

Third Part

The Essence of Technicity

Chapter 3

Technical Thought and Philosophical Thought

Within the first phase¹, the opposition that exists between technics and religion is inherent to the elaborative technics of the natural world in its contrast with religions that think out the destiny of man as an individual. However, there is a second phase to technics and religion: after the fashioning of the natural world, technical thought turned towards the human world, which it first analyzed and dissociated into elementary processes, then reconstructed according to operational schemas while preserving figural structures and leaving aside background qualities and forces. Certain types of thought also correspond to those technics that bear upon the human world taken in its totality. The custom is not to call them religions since tradition reserves the term religion for contemporary modes of thought on the technics that fashion the world—the modes of thought that assume the function of totality (as opposed to the technics applied to the human world) are the great political movements of the world and are the functional analogue of religions. However, man's technics as well as social and historical thought systems arise from a new wave of unfolding from within magical thinking. Ancient technics and religions were able to develop by feeding off the dissociation of the magical primitive universe considered to be almost exclusively as being the natural world; the human world remained enfolded in the matrix of primitive magic. On the other hand, from the moment that man's technics breaks away from this matrix and considers man as technical matter, from this new rift in the foreground/background relation, two systems of thought correlatively emerge which in one instance seizes human beings beneath

¹ The phases mentioned in this opening paragraph refer to Part 3. Chapter 1 "The Genesis of Technicity". In his Whiteheadian conception of the process of becoming of the ensemble, Simondon conceives technicity as one of two phases created in the simultaneous yet atemporal process of becoming, where each phase represents a rift or split between opposing aspects of being. In the first phase, technicity and religion emerge from magic, the central and original being of the world. Each phase in turn splits into practical and theoretical aspects. (p. 159-160)

the level of unity (the technics of human manipulation) and in the other seizes them above the level of unity (political and social ideas). Like ancient technics and ancient religions emerging from the rupture of the magical matrix of the natural world, human technics and political thought move towards mutual opposition. Technics operate on man through figurative characters—pluralizing him and studying him as though he were a citizen, a worker, a member of a familial community. These are the figurative elements that are retained by technics, specifically criteria such as their integration to social groups and the cohesion of groups. They transform attitudes into structural elements in the same way that descriptive sociology transforms choices into bars on a bar chart. Instead of analyzing man, social and political thought classify him and judge him by pigeonholing him into categories defined by background qualities and forces, much the same way that religions classify and judge by pigeonholing every individual into categories such as sacred or profane, and pure or impure. And in the same way that religions rebel against technics' profanation of the sacred character of certain locations and certain moments by imposing on technics the respect for these locations and moments by means of prohibitions (for example, statutory holidays). Social and political systems of thought do the same—even when they oppose each other—to limit man's technics and force him to respect their reality, as if the technics of man were impious and opposed to respecting the totality. The human world is thus represented within its elements by man's technics and within its totality through social and political concerns. But these two representations are insufficient because the unity of the human world can only be grasped from a neutral stance. Technics pluralizes it and political ideas integrate it into a higher unity (that of the totality of humanity in its becoming) where it loses its real unity like an individual in a group.

Hence, the real level of individuation of human reality ought to be grasped by a system of thought that could serve the human world analogously to aesthetic thought within the natural world. This system of thought is still not yet constituted and perhaps it should be philosophical thought which must give form to it. We can consider aesthetic activity as an implicit philosophy, but even though aesthetic thought can be applied to the human world, it seems difficult that it would be sufficient to build a stable and

complete relation between man's technics and social and political thought systems. In fact, this construction could never exist in isolation seeing how the human world is linked to the natural world. Man's technics emerged as separate technics when the technics for the elaboration of the natural world, by their abrupt development, modified social and political realms. Thus, the relationship ought not uniquely be established between man's technics and social and political systems of thought but between all elementary functions and all the functions of the ensemble, thus including the technics of man and the technics of the world, as well as religious, social and political systems of thought. Philosophical thought is suitable for similar elaboration because it can know the becoming of various forms of thought and establish a relation between successive generic phases particularly between that which achieves the rupture of the natural magical universe and that which achieves the dissociation of the magical human universe which is in the process of self-achievement. On the other hand, aesthetic thought is contemporaneous with each bifurcation; even if it were possible to create a new aesthetic between the technics of man and social and political thought, a system of philosophical thought, an aesthetic of aesthetics, would be required to reattach these two aesthetics that follow one another. Philosophy would thus constitute the upper neutral point of the becoming of thought.

Philosophical effort is found to have a unique task to accomplish: the quest for the unity between technical modes and non-technical modes of thought. However, this task can take two different paths.

The first would consist of preserving aesthetic activity as a model and to try to realize an aesthetics of the human world in order that the technics of the human world would be able to meet up with the functions of the totality of the world where concern animates social and political thought. The second consists of not taking technics and systems of thought as assuming the functions of totality in their original state, but only after having split them into theoretical and practical modes, reunited as ethics and science. Therefore, the second path, which makes a longer detour, corresponds rather well to a traditional philosophical quest as well as to the demands of the nature of the problem. But, in the current state of ideas and methods, it would appear to be driving towards an impasse to the extent that Kant made efforts to differentiate between

theoretical and practical realms, assigning independent status to each one. Descartes had also sought to found a provisional morality anterior to the attainment of theoretical knowledge. We can ask ourselves if the unsolvable nature of the problem of the relation of science and ethics wouldn't be the result of science and ethics not being a true, perfectly coherent and unified syntheses but a somewhat-stable compromise between the contributions of technical thought and religious thought, i.e. between the demands of the knowledge of elements and those of the functions of totality. In this case one would have to go back to the origins of the modes of thought at their foundation—to the unphasing that pits technics and religion against each other—prior to the rift which forces the emergence of a theoretical mode and a practical mode within technics as well as within religion. Philosophical thought, reflecting on technics and religion, could perhaps discover a reflexive technology and an inspiration drawn from religion that would directly and completely coalesce one with the other instead of creating an incomplete and precarious intermediary space for relation such as the one that aesthetic activity is based on.

