Science of Recording

Maurizio Ferraris, Turin

Introduction

In what follows I would like to recommend the creation of a new undergraduate course, or, rather, a brand new academic program, with all its MAs, BAs, and PhD programs, dean and faculty, freshmen and freshwomen, applications, debates on newspapers, government commissions, areas of study, Erasmus programs, faculty's impact factor, and so on. The name of such a new academic program, or undergraduate course, would be "science of recording" and it would be designed to address the new needs of our society, which, in entering the new century, has to face the challenge of a world that was mistakenly thought to be dominated by communication (and, unfortunately, by all sorts of wannabe orators) and that unexpectedly discovers itself as being dominated by recording.

Don't worry, I am just kidding. I have no such intention. My aim is just to illustrate the significance of writing and recording in our world, and to point out that such a significance has been sometimes overlooked, causing perspectival mistakes that, at least in my opinion, should be corrected, and there is no better occasion to start doing it than at a conference on the "Philosophy of the Information Society". No doubt that our society, and almost certainly every conceivable society, is a society of information: one cannot live without knowing; not even Robinson can do it. *A fortiori* in a complex society, one cannot live without knowing.

It is often thought that that means that we live in a society of communication, both in the sense that communication is necessary for society and in the sense of an unprecedented expansion of communication in our time. I doubt both such contentions. Of course, a society must communicate in order to exist; but communication alone doesn't suffice. Indeed it seems a function that is subordinated to something more essential, namely *recording*. The idea I would like to sketch here is that we live in a society of recording and that this is the possibility condition of a society of communication, and, of course, of information. By saying that we are in a society of recording I just mean that if we look to all the transformations that have characterized our time we find that they have mainly happened in the realm of recording and not in that of communication.

Ontology of actuality

Let us begin by considering actuality. The 20th January 2008 the *New York Times* published an article on the new Japanese teen trend to read novels (written and distributed) on cell phones. One would make a mistake in deeming such a story as just another oriental weirdness, just like the story according to which Japanese people sleep in cylinders. No doubt it's a weird story, however such weirdness has nothing to do with the Far East, but has to do with all of us. This is because this story plainly contradicts a conviction that is typical of our time—young people don't read books, they just watch TV—and seems to deny the alleged primary function of phones, namely their being instruments designed for speaking, not for reading novels.

Let us turn the page, so to say, but let us keep our eye on the *New York Times*. There have been a lot of discussions some months ago about the announced disappearance in 2013 of the paper edition of the *New York Times*. However, such piece of news, though having a symbolic significance, is not so surprising. Indeed, while the *New York Times* announces the end of its paper edition, entire forests are destroyed to produce the paper on which countless free publications are printed, and which owe their existence to computers. Isn't it curious? We can dispense with paper thanks to computers, but will the function "print" be ever removed from word processors?

It will never be removed—I bet—at least if we consider the moral of a further story that appeared on newspapers: the IATA (International Air Transport Association) has placed its last order of paper tickets. From 2008, there will be no more paper tickets, only codes. Really? I don't think so. The right thing to say is that there will be codes that will be written on post-its, or printed on paper in office, just like we already do with our e-tickets for trains and planes. When there will be no official paper tickets, there will be a flourishing of homemade tickets, and the obvious reason for this is that it's hard to remember all those codes and one cannot simply open her or his laptop at the check-in desk to retrieve the code—for this would predictably irritate the people waiting in line. What we are confronted with is a process that is somewhat paradoxical: the disappearance (in principle) of paper caused by the fact that it is possible to write "without paper" amounts to an unprecedented, in human history, invasion of paper.

These are only three among numerous pieces of news whose subject is writing. These stories—that grab our attention more and more—often have the typical form of prophecies that haven't been fulfilled or that of prophecies that have been fulfilled, but in the opposite way. Their characteristic mark is always the same: we were told that writing was going to be replaced

by the radio, the television, and the telephone, and—here we are—writing and reading all day long, on our computers, cell phones and smart phones, which combine the functions of computers and phones. This prophecy has been followed by many other prophecies. For instance, that computers would have been literally eaten alive by television (do you remember when they told us to use the TV screen as the screen of our computers?), when precisely the opposite happened. Or, that paper would have disappeared from our tables, whereas it is precisely the possibility to write without paper has multiplied the quantity of paper with which we have to deal with in our everyday life, from undesired advertisements to free newspapers and bargain books. And the prophecy according to which the postmodern world, the world of information, would have been immaterial, while obsolete plastic and silica contribute to a great extent to the worsening of the trash emergency.

