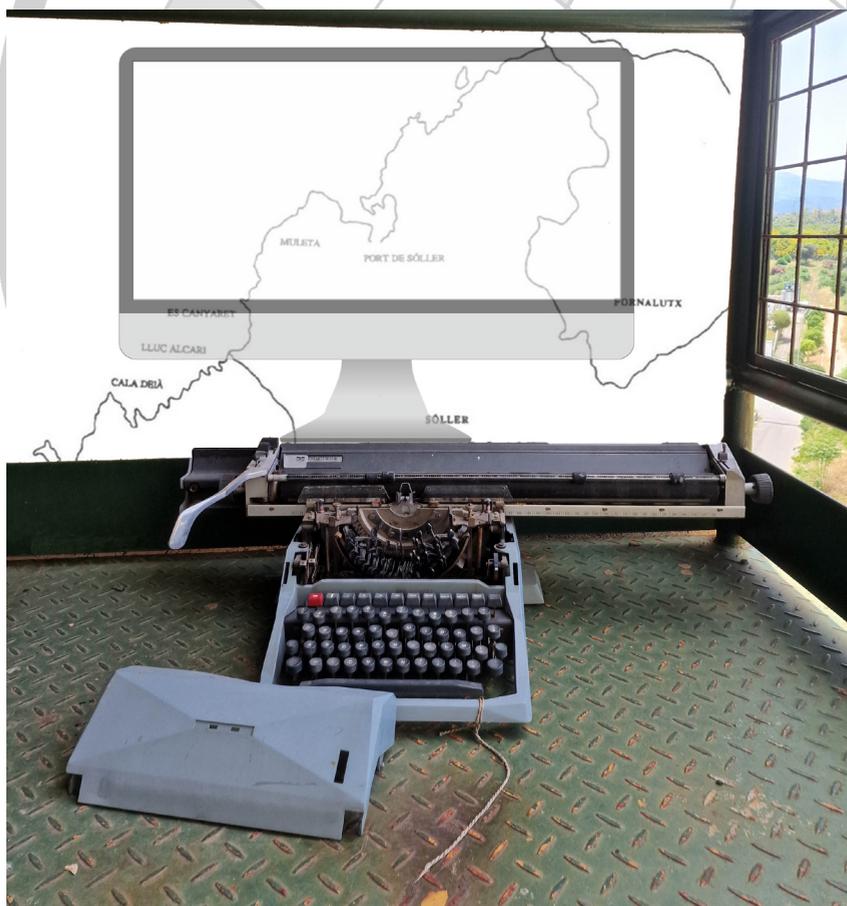


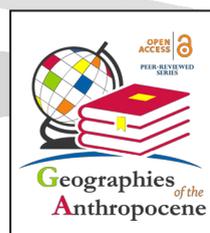
INFORMATION TECHNOLOGIES AND SOCIAL MEDIA: NEW SCIENTIFIC METHODS FOR THE ANTHROPOCENE

Gaetano Sabato, Joan Rosselló (Editors)



Preface by Javier Martín-Vide

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Information Technologies and Social Media: New Scientific Methods for the Anthropocene

Gaetano Sabato, Joan Rosselló

Editors



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Anthropocene*

Gaetano Sabato, Joan Rosselló (Eds.)

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10. Technologies for communication and new models of thought. Culture, philosophy and social identities

*Alfonso Di Prospero*¹

Abstract

The Covid 19 pandemic has forced us to a much larger use of digital communication technologies. The article proposes to investigate the structure underlying a cultural model capable of supporting the widespreading of the new forms of communication along more desirable lines. The article also examines the opposition between those who hold favorable views and those who hold negative views about the employment of the new technologies. I maintain that the most important factor is not in the technical nature of the devices, but in the structure of the meaning constituting the content of communication. I also consider it of pivotal importance to analyze how cultural models can offer semantic tools and aids in order to give a more fruitful configuration to the contents of communication.

Keywords: Pandemic, ICT, Agamben, Self-organization, Objective pull

1. Pandemic and new models of culture

The shock of the Covid 19 has brought about the effect of the necessity of a fast advancement in the process of wide spreading of the new technologies for communication. Of course this circumstance has provoked an intense debate. In the Italian context we can recall the positions of Maurizio Ferraris (2021a, 2021b), who defends a positive interpretation of the meaning of technology in general and of the new technologies for communication in particular, while Massimo Cacciari (2020) can be mentioned in particular among the critics who make some serious accusations against the use of digital devices in education and teaching. Giorgio Agamben (2020) has also become well known to a larger public of non specialists for his position against lockdowns and the use of the

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greenpass in Italian politics, as a means of contrasting the pandemic. Massimo Adinolfi (2021), Donatella Di Cesare (2021), Giacomo Marramao (D'Alessandro, 2021) entered the debate so as to contrast Agamben's and Cacciari's positions. Zuolo (2021) dwells on the suggestion that Agamben's tenets about the Covid 19 are a direct consequence of his previous and well known philosophical elaboration.

