

The Roles and Challenges of Semiotics Unraveling Big Data in the Glocal Contemporaneity Ruled by Dromocracy

Janaina Antunes^(✉)

Pontifícia Universidade Católica de São Paulo, PUC-SP, Sao Paulo, Brazil
tcheina@hotmail.com

Abstract. Big data is capable of hugely impacting the decision-making process, regarding that we are able to correctly interpret it. The challenge of analysing big data lies exactly on the balance between two things: its rapid-pace nature and our lack of a humanly possible capacity of following such speed. It is exactly Digital Semiotics that gives meaningful organization to big data, transforming it from data trash into a sea of useful information. Semiotics can tell us the nature of big data and it can also show us how to experience, manipulate and control it within the cultural conditions of global interactivity and of the velocity of production so typical of our era. Dromocracy, the life governed by a fast speed, is the name of the phenomenon which articulates the process of the so-called glocalization, which is a cultural development that staggers to the planetary territory and empowers to the infinite the hybridization of realms of existence, through such velocity. The role and the importance of Semiotics grow in Dromocracy, especially considering big data; and what sets Semiotics apart from any other science and makes it stand out is exactly that it could be the answer to understanding such world for all areas of knowledge, if, and only if, Semiotics is able to look inside itself for a deep, introspective adaptation to the ways of Dromocracy.

Keywords: Big data · Digital semiotics · Cybercultural Dromocracy · Glocality

1 Introduction

Big data is capable of hugely impacting the decision-making, regarding that we are able to correctly interpret it. Nonetheless, the challenge of analysing big data lies exactly on the balance between its rapid-pace nature and our lack of a humanly possible capacity of following such speed.

The greatest role of Semiotics in this scenario is to make big data “smaller”. Through Semiotics we are able to divide it, restructure it and understand what is beneath and beyond it. Semiotics is the tool through which we can “translate”, decode big data.

We will walk through this task analysing how the Unclassifiable, the Glocality and the Dromocracy are spread and how they work, being this way able to find a solution to their challenges through Semiotics strategies, and being able to define the new roles of

Semiotics in our contemporaneity. We shall start with the most challenging part of the process: classifying things. A contemporary problem not only regarding big data.

2 Cyberculture and the Unclassifiable

The clear time lineage of culture, of the evolution of culture is gone in the advent of cyberculture (which is precisely characterized as a real-time interactive digital culture), because the latter makes it possible for a person to be influenced by cultures originally completely unlinked, completely out of a given time order, or geographical order. We may be jointly influenced by a Neolithic Asian art and by African Expressionism.

The fact nowadays is that the cyberspace brought us an enormous number of possibilities of influences from many different cultures, from different times and localizations. We are ravished with infinite influences, many times not being able to personally tell what they were or where they came from, consequently creating a great difficulty to name ourselves, because nowadays we are atemporal and nongeographical. [1, p. 5]

The matter takes greater proportions regarding big data. Even if all its contents were very easily definable, we would still have much difficulty separating them into categories. With the introduction of contents that by themselves are already unclassifiable, our task as semioticians became herculean, especially since we do not know yet how to proceed in such scenario.

We are accustomed to work with a large taxonomization and with very concrete concepts, opening up just for their hybrids. But while hybrids have characteristics of different trends all mixed into one place, and while they may or may not be completely linked to the cyberculture, the unclassifiable is unique: origins and influences may be many, but they are impossible to be recognized or to be traced, making it impossible to be named and taxonomized.

As semioticians we have to be able to analyse whether such taxonomies could be implemented, if they are applicable to, i.e., social media analytics; and run more widely into, i.e., free text or unscripted data analysis. This could be done through a combination of mechanical coding and automated coding systems.

There is such a hunger, a supposed necessity to give those systems taxonomies, when actually, due to the velocity so characteristic of our contemporary digital world, the moment they are named, they no longer have the same purpose once had when they originated. There are so many semioticians in charge of these nominations; when, in reality, what we really need is semioticians knowing how to use tools, and developing such tools to decode big data, no matter what are their taxonomies.

On the other hand, there is such a big extent to which assumptions and biases get in the way of the Semiotics work, much more than the unnamed items, because they have to be identified and corrected before being decoded, whereas the first ones can be directly decoded disregarding the fact that they do not have a specified name. We have to wonder if taxonomies are more helpful or unhelpful: did the current pressure to name everything cause the rise of the aforementioned assumptions and biases as a result of mislabelling, or was the lack of definitions responsible for them?

That is where the true value of Digital Semiotics comes in: the contemporary processes that create big data are happening and will continue to happen independently

of our ability to name them. However, Semiotics is the tool through which we can follow the process, predict the next steps, even considering how challenging it can be due to the velocity of our cyberculture.

