegger knows of course, and he says it, that there is no Being without being or being without Being. He therefore recognizes the existence of two relationships: the difference between Being and Being and the identity between them, because he admits that one is not without the other. Preserving the mystery of the Being against metaphysics then requires Heidegger to effectively take the means not to pose that the meaning of the Being of the Being is revealed precisely in the fact that the Being is related. However, it

is precisely because it is a relationship that being can transform itself, generate itself, produce something new. This future of the relationship between being and being is the realization of the meaning of Being as the future of life and knowledge.

Heidegger hardens the opposition between Being and being in such a way that the Being to which he refers is in fact only an abstraction. The mere determination of the Being as a veil/disclosure/event is insufficient, as is the determination of the essence of the technique as metaphysical. Unless it is then understood as the essence of all the separate and reified dimensions of human action, metaphysics cannot be considered as the essence of the technique, as what specifies it as a technique. At most, it can be used as the incubation matrix for the technique. Indeed, modern metaphysics, for example, will bring together the theoretical and ethical conditions for the modern development of technology. But, before dissolving into the metaphysical understanding of the Being, the essence of the technique is the triple differential relationship maintained by the rationalization of doing with theoretical thinking, ethical understanding and aesthetic research. As such, it is structured by social relations in their cultural and institutional manifestations and by their ideological objectification, particularly in religion. By directly determining the essence of the technique as metaphysical, Heidegger skips a double mediation: that of the social structure, the logic of production and reproduction of social practice and that of the ideology that legitimizes it. By assuming such a leap, he is not completely mistaken because the metaphysical understanding of being is ultimately at the very foundation of this double mediation; but he prevents himself in advance from any political determination of the problem of technology and lacks the determination of what truly specifies the technical dimension in his negative relationship to the other dimensions of praxis.

Appendix 2: The Eight Theses on Hegel's Philosophy of technology and the Excerpts.

First thesis (Excerpt one): Hegel understands the Homeric world as a world in which *Techné*, as the objectification of the technicality of practices, belongs to the character of heroes, to the individuality of the individuals⁶. In *Aesthetics*, we thus find a profound analysis of epic art and artistic representation of the archaic period in ancient Greece, which he calls the "heroic age" or "Homeric period", in which *Techné* is a total knowledge of a total individual. In the Heroic age, *Techné* is a joyful conjunction of *Épistémé* and *Poiesis*.

The second thesis (Excerpt Two): Hegel sustains the idea that the knowledge of means is essential to Mankind and that, somehow, the means are more important than the ends. The argument invokes the stability and cumulativeness of technical knowledge with regard to the fluctuating nature of human purposes. By contrast, Heidegger will sustain that it is only as knowledge (*Épistémé*) revealing the being, since *Techné* imitates and so unveils the mode in which Being produces beings, that *Techné* is also, secondarily, knowledge of the means of achieving an end.

Third thesis (Third excerpt): As knowledge of the means, the technique has an eminent function even in the artistic production itself. For Hegel, because Art is the realization of an idea in the sensitive reality, in each art there is a crucial dimension of technique. For Heidegger, the work of art is the finished form of the product of technic. It is such a thing because it retains

in itself, as a work, the disposition to unveil a world and it does so in the very way in which the Being reveals itself, combining withdrawal and openness.

Fourth thesis (Fourth Excerpt): Heidegger sustains that Metaphysics is the essence of the technic and the real mover of its deployment. Metaphysics has emerged as an autonomous and separate theoretical project in the dissolution of the pre-Socratic conception of *poiesis*. For Hegel, it is the slave's struggle against nature which forms the very crucial aspect of the becoming of technics. This becoming itself appears to be a consequence of political domination. So, political domination is in fact the mover of the becoming of technique and technology, but in return, as in Marx, the becoming and the stabilization of technical knowledge modifies profoundly political relations.