One aspect of the thesis that I wish to defend is that these episodes – even if relevant in the ordinary sense in the public discourse about decisions of collective interest – only affects one level of the issue to be dealt with today. The dimension of the question that I wish to consider does not concern the specific and explicit contents of texts and discourses that philosophers and intellectuals are proposing on this subject, but rather the sociological meaning of their productions. Actually my analysis will not concern the authors that I have mentioned, but some aspects of the general structure of the communication processes in the cultural dynamics – within which the discursive practices of these philosophers are also contained. All the same, the kind of trouble that the philosophical reflections have gotten into while facing the particular problem of the pandemic is a pertinent example of the difficulties discussed in this paper.

The Covid-19 pandemic itself is a correlated of the present process of globalization and it is a cue and a symptom of the limits that affect it. Every pandemic presupposes a net of relationships that has reached a too high degree of development: a sort of promiscuity that can show itself in different ways. Animals living in too close proximity to human beings, people living in too dangerously crowded conditions, too many individuals moving from one country to another. Then – this is my issue – what is the *model of culture* that could be adopted to manage these processes? In other words, in a nutshell: what is the model of culture that can be suitable to the Anthropocene era? (Mercatanti, Montes 2021; Delanty, 2021; Ricciardi, Vella, 2021; Aime, Favole, Remotti, 2021; Indirli, Di Maio, Martinelli, 2021).

The reference here is to the *structure* of communication in cultural activities, not to its contents. Which patterns of communication should be adopted in a world where the standard of sociality is designed on a global scale? The increasing amount of messages and relations today render different from the past the underlying logics that control the dynamics of communication and explain the strategies adopted by the speakers. Our reflections about the meaning and the functions of the cultural productions must also take these aspects into consideration. An example of the problems to investigate can be found in the political ideas of Dario Fo, a great writer

and Nobel Prize winner. In the Seventies Fo expressed his appraisal for the figure of Mao Tse Tung, but the question arises of what ground there could be – in principle – for a reliable evaluation of the above mentioned case, when an observer claims to understand something concerning the politics of a faraway country, in such an exacting issue (of course the circumstance that Fo visited China does not alter the nature of this problem). Clearly Fo’s case is only one example of a widespread way of being engaged in political and cultural activities (Tesini, Zambonardi, 2018): similar difficulties are well known in the history of philosophy (we can also recall the different case of Martin Heidegger’s endorsement to the Nazi Party, in his own country). In these years, and since a long time, this attitude is less common, yet the issues that it entails remain urgent. In my perspective the question is utterly general. What is the epistemology of these connections that the social actors attempt to find on a global scale?

What happens in a city like Wuhan – mostly unknown in the West, up to the pandemic outbreak – can change our life. We can also remember that, while in Western societies the causes of the Covid 19 pandemic are attributed to the poor sanitary conditions of the markets in Wuhan, China widely maintains a different interpretation, according to which the virus has been brought from the U.S.A. (ADNKronos, 2020). In perspective, what are the entailments of such a divide within the global public opinion?

The flows of communication are not always reliable. Often, they are rather wholly conditioned. Even if pieces of information about these far countries (slaughters, persecutions, lack of freedom of speech) are available, in some cases it is difficult to evaluate if they are trustworthy. (In an obvious sense, it is to be considered that in the history of the political movements, the phenomenon of echo chambers has always existed.) The kind of difficulties that were present in the years of the first representations of *Mistero buffo* are still extremely dangerous – furthermore they have increased as the net of global intersections has become denser and more intricate. Refusing to give relevance to the facts that concern people from other countries cannot be a viable option. Rather, we should develop models of communication to contrast these mechanisms.

2. Culture and self-organization

Edgar Morin (1973) applies the concepts of self-organization to the study of human nature and its capacity of producing culture. He believes that the presence of “noise” in the flows of information is not necessarily an obstacle

for the tasks of the system, but rather a condition that can facilitate a shift towards more advanced levels of organization. Scott Ashby's principle of "order from noise" is also largely used by Niklas Luhmann (1984) in his *Social Systems* theory. Among many others, Maurizio Ferraris' hope (even if his analysis follows different lines from mine) is that the pandemic can be the ground to obtain:

“il cambiamento di prospettiva necessario per trasformare lo *choc* in esperienza [...] e per trarre da questa crisi [...] un insegnamento che non ha precedente nella storia e che costituisca un possesso perpetuo dell'umanità” (Ferraris, 2021a, 66)².

