

The Effect of Globalization on the Organization of Knowledge

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ABSTRACT:

The globalization of electronic information does not seek out a more democratic and egalitarian society. Information is articulated within a set of gears that entail the social exclusion of those who lack electronic information. Different ways of accessing electronic information also create specific and different forms of development among different countries. There are established and implanted historical ways of organizing, and now technology can be used as a way to subjugate or emancipate. The technological present restricts thought, whereas the dominant ideology imposes a certain form of organization. This is why it is necessary to subvert this trend through different logical-semantic and ethical-political tools. The complex network of knowledge, symbolic representations, cultural networks of knowledge and symbolism make up the backbone of this integrated instrumentalization of our knowledge.

Traditional classifications of knowledge are limited like Western epistemology, given that the demarcationism which makes them up exacerbates difference, because demarcating is a form of recognition and representation of classifying structures, which wall off, delimit and fortify. However, as with any form of power, there are no discourses without counter-discourses, so a deconstruction of this demarcationism is indispensable. Classification is performed by creating always invented borders with separating objectives, and the scientific policy of memory and the organization of knowledge is based on dominant ideas. Knowledge is reduced to a structured, hierarchical wisdom which, however, takes on the appearance of including others.

Coherence of meaning is sought out. All cultures are organized around a closed discourse constructed using explicative fragments. Power sets up the symbolic order, and symbols are established as self-defense mechanisms for meaning. Labeling the real is carried out from a perspective of coherence. Naming and conceptualizing means classifying. Reality is a reproduction of meaning, and there is no reality outside of the conscience, which is why the reality which has not been named is intact. As for the Organization of knowledge, reality is equivalent to representation, or in other words, there is no other reality than the one which is represented. In this way, everything that has not fit into the electronic context is gradually left out of reality.

The idea is to reduce the plurality of the real to the unit, by way of concepts or ideas, and the process is completed in the opposite direction when attempting to re-construct or recover reality. The nullification of plurality is thereby made complete. Moreover, identity-based multi-culturalism attempts to construct otherness on the basis of self. Culture lies in how things are ordered. Demarcating means building imaginary barriers, but there may also be transversal languages for communication, all within the context of the community of meaning. The human mind processes things using programmed mechanisms, in a programming which may be referred to as Theory, Culture or Religion. Meaning is shared within a delimited conceptual framework. Within one specific community, it need not be inter-culturally shared, and therefore it lacks shared trans-cultural categories. However, subverting this order would be an act of rebellion against meaning and its mindset.

The Revolution of Lights, otherwise known as the Enlightenment or Modernity, made a commitment to reason as the most powerful tool for facing the darkness of the Middle Ages, and it also proposed alphabetical organization to create order for knowledge in the Encyclopedia. For the construction of electronic knowledge, it will be necessary to create a more humane rationale and ethics, which must include many other perspectives and even that which they forget. Therefore, a new way of organizing knowledge is necessary.

Within the methodology that sets up the Organization and representation of knowledge, classification is the most perishable, even more so than interpretation. Deconstruction implies thinking about de-classification, or in other words, the search for other organizational orders in the universe of knowledge. The tree as an organizational structure conveys power structures, and conveys an order of a chaos, like the claim that says *the chaos that order imposes upon us*. In the origin of language lies an externalization of power. On the basis of this *pathos* of distance is built the right to create values and establish rules. In all, the theory of classifying knowledge implies that all classification is based on an ethics or set of values. And the very gestation of language, of the hierarchy and classification, may lie within the struggle for primitive forms of control or imposition. It is within these parameters that knowledge organization Systems have been created.

Keywords: Globalization, Knowledge organization, Writing, Oral forms, Visual forms, Demarcationism

1. ORIGINS OF WRITING IN THE TRANSITION FROM ORAL FORMS OF ORGANIZING EXPERIENCE INTO VISUAL FORMS

The origins of writing as a means of primitive control in agriculture along the Nile, Tigris, Euphrates and the Yang-Tse-Kiang rivers indicate that societies that were to have writing developed within a controlled environment, in contrast with cultures and societies that did not have writing and are generally known as oral or primitive societies. The origins of writing are coetaneous with the origins of agriculture and private property, the beginnings of the division of societal employment and the early stages of patriarchy, all of which went hand in hand with a certain specialization of the senses that lead to an elevation of the visual experience. Auditory experience of the spoken word was substituted by visual experience of the written word, which produced the transition from an oral organization to a more visual organization of experience.