This relation would be at the same time theoretical and practical because it is taken before the split into theoretical and practical modes. It would truly and completely fill the role that aesthetic activity can only partially fulfill, seeking to insert technics and religion into a unique world that is at the same time natural and human (political and social thought are here considered as being in the same order as religion and able to be treated similarly). In order for this insertion to take place, technical thought and religious thought must be at the level of unity and not above or below unity. These structures of plurality and of totality ought to be replaced by a network of unities attached analogously to one another.

The condition of this discovery is a deepening of the sense of technics and of the sense of religion that can end up in a reticular structuration of technics and of religion. Technics and religion can coincide not through the continuity of their content, but through a certain number of singular points belonging to one or the other realm, and by the constitution of a third realm that results from their coincidence, that of cultural reality.

Technical thought can be structured by the discovery of schemas that are vaster than those of utilization within a specific realm.

The pluralism of technics is in fact not only the result of the diversity of technical objects but of the human diversity of trades and the realms of utilization. Technical objects with many varied uses can involve analog schemas. The true elementary unity of technical reality is not the practical object but the concretized technical individual. By reflecting on these concretized technical individuals, it is possible to discover true technical schemas that are pure—such as those of the various modes of causality, of conditioning, or of command.

The reflexive effort applied to technics is characterized by the fact that a technic of all technics can be developed through the generalization of schemas. In the same way that we can define pure sciences, we can dream of founding a pure technic or a general technology very different from theoretical sciences whose applications are translated into technics. In fact, it is true that a discovery made within a scientific realm may permit the genesis of new technical devices. But it is not directly, through deduction, that a scientific discovery becomes a technical device. It provides technical research with new conditions, even though the effort of invention must be applied in order for the technical object to appear. In other words, scientific thought must become an operational schema or a support for operational schemas. On the other hand, that which we call pure technology is at the juncture of various sciences as well as various traditional technical realms that are spread out between various professions. Hence, schemas of circular action and their various realms are not the property of any particular technic; they were noticed and conceptually defined for the first time within technics related to automatism and the transmission of information because they play an important practical role—though they had previously been used in the technics of thermal motors which Maxwell had already studied theoretically. Any thought system whose contents span a plurality of technics, or that at least can be applied to an open plurality of technics, goes beyond the technical realm. Various processes contributing to the functioning of the nervous system can be thought of in terms of schemas of recurring causality, like certain natural phenomena. Thus, the schema of relaxation is always identical to itself, whether it is applied to a technical device,

to the intermittent functioning of a fountain or to the phenomenon of tremors in Parkinsonism. A general theory of causality and conditioning goes beyond the specificity of a realm, even if the conceptual origins of the theory emerge from a particular technic. For this reason, the schemas of a generalized technology rise above the separated technical object. In particular, they allow to adequately think out the relationship between technical objects and the natural world, i.e. to ensure the insertion of technics in the world in a way which goes beyond empiricism. The technical object, placed within the scope of actions and reactions where the game is foreseen and determinable, resulting from the rupture of the primitive structuration of the magical world is no longer the object separated from the world. The foreground/background relationship, broken by technical objectivation, is found once again to be within general technology. Likewise, the technical object is invented according to the milieu into which it must introduce itself and the specific technical schema reflects and integrates the dispositions of the natural world. Technical thought spreads by incorporating the demands in the modes of being of the associated milieu to the technical individual.

That way, to the extent that a polytechnical technology replaces separated technics, technical realities themselves adopt a network structure within their realized objectivity. Like the work of artisans, they're in relation with each other instead of being self-sufficient and they're in relation with the world they enmesh in the matrix of their nodes. Tools are abstract and free, transportable everywhere and at all times, but technical ensembles are true networks concretely linked to the natural world: a dam cannot be constructed just anywhere no more than a solar oven can be. A smattering of elementary notions about traditional culture would have one believe that the development of technics is the reason for the elimination of the distinctive character of place and locale, responsible for the loss of local customs and the artisanal handicrafts. In reality, the development of technics creates a much more important and much more deeply rooted concretization than that which it destroys. An artisanal custom, such as a regional dress, is barely rooted except in the human world, and can travel simply from one place to the next through influence. On the other hand, a technical ensemble is deeply rooted within the natural milieu; there are no coal mines in primary territories.

Thus, certain superior places in the world are constituted: natural, technical and human.

It is the ensemble, i.e. the interconnection of these superior places which constitutes this polytechnical universe that exists simultaneously as natural and human. The structures of this matrix become social and political. Within existence, for the natural world and for the human world, technics are not separate. For technical thought, they remain as if they were separate because there is no thought system sufficiently developed to permit theorizing this technical reticulation of concrete ensembles. It is the task of some such entity to make it the duty of philosophical thought since there's a new reality to be found there which is not yet represented within culture. Above these technical determinations and norms, one would have to discover polytechnical and technological determinations and norms. There exists a world of plurality of technics which has its structures proper and which ought to be able to find adequate representations specific to it within the content of culture. The general term network, commonly used to designate structures of interconnectivity of electrical energy, telephones, railroad tracks, roads, and the like, is far too imprecise. It does not take into consideration particular realms of causality and conditioning that exist within these networks which link them functionally to the human world and to the natural world, as if they were a concrete mediation between the two worlds.

The consequence of introducing into culture representations that are adequate for technical objects is to make the nodes of technical networks into real reference terms for all human groups, even though now they are only for those who understand them, i.e. for the technicians from each specialty. For everyone else, they only have a practical value and correspond to very confused concepts. Technical ensembles introduce themselves into the world as if they didn't have the natural and human rights to belong, whereas a mountain or a promontory, which have less concrete regulatory power than certain technical ensembles, are known by everyone in a region and form part of their representation of the world.