All these wrong predictions are somehow suspect. We'd better acknowledge an essential continuity in the phantasmagoria of technological transformations: what we are confronted with is the spreading—with or without paper—of something older than Pyramids, namely *writing*, which is, and has been, the genuine vehicle of globalization, more than jet planes. How is it possible? How is it possible that all the current technology is essentially designed for the function of writing, i.e. recording? How is it possible (another not so implausible prophecy) that the control of energetic resources is something less valuable, from a political point of view, than the control of memory? In order to answer these questions it is not enough, I believe, to make appeal to the power of technique. Because, even if it is true that technique engenders needs, technique also addresses existing needs that sometimes may be unexpressed, just like in the case of the explosion of writing: no one, neither computer makers and phone makers, could have imagined what happened next. This means that what took place, somehow surprising us all, has to do with the very foundations of social reality.

Communication

Even if this is true, one might wonder whether there is something wrong, or at least exaggerated, in the two main presuppositions that has been at the core of the reflection on the nature of the society of the past century, namely that our society is a society of communication, and that the more synchronic is communication the more effective it is (I speak, you listen, then you speak), that is to say that perfection in communication, as Plato already had it (the first philosopher to condemn writing), can be achieved by means of

orality.

On what was based the idea that modern times, more than any other times, are characterized by an explosion of communication (idea that has given rise to a great number of studies, disciplines, academic programs, devoted to communication, which were simply unthinkable and nonexistent before the twentieth century)? Here's my answer. The idea behind the creation of something like a science of communication, or theories of information etc., is almost certainly the upshot of the introduction and impact of tools such as the radio (and its role in the great dictatorships of the Thirties and then in Second World War), the first television broadcastings (which were not recorded), and telephones in every house. This system of communication was the last mark of modernity. But if this is true, why there has been such a huge comeback of writing? One could say that writing is already present in communication, for instance in newspapers. But we know that in the discourse about communication newspapers were thought of as a fragile creature, threatened by television, a creature that was destined to disappear. Also in this case, the opposite has happened. Television shows have web sites and can be seen off line. Moreover, we can read newspapers on computer screens, we can visit a radio or TV web site, and access the infinite video resources of You Tube.

The reflections on the science of communication go hand in hand with the ideal of dialogue, and the ideal of communicative transparency¹. The basic idea was that the task of philosophy was that of analyzing language and of enabling dialogue, the fundamental rationale of humanity. But things went in a different way. On the one hand, the linguistic turn has ceased to be the crucial topic of philosophy (be it analytical or continental); on the other hand, no one talks about communicative transparency anymore, and this is not because human beings are evil, but simply because it couldn't be achieved. Information doesn't look for, and doesn't need, transparency; and dialogue is a utopia that even its advocates do not practice. What happened instead is the triumph of control, of the tracking of every single information—ranging from our purchases on the web or in a supermarket to emails and phone calls—that increases the possibility of control.

Recording

The crucial point then is that what evidently prevails is not communication, but, so to say, its possibility condition, namely recording. In such a phenomenon there is, somehow, a return to the origin, or better, a return to

the essence. The first forms of writing were not intended for communication, but for the recording of debts and credits, nothing but a means to overcome the finitude of individual memory.

But isn't this use of writing what has made its powerful come back in the last thirty years? Since 1981 (first pc), we have assisted to what I have already defined as an explosion of writing, and such an explosion is far from being accidental. Mainly because what characterizes it is not writing as communication, but writing as recording; and precisely these kinds of phenomena made something like globalization possible, which in turn is nothing but the possibility of overcoming the limits of synchronic communication and of transferring packs of recorded data, ranging from financial to personal data, from one part of the world to the other, thus transforming the *orbe* in *urbe*. With the telephone this wouldn't have been possible, just like it wouldn't have been possible to make agreements and sign contracts (that is to say to create social objects) without the parts involved in such contracts and agreements being physically present.