Can we detect any conditions that are suitable to catalyze such a kind of process? When put in these terms, the task is too exacting. But I wish to make the attempt to offer some remarks.

One focus will be on the field of teaching, but in a perspective that is not that of the concrete application of pedagogic tools in the classroom. In schools, a moment of *mediation* can be found between the contents of the cultural universe and the learners, therefore the definition and the conceptual analysis of those contents can also be involved in the issues of teaching, if finalized to understand the *impact* of cultural productions on the learners' lives. But my interest does not lie in detecting the best way to transmit knowledge, competencies and abilities. Of course this is also an interesting point, but it presupposes that *we* (the adults) *know* with a certain precision how to identify the best contents, competencies and abilities that young people need to learn. In the current historical moment, when cultural frameworks are rapidly changing, the task of this detection is neither simple nor is an obviously attainable outcome.

The debate about the employment of digital technology in the field of teaching is truly interesting (Riva, 2014; Ranieri, Pieri, 2014; OECD, 2012; Maragliano 2013; Midoro, 2015; Roncaglia, 2018; Reale, 2013). It is well known that there are strong differences in the evaluation of the impact of technology on learning and on cognitive processes. Manfred Spitzer (2012), Nicholas Carr (2010), Jean Twenge (2018), Byung-chul Han (2013), Sherry Turkle (2011, 2015), Susan Greenfield (2014), Maggie Jackson (2008), Adam Gazzaley and Larry Rosen (2016), have maintained in various ways

² «[A] change of perspective necessary to transform the *choc* into experience [...] and to draw from the current crisis unprecedented lessons bound to become a perpetual heritage of Mankind» (author's translation).

that the effect of digital technology on the human mind is negative. As the effects of digital technology increase, the patterns of thought are damaged, the structure of the attention becomes less effective, and the quality of interpersonal relationships deteriorates: the image of the “swarm” is used by Han to describe a new kind of sociality; the empathic contact between individuals is threatened by new models of relation where distance is overwhelming. Finally, individual thought becomes less capable of keeping its focus for a long time.

On the opposite front, there has been an important contribution by Pierre Lévy (1994) concerning collective intelligence (see also, among many others, boyd, 2014; Johnson, 2006). Marc Prensky discusses the entailments for pedagogy: «if Digital Immigrants educators really want to reach Digital Natives – i.e. all their students – they will have to change. It’s high time for them to stop grouching, and as the Nike motto of the Digital Native generation says, ‘Just do it!’» (2001, 6).

In all likelihood the main limit of this debate is represented by the existence of a strong polarization between optimistics and pessimistics. Those who embrace one party tend to overvalue all the aspects that converge with their opinion. If someone defends the use of technology, he or she also defends a model of language and communication that seems to have an affinity with it. So Prensky’s wish is that educators adopt the “languages” and the aesthetics of the new media. On the contrary, if someone criticizes the diffusion of the new technology for communication, they seek in the past models of communication and in the traditional conception of culture the right exempla to be followed, both in the contents and in the aesthetics precepts. It can be argued that something in this frame is not convincing, by considering the potential of a fundamental tool of pedagogy in the field of new technologies: the hypertext. In the hypertext, a more structured form of thought can be exercised, perfectly in line with the demands of a traditional request of autonomy in thinking: it allows us to analyze, decompose and recompose the contents of learning. Since the choice to activate a link depends on the individual will, it is also adapted to grasp the individual level of capacity and knowledge, corresponding to the need of satisfying the individualization of learning. But the complementarity and the reciprocal recall of the two sides of this evolution – the traditional one and the future one – are much more important than the only example that the hypertext can show: they concern the very framework of the cultural activities. When we talk about culture, we are also talking about an extremely differentiated world. The symbolic dimension of the communication processes within the cultural productions allows and

increases the possibility of this differentiation, so as to make the contents of culture, arts and science appear meaningful and profound, for their capacity of grasping ever more subtle aspects of reality. The improvement of knowledge is acquired by means of setting new constraints on the structure of meaning. Niklas Luhmann's picture of social evolution makes use of a parallelism with Darwinian biology. Within a species the biological organisms evolve and reach fitness to the environment by imposing new constraints to their own structure. As a result, the organism's freedom is larger if it develops the proper constraints on its own structure. Also in the cultural and social dynamics, systems can evolve and become more complex if they impose to themselves the proper constraints. "*Legum servi sumus ut liberi esse possimus*" (see also Elias, 1983: on the connection with this author, see *infra*).