Meanwhile, we can ask ourselves to what extent the creation of a general technology will draw closer a technics of religion. The recognition of true complex operational schemas and the integration of technical ensembles would not suffice to allow this rapprochement if there was not at the same time but one theoretical conscience of process, or one normative value contained within them. In fact, the reticular structures of integrated technics are not only the

means available for an action and abstractly transportable no matter where, usable no matter when. We change one tool or instrument for another, we can make or repair a tool, but we can't substitute one network for another. One cannot build a network of one—one can only connect to a network, adapt oneself to it, participate in it. The network oversees and enfolds the action of the individual being, actually dominating each technical ensemble: a form of participation in the natural world and in the human world which provides technical activity with a collective normativity that cannot be enforced. It is no longer only the somewhat abstract solidarity of the trades such as the one invoked by Sully Prudhomme (the solidarity of specialists, the mason, the baker) but a solidarity extremely concrete and actual, that exists moment to moment through the interplay of multiple conditionings. Through these technical networks, the human world acquires a high degree of internal resonances: powers, forces, potentials that push towards action exist in the reticular technical world in the same way they would exist in the primitive magical universe. Technicity is part of the world; it is not only an ensemble of means, but an ensemble of conditionings to action and invitations to act. A tool or an instrument has no normative power because it is permanently at the disposal of the individual: the more normative power technical networks take up, the larger the internal resonance of human activity will become through technical realities.

Now, the valuation of technical ensembles and their normative value draws out a very particular form of respect, which takes aim at pure technicity itself. It's this form of respect, founded on the knowledge of technical reality, and not on the prestige of imagination, which can ingress into culture. One important road at the exit of a large city commands this type of respect, like a port, a railway hub or an air traffic control tower at an airport will. The nodes of a network have this power in themselves as nodes and not because of the prestige as such these technical objects may embody. As a case in point, the clock at the Paris Observatory was slightly disturbed a decade ago during a tumultuous visit by a group of science students who gained entrance through the catacombs. The impact resulting from the violation of sacred technic was at that moment quite considerable. Now, if the same clock had been placed within an educational laboratory,

and we would have voluntarily disturbed it in order to demonstrate the self-regulating mechanisms of its functioning, no emotion corresponding to the violation of the sacred would have been felt. Its disturbance was scandalous because the clock of the Observatory is a node in a network (it broadcasts time signals on the radio), and it's not because of the practical danger that this disturbance may have caused, since it was too inconsequential to have caused any significant errors to ships at sea—in fact, independent of the practical consequences which might have ensued, a profanation had taken place in the true sense of the word: the stability of a system of reference had been perturbed. It is likely that art students would not have had the idea for such a stunt because for them the clock of the Observatory does not have the same normative value. It is not sacred because they have no appreciation for its technical essence and it is not adequately represented conceptually within their culture. These forms of respect and disrespect as the built-in nature of values superseding utility manifest themselves within the technicity integrated into the natural and human world. The system of thought that recognizes the nature of technical reality is that which, going beyond separate objects—utensils, according to Heidegger's expression—discovers the essence and the range of technical organization beyond separated objects and specialized professions.

Traditional religious thought seems to find a means of self-awareness in the preconceived idea of a struggle against new technics. In fact, it is not technics themselves which are targeted, but the type of civilization contemporary with these technics which not only leaves traditional religions by the wayside as well as ancient technics which were once their contemporaries. This opposition is skewed at its very foundations by the fact that actual technics should be coupled to social and political thought and not to religions that are not their contemporaries. It is only after becoming aware of the coupling of technics and religions of the same era that the continuity of successive steps can be perceived—though not in the opposition of one phase of an era to the opposite phase of another era.

If we consider the social and political systems of thought of our era (contemporary with the recent development of technics), we can see that they rein in the character of the absolute universality of religions

to a dimension in accordance with their ingression into the natural and human world. Without a doubt, all social and political doctrines tend to present themselves as an absolute, unconditionally valid, outside of the *hic et nunc*, while social and political thought proposes actual and concrete problems. Like technical thought in way of development, it ends up as a reticular representation of the world, with key points and essential moments. It applies itself to technical reality by treating it as more than a simple means and grasps it at the level of the insertion of reticulation into the natural and human world. Thus, three recent great social and political doctrines have incorporated, each in an original way, a representation and valuation of integrated technics. National Socialist thought is linked to a certain conception which ties the destiny of a people to technical expansion where even a role for neighbouring peoples has been thought up as a function in this master extension. The American democratic doctrine entails a certain definition of technical progress and of its incorporation into civilization. The societal notion of standard of living, which constitutes a cultural reality, possesses a content whose important terms are technological (not only the possession of this or that instrument or utensil, but the fact of knowing how to use this or that network and be functionally connected). Lastly, the Marxist Communist doctrine, in its lived and realized aspects, considers technological development as an essential aspect of the social and political project to be achieved. This development becomes aware of itself through the use of tractors and the creation of factories. At a political level, the self-awareness of the great nations entails not only a representation of their technical level (which would be only an estimate of power) but of their ingression by means of technical reality within the entire actual universe. A change of technics brings with it a modification of that which we could call the political constellation of the universe: the key points move to the surface of the world. Coal is today less important than it was on the eve of the Great War, but petroleum is more important now. These structures are more stable than economic structures and rule over them. Various mine shafts providing access to mineral deposits have remained stable since the Roman conquest of Gaul in spite of a great number of economic changes. Social and political thought insert themselves into the world according to a certain number of remarkable,

problematic points that coincide with the insertion points of technicity considered as a network.

We don't mean to say by this that social and political structures restrict themselves to only expressing the state of the economic which itself is determined by the state of technics. In fact, what we wish to say is that the distribution and ingression of nodes into social and political thought in the world at least partially coincides with that of technical nodes, and that this coincidence perfects itself as technics ingress to a greater degree into the universe under the form of fixed ensembles linked to one another, inserting human individuals into the matrix that they establish.