This transition is one that went from non-alphabetized or illiterate knowledge to the alphabetization of knowledge, and it set out a collection of symbolical representations that gave structure to and defined conceptual thought, as well as the representation of reality. Early and distinctive alphabets determined the development of social structures, abstract thought and ways of representing reality.

The phonetic alphabet gave origin to the detribalization of old societies, particularly in ancient Greece. As a consequence, the tribal state, which functioned as a biological unit compared to the new societies that were growing in an environment of exchange of ideas, was dissolved.

According to McLuhan, the opening up of tribal societies was influenced by the phonetic alphabet as the visual experience took over from the oral experience; as the written form superseded the spoken form. It also marked the progression from magic and myth to abstract thought and then to *logos*. The experience of the phonetic alphabet during this detribalizing period of time contributes towards the elimination of a surrounding world or network based on audio-tactile framework of the senses. The meaning of time, in classical Greek terms, would become merely chronological and mono-linear, in comparison to the notion of simultaneous time that was common in illiterate societies. In the transition between the magic auditory world and the neutral visual world a rupture was produced within the individual, who became detribalized and alienated.

2. INITIAL SYSTEMS OF VISUAL SCRIPT AND THE CONSOLIDATION OF LINEAR ORGANIZATION

The non-graphical and illiterate world is more tribal, sonorous, communal, magical, feminine, sacred, identified with the planet and the surroundings, auditory, aesthetical and warm than the alphabetized world, which is more open, individualist, Western, rational, profane, masculine, visual, neutral, colder¹ and more distanced from the world. The oral world is more alive, stronger, more magical and dynamic than the sensible, meaningful and statically visual or textual world. These two (contrasting) concepts set the scene for distinctive types of societies. For example, there are more oral-auditory societies in Russia, China and India than in Western societies, which tend to have more of a visual culture.

The first written forms or representation of images in Mediterranean societies were holographs, which consisted of simple drawings that represent objects, ideas events and names. From then on the phonetic writing system, which represents sounds with symbols, began to develop into an alphabet, and the act of writing itself became easier with the use of chisels or quills (MacLuhan).

Other writing systems, such as the pictograph and the ideograph (both from China) or the hieroglyph from Phoenicia and Egypt, where a word is represented by a number of symbols and words are polysyllabic, do not have the detribalizing force of the Greek and Babylonian phonetic alphabets. No other alphabet has abducted man from his interdependent auditory environment and the magical world of simultaneous oral associations (Levi Strauss).

The new phonetic alphabet implied a leap forward inasmuch as the letters represented sounds and not ideas nor symbols. This gave it huge adaptability, a result of which has assured its survival for more than four thousand years. The phonetic alphabet disassociates and abstracts image and sound, and takes away meaning from the sound of the letters. Consequently, there are letters and sounds without meaning. Signs and sounds are thus often incomplete. Sight and hearing are frequently disassociated, for example, Spanish text is more phonetic (MacLuhan).

A sensory fudging took place in the transition between auditory and visual societies. The overruling of the visual senses resulted in an inexorable attenuation of the other senses. Western societies, in terms of the structuring of thought, have given priority to visual values in contrast to tribal societies who gave emphasis to auditory values, such as oral thought. Alphabetical technology leads to sensual disintegration. The phonetic alphabet reduced the simultaneous function of the senses. In other words, the utterance or verbalised expression was converted into visual code. The

phonetic alphabet revolution had far more impact than the revolution brought about by the printing press.