Along these lines, the aesthetics of the new media, based on fragmentation, speed and lack of structure, can be criticized (against Prensky), while the underlying and increasingly progressing level of complexity of the universe of meaning can be seen as a part of a global process in the evolution of culture: in my perspective, this aspect of the cultural production is still more *amplified* by the new technologies for communication, i.e. some structural properties of the traditional dynamics in the production of culture are *kept* and empowered by the new technological tools. If we look at the writing itself, we easily find that *virtuality*, *abstraction*, *differentiation* in the formulation of meaning and *distance* are four fundamental aspects of the kind of meaning that is conveyed by the *book*, namely by one of the most representative devices and symbols of the traditional paradigm of culture. In an early stage of the process of civilization, the fact of using books instead of oral communication could appear as a damage and a *vulnus* to the basic insight of the culture of that time (Plato). The fact of reading books (e.g. novels) could be the ground for the charge of having the regrettable attitude towards escaping from reality, with a sort of parallelism with what is known today as "phubbing" (in Plato's Academia Aristotle was ironically named "the reader", since his habit of reading was much greater than other Plato's disciples'). But these remarks cannot be only seen as a reason for a sarcastic criticism of the conservative attitude shown by many philosophers and intellectuals: "when writing was the most innovative technology, philosophers like Plato were enemies of writing; now the greatest innovations are in digital communication, and many philosophers' position is to defend writing and criticize the new devices". Actually, caution in front of new inventions is wise: they can bear new systems of equilibrium between the parts that

constitute our social universe, and this can produce dangerous recoils. The net of connections between the parts constituting the social system is large and intricate. We do not know where and when the effects of our actions will be felt. We need to observe what happens for a sufficiently long while of time in order to understand what is the better thing to do. Obviously, dealing with the goal of delineating a general picture of such an issue would be too exacting a task for this paper. All the same, some interesting points can be highlighted.

3. Teaching, reflexivity and collective mind

A first consequence of these observations is the necessity to admit that the relationship between teachers and learners – and also the still more important relation between the traditional models of culture and the new forms of thought and expression – is not linear (*from teachers to learners*), but circular. Paulo Freire (even if in a different field of pedagogical interests) emphasizes that each act of teaching is also a form of learning (Freire, 1996). In my perspective, this point should be radicalized, meaning that the single teachers cannot be left to work with their obviously limited strength. Rather it is necessary to discuss models that can be able to obtain the endorsement of large social groups, and it is necessary to define the contents that constitute the cultural universe and their epistemological status. The effort of the single teacher can be useful to mediate between the most idealized and abstract goals of teaching and the limits of the concrete context where the learners live. But the task of delineating the scientific meaning of the cultural contents is something that the teachers must take from external sources: books, debates, specialists and experts, and also from the feedback of their classrooms and from the social environments where the students live, since the boundaries of meaning are a collective and collaborative artefact, and therefore the students' feedback can also help to establish in some cases the exact line to trace in order to say whether an utterance is correct or not. For example, this last aspect is fundamental in order to establish *the point from which* we can speak of “fake” news in the public communication concerning the results of scientific research: some ambiguities are necessary in every kind of communication, so also the results of the scientific inquiries need to be presented with approximation.

In this historical moment the task of shaping the universe of culture, its form and its boundaries, is radically constructive. The meaning and the effects of intellectual habits that we (the adults) believe to be clear, in the

future may turn out to be very different from our present diagnosis, simply because these years the structures of communication have been quickly changing and the resulting meaning of a message that only exteriorly remains the same, might become different. For instance, this problem might arise: the traditional contents of culture (for example the works of the great writers) have a more articulated and complex structure, so they provide an enhancement, but their complexity – in statistical terms – can become a reason why there will be fewer opportunities for the social condision of their outcomes. Is this not ground to fear that their complexity (under some circumstances) can become an obstacle for the enrichment of personality? If the language that I am competent to use – for its complexity – is appropriate to only few kinds of social context, in the other ones I will be forced to employ a language that I am less able to use compared to others (of course the condition *ceteris paribus* is always to be maintained), and this can be a factor of hindrance for the full development of my capacities. The power and the value of the individual capacity of reflexivity is to be asserted, but we need to consider also the adjustments that are necessary to make it compatible with Bauman's "liquid modernity" (Margaret Archer's contribution is to be recalled here). I really do not wish to defend a direction of thought in which conformism is to be rewarded. Both the individual and the collectivity need to tap into the resources of the individual creativity. But this fundamental goal is to be concelead with the other one, for which the several lines of communication between persons are to be maintained undamaged.