Meanwhile, such a formal rapprochement of the structures of political thought to those of technical thought does not solve the problem of the relation of technics with non-technical forms of thought. In fact, it comes at the cost of a certain renunciation of universality with which political and social thought come to make their structures coincide with those of technical thought and particularly with technical thought applied to the human world. Political and social thought comes to coincide quite perfectly with representations of commerce, of imports, of exports, i.e. economic realities that result from the existence of technics but which translate the manner in which technics are used by human groups. The modes by which human groups use technics are subjected to technics that are no longer applicable to the natural world, but to the human world, and which don't produce technical objects or technical ensembles, as long as we consider advertising or purchasing and selling entities as such. We could therefore say that the agreement between technical thought and non-technical thought is only actually possible by paying the price of a significant simplification and abstraction applied to both the technical and the non-technical realms.

This simplification essentially consists of, on the one hand, creating a rift between the technics of the natural world and the technics of the human world, and on the other hand, by creating a rift between religious thought and political and social thought. As a result of this rift, instead of being constrained to remain within an elementary plurality beneath the true unity, the technics of the human world

can believe that they grasp the true unity of the global nature of groups, of crowds, of public opinion, etc by forgetting the demands of the technics of the natural world. In reality, they continue to apply elementary thought to global realities, studying, for example, the mass media as if they were distinct from the concrete reality of groups within which they operate. Though it usually goes by unnoticed in the application of technics, the rift between the foreground and the background is quite clean and lasting within the technics of the human world because these technics look precisely to act as background figures, i.e. those that are the least formalized and the least institutional. In spite of this, they are still figural realities and not whole or complete reality.

The same insufficiency manifests itself within political and social thought that remains intermediate between the true consideration of totalities (which characterizes real religious thought that is non-politicized or socialized by the influence of a group), and the expression of the needs of a particular moment or group as the application of mythology: generally, it is the mythology of the group which is construed as a doctrine that can be universalized. For this reason political or social thought is a thought of combat—it is due to a pretention towards universality from that which is neither universal in its origins nor in its intentions. We can thus understand quite readily that between the technics of human manipulation and political and social thought there is not much separation: a political movement can use advertising techniques transformed into methods for propaganda, the same way that specific manipulation techniques steer towards a political and social option. But this encounter, this mutual complicity, cannot exist but at the price of abandoning its loyalty to elementary functions (which characterize true technicity) and to the correlative abandoning of the mission of representing the functions of totality (which is characteristic of religious thought). The alliance of an ensemble of processes and a mythology is not the coming together of technicity and the respect for the totality.

This is why philosophical thought must maintain the continuity between successive stages of technical thought and of religious thought, and subsequently of social and political thought. Technicity must be maintained throughout the range of technics, from those applied to the natural world to those which address themselves to the human world, and then, the concern for totality must be maintained from religions to political and social thought.

Without this continuity, without this real unity of the becoming of technics and of systems of thought relative to the functioning of totality, a false dialogue sets itself up between relative forms in the natural world and relative forms in the human world. For example, the technics of human manipulation are but one more variable within industrial technics (scientific management), or again, the way traditional religious thought adopts a vision of the world closest to its own and thus denies itself of its power of universality.

Because of its purpose, this study cannot devote itself to the problem of establishing continuity between religious forms of thought and social and political forms of thought. Meanwhile, it must devote itself to the extent that this effort is symmetrical to that by which technics of the world must be drawn near to those of man.

Hence, if man's technics are found wanting in their function of analysis of elements and yet act globally through empirical processes (that which translates statistical conceptualism while developing within a comfortable nominalism), it is because they consent to detach themselves from real objects, elements, individuals or ensembles. There cannot be true technics separated from the human world. The technics of the human world must have objective support and cannot only be purely psychological unless they become processes—in other words, it's only through a broadening of technical ensembles that simultaneously encompass their ingression into the natural world and into the human world that we can act upon the human world, through this ensemble and in accordance with this human and natural ensemble: as mediation between the natural world and the human world, technical thought cannot act on the human world unless it does so through the intermediacy of this mediation. Human reality cannot be the object of technic except when it is already engaged in a technical relation. There is no legitimate technics except for technical reality. Technical thought must develop the network of relational points between man and the world by becoming a technology, i.e. a technology twice-removed whose function is to organize these relational points. But, it would not know how to legitimately apply technical thought to a non-technical reality, for example to that which we could name the natural instantaneous human world. Technology cannot develop itself on anything but a reality that is already technical. Reflexive thought must carry out the promotion of technology,

but it must not try to apply schemas and technical processes outside of the realm of technical reality.

In other words, it is not human reality, and particularly that which may be modified within human reality, i.e. culture (the active intermediary between successive generations, co-temporal human groups and successive or co-temporal individuals), which must be incorporated into technics as a material upon which work can be carried out—it is culture, considered to be a lived totality, which must incorporate technical ensembles by understanding their nature in order to be able to adjust human life according to these technical ensembles. Culture must remain above technics, and it must incorporate into its contents the knowledge and intuition of the real schemas of technics. Culture is that by which man adjusts his relation to the world and his relation to himself. Now, if culture would not incorporate technology, it would encompass an obscure zone and would be unable to bring forth its regulating normativity to the coupling of man and world—for in this coupling of man and world (that of technical ensembles), there exist schemas of activity and of conditioning which cannot be clearly thought out except through concepts defined by reflexive or direct study. Culture must be contemporaneous with technics, it must reform itself and regather its contents from one phase to the next. If culture is only traditional, it is bogus, because it implicitly and spontaneously includes a regulating representation of the technics of a certain period and it falsely brings forth this regulating representation into a world to which it cannot be applied. Thus, the assimilation of technical realities into utensils is a cultural stereotype based on the normative notion of utility, which sometimes enhances its value and at other times detracts from it. But this notion of utensil and of utility is inadequate for the effective and actual role of technical ensembles in the human world: it can therefore not be efficient in its regulating function.