Fifth thesis (Excerpt five): Hegel sustains that *Techné* is a kind of violence on the objects which serve as means and purposes. Because the purpose is always subjective but must have a correlate in the objectivity of the world, in a state of things or an object, there is a first misuse of its own being; there is a second one with the misappropriation of the thing used as a means. In Hegel, the violence is linked to the cunning of reason, and the slavish way of confronting the exteriority. Relying on the Platonic interpretation of the myth of Epimetheus, Heidegger will partly take up this thesis and will add that, for the mortals, this violence responds to the violence they experience from *Diké*.

Sixth thesis: For Hegel, as for Marx, the apparition of modern technic is linked to the progress of the division of labor, the process of innovation and the rationalisation which goes with the application of science to industry. For Heidegger, Modern technology is still a metaphysical mode of unveiling, but which, as modern, concerns now the foundation of being, nature, as a fund to be exploited and a reserve of energy.

Seventh thesis: Hegel is ambivalent in front of modern technology. He recognized in the system of machines the triumph of mechanical and abstract labor; and in the same time, he saw a chance but also a risk in the substitution of men by machines.

Eighth thesis: Hegel never really caught the fact that science was able to be the mover of the evolution of technic and its transformation in technology. It makes the major difference with Marx who, in the *Grundrisse* in 1857-1858, spoke of the *Scientific Power* to signify the source of the progress of productivity. We can say it is also on this point that lays the major difference with Heidegger.

Excerpt 1

Hegel's *Aesthetics, Lectures on fine Arts, Oxford University Press, 1975, Vol 1 and 2*

“This is a state of society which we have already learnt to recognize as the Heroic or, preferably, the ideal Age. The Heroic Ages are no longer restricted to that idyllic poverty in spiritual interests; they go beyond it to deeper passions and aims; but the nearest environment of individuals, the satisfaction of their immediate needs, is still their own doing. Their food is still simple, and therefore more ideal as for instance honey, milk, wine; while coffee, brandy, etc., at once call to our mind, the thousand intermediaries which their preparation requires... So too the heroes kill and roast their own food; they break in the horse they wish to ride; the utensils they need they more or less make for themselves; plough, weapons for defence, shield, helmet, breastplate, sword, spear, are their own work, or they are familiar with their fabrication. **In such a mode of life man has the feeling, in everything he uses and everything he**

surrounds himself with, that he has produced it from his own resources, and therefore in external things has to do with what is his own and not with alienated objects lying outside his own sphere wherein he is master. In that event of course the activity of collecting and forming his material must not appear as painful drudgery but as easy, satisfying work which puts no hindrance and no failure in his way.” (p. 261)

“...indeed in our civilization our attitude to a mass of objects, things, and words is one of an extremely inflexible gentility and we have an extensive hierarchy of grades of distinction in clothing, furnishings, etc. Moreover, nowadays the production and preparation of any and every means of satisfying our needs is split up between such a multitude of activities in factories and workshops that all the particular steps in this wide ramification are reduced to something subordinate which we need not notice or enumerate. But the world of the heroes was not like this; there was a more primitive simplicity of objects and contrivances, and it was possible to linger over their description, because all these things rank alike and are counted as something in which a man may take pride on the score of his skill, his wealth, and his material interests, because he has not been diverted from them by his whole course of life and led into a purely intellectual sphere. **Slaughtering oxen and preparing them for food, pouring wine, etc. is an occupation of the heroes themselves, an occupation that they pursue with enjoyment for its own sake,** whereas with us if a luncheon is not to be an ordinary everyday one, it must not only involve bringing rare delicacies to the table but require excellent talk besides.” (1054-1055)

Excerpt 2 Hegel, *The Science of Logic* (1812-1816), 2010, Cambridge University Press

“Since it is finite, the purpose further has a finite content; accordingly, it is not *rational* absolutely, or simply in and for itself. But the *means* is the external middle term of the syllogism which is the realization of purpose; in the means, therefore, the rationality in the purpose manifests itself as such by maintaining itself in *this external other*, and precisely *through* this externality. **To this extent the means is higher than the finite purposes of external purposiveness: the plough is more honorable than are immediately the enjoyments which it procures and which are the purposes.** The *tool* lasts while the immediate enjoyments pass away and are forgotten. It is in their tools that human beings possess power over external nature, even though with respect to their purposes they are subjected to it.” (663)