These remarks drive us to the other side of the issue, namely the bad outcome that we have obtained in these years from the WEB mediated channels of commuicaion (Zickmund, 1997). Ferraris' claim certainly is right when he says that the WEB communications have been indispensable in the course of the pandemic. But this evaluation can be done more confidently in relation to the activities that were relatively designed as routines. In the decisional and informative moments (in those cases, namely, where the dimension of novelty is central) the outcome has been more delusive.

In general, even before the pandemic exploded, the analyses of the processes of digital communication were controversial. The enthusiastic vision of Lévy has been shown to be unrealistic. The extremely dispersive character of the most widespread forms of digital communication leaves us with the suspicion that the level of rationality and cognitive complexity that a social group can reach by means of the "collective/connective intelligence" model is lower if compared at least to the best products of the

traditional model of culture. Under this aspect, it is the lower level of the internal differentiation of the meaning that makes online communication less rational and articulated in comparison with the medium of books. But the problem – I wish to sustain – is not in the tool – in the technological device – that we use. This claim could lead us to an excessive form of technological determinism. Rather it is the structure itself of information that is involved: even without the use of technological devices, human life in the present times is absorbed by patterns of behaviour for which the level of *abstraction* is highest. If some individuals appear on the scene of communication, the respective biographies, activities and beliefs are different and unknown to the others. The content of information that anyone possesses about their interlocutors can be seen as abstract in the literal sense where everyone must “abstract” some simple items that are present now in the shared scene from the actual identity of those persons. Each person’s messages and behaviours should be designed in such a way to be coherent with the specific social scene, but also with the personal projects, wishes and goals – even if these do not appear in the present scene of communication – if they need to remain coherent with their own identity. If they could hope to attract other individuals in a collaborative relationship with them, in order to pursue common purposes, this would become a “concrete” context of communication, but the fragmentation of the social system and the precariousness of the various contexts where each of us is acting, make this strategy extremely difficult to adopt. Before a relationship has been established, each individual must assume patterns of behaviour that are coherent with the pieces of information that are shared (simply because other ones are not available). If someone aims to share some personal project with others, they need to convey their messages and behaviours in such a way that they could be coherent *also* with this proposal, but if the scissor between the contents of information pertinent with the *first* proposal (when the first meeting occurs) and those pertinent with the *second* one (in the sake of increasing the reciprocal knowledge) is too great, it will be impossible in principle to pursue the goal of building relationships endowed with a richer meaning.

In the debate about the new technologies for communication the attention has been brought to the “virtual communities” and to the capacity of the WEB to offer great resources to create new nets of relationships (Rheingold, 1993; Tubella, 2005; Ragnedda, Ruiu, 2017; van Dijk, 2004, 2006; Berg, 2012; Boase, Horrigan, Wellman, Rainie, 2006). This is an aspect of the issue that is fundamental in my perspective. Also in this case, however, the most relevant point is not the availability of more sophisticated devices for

communicating, but rather the epistemological structure of the pieces of information that are transmitted. The assumption here is that a virtual community will be productive and positive only if the epistemological format of the contents of information is defined so that the interlocutor could be convinced to take part in a shared effort of work and elaboration: this fundamental condition cannot be realized by the technological devices alone. In this sense it is urgent to conceive of a form of culture that can be an aid to set and control the flows of information in the proper ways.

4. The objective pull and the real as virtual

From my point of view we should dwell on the architectural logics of the processes of communication, refusing a bipolar opposition between holders and enemies of technics and new forms of communication. A good point of departure is David Lynch's work on *Internet of us* (2018). This author expresses opinions that are very balanced about the risks and the limits of the kind of knowledge that is mediated by the WEB, but also for the kind of knowledge that was offered by the traditional conception of tuth. His theoretical formula is "The Real as Virtual" (Lynch, 2018, 67):

The problem of distinguishing the real from the unreal, or the true from the untrue, is hardly the result of the digital age [...] Take a coin out of your pocket and hold it in your hand before you. Now look at the coin: what shape does it look like? [...] If requested] A child might draw a circle, but a more skilled artist wuld draw the ellipse. Why? Because that's what we are perceiving. But if so, then we have a puzzle. The coin is circular. What we pereive is not circular. Therefore, what we perceive is not the coin (ibidem)

The author offers important remarks on the meaning of this point for the issue of fake news: a reporter will never describe exactly what he/she sees, and this was also true before digital and WEB communication became dominant.