Non-graphical, implicit, simultaneous and discontinuous forms were lost in the historical and psychological distance and were substituted by visual, explicit, uniform and sequential forms. This development was causal in the scientific awakening that was experienced in Greece (McLuhan). Greek culture immersed itself in visual and linear thought, and in a language context, the new alphabet and its initial users were decisively important. The idea of linearity and homogeneity were a product of this. Visual form did not affect poetry and music quite as much, although they also drifted gradually towards visual organization. These issues had decisive consequences: Aristotelian logic is based on homogeneous terms for subject and predicate positioning; it also established visual order and homogeneous linearity, which engendered actual scientific principles requiring precise language, and also produced visually perceivable and stable signs. Thus language was formed to exclude everything, including the words themselves, except in a visual sense.

In conclusion, detribalization, individualization and pictorial representation amount to the same thing in as much as they all represent linear codification on a single plane and establish it as a restricted convention (McLuhan). The Romans continued the changes produced in the Greek world and applied that knowledge to a linear organization of many other facets of life.

3. FROM THE INTEGRAL EXPERIENCE OF ORAL CULTURE TO THE WRITTEN TEXT AND THE DIVISION BETWEEN FORM AND CONTENT

As the written word began to consolidate itself a transfer of reality from the object to a verbal form, which would be repeatable, linear and permanent, took place. The reader of the phonetic alphabet is under constant pressure, as the written code leads the reader to experience the content, which is spoken language. This pressure produces the unconscious fact or the experience of content. On the other hand, in non-alphabetized societies nothing is left out of experience or language. All levels of meaning are simultaneous here. With written language, however, the reader, according to Freud and the psychoanalysts, unconsciously constructs a meaning or chain of meanings of the content. Consequently, the unconscious is tied to the very origins of language. Without the unconscious language would not exist and there would be space available for what is outside of language. McLuhan believes that the work of Freud and others are mere translations by modern man in an attempt to recover ancient oral and auditory models. When we move from one dominating form of knowledge to another we make evident the fact that there is diversity

in distinct cultural forms and models. Therefore, a concept of complete reality cannot be established around a single meaning, as that would derive into a distorted sense of reality: *"The enhanced knowledge of exact methods in many societies constitutes a liberation from the prisons they contain."*

The image is linked to the conscious act that accompanies it. Sign and image have become insignificant, or have lost understanding in terms of relating to other beings, although successive relationships can arise. Despite the fact that oral thought moves in the world of images it can also be generative with regard to the ordering of elements and to analogy. The association between signifier and signified can be reversed here. An incessant reconstruction is hence produced by means of order. For example, as happens with poetry, which not only speaks of things but by things also. Mythical or oral thought is not constructed with structured interlinks but rather by using residual and parts of events. Signs thus attain the level of the things they signify.

The role of the book in the shaping of human knowledge has had a defining influence. In reading, (by means of a phonetic alphabet), it is concerned only with content but never with form. As a result, form is separated from content and phonetic characters are often repeated. Nevertheless, this error or omission in writing forms is not necessarily given in alphabetic reading. For example, the Chinese language does not separate the spoken form and the visual code in the same way that Western languages do.

Consequently, whatever the technological forms are they are responsible for configuring reality, science and art. A recovery of orality can take place in the synaesthesia and tactility that are found when reading aloud children's books and works from the Middle Ages (McLuhan). However, with the arrival of the printing press in the Renaissance, speed-reading and the visual intensity of written language became widespread. Linearity was highly influential in many different aspects. New disciplines and subjects were created that demarcated space and time. Geography, for example, is a subject that emanated from the new cartographical materials that were harnessed during the voyages of discovery that took place during that time, and it can also be applied to man's sojourns into space. Furthermore, time is made into something (an entity of sorts) for all the community: the church bells would mark time and this common time would be organized. This manufactured 'something' represented reality, space and time and developed into a bigger organization of that reality.

Levi-Strauss' perspective with regard to the delimitation between the dominated thought of oral societies, in contrast to civilized or domesticated thought, was that oral thought contained numerous abstract terms that were used to refer to the qualities or properties of things. In other words, wide ranging or abstract terms were employed in the context of oral

thought, although in the Western world trends have often considered them to be pedestrian or linguistically poor. One of the tendencies of oral thought has been to not follow objective patterns, in spite of the fact that these two kinds of thought have the universe as a topic or subject for thought, in order to satisfy particular needs.