Deprived of the contribution of cultural regulation passing through the intermediary of an adequate representation of technical realities, the coupling of man and world develops itself in a state of isolation in an anomic, non-integrated manner. On the contrary, this unregulated development of technical realities enveloping man justifies, at least at a superficial level, the implicit mistrust of culture for technics. In those human milieus that promote one technic, a self-justifying culture comes into existence while general culture becomes inhibiting (but not regulative) of all technics.

Now, the philosophical and notional awareness of technical reality is necessary for the creation of cultural content that incorporates technics—but that is not enough. In fact, nothing proves that technical reality can be adequately known through concepts. Conceptual knowledge can well designate and recover technical reality at the level of separated technical objects which allow themselves to be classified according to structures and uses, but only very difficultly can it introduce technical ensembles to knowledge. In order to acquire this knowledge, the human being must really be put into a difficult situation since it is a mode of existence which must be tested. The tool, the instrument, the isolated machine allow themselves to be *perceived* by a subject which remains detached from them. But the technical ensemble cannot be grasped except by intuition since it does not allow itself to be considered a detached, abstract, or manipulable object that is at the disposal of man: it corresponds to an existential trial or ordeal. It is linked with the subject through reciprocal action.

Also, in the same way that in olden days a voyage was considered a means of acquiring culture because it constituted a mode of adversity for man, one must consider technical trials as ordeals in relation to the ensemble, with their attendant effective responsibility, as having cultural value. Strictly speaking, all human beings to a certain extent must take part in technical ensembles, and must have an assigned responsibility and a specific task in relation to the ensemble in order to link up with the network of universal technics.

Furthermore, the individual must not have been tested by one species of technical ensembles, but by a plurality of them, in the way that a traveler must encounter a variety of peoples and experience their mores.

These types of trials must thus be conceived as a means of sampling ordeals from every type of technic and technical ensemble rather than as an effort to participate in the human condition of each technic. In each technic there are technicians, labourers, workers, managers, and the conditions, inasmuch as they are strictly social, can be quite analogous at each level in the various technics. It's the specific ordeal within the technical network which must be tried to the extent that it puts men in the presence of, and within a series of actions and processes that he alone is not directing, but in which he participates.

The philosopher, in this role comparable to the artist, can help gain awareness of the situation within the technical ensemble by thinking about it and by expressing it. But, again like the artist, he must be the one to arouse intuition in others when a definite sensibility is awakened that allows the comprehension of the sense of the real ordeal.

We must state that art, as a means of expression and of cultural realization of technical ensembles, is limited. Art passes through *aisthesis*, and thus finds itself naturally taken to understand the object, the tool, the instrument, the machine. But real technicity, that which is integral to culture, is not what is manifested. All the celebrated colour photographs of sparks, of emanations, all the recordings of sound, of noise, of images generally remain an exploitation of technical reality and not a revelation of this reality. The technical reality must be thought, it must be known through participation in its schemas of action. An aesthetic impression may emerge, but only after the intervention of real intuition and participation, and not as a fruit of the simple spectacle: all critical spectacle remains childish and incomplete if it is not preceded by an integration to the technical ensemble.

Now intuitions of technical participation are not opposed to the forces and the qualities of religious and socio-political thought. Socio-political thought is unbroken in relation to religious thought not when, strictly speaking, it is an actual totality and already realized (because the totality is what it is—it is an absolute and cannot push to action), but when it is subjacent to vaster ensembles that are beneath actual structures, and when its validity portends new structures. It is the relation of totality in contrast to the part, of the virtual totality in contrast to the actual part, that expresses socio-political thought. It expresses the function of relative totality, while religious thought² expresses the function of absolute totality and the function of virtual totality, whereas religions express the function of actual totality. There can exist a complementary relation between the intuition of integration to technical ensembles and to socio-political intuitions because technical intuitions express the result of history and of the conditioning of life, of the *hic et nunc*, whereas socio-political intuitions are projected towards the future as the active expression of potentials. Socio-political thought is the expression

² The original text has the word religion here, but structurally and semantically the line of reasoning does not make sense, so I have taken the liberty of changing it to religious thought.

of tendencies and forces which surpass all given structures. Intuitions relative to technical ensembles express that which humanity has made, that which is made, and that which is structured because it is made—accomplished. Therefore, figural power can remain invested in technics while background power can remain invested in socio-political thought to the extent that figural reality is that which is given in the system of actuality whereas the power of the background includes potentials and holds the future in reserve. Impossible at the level of the relation between the objectivised technical element and universal religious thought, the relation becomes possible once it sets up the expression of virtuality between technical ensembles, the expression of actuality, and socio-political thought. There is a compatibility between actuality and virtuality through real becoming, that extends between this actuality and that virtuality. Philosophical thought grasps the correlation between actuality and virtuality and maintains it by instituting the coherence of this relation.

It is therefore the sense of becoming, the capacity of technics to instigate the simultaneous becoming of the natural world and the human world which renders compatible elementary intuition and the intuition of ensembles. Technical intuition, at the level of ensembles, expresses becoming by virtue of being its base and in terms of results obtained. Socio-political intuition is the ingression of tendencies, the expression of virtualities, and of forces of becoming within that same reality. At the level of technical thought linked to tools and of universalizing religious thought, there cannot be a direct encounter between these two types of thought because the mediation of becoming is not possible. Each tool, each individual technique for the manipulation of tools presents itself as stable and definite. Universalizing religious thought also presents itself as stable and definite in reference to a background of atemporality, but, on the other hand, the introduction of technicity into ensembles that include man in terms of organizer or element render technics evolutive. At the same time and to the same extent, the evolutive character of human groupings becomes aware and this awareness creates socio-political thought. The technical thought of ensembles and socio-political thought are coupled by their aboriginal conditions and their points of ingression into the world—both are born from becoming; one expresses a definite past which serves as a base, while the other expresses the possible future which serves as objective.