We'd better start from this consideration. Human beings are animals that communicate. But there wouldn't be any communication without recording: would a communication between amnesiacs have any sense? Our task, at this point, is that of not taking recording for granted, in order to detect its real features—a task that is far from being trivial. Communication is such a massive phenomenon that its possibility condition and its purpose (as I just said without the memory of what is communicated, without recording, there would be no communication, it would amount to talking past one another) are put in the background (without recording in our head we wouldn't have nothing to communicate). Indeed there are three basic reasons behind the priority of recording on communication.

Firstly, recording intervenes in fixing the subject of communication. In fact, there are at least two good reasons for not communicating: having nothing to say, and not remembering what one wanted to say. As to their practical consequences, these two circumstances are equivalent, and this is why philosophers, from Plato to Husserl, have always stressed the necessity of fixating the contents as the basis of knowledge, and, after that, for communication. However, even if we don't consider hyperbolic scenarios like the one involving amnesiac speakers, it is enough to consider a messer speaker, who cannot focus on the content of her communications, muddling and confusing herself, and forgetting what she has to say. Almost certainly, her defects would be perceived as defects in communication, but at their basis there would be defects in recording.

Secondly let us imagine that someone communicates with us with a non-

fixated code, for instance by mixing different languages in a casual way; very few things would be understandable. Or let us imagine that someone wanted to communicate with us by means of a private language, namely a language whose code nobody possesses, neither the speaker of such a language. We wouldn't understand anything, precisely like in the case of the messenger speaker. And also in such a scenario we would deal with something that looks like, at least superficially, a defect in communication whereas the defect in question is one that concerns recording, in particular that very important kind of recording that is codification. Finally, let's imagine to be in a conversation with someone and to formulate clear and distinct ideas in a perfectly fixed code. The other speaker, however, has taken a medicine that prevents her to record segments of speech longer than a few words. When I will be ending my utterance, the other speaker will have already forgotten its initial part and when my utterance will be complete, she will remember (for a very short time) only the last two words. No doubt that such a speaker (who completely ignores to be under the effect of a medicine, and even if she were told so she would have forgotten it immediately) would believe that it is me who talks in a very confusing way, and that it is me having serious defects of communication, whereas the truth is that it is her having serious problems in recording.

A first conclusion can be drawn from this simple thought experiment. By examining the classic model of communication², it's easy to see that there are elements in it that belong to recording. In other terms, only the function of contact, i.e. addressing someone, cannot be translated in terms of recording.

Inscription

At this point, one can legitimately object that even if recording is important, what really matters is that what is recorded can manifest itself. In other words, aren't records that are hidden in our heads completely useless? Of course, but, first of all, a record isn't necessarily hidden in our heads. My shopping list is undoubtedly a record (since I didn't intend to communicate what it's written on it to someone else and it's highly dubious that I intended to "communicate" its content to myself), but it's certainly not hidden in my head. Moreover, it can be read by someone else, but if the person who reads it treated the list as a form of communication he or she would be quite bizarre and somehow indiscreet (unless this person is affected by one of those pathologies that makes people think that everything talks to them, including laundry receipts and unknown people's shopping lists).

What I have called elsewhere³ "inscription in technical sense" is a kind of record that is, at least in principle, accessible to others but isn't necessarily destined to become communication, and I believe this is the answer to the objection according to which records are nothing if they aren't communicated. If I ask the time to someone and he or she answers, we have a communication. But if I read the time of an ATM transaction on a receipt can we really say that this is communication? There's a crucial difference, I believe.

Recording not only is at the foundation of what we call "communication", but, contrary to the appearances, is at the very foundation of our *social* life. To illustrate this point, I propose two simple experiments: 1. Keep all the tickets and pieces of paper collected in one day; 2. Do the same in a one-week journey. The quantity of paper collected would be very telling: a network of rights, obligations, possibilities, institutions and payments, that are encapsulated in documents, be they solemn documents such as the Magna Charta or more ordinary documents like parking cards, that nowadays are made of plastic. As I have argued elsewhere, the constitutive rule of social objects is *Object = Inscribed Act*: social objects are constituted by the records of acts that involve at least two persons and that are characterized by the fact of being inscribed in some physical support, ranging from marble to neurons, from computers to paper, of course.

