THE LIMITS OF HUMAN PROGRESS: A CRITICAL STUDY

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ABSTRACT   Human progress cannot be measured by what people produce but by the stages of production. The shift from the development of language in the classical period to religion in the medieval and technical progress after the Renaissance does not tell the whole story. Each of these domains forms an internally consistent system involving people as both agents and subjects of development, and each system tends towards a stifling completeness at its height. Each successive system represents a more primitive need: to communicate, to be at one with the world, to sustain life. As such, each is progressively more universal. But technical progress is not truly systemic, passing by peoples of the underdeveloped world, and requires reflexive thought to bring out this failure, and to integrate technical progress with human progress as a whole.

KEYWORDS: Simondon, language, religion, technics, technology, progress

> The problem of human progress cannot be posed unless one takes into account the entire system of activity and existence constituted by what man *produces* and what man *is*. Consideration of what man produces (language, technics) does not permit evaluation of human progress, nor prediction of its law of development as a function of time, because attention is then solely directed towards the objective concretization of human activity. For this reason, as long as one considers only objective concretization, one has no criterion to enable one to distinguish between one system of concretization and another as the sole sign and valid medium of human progress. It has proved possible to identify the progress of language in all its forms with human progress, as classical humanism has done. Similarly it has been possible to identify technical progress in all its forms with human progress. If you do make this identification, which we think reductive, you will then find that human progress has a limited temporal evolution and foresee by analogy that technical progress will describe a sigmoid curve,[1] as in the case of linguistic progress.

However, even if one wanted to evaluate human progress on the grounds of objective concretization alone, it would be imperative to consider the series of possible concretizations as progress, not such and such an objective concretization, which is in itself self-limiting. That linguistic and technical progress share internal processes of inhibition which gives their development the form of a sigmoid curve when regarded as a function of time is hardly doubtful in the case of language, and is perhaps also true in the technical domain. But *human* progress consists in the way man, having pushed the possibilities of language to the point of saturation, turns towards technics, and enters upon a new domain of development. If to us human progress appears identifiable with technological progress, it is because in our day and in our civilization human progress is engaged with the development of technology. Nothing allows us to presume that having brought technical development to saturation, if indeed such saturation can be achieved, humanity will not find itself engaged in another domain of progress. Besides, the reduction of the domains of progress that have been already attempted to only two seems excessive: if the ancient classical civilizations seem to have achieved the saturation of language development, those of the medieval period seem to have achieved the same in religious development. Starting with the Renaissance, the spirit of technical development first sought the spirit of development in the ancient example of the development of language, but then distanced itself from it. The Renaissance was effectively first a new phase, short and intense, of linguistic development, before becoming an introduction to the phase of technological progress in which we live. The Reformation, between religious and technical phases, manifests the introduction of the power of linguistic progress, inspired by ancient classicism, into religious becoming. Likewise, at the end of the ancient world, one can see new forces of progress, essentially religious and ethical, applied to promoting the most highly elaborated phase of

the development of language, in the form of the ethico-religious phil-
osophies in full expansion, Stoicism and Gnosticism. Thus there exist
not only a succession of domains where development creates objective
concretizations – language, religion, technology – but there also exist
durable overlappings between these domains, manifesting a pursuit
of universality.

Nonetheless succession, or even overlapping, of successive stages
does not signify progress. If the linguistic phase, the religious phase, the
technical phase, and all those other phases of human activity past and
future were self-limiting and ignorant of each other without intercom-
munication, humanity would be called to live each successive venture
to no avail, until the saturation and abandonment of each of them. And
one might then speak of the progress of language, of religion, or of
technology, but not of human progress. Indeed, what these successive
phases of objective concretization have in common is not the content
of that concretization: pontifical power cares as little for Greek theatre
as radar cares for the cathedral. It is man who is common, man as
the motor and promoter of concretization, and man as the creature
in whom objective concretization resonates, that is to say, man as
agent and as patient. Between the objective concretizations of each
self-limiting cycle of progress and man there exists a bond of reciprocal
causality. In each cycle of progress, man forms a system with what he
constitutes, and this system is far from being saturated. It is not the
sum of human possibility that is reflected in objective concretizations,
language, religion, technology. Thus we can say that there is human
progress *only if*, when passing from one self-limiting cycle to the next,
man increases the part of himself which is engaged in the system he
forms with the objective concretization. There is progress if the system
man–religion is endowed with more internal resonance than the system
man–language, and if the man–technology system is endowed with a
greater internal resonance than the system man–religion.