It is therefore within the perspective of permanent change in technical and socio-political structures that technical thought and socio-political thought can concur.

Elementary technicity, that which animates the thought of artisans and the basic universal religiosity (which is contemporaneous with the first development of technics), can serve as a paradigm for the thought of becoming of technical ensembles and for the becoming of totalities. Without elementary technicity and universal religiosity as models, the technical thought of becoming-ensembles and the evolving socio-political thought of communities would lose their reciprocal tension. The thought of technical ensembles must be inspired by that of elements, and that of becoming of the human world by the function of totality in order that these two forms of thought (which must meet each other analogically, but not blend into one another) can maintain their autonomy and not become mutually subservient—the functional totality of thought emerging from the primitive relation to the world must be maintained through the real bipolarity of the results of primitive dephasing. Culture is directed by this bipolarity—it develops between technical thought and religious thought. It is that which links the lived comprehension of the technicity of becoming-ensembles to that of human groups represented within socio-political thought.

The past, which is to say the first forms of technical thought and religious thought at the level of the first bifurcation in magical thought, as well as aesthetic activity placed on the neutral point of this first bifurcation, must be preserved in terms of cultural content, i.e. as a basement providing models to actual thought, but it is only in terms of cultural content that it must be preserved. It would be an error against becoming to want to substitute in the representation of technicity actual ensembles by elements, tools, or instruments—technicity, in its actual lived reality, does not happen at the level of elements only, but also, and essentially, at the level of ensembles. Today, ensembles are depositories of technicity in the same way that fractionalization into elements was at one time. Thought must set forth from the knowledge of the technicity of elements, relocated in the past, in order to grasp within its reality the technicity of ensembles, since it results effectively from it: thought must go from the cultural to the actual in order to understand the actual in its reality. Likewise, religious thought is a permanent reminder of the meaning of totality, and culture must renew the anchoring of socio-political thought in universalized religious thought by proceeding from the cultural to the virtual in order to grasp and promote the virtual in all its worth.

The non-cultural in technics is the uniqueness of each determinate technic tending to impose its norms, its schemas, and its own particular vocabulary. Technics, in order to be understood in their real essence (which is solely cultural), must be presented and experienced as a bundle of plurality and this plurality is part of the technical condition which comprehends elements. Inversely, religious thought must be understood as unconditional unity in itself. That which is contrary to culture within religions is their possible plurality, i.e. the confrontation of specific religious traditions (a mode religions tend to adopt) in terms of traditions as such, necessarily rooted—culture must create a superstructure from which the various religions appear in their unity as religions. This is the gist of ecumenism: the condition of integration of religions to culture, the condition of fecundity of religions in the sense of culture. It is perhaps uncertain that there really are open religions, and that the opposition between closed religions and open religions is as sharply defined as Bergson established. However, the openness of religions is a common function to various religions, though to a certain extent they are closed to themselves.

It must have been difficult to construct ecumenism in the distant past, since it cannot constitute itself unless it has at its disposal the means of a reflexive thought wanting to found culture: it is in itself and essentially philosophical work. It requires an awareness of the deep meaning of religions and this can only happen except by placing them anew in the becoming of thought emerging from primitive magic. Up to now, limited ecumenisms (such as within Christianity) have been born, but this is a type of universal ecumenism that philosophical reflection must develop in order that religious reality can integrate itself to culture.

The institution of a technology possesses the same meaning as that of ecumenism, but as a consequence makes understood the true elementary particularity of technical objects according to a general normalization of vocabulary and of common notions, replacing the false specificity of terms from the trades caused by use and not by the essence proper of elements. Technology is that from which the plurality of technical objects, depository of primitive technicity, serves as the foundation for the constitution of technical ensembles. Ecumenism is that from which the universalizing uniqueness of religious thought, depository of the function of primitive totality,

serves as the foundation for social and political thought. Technology accomplishes the conversion from plurality towards unity, while ecumenism (firstly understanding unity) accomplishes or allows to accomplish the possible conversion towards a plurality of socio-political ingressions. The conscious understanding of the function of plurality and of the function of unity are necessary foundations in order to make mediation possible at the level of the encounter between the status of plurality and the status of superiority in relation to the unity realized by the matrix at the neutral point of thought-becoming.

Meanwhile, in order that philosophy may bring about the integration of the sense of technics in culture, it is not enough that it apply itself to culture outside of philosophy strictly speaking, as if it had to carry out a task determined by a sense of duty. Because of the reflexivity of thought, all philosophical activity is also a reform of the world of knowledge and impacts the theory of knowledge. The conscious awareness of the genetic character of technicity must bring philosophical thought to present in a new way the problem of the interaction between concept, intuition and idea, and correlatively, to correct the sense of nominalism and realism.

In fact, it is not enough to say that the technical operation provides a paradigm for what is essentially inductive thought, while religious contemplation provides a model for deductive theoretical thought. This double paradigm is not limited to sciences: it extends all the way to philosophical reflection by providing it with usable modes of knowledge that are transportable to other realms. Furthermore, technical processes and religious contemplation provide implicit axiomatics for all subsequent knowledge—there is in effect a link which ties a mode of knowledge (through concept, intuition, or idea) to an implicit axiomatic. This implicit axiomatic is constituted by the interaction that exists between the reality to be known and the knowing subject, i.e. by the primary status of the reality to be known. In fact, technical thought provides the model for the intelligibility of elements taken either one by one or in combination as the mutual constitutive relations of the ensemble. The real to be known is at the end of the effort of knowledge; it is not a mass offered in its totality on the spot, made up of elements that are knowable as a combination of elements—an essentially objective reality.