Willard Von Orman Quine speaks of "objective pull" (1960, 5) to describe a point that is the same as that which Lynch illustrates with the example of a coin.

The usual premium on objectivity is well illustrated by "square". Each of a party of observers glances at a tile from his own vantage point and calls it square; and each of them has, as his retinal projection of the tile, a scalene quadrilateral which is geometrically dissimilar to everyone else's [...] the more objective usage is, by its very intersubjectivity, what we tend to be exposed to and encouraged in (Quine, 1960, 6).

Actually this is a general question affecting the processes of thought that we undertake. The fact that these examples are taken from simple acts of perception, is not a reason to minimize their relevance. Rather it is the opposite: in other conditions – when social or subjective interference are more distinguishable – the problem becomes still more important. Lynch’s observations are useful to underline exactly this aspect.

Quine’s words show that the root of the problem is in the relation between intersubjective knowledge and subjectivity (even if his own position is connected with a behaviouristic heritage that makes it difficult for him to acknowledge the right weight of the subjective point of view). In sociological analysis, the severity of this kind of issues becomes overwhelming.

Within the framework of the psychology of development (especially with reference to Jean Piaget’s genetic epistemology) and with a systematic analysis of the works of the Gestalt Psychologie, Ash Gobar deals with this subject in a very interesting research. Even if the details of his conclusions are not relevant here, he observes that

“the degree of the intersubjectivity of knowledge varies directly with the degree of object constancy and inversely with the amount of critical interference: Thus objective knowledge (e.g. logic) builds its home on the bedrock of permanent constancy, and where critical interference prevails there also prevail conflicting viewpoints” (e.g. aesthetics) (Gobar, 1968, 281).

In some of my previous works I have tried to develop a gnoseological framework that relies on genetic epistemology, by connecting it with a specific perspective on the problem of induction (Di Prospero, 2020a, 2020b). I hold that in the debate about induction it has been under evaluated the importance of the fact that it is a non-monotonic form of inference, for which the correctness of inductive conclusions is to be maintained – in a procedural sense – only in relation with the initial knowledge from which the inference has been drawn. In this picture, my hypothesis that the cognitive development of the child – in the representation of it that is given by Piaget – can be resolved as due to continuous applications of inductive generalizations. The newborn is in a condition of “solipsism without subject” (since the newborn does not possess the notions of subject and object): the notions of space and time, object, subject are acquired step by step, thanks to inductive generalizations. Furthermore, the capacity of

rational reciprocity is developed thanks to inductive generalizations. In other words, the fact that the child finds that the human beings around her react and furnish pieces of information in a regular and essentially reliable way, becomes the ground of our sense of intersubjectivity. Therefore – in relation with the debate about the use of the WEB today – the entailments that should derive is that *new* and more evolved levels of intersubjectivity should be created, on the ground of the *trust* that has been realized and enhanced in the previous ones. This means that we should look at the evolution of media communication under the sign of continuity, even in the presence of phenomena of strong acceleration. In order to make the net of relationships that this kind of sociality can produce more reliable and humanely livable, new patterns of behaviour and thought should be elaborated, but the simple choice of being pro or contra the new technologies seems to be conceptually too poor to guide or to make it possible to understand this evolution. Probably a very meaningful term of comparison can be found in the “process of civilization” described by Norbert Elias, while the school of Toronto (McLuhan, Innis) gives essential insights on the technological dimension of the issue. The basic idea is that new models of “manners”, namely some new “etiquette” must be developed, even to regulate the most evident distortions in the WEB communications (e.g. hate speeches), but not (or not only) in the relatively superficial form of a system of rules (“netiquette”) to control the contents of the chats on the social platforms: rather in the form of a deep reflection concerning the entailments of the new forms of (digital) *distance* between users. The desire to keep the same patterns to express, e.g., empathy, is probably not to defend. But which new patterns should be introduced in order to facilitate the processes of auto-organizations of the social relations?