To summarize: if our biological life depends on Dna, our social life depends on another code: writing, whose function is to record, with or without paper, our social acts. This is why our future, even in the more extraordinary scenarios, will always require writing. Because many of the actions we do in our everyday life are social acts and such acts always leave a trace, be it the

list of telephone companies that tracks our calls or the restaurant receipt, the train ticket or the taxi receipt, the sent mail or the received one.

Imitation

If the hypothesis I am following can be accepted, the notion of inscription, which is a public, ordinary thing—something before everyone’s eyes—could take the place of two rather esoteric notions that have been widely discussed over the last years: the *nemes* and *collective intentionality*.

Let us begin with *nemes*. Roughly thirty years ago⁴, social sciences have started to be interested in the notion of “meme”: an information unit that can be replicated by a mind or some other support, and which constitutes the equivalent of the gene for the genetics. The underlying idea is that a *neme* encodes information, and it can be transmitted by imitation. Now, the biological metaphor, according to me, is not of any help, and neither is the idea of dealing with minimal units. From this point of view, appealing to inscriptions, which are things everybody knows about, has the same explanatory advantage as appealing to memes, without endorsing an almost science fictional route. There are plenty of inscriptions in the world, and—metaphorically speaking—there are styles that remain impressed: behaviors, memories. This is how culture comes about, and—more specifically—how social objects come into existence, without thereby evoking esoteric entities.

Inscriptions—both in a proper and a metaphorical sense (i.e. styles and the like, as above I hinted at)—are transmitted by imitation (viz. through one of the most typical performance of writing: iteration) and this is all what it takes to constitute a minimal social structure. It seems to me that here we have a very important intuition concerning society: society actually comes about by imitation, and by iteration of behaviors (and this is a further proof of the fact that recording is more important than communicating). Now, let us consider this attentively. If it is possible to explain the whole formation of social reality on the grounds of a imitation-iteration system—what inscriptions ensure—then we meet both the demands of common sense (which knows basically everything about social reality—think at envy, which is a form of imitation: this is what investments in advertising are based on), and those of philosophical and sociological reflection⁵. Moreover, after having dismissed an obscure notion, we would be in a position to explain the whole social reality without appealing to another notion—which is not less obscure than the former: the notion of “collective intentionality”.

Allegedly, collective intentionality⁶ is a weird kind of “social glue”. It is

what allows hyenas to cooperate in hunting a lion, and us all to consider a 10 euros bill as possessing a value of 10 euros. Such a glue is not just peculiar, but it is mysterious too⁷. Now, it seems to me much simpler to ground society on imitation, and imitation on writing. In order to back up such a thesis think at what I have just said concerning imitation, and then consider the following counter-argument against collective intentionality: if really the glue of social reality is collective intentionality, what do we need documents for? Should we simply consider them memos of collective intentional states? This would be nonsense. If collective intentionality can do and undo basically everything at its own will—as in a sort of permanent revolution—why should we fix some of its states, which are doomed to be overcome anyway (I wonder what Searle would think about the Trotzist outcomes of his theory!).

If things are not that way and we indeed need documents, how can be maintained that everything depends on collective intentionality? Let me give an example, in order to be clear. In *The Untergang* there is a scene, after the Berlin battle, in April 1945, in which the last German defenders are enclosed in a fortified area, they are determined not to give up till the very end, and they clearly share with the collective intention “we are in war and we will stand united till the end”. At a certain point, the Russian soldiers arrive. For a long while everybody hesitates, then a German soldier drops the rifle off, and one after another they follow him and do the same. They all give up, and undoubtedly (since they are a group) at a certain point they have thought “we give up”. However, the first one has surely thought “I give up”. More importantly, the fact that everybody eventually gave up has not brought the war to an end. To be sure, the war ended only after that the resigning, first of the troops of the Berlin Square, then of all further German troops, has been signed. Therefore, what determined the social object “peace” has not been collective intentionality, but a series of inscriptions.

A last remark concerning collective intentionality. Recently, the so called “mirror neurons” have been discovered and studied. These are neurons that fire both when an animal (a chimp) makes certain movements for a certain aim, and when it observes those very movements in the researcher or in another animal⁸. The idea was to find in these neurons the biological base for collective intentionality. My point is whether it would not be more sensible to take them, more simply, as the base of imitation. Actually, there is no reason to think that something more complex is going on here, and it would be an exaggeration to put the whole burden of social reality and its construction on a kind of neurons. According to the hypothesis that I am putting forth here, the “imitation system” is based on mirror neurons, and this would not rule out that a related “inscription system” might be explained by a base

of “reading neurons”⁹, and by the evolutions of the forms of inscriptions, along with bureaucracy and cultural systems—that is the normal equipment through which we both explain the social world, and we act in it.