Certainly this is a very delicate question, for it is here that there
appears the effective role of man taking consciousness of the dev-
elopment process, man who forms part of the system in which this
process unfurls. There are undoubtedly aspects of automatism in
every development, and hypertrophy of automatism coincides with
the end of evolution, and with the saturation that concludes each
process of development. Such was the state of language at the close
of the ancient world: it became purely a matter for grammarians and
formalist logicians seeking etymological rectitude in naming. Surely, a
grammar or a formal logic does not reflect man, or at the least reflects
only the smallest part of man, one that should not be inflated. All the
same, in its classicism, the phase of linguistic development at its
apogee was charged with more hope; at the time of the Sophists and
of the *Panegyric Discourse*,[2] language, conceived as the repository
of knowledge, appeared as the foundation for a "perpetual eulogy"
of humanity. Such too was religion in its ascendant phase, with its
universal ecumenical inspiration. It ended nonetheless in that rigorous

administration of thought and action which no longer reflected the power of human progress. To put it another way, after a leap imbued with the power of universality manifesting a high degree of internal resonance in the system formed by man and his language, or man and his religion, there comes a closure, a progressive saturation of the autonomous system of objective concretization, to the same degree reducing the system's internal resonance, initially much vaster, formed by man and the objective concretization. The real *center of systematization* shifts. At first it is to be found between man and the objective concretization. Little by little, it is the objective concretization alone which constitutes the system. Man is ex-centered, the concretization mechanizes and automates itself; language becomes grammar and religion theology.

Will technology become industry as language became grammar and religion theology? It is possible, but there is no necessity, and one should not confuse the three cases. In fact, if language became grammar, it was because from the beginning the share of human reality translatable into language was too weak to establish a valid reciprocity between man and the growing system of language. It required privileged situations to instigate this reciprocity, the condition for the adequacy [French: *adéquation*] of language to man: such were the ancient democracies like Athens. But language, more or less adequate to the life of an ancient city-state, was deeply insufficient for the geographical dimensions and forms of exchange of an empire. The humanism of language was of short duration; in our times it subsists artificially in very small human groups with no capacity for constructive expansion. As for religion, it proved adequate to the geographical dimension of empires, covering areas as big as continents, and far larger than the ancient city-state, all the while cementing different social classes, even penetrating into castes. The current regression of religion is manifest in the loss of its universal geographic power and its defensive withdrawal into limited human groups, recalling that of the humanist culture founded on language which found refuge among the literati. If technology becomes industry and takes defensive refuge in a new feudalism of technicians, researchers, and administrators, it will evolve like language and religion towards closure, centering on itself instead of continuing to form, with man, an ensemble in process of becoming. Yet we need to note that the claim to universality was more justified in religion than in language, in the sense that the capacity for continual progression across diversity demonstrated much greater expansion in the religions. Religion, in effect, concerns a more primitive reality, less localized, somehow more natural for man than that to which language addresses itself. Religion is more implicit than language, closer to the basics, less civilized, therefore less limited to the city-state. Technology is even more primitive than religion: it connects with the elaboration and satisfaction of biological desires themselves. It can therefore intervene as a link creating ensembles between the people of different groups or between people and the world, in circumstances far less tightly limited than those required for the full use of language or full religious

communication. The impression of a fall into primitivism, into vulgarity, which we feel at the passage from religion to technology, the Ancients felt watching the most perfect monuments of language abandoned in favor of a religious upsurge which they judged vulgar, destructive and filled with the seeds of barbarism.

Yet this step-by-step descent towards primitivism and materiality is a condition of universality: a language is perfect when it is congruent with the polity that is reflected in it; a religion is perfect when it achieves the dimensions of a continent whose diverse ethnicities are at the same level of civilization. Technology alone is absolutely universalizable, because that part of man that resonates with it is so primitive, so close to the conditions for life, that every man possesses it in himself. Thus there is at least the chance that the seeds of the *decentering* of man, and thence of the *alienation* of the objective concretizations which he produces, may be feebler in technology than in language and religion.

All the same, the internal resonance of the systemic man–technology ensemble will not be secured so long as man is not known technologically, such that he becomes homogenous with the technological object. The threshold of non-decentering, and thus of non-alienation, will only be crossed if man intervenes in technical activity in the dual role of operator and object of the operation. In the current state of technical development, man intervenes above all else as operator. Admittedly he is also a consumer, but only *after* the technological object has been produced. Man is very rarely, as man, that on which the technological operation is carried out. Most often, it is only in rare, serious and dangerous or destructive cases that man is the direct object of technical operations, as in surgery, war, or ethnic or political struggles: such activity is conservative or destructive and degrading, not instigating. Surgery, warfare, and psychological action do not construct man: they do not institute a positive reaction through the medium of technicity. So far, there has been no solid relation of interiority between the techniques of action on things and techniques of action on people. In the best cases, techniques acting on human beings merely replace the role previously devolved to language (political struggle) or religion (psychoanalysis). Technology would have the opportunity to prime a non-sigmoid process of development if it could effectively and completely replace the activities of language and religion. Since, at present, there exists no a metrology applied to humans, nor a human energetics, the unity of techniques devoted to humanity does not exist, and no genuine continuing relation is possible between these techniques and those directed towards things. The various techniques devoted to things appeared when science (in this case Physics and Chemistry) provided the foundations of a true science of measurement. Such a science, foundational to a scientific measurement applicable to humans, does not yet exist in any stable fashion in the domain of living organisms.