5. Representations of culture

An important consequence of my assumptions is that intersubjectivity should be conceived not as a *prius* in the human condition, but (strictly speaking) as the object of *a posteriori* and empirical learning. If we scrutinize the most widespread representations of culture and scientific research, this request seems to not be satisfied. The mainstream epistemology seems to take the principle of the intersubjective and public character of scientific knowledge as obvious and undisputable. In philosophy, at least since the writings of Wilhelm von Humboldt about language, it seems that the idea of the priority of language over thought and

perception is commonly accepted. Of course it is not my intention to make an attempt to minimize the importance of the attitude towards social life for human beings, but maybe the great complexity of the flows of information and communication in these years can be a reason to utilize a more analytical approach. The thesis that the sense of sociality is the outcome of a learning process (at least if we conceive of it as a well structured form, evolved beyond the simple reactions, for example, smiling to adults, that appear early in the child development), can give a plausible account of the fundamental relevance of the social relationships in human life, but it is also able to explain the different properties of the various contexts. In a *Gemeinschaft* all the individual reactions to the claims of truth arising from the social environment can be still understood within a pattern of behaviour that is analyzable in a way that is similar to Quine's objective pull. But such a kind of automatism today cannot be seen as innocuous any longer. In general, we know from the history of the tragedies of the last century that in a *Gesellschaft* (a modern State-Nation is intrinsically a *Gesellschaft*, accordingly to Benedict Anderson and Ernest Gellner's investigations) the "social" instincts of human beings can become a trap (as it is shown by George Mosse). The point is that in modernity, in the presence of too long lines of communication, the distance between persons makes it impossible to exercise a sufficient form of control over the claims of truth coming by the interlocutors. Today these mechanisms are still more accentuated. The general lines of the sketch of theory that I propose lead to retain that today – with reference to the problems created by the WEB communication – we should accept a representation of the cultural universe where each individual counts as a centre, in the sense that each one has to go by itself through the process of construction of intersubjectivity, but the entailments of the constraints due to intersubjectivity must be dislocated according to a more complex map of the engagements that are involved. Elias' lesson is that before the beginning of modernity the most usual emotional reactions were totally different from the patterns that became dominant in the following time. Furthermore his analysis entails a conception that is symmetrical and specular with Foucault's and Agamben's biopolitics: is the net of the increasing interdependencies between the social parts in modernity a condition for a more fruitful process of civilization, or is it a device to better control and limit the freedom of the individuals? In any case today this evolution is still ongoing. Everyone is a centre of cognitive activity: in this sense the processes of cultural production need to fulfil the constraints that this circumstance brings about. It is at this depth that we need to deal with the analysis of the cultural productions in front of the global challenge

posed by the Covid 19. The hypothesis that I wish to support is that – in accordance with the theoretical framework that I have derived from genetic epistemology – the cultural productions must also be considered expressions of the complex movements involved in the shaping of intersubjectivity. In this sense, for example, the creations of philosophy, arts and culture should be offered to the learners not as some “direct” contents of “truth”: this would imply the risk of justifying an attempt to construct the social sharing of meaning under the sign of an excessive claim of uniformity, almost as a “fusive” experience between the individual conscience and the global set of the contents of culture, following a model that I have illustrated by the notion of “objective pull”. Instead, the symbols and creations that the cultural productions offer constitute a “semantics” in the sense of Luhmann: a repertory of concepts, issues and topics that become easy to treat for their large accessibility in the flows of communication. In this way, those are the tools for autonomous processes of self-organization that people should manage by starting from their personal experience: in my interpretation of Piaget’s epistemology, the ground for stable and progressive improvements in the economy of the social and the psychic systems can be found mainly in the individual experience and the correspondent inductive generalizations.

It is meaningful that Agamben expresses one of the main aspects of his philosophical problems with the following words:

“Che significa che la vita privata ci accompagna come una clandestina? Innanzitutto, che essa è separata da noi come lo è un clandestino e, insieme da noi inseparabile, in quanto, come un clandestino, condivide nascostamente con noi l’esistenza. Questa scissione e questa inseparabilità definiscono tenacemente lo statuto della vita nella nostra cultura” (Agamben, 2014, 17)³

“E, tuttavia, solo se il pensiero sarà capace di trovare l’elemento politico che si è nascosto nella clandestinità dell’esistenza singolare, solo se, al di là della scissione fra pubblico e privato, politica e biografia, *zoè* e *bios*, sarà possibile delineare i contorni di una forma-di-vita e di un uso comune dei corpi, la politica potrà uscire dal suo mutismo e la biografia

³ “What do we mean when we say that our private life accompanies us clandestinely? First of all, that our private life is separated from us just like a clandestine traveler is, and – at the same time – it is inseparable from us. The reason is that, as a clandestine traveler, our private life secretly shares its existence with us. This split and inseparability strongly define the statute of life in our culture” (author’s translation).

individuale dalla sua idiozia” (Agamben, 2014, 18)⁴.