Excerpt 3 Aesthetics, Hegel’s *Aesthetics, Lectures on fine Arts*, Oxford University Press, 1975, Vol 1, Introduction

“All that is essential is to state the view that, even if the talent and genius of the artist has in it a natural element, yet this element essentially requires development by thought, reflection on the mode of its productivity, and practice and skill in producing. For, apart from anything else, a main feature of artistic production is external workmanship, since the work of art has a purely technical side which extends into handicraft, especially in architecture and sculpture, less so in painting and music, least of all in poetry. **Skill in technique is not helped by any inspiration, but only by reflection, industry, and practice.** But such skill the artist is compelled to have in order to master his external material and not be thwarted by its intractability. (p.27)

Excerpt 4 *The Phenomenology of Spirit*, Oxford University Press, 1977

“Through work, however, the bondsman becomes conscious of what he truly is... For, in fashioning the thing, the bondsman's own negativity, his being for self, becomes an object for

him only through his setting at nought the existing *shape* confronting him. But this objective *negative* moment is none other than the alien being before which it has trembled. Now, however, he destroys this alien negative moment, posits *himself* as a negative in the permanent order of things, and thereby *he comes for himself*, someone existing on his own account. In the lord, the being-for-self is an 'other' for the bondsman, or is only *for* him [Le. is not his own]; in fear, the being-for-self is present in the bondsman himself; in fashioning the thing, he becomes aware that being-for self belongs to *him*, that he himself exists essentially and actually in his own right. The shape does not become something other than himself through being made external to him; for it is precisely this shape that is his pure being-for-self, which in this externality is seen by him to be the truth. Through this rediscovery of himself by himself, the bondsman realizes that it is precisely in his work wherein he seemed to have only an alienated existence that he acquires a mind of his own. For this reflection, the two moments of fear and service as such, as also that of formative activity, are necessary, both being at the same time in a universal mode. Without the discipline of service and obedience, fear remains at the formal stage, and does not extend to the known real world of existence. Without the formative activity, fear remains inward and mute, and consciousness does not become explicitly *for itself* if consciousness fashions the thing without that initial absolute fear, it is only an empty self-centred attitude; for its form or negativity is not negativity *per se*, and therefore its formative activity cannot give it a consciousness of itself as essential being. If it has not experienced absolute fear but only some lesser dread, the negative being has remained for it something external, its substance has not been infected by it through and through. Since the entire contents of its natural consciousness have not been jeopardized, determinate being still *in principle* attaches to it; having a 'mind of one's own' is self-win, a freedom which is still enmeshed in servitude. Just as little as the pure form can become essential being for it, just as little is that form, regarded as extended to the particular, a universal formative activity, an absolute Notion; rather it is a skill which is master over some things, but not over the universal power and the whole of objective being." (118-119)

Excerpt 5 Hegel, *The Science of Logic* (1812-1816), 2010, Cambridge University Press

“That the purpose immediately refers to an object and makes it into a means, as also that through this means it determines another object, **may be regarded as violence** inasmuch as purpose appears of an entirely different nature than the object, and the two objects are in like matter mutually independent totalities. But that the purpose posits itself in a mediate connection with the object, and between itself and this object inserts another object, **may be regarded as the cunning of reason**. As remarked, the finitude of rationality has this side, that purpose relates to the object as a presupposition, that is, as external. In an immediate connection with that object, purpose would itself enter into the sphere of mechanism and chemism and would therefore be subject to accidentality and to the loss of its determining vocation to be the concept that exists in and for itself. But in this way, by sending an object as a means ahead of it, **it lets it do the slavish work** of externality in its stead, abandons it to the wear and tear while preserving itself behind it against mechanical violence” (p. 663).