On the other hand, religious thought, being the paradigm of deductive thought, sallies forth from a function of ensemble immediately acknowledged as having an unconditional value, and which can only be revealed explicitly, but not constructed and produced by a thinking subject. Religious thought provides the model for the contemplation of being, of respect for being which can never completely resolve itself in terms of knowledge but of which a certain representation can be created. Relative to being, knowledge and the subject which accommodates it remain incomplete and inferior. In fact, being is the real subject and the only complete subject. The subject of knowledge is but a subject twice-removed in reference to a primary subject and as a participant in it: knowledge is conceived as an imperfect doubling of being because the subject of knowledge is not the true subject. This contemplative mode of knowledge is the basis for idealist realism in philosophy. *Eidos* is an aspect of being, a structure of being that exists for itself before it is even conceived. It is not essentially and immediately an instrument of knowledge; it is firstly a structure of being. It becomes a representation in the soul but only in a secondary manner and as a participant, thanks to the genetic relation between the soul and ideas. Knowledge is neither formed nor constructed by the subject. There is no genesis of knowledge, but only the discovery of the real by the spirit. Knowledge is imitation of being because being is essentially subject in itself, even before any awareness by this secondary and imperfect subject which is man. An example of a similar axiomatic metaphysics is that which governs Plato's theory of knowledge. The Good is the primary and absolute subject. It is that which structures the plurality of ideas where each one cannot be entirely subject to itself in that it is this idea and not that idea. The Good is the metaphysical translation of the function of totality as a subject, prior and superior to definite knowledge, guaranteed to be intelligible in its knowledge and its validity. All knowledge is to a certain extent knowledge of Good, not directly and of itself, but indirectly and through reflection, since that which constitutes knowledge by ideas is the primary totality of being, the absolute subject, towards which all efforts of specific knowledge are vertically arranged. Man's knowledge travels the ontological path in reverse from that which is Good to objects through ideas: moving objects up the chain of analogical reasoning to ideas (to which they are objects), and ideas to that which is Good.

On the contrary, operational knowledge provides itself with the possibility of constructing its object. It dominates it and causes to appear, rules over, the genesis of its representation from elements that can be manipulated, in the same way that the artisan constructs the object in front of him by assembling the pieces in a coherent way. The concept, instrument of operational knowledge, is itself the result of an operation of ingathering, involving processes of abstraction and generalization from a given experience in a specific *hic et nunc*. The source of knowledge is in the *hic et nunc*, instead of residing in the unconditional and interior totality of all human gestures, which even govern those human gestures which find themselves already conditioned by knowledge before coming into existence and becoming realized. For contemplative knowledge, the real is the absolute subject, whereas for operational knowledge it is always object as in the immediate sense of "that which is placed in front of", like a piece of wood placed on a workbench, waiting to be incorporated into the ensemble which is being made. In operational knowledge, the real does not precede the operation of knowledge, it follows it. Even if it does appear to precede it according to current experience, it follows according to real knowledge, since this knowledge does not grasp the real except when it reconstructs it through the manipulation of elements.

This opposition between the two modes of knowledge is important since the succession of philosophical schools demonstrates that there exist two currents of thought which can barely come together. We can designate them globally as a posteriority or a priority. The *a posteriori*—empirical, conceptualist, partially nominalist (since knowledge, by becoming more and more abstract, distances itself from elementary sources)—defines knowledge as the operation which uses the concept. On the other hand, the *a priori*—deductive, idealist, realist insofar as it is acosmic—defines knowledge through the grasping of the real through the idea.

However, if the source of this opposition and incompatibility between the two basic axiomatic metaphysics is the splitting of the primitive mode of being in the world into technics and religion, we must affirm that philosophical knowledge cannot be satisfied by comprehending being through the concept or through the idea, nor even successively by one or the other mode of knowledge. Philosophical knowledge, as a function of convergence, must call upon a mediated and superior mode of knowledge which in its unity reunites concept and idea. Now, it is completely exact to identify

intuition with the idea. Knowledge through intuition is a grasping of being which is neither *a priori* nor *a posteriori*, but contemporaneous with the existence of being which it grasps, and at the same level as this being. It is not knowledge through idea, since intuition is not already contained within the structure of the known being. It is not a part of this being. It is not a concept, since it possesses an internal unity which gives it its autonomy and its singularity, preventing genesis through cumulation. Lastly, knowledge through intuition is really mediated in the sense that it cannot grasp being in its absolute totality, like the idea, and neither from its elements nor in combination, like the concept, but at a level of realms constituting a structured ensemble. Intuition is neither sensible nor intellectual. It is an analogy between the becoming of the known being and the becoming subject—the coincidence of two becomings. Intuition is not only a grasping of figural realities, like the concept, nor a reference to the background totality of the real in all its unity, like the idea. It addresses itself to the real in terms of forming systems within which genesis takes place. It is a knowledge proper to genetic processes. Bergson cobbled out of intuition the mode proper for the knowledge of becoming, even though we can generalize Bergson's method without barring intuition from realms such as matter, because it appears to not present the dynamic character traits necessary for intuitive apprehension. In fact, intuition can be applied to any realm in which genesis is operational because it follows the genesis of beings—it considers each being at its level of unity without decomposing it into elements the way that conceptual knowledge does, but without destroying its identity by rendering it relative to a background totality which is more vast. The concept keeps of its technical nature the capacity to grasp the essence of figurative realities while, on the other hand, the idea is particularly capable of knowledge of background realities. Intuition intervenes as a mediator that takes into consideration ensembles within which there is structural genesis, i.e. a genesis of correlation between figure and background. Intuition is thus particularly a process of philosophical knowledge because thanks to thought it can grasp being in its essence, which is the formula for its genetic becoming, while remaining at the neutral point of this becoming in order to ensure the function of convergence.