It therefore seems possible to foresee that technological progress will not always preserve the explosive aspect which it manifests in the domain of objective concretization. Moreover we should consider

more moderately the repercussions of this progress in everyday life. Here the pace is less than explosive: lighting, furniture, food, transport all change, but slowly. And, if industry changes, agriculture in our regions is a domain where technological progress is far from having assumed an explosive pace. It would be wrong to confuse technical progress, of value to vast groups of human beings, with the exceptional results achieved in the specialist milieu of scientific technology. The technical object increasingly requires a *technological milieu* in order to exist. So machines like drills and grinders cannot be employed in a workshop without risking silicosis in their operators. New machines cannot simply break in: the artisanal milieu must be transformed into an industrial milieu, requiring energy supplies, automation, and remote control, not to mention human and economic conditions, which make the transformation even slower. Often enough the introduction of an isolated machine, whose performance contrasts with those of other machines and the possibilities of the surroundings, gives a spectacular impression of the abstract notion of possible progress, whereas, if the whole ensemble is modified homogeneously, this appearance of explosive pace is erased. The slow speed of real progress, in the very domain of objective concretizations, means that technical progress is already tied to social conditions. The inhibiting forces which could otherwise retard it are already operating, but they do not stop it. On may then surmise that, because of this slowness, technical progress will not suddenly assume an explosive pace, because regulatory conditions already exist, and the exploitable riches of energy and raw materials are considerable. According to the journal *Prospective* (whose first number has just come out), the possibilities for long-term development do not justify an attitude inspired by Malthusianism.

If technical progress is to be considered as human progress, it will have to involve reciprocity between man and objective concretizations. This means initially that there must be homogeneity between the different domains of technical development, and an exchange of their determinations. Progress assumes an explosive pace *when it is already in its origins a fragmented progress*, fulfilling itself in sharply separate domains: the more fragmented its condition, the less it is *human* progress. Such is the case of the technical progress accomplished in a matter of years in oil and gas prospecting. In France, Lacq gas crosses underdeveloped areas, bringing them no profit, heading off for sale far away in already industrialized areas. The gas discovered by oilmen in the Hassi-Messaoud region flames like a torch in the sky while, in Algeria, men kill one another and children die of hunger beside wasted fields and cold hearths. Technological progress would be much more profoundly human progress if it was already progress of all technologies, including agriculture, which in terms of excellence is, in every sense of the word, the poor relation.

Such progress would therefore be much slower at each point and much more profound in its totality, thus much more truly progress. Transforming all the conditions of human life, augmenting the exchange

of causality between what man produces and what he is, true technical progress might be considered as implying human progress if it has a network structure, whose mesh is human reality; but then it would no longer be solely an ensemble of objective concretizations. For technical progress to be self-regulating, it must be a progress of the whole; which means that each domain of human activity employing techniques must be in representative and normative communication with every other domain; this progress would be of an organic type, and would form part of the specific evolution of man.

In addition, even if such a conclusion might appear illusory, it must be said that human progress cannot identify itself with any single crisis in the progress of language, religion or pure technology, but only with that which, in each of these crises of progress, can be passed on to other crises of progress in the form of reflexive thought. In effect, this inner resonance of the ensemble formed by the objective concretization and man is thought, and can be transposed. Only philosophical thought is common to progress in language, progress in religion and progress in technology. Reflexivity of thought is the conscious form of the internal resonance formed by man and the objective concretization; it is this thought that ensures continuity between successive phases of progress, and it is thought alone which can maintain the preoccupation with totality, thus ensuring that the decentering of man, in parallel with the alienation of the objective concretization, do not occur. In our times, reflexive thought must devote itself particularly to guiding human technical activity in its relation to man, because it is in this domain that there exists the greatest danger of alienation, and where we find that absence of structure which stops the technological progress practiced in objective concretization from becoming an integral part of human progress, by forming a system with man. The question of the limits of human progress cannot be posed without also posing the question of the limits of thought, because it is thought that appears as the principal repository of evolutionary potential in the human species.

Translated by Sean Cubitt

NOTES

1. A sigmoid curve is an S-shaped graph found in statistical analysis. Typically it shows a slow rise along the time axis which goes through a phase of accelerated growth before reaching a plateau. It is typically found, for example, in the early adopter, rapid take-up, and saturated market phases of technological innovation.
2. Isocrates, *Panegyricus*. In George Norlin (trans.), *Isocrates with an English Translation in three volumes*. Cambridge, MA, Harvard University Press; London, William Heinemann Ltd, 1980. Available at the Perseus Project, http://www.perseus.tufts.edu/cgi-bin/ptext?lookup=Isoc.+4+1.

TRANSLATOR'S NOTE

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