Power

Let me sum up what I have done so far, before going to the most salient points of the paper. Actuality is characterized by an explosion of writing and recording with respect to which an explanation in term of “communication” looks like underdetermined. However, if we look at recording and inscription (as the public dimension of recording) in so far as they are constitutive elements of social reality, we are in a position to account for the reason why writing is so predominant, and therefore we have an explanation of the actuality we are in. And we can do that without appealing to weird entities, but only to common sense ingredients, which can show us how the social world is based on the rules of imitation and relies heavily on inscriptions of acts, up to the creation of a class of bureaucrats and the like, who after all are much more visible entities, and have roles and functions in a much more clear way than memes and collective intentionality.

Now, I would like briefly to explain in which way the theory of inscription I am presenting here can explain not only the construction of social reality, but also, more specifically, the genesis of the institutional reality—that is to say, of power. How is that possible that certain inscriptions can generate other inscriptions, and also to endow them with a value? In other words, how come that a document makes myself a professor and authorizes me to hold exams, which is what other people needs to get a degree, which in turn is what will authorize them to perform certain functions? How is that possible, and *a fortiori*, that a document authorizes the Bank of Italy to emit banknotes that may be used all over Europe and that, in case, can be used to generate other documents, for instance by buying stamps. I will explain this possibility on the ground of two elements, *tradition* and *securitization*.

I start with tradition. Both philosophy¹⁰ and common sense have always known the value of tradition, which guides our judgments through our prejudices, confers authority to practices which have been preserved through generations, and so on. Now, it would not be possible for a tradition to be there, if it were not possible for recordings to be the case—be it in a oral form, as in the poems and rites of societies that do not have writing, or be it in laws and documents, which often transfer the “holy” power of tradition (of “unwritten laws” in a more mundane space, that of beaurocracy,

which—on the other hand, and as Kafka teaches us—is not less powerful than the traditional space. The clerks who are supposed to give us the forms to fill in manifest, through their rudeness, a power that is similar to that of the sorcerers¹¹. Even in beaurocratic societies, we see a survival of traditional authorities, for instance in the etiquette's rules. Those are institutional non-written laws, which have been written only on behalf of the uneducated, who are uneducated precisely because they need to read the etiquette's rules. Beside laws that *must not* be written (as the etiquette's rules), there are secret societies whose laws *cannot* be written (although if we could we would do it, and often, very carefully, indeed we do it). Usually such associations have complex rituals (masonry initiations, mafia code, etc.) that hold the place of writing. In any case, etiquette and secret societies are exceptions to the rule of "beaurocratization". Rather, they show how the development of a tradition of written laws is the most common outcome of the construction and distribution of power in modern societies.

Let us come now to the role of securitization, which I intend not just in the economic sense (e.g. as applied to illiquid assets), but in a wider sense, with reference to the possibility of fixing through writing values, activities, titles, appointments, goods. Here, by generalizing an hypothesis concerning the birth of the capital¹², my hypothesis is that the possibility of writing is at the base of the construction not just of the capital, but also every form of power, which not by chance is always backed up by systems of distinction, classifications, hierarchies, and archives¹³.

This fact, strictly speaking, is not merely a development of the idea that a society without a memory cannot be conceived, but it encompasses a further element, the nexus between recording and power. On the one hand, there is no power if there is not an inscription that establishes it—either a document in our pocket, an academic toga, a military degree, or a sash hat. On the other hand, in the social world the recording of sensorial data is obviously a source of power: indeed, one can acquire power even simply by possessing certain recordings (think at telephone companies), or by recording what the costumers of a supermarket buy, or more simply by having an addresses list. In many cases there is a privacy legislation that, at least in principle, protect such recordings, and this is quite telling about the power that they confer to whom possesses them (and it is not by chance that such recordings are usually property of the State, namely the entity that, in modern societies, embodies legitimate power).