For intuition, the level of unity is neither totality, like knowledge through idea, nor element, like conceptual knowledge. In this way, philosophical thought can renew its relation to being which at one time was primitive magic,

and then aesthetic activity. The known being, the world, is neither object nor subject in its origins. It is the supposed object when it is subjected to operational thought, like with mechanistic scientific knowledge and it is the supposed subject when it inspires contemplative knowledge, like the Cosmos of the Stoics. But the notion of object is still of technical origin, in the same way the subject is of religious origin. Neither one can be totally applied to the world or to human beings, since they would constitute a complete totality unless they were taken together. In fact, because of their common origin, the notions of object and subject are limits that philosophical thought must surpass by causing the convergence at the neutral point within mediated knowledge of knowledge in terms of object and knowledge in terms of subject according to intuition. Philosophical thought cannot constitute itself this way, except only after having exhausted the possibilities of conceptual knowledge and of knowledge through ideas, i.e. after a technical awareness and a religious awareness of the real. Philosophy comes after the technical construction and of the religious ordeal, and it defines itself as the capacity for intuition in the interval which separates them. Technics and religion are the two polar directions that arouse philosophical intuition in the real.

Within philosophical thought, the relation between technics and religion is not dialectical. To the extent that technics and religion are two opposed and complementary aspects of a mode of primitive being in the world, these two poles must be kept together as the couple that they form: they are simultaneous. The elucidation of philosophical problems cannot be validated by accepting the unimodal character of thought emerging from a single phase. The aesthetic vision of reality cannot fulfil philosophical research since it only applies itself to select realms of the real, those in which the coincidence of figural realities and background realities is possible without subsequent elaboration. Aesthetic thought is not directly active as it has no impact on the real of which it is a part—it restricts itself to exploiting it by detaching itself. It refracts aspects of reality, but does not reflect them. On the other hand, philosophical thought goes further than aesthetic activity since it originates from genetic becoming and re-inserts itself into it to complete it. Intuition is in fact a simultaneously theoretical and practical relation with the real. It knows it and acts on it because it grasps it at the moment of its becoming.

Philosophical thought is also ingression of philosophical gesture into the reticular object-background structure which defines itself within being. Philosophy intervenes as a structuring power, as the capacity to invent structures, that would solve the problems of becoming at the level of this intermediate nature between plurality and totality which is the reticular diversity of existential realms.

Intuition finds within a real unity the figural aspect and the aspect of the background since elements and the totality are not the concrete ensemble of being. The unity of being is the active center from which the object and the background come to be from their division, i.e. from elements on the one hand and totality on the other. Intuition knows and achieves this unity of being as a gathering of elements and of totality. Intuition is itself an object-background relation: it is not, like the idea, of the same nature as the being which it comprehends, since by being of the same nature it can only grasp the background which is not the ensemble of being, and it is not abstract like the concept which abandons the concreteness of being only to preserve the defined foreground object. Grasping the primitive relation of object-background, intuition is analogous in terms of being. It is a knowledge which neither justifies full realism nor pure nominalism, but a stable mix of the two ways of envisaging the scope of knowledge: intuition is not equivalent to being, it is not of being as a real idea, but it is analogous in relation to being since it is constituted like it, by the same becoming, which is the object-background relation. It finds complete existence within being in which magical thought is a presentiment, before the appearance of technics and religion. We can therefore say that in accordance with the becoming of thought, there exist three types of intuition: magical intuition, aesthetic intuition, and philosophical intuition. Aesthetic intuition is contemporaneous with the rift in magical thought between technics and religion, and doesn't carry out a true synthesis of the two opposing phases of thought: it only points out the need for a relation and achieves it through allusion within a limited realm. On the other hand, philosophical thought must really carry out the synthesis and must construct culture, coextensive with the endpoint of all technical thought and of all religious thought. Aesthetic thought is thus the model of culture, though it is not all of culture. It is rather the announcement of culture and a demand for culture, but not culture itself—since culture must really bring together all of technical thought to all of religious thought,

and for that, it must be composed of philosophical intuitions which draw their origins from couplings operating between concepts and ideas. Aesthetic activity fills the interval between technics and religion, whereas philosophical thought grasps and translates the extent of the interval. Philosophical thought considers it as positively significant—not as a statically free realm, but as a direction defined through the divergence of two modes of thought: whereas aesthetic thought is conditioned by becoming, philosophical thought comes to be with divergent becoming so as to make it converge once again.

The technicity of technical objects can therefore exist at two different levels. Original and primitive technical objects, which appeared as soon as magical thought ceased to have important functional meaning, are true depositories of technicity insofar that they are tools and instruments, but they are not objects to the extent that they can be put to work by an operator. The operator's gestures are themselves also part of technical reality since they're contained within a living being which places its perceptual power, its role in elaboration and invention at the service of the technical task. The real unity is that of the task more than that of the tool, even though the task cannot be objectified and can only be lived, experienced, achieved, and, properly speaking, not thought. On a second level, technical objects are part of technical ensembles. As a result, neither on the first level nor on the second can we consider technical objects as absolute realities that exist by themselves, even after having been put together. Their technicity can only be understood by the integration through activity of a human operator or through the functioning of a technical ensemble. It would therefore not be legitimate to seek to understand by induction the technicity of the object in the same way we seek to understand natural beings. The technical object, never keeping its technicity entirely to itself whether because it is a tool or because it is an element of an ensemble, must be known through philosophical thought, which is to say through a system of thought that possesses the intuition of becoming of the modes of relation between man and the world.

The use of this genetic method defines the technical objects in reference to the technicity of the artisanal operation or of the technical ensemble, and not to the technicity of the operation or that of the ensemble resulting from technicity as merely a property of the object.

Nevertheless, the functional character and the conditioning of the genesis of the technical object translate themselves quite effectively through a type of becoming which is particular to the technical object, that which we have called the concretization of the technical object. The process of this concretization can be understood directly by examining a certain number of examples of technical objects. But the sense of this concretization, inherent to the object of a technicity which is not entirely contained within it, can only be understood through philosophical thought in accordance with the genesis of technical modes and non-technical modes in the relation between man and the world.