In *Quel che resta di Auschwitz* (Agamben, 1998) he develops a subtle and interesting analysis of the figure of the “Muselmann”, also using it to criticize Apel’s theory about the foundational claim of communication in ethics. For Agamben the fact that the Muselmann in the Nazi lagers could *not* speak and testimony their tragedy – because they were those who lost all hope and will – is exactly the reason for which we must give the maximal weight to their experience. The attitude of Agamben in relation to this issue has been criticized for its intellectual complexity, in front of such a tragic event, but maybe this has been a mistake. It is exactly the intense desire to oppose historical experiences similar to Auschwitz that can drive us forward with articulate and subtle investigations. In any case, the combination of this point with the other one, previously cited, can constitute our leading thesis: my proposal is to reflect whether the main problem actually is in the definition of the background categories that are employed. In his book *The Knowledge Machine. How Irrationality Created Modern Science*, Michael Strevens (2020) underlines the contrast between subjectivity and intersubjectivity, claiming that the orthodox conceptions of science dismiss the fundamental role of subjectivity. In his reflection Agamben poses a corresponding issue. In both cases, the assumptions that I have proposed entail that maybe it is necessary to reformulate the relationship between the individual and the social knowledge from its basis, avoiding a sharp contraposition and interpreting the social contents of knowledge as a progressive result of individual undertakings. According to this approach, Agamben’s criticism of Apel is utterly correct: if we accept the idea that the principle of ethics lies in communication, then the most vulnerables subjects (the “Muselmann”) will be abandoned; but the risk deriving from following Agamben’s line lies in the fact that *my* subjective perspective is different from that of anybody else’s, therefore also the concrete lines of communication between persons (also between *me* and *them*, or between *Agamben* and each other one) are to be taken into account. The dimension of intersubjectivity is not an *a priori* that can be presupposed as a given reality in absolute terms (contra Apel). It needs to be built, by means of individual

⁴ “Nevertheless, our thought will only manage to find the political element hidden in the clandestinity of our singular existence if – beyond the split between the public and the private sphere – politics and biography, *zoè* and *bios* –, it will be possible to outline the contours of a form of life and the form of a common use of our bodies; only then politics will be freed after its muteness and individual biography from its idiocy” (author’s translation).

efforts that can be uncertain, difficult and very exacting. For this second clause, Agamben's position can also be criticized, because (in the case of the Covid 19 pandemic) the claims of the collectivity (or of its representants: scientists and political decision makers) are to be considered by means of empirical reasons, treating the notion itself of the claims of an "intersubjective" knowledge concerning the right policies to adopt, as a kind of knowledge that is founded on a storage of empirical pieces of information. In this sense, the request of an "absolute" demonstration of the rightness of these policies would be in principle without meaning: surely scientists and decision makers engaged against the Covid 19 may have made mistakes, and there can have been tricks and cheats, but we must also consider that the possible opposite plans of action in any case would have been required to bear the burden of proof (as a condition for the process of constituting a more complete intersubjective sharing, in principle, of the decision-making) and no one among them was able to satisfy this requirement (both in the scientific dimension and in the ethical and political one).

Clearly, in dealing with the complex philosophical ideas that have been recalled in this paper, and in dealing with the emergent global issues that have appeared over the past few years, my suggestions can only aim at being of little interest, but I hope that their basic lines can be perspicuous enough to invite the public to undertake a more systematic reflection on them.

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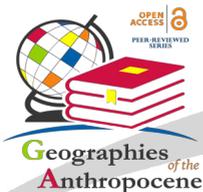
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The development of technology during the Anthropocene has affected science and the ways of “doing science”. Nowadays, new technologies help scientists of several disciplines by facilitating knowledge and how to manage it, but also allow for collaborative science, the so-called “Social Science”, where everyone can be a scientist and be involved in providing data and knowledge by using a computer or a smartphone without being a specialist. But is it really that simple? Actually, the daily and integrated use of different digital technologies and sharing platforms, such as social media, requires important reflections. Such reflections can lead to a rethinking of epistemologies and scientific paradigms, both in human geography and social sciences. This volume titled “Information Technologies and Social Media: New Scientific Methods for the Anthropocene” includes 10 chapters exploring some changes related to the way to do science with a multidisciplinary approach. From classroom experiences to the use of Citizen Science, from Artificial Intelligence use to how Social Media can help researchers, the book reflects on the ICT influence during the last few decades, exploring different cases, complementary perspectives and point of views.

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