A last observation on this. An argument *e contrario* on the role of inscrip-

tion in the constitution of power may come exactly from what certain philosophers call the “bare life”¹⁴, i.e. life without rights, life reduced to its biology. It is not by chance that such a life is called “bare”, namely without inscriptions, either documents or cloths, mobile numbers, or credit cards. Such life is described as void of any power, liable to anyone; and it is not difficult to believe it, if we think at the poor *sans papiers*¹⁵, or to the inmates of Lagers. Now, it is not difficult to notice that the level of lack of power is inversely proportional to the number of inscriptions which a subject has at his or her disposal. The poor has no money, but has an identity, and thereby—at least in principle—has rights; the *sans papiers* has no documents, but usually has a mobile, or certain documents whose validity is disputed; at the lower level of the pyramid, void of any rights and powers, there is the Lager inmate. I take this to be a good example to show how power depends on inscriptions.

Difference

I must now explain why recording is so powerful as I depict it. The underlying idea is that mere communication has not social import, if it is not recorded. If someone communicates to me something, and I immediately forget what I have been told, all I can do is to ask to repeat what they have just said, and be more attentive, or (in case the object of communication is not easy to remember, let us say a telephone number or an address) get a pen and a piece of paper. Communication alone is worthless, and what I have said about information holds true (*a fortiori*) of an order or a promise, not to mention of a performative, that would be completely meaningless if the element of recording were not present in communication.

Still, we ask how is all that possible. Let me come back to globalization, and elaborate on it. As a matter of fact, for a long time I have asked myself why, in a famous book¹⁶, Derrida has coupled writing and difference, and I have always found cryptic and difficult to grasp all his talk about *différance*¹⁷. However, precisely the example of globalization (and all what contains) can make much apparent, even trivial, the link between the two, and make concretely understandable the notion of *différance*, which I will simply call “difference”—keeping in mind that such a word does not refer only to difference, but also to the act of differing, or referring.

I claimed before that what makes globalization possible is not the fact that goods and commodities travel, or that people at different places can communicate, but writing as a form of recording. Consider these three situations.

(1) A Travel B

This is the model of physical transport, which has always been there, and that thus cannot be what has produced globalization. If in A something from B arrives, or if you move from A to B, either way you are localized, not globalized.

(2) A TV, telephone B

You are in A and see B, or you speak with B. But at a certain moment, because of the time zones, you have to choose: either you are in A or in B. And indeed you stay in A.

(3) A Web B

Through fast writing (web) you are in A and in B at the same time, thanks to a difference (postponing) that inscriptions make possible.

Model (3)—the model of globalization through writing—allows us to overcome the problem of the time zones, it transmits recordings that are already stored in a compact way, and is the fastest and the most prolific—compared to all others. How is that possible? Indeed, we realize that the possibility of differing, of postponing, of avoiding the synchrony of exchanges is the base not only of globalization, but of every kind of society. And this demonstrates that globalization is not an accident, but what society, since humanity dwelled the caves, was bound to.

Notes

1. Habermas 1981.
2. Jakobson 1963.
3. Ferraris 2007.
4. Dawkins 1976.
5. E.g. the reflections by Gabriel Tarde on the “laws of imitation” (Tarde 1890)
6. Searle 1995, Tuomela 1995 e 2002.
7. I have discussed collective intentionality in Ferraris 2005, and in

8. Gallese 2003.
9. Dehaene 2007.
10. Gadamer 1960.
11. I owe to Giuliano Torrenco the following comment: “Beaurocracy in India is indeed massive (every “official” action requires a lot of forms and documents, and generates as many of them). The beaurocrats (who are 10% of the population, sometimes including whole families) have really power, since by delaying or denying to you even just a step of the usually long course, they literally can get you stuck for days (and imagine if you need to reserve a train for the day after...). From this it follows a weird mix of reverence and hate by the non-beaurocrats, and also a sort of “submission” behavioral code—whose only purpose is to make the whole beaurocratic machinery work. The basic rules are: do not get the beaurocrat nervous, you won’t get anything done, always claim that their are right, apologize all the time, etc.”
12. De Soto 2000.
13. Bourdieu 1979.
14. Agamben 1995 (the expression is by Walter Benjamin).
15. Ferraris 2007.
16. Derrida 1967b.
17. Derrida 1968.

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