3 Glocality and Velocity

The unclassifiability is emerging as the main cultural characteristic of the twenty-first century, born under the technological and cultural conditions of the contemporary world, a consequence of global interactivity and of the velocity of production.

This is a phenomenon simultaneously local and international, situated in the cyberspace era, which utilizes cyberspace as a means for the internationalization of culture. It is deeply embedded in the typically cibercultural concept of glocality.

The process of glocalization staggers to the planetary territory and empowers to the infinite the phenomenon of this hybridization of realms of existence, transforming the world into a kaleidoscope of intersecting glocal strongholds for the circulation of information and data. [4]

Glocal is where we are when not localized in the local nor global. For instance, when we visit a virtual museum, we are not literally in the city of this museum, in its geographical localization; on the other hand, we are not at the place where our physical body is, because we are not experiencing those surroundings. We are experiencing the glocality of the museum that welcomes us through the virtual.

Glocality is the a worldwide phenomenon that affects all people through cyberspace and reaches even those without Internet access, which are influenced indirectly, because they suffer this influence on contact, however sporadic, with an individual who has a direct influence of cyberspace. The cyberculture undergoes a universal dissemination provided by all individuals who have contact with the cyberspace.

The glocal equates to a socio-technical homeostatic entanglement, obliterated and irreversible (...) at the regional, national or international level. [4, p. 13]

In glocality we are always isolated, both in the so named Glocal Lato Sensu as in the Glocal Stricto Sensu. The first is the situation in which we are isolated by lack of access to internet, and the second is the one in which we are isolated from the territorial world around us protected by a Glocal Bunker, that is, our infinite gadgets that separate us from the physical environment in which our body is. Even though we are isolated geographically, we are also always united to everyone by cyberspace. An individual may be isolated from technology, but s/he can never escape the irreversible process of glocality.

The logic of relationships is not direct and dependent upon defined elements, but it is associated with a complex process of factors and trace elements, apparent and non-apparent, establishing transversal paths of relationship and causing countless reciprocal connection developments, conflicting and/or excludent that are beyond the reach of an accurate perception, yet thorough and experienced. [2, p. 87]

This union between global that circulates and the “where” the body is (or “where” it acts), which is the communication basis of this current civilizing process, occurs by several garments (which for now are smartphones, tablets, computers), but these garments are of no importance because the glocal lies not in them. The glocal quality of

communication is given more in the functional sense than in the structural sense of experience. This is what sustains the inextricable link between the global network and what circulates instantly through the interactive or hybrid mass communication.

Communication is every day less and less confined to fixed locations, and the new telecommunication modes have produced transmutations in the structure of our daily conceptions. [3, p. 25]

The new status of glocality produces such transmutations, imposing a restriction: one that it is no longer possible to separate the content that is circulating internationally, nationally, or locally; or even in terms of the place that you occupy and the place where your body is. This new feature introduced by digital communication modifies the dynamics and the consistency of global communication that happens in the physical realm in which we operate. The process of glocalization also means cultural development to the extent that it permits miscegenation in the culture field, a content hybridization in the web without borders. The direct result of glocality on big data is this transmutation: glocality makes big data placeless, more than it ever was; because even though we could not specifically point out a location for any piece of data before, now we cannot trace its origins as well. Big data is not virtual anymore, it is glocal.

From this perspective without horizon in which the city access ceases to be a door or a triumphal arch to transform itself into an electronic hearing system (...), the break of the continuity does not occur either in space or in a limited urban sector, but mainly in duration (...) and successive or simultaneous occultations that organize and disorganize the urban environment to the point of causing irreversible decline of local. (...) Since then no one can be considered separately by physical obstacle or large "distances of time." [6, pp. 8–10]

The cyberspace and digital culture have eroded our ability to identify the cultural lineage of artefacts and even people. We are being ravished by so much data at such a rapid flow of information that at one moment or other people get fed up, because we are not yet adapted to this velocity, we did not have time to develop the skills to learn, to do so many things at once. Some people have developed more aptitudes to deal with the fast pace of the world, although no one has reached such a level of geniality to be able to run after this pace.

4 Dromocracy

This velocity aforementioned is the factor that moves and controls our lives and our society. This "era of velocity" is called Dromocracy. The expression was coined by Virilio [5] based on the greek prefix *dromos*, which means the social articulation towards racing, velocity, speed; and thusly making Dromocracy a world view and/or a life governed by velocity. Dromocracy is a phenomenon that articulates the glocal through velocity. It is a system, a process. It rose in the twentieth century, when it was still a social process happening more isolatedly. Nowadays, Dromocracy is still a social process, but it has also become a regime that rules our lives, it has become this era. It is the congruency among the media, the state, the market, the companies and most importantly, the individuals that live under this regime willingly and that feed such system with their collaboration: the regime of Dromocracy is not imposed or forced on anyone.

Nobody (...) supervenes the “world” except by acting on it from the glocal context; no one can appear or speak to each other, as well as act in reality in a fast and effective mode except in and through the instant world of media signs, so the effect of glocalization; and even with severity, no one can predict about oneself or about any object or mark that has been or is being(...) Thus, everything becomes or tends to pass through the semiotic network in real time (...), socially structured as a kind of media-operating system (...) of contemporary culture in its interactive phase, established as Cybercultural Dromocracy. [4, pp. 25–26]

What every single person on the planet is already doing is a new kind of decision-making. We are overwhelmed with information not only from cyberspace but also from every other kind of media, and despite the fact that we are not able to process all that, we are already considering it, no matter how unconsciously, when we make a decision. In this new reality, such tools as surveys (among others) to find out why people buy what they buy, are no longer reliable. It is not the answers that the people give that matter anymore; it is the signifiers within the answers – exactly because, as previously mentioned, we are not able to pinpoint our flow of influences and interests. Consequently, in that scenario, the only tool for such a task is Semiotics, only it can show us how that is actually working. The role and the importance of Semiotics grow in Dromocracy, especially considering big data.

5 The New Roles and Challenges of Semiotics: Strategies

The challenge, once again, lies on velocity. The moment something catches our eye is because it is already big enough to be seen (no matter how insignificant it may be considered), and at this moment, in our rapid pace contemporary world, it is generally already about to die.

Nonetheless, we have to change our semiotic reading. It is not only about the changes in language, in media, etc. It is also about new archetypes – they changed – we are still practicing Semiotics based on archetypes that do not represent reality anymore.

However, things are changing in a pace that we cannot establish which are the new archetypes, so we come back to velocity: since archetypes and models change faster than we are able to identify and name them, we also have to be able to read these things not based on these old models, but we have to develop a new innovative method to do these readings without models. It is a new paradigm for Semiotics.

Big Data is endless and we will never be able to decode it entirely no matter how much time we spend on it, no matter how fast we do it, because it will always be changing, with new data appearing and disappearing at a faster pace than the human one. Acknowledging that fact is the first step to a new and urgently necessary Digital Semiotics based on ever-changing signifiers.

Semiotics' taxonomy will nevermore be as stable as chemistry's or biology's taxonomies are, if it ever was. Semiotics has to learn to deal with fluid structures, because the old fixedness of structures is already not enough to decode big data, and very soon it will be completely useless. There is still this fixedness, but we have to stop trying to make it last longer – the duration it is going to last does not matter anymore – what is crucial to be done is to adapt our methods or to create new ones that are as flexible and that flow as much as data and the contemporary culture do. It may seem

counterintuitive, unnatural or even completely “unsemiotical”, but the survival of Semiotics depends on learning how to analyse the data on our hands without standards and/or with fluid, ever-changing standards.

What sets Semiotics apart from any other area and makes it stand out is exactly that it could be the answer to understanding such world for all areas of knowledge, if, and only if, Semiotics is able to look inside itself for a deep, introspective adaptation to the ways of Dromocracy. There is no magic solution, and that is exactly why there is no research, no literature about this in the field of semiotics (even though very few academics, all cited here, have done so in other fields): we just have to learn how to deal with such challenges, not lose time developing theories that will not be accurate by the time they are developed, that is the simplest and most demanding solution.

For all that, the Semiotics field needs not only to develop new tools, but also adapt old ones. We can have a tool deeply based on structure, i.e. the square, but we can use it for completely unstructured objects of study, we simply have to make adjustments. We can indeed decode the unstructurable through structuring Semiotics tools without changing the unclassifiable nature of the object. We simply have to let go of the old habits that tell us that we need names and taxonomies to have something analysed. We have to look for a new framework of understanding, more flexible and supported by the dynamic comprehension of human phenomena beyond the visible and sortable; not at all less valid and representative, but quite the contrary: much more representative of our world even without the possibility of being represented by a specific name.

References

1. Antunes, J.Q.: História da Cultura Contemporânea: Cibercultura e Cultura Nobrow. In: Proceedings of Simpósio Nacional de História Cultural, Edição, vol. 1, issue 5, São Paulo (2014)
2. Sakamoto, C.K.: Criatividade e Construção da Realidade Contemporânea. Trama Interdisciplinar, vol. 3, issue 1, pp. 86–96, São Paulo (2012)
3. Santaella, L.: Linguagens Líquidas na Era da Mobilidade. São Paulo, Paulus (2007)
4. Trivinho, E.: Glocal: Visibilidade Mediática, Imaginário Bunker e Existência em Tempo Real. AnnaBlume, São Paulo (2013)
5. Virilio, P.: Velocidade e política. Estação Liberdade, São Paulo (1996)
6. Virilio, P.: O Espaço Crítico. Editora 34, São Paulo (2014)