According to Levi-Strauss, the transition from oral thought to Western and domesticated thought came about when the intermediary agent between image and concept, which is the (linguistic) sign, acted as the link between the image and the concept. Image is thus the signifier and the signified is associated to the concept. Thought in Western society works by means of concepts whereas in oral thought it works by means of signs. *Magical thought is not a beginning, an outline, an initiation nor part of a whole that is not yet reality. It is an articulate system and independent from the other system known as science, except for the formal analogy that joins them and that makes the former a metaphorical expression of the latter. Consequently, instead of considering science and magic as opposites, it would be wiser to situate them alongside each other as two distinctive modes of thought that render different theoretical and practical result.*

4. CONSTITUTING MEANING IN THE ACT OF NAMING THINGS AND DEMARCATING KNOWLEDGE

Levi-Strauss believed that oral societies establish differential separations in thought, and not subordinating separations, as societies with writing do. The latter's reality is altered and their forms of thought exhaust it, filter and imprison it and totalize classification and determination. It is only possible to name something, that is, only one meaning is established. On the other hand, oral thought is not domesticated for the purpose of obtaining benefit, as contemporary science is. Nevertheless, there are areas in our civilization that artificially protect oral and abstract thought, for example, art.

Demarcationism is a historical activity that is based on exclusion, designation and the simultaneously establishment of hegemonies and segregation. It both needs and is needed by power, which entails a certain organization of memory and an ideology of power, excluding what is not represented in its own construct. When demarcations are set it means that nuclei, centres and peripheries are established. Segregation and exclusion are very necessary in order to exercise power. An exclusive proclamation of the control of meaning contains an exclusion of the segregated meaning. Society and its expressions are organized around a discourse that is constructed from explicatory fragments. The construction of reality is a

representation that is associated to its creator (Garcia Gutierrez).

Demarcationism affects physical and conceptual aspects. Concepts acquire existential reality, insofar as composition, decomposition and recomposition are constituted by it. Segregational frontiers are being created for the purpose of naming, demarcating, and classifying peripheries and segregations. These frontiers are invented and imply the construction of an order of symbolical representation².

The manuscript societies can be defined as audio-tactile, compared to our own audio-visual society. The return to a magical, unconscious, sensitive, musical, personal and collective culture has happened on various occasions in the history of Western civilization. According to McLuhan nowadays we live in a unique space where tribal drums are heard in conjunction with globalization and that this global community is not based on orality, but rather on visuality. Vinton Cerf, a technician of this construct, who is deaf (as is his wife), participated in the production of a communication device for the deaf that does not even require the use of the ear. So McLuhan's global village is characterized by a change in the senses that are used, but it is also a model of a global village with organized government entities that have a global geographical dimension. Globality does not reach us through auditory senses or auditory knowledge, but through the complete and global means of production, commerce, government and social control, as pointed out by Chomsky.

What is more, the globalization of electronic information does not pursue a democratic and egalitarian agenda. It burrows further into segregational objectives in such a way that information is articulated within a mechanism that explicitly excludes those that do not have electronic information. Distinctive access to electronic information requires different and specific approaches by other countries.

Dominant ideologies impose a set way of organizing and so it becomes necessary to subvert that tendency by using distinctive logical-semantic and ethical-political tools. The complex web of knowledge, symbolical representation, symbology networks and cultural knowledge provide a means to instrumentalize our knowledge in an integral sense.

Coherence of meaning is pursued. All societies organize themselves around a closed discourse constructed from explicatory fragments. Power determines symbolical order, and contingencies such as self-defence of meaning are established. The reality label is created from the coherentist perspective. To name and conceive is to classify; reality is a reproduction of meaning and there is no reality outside of consciousness, which also means that any reality that hasn't been named remains intact. We are asked to place ourselves in Wittgenstein's point of view, where the ladder is removed after climbing up it. In what concerns the organization of knowledge, reality is equal to

representation. In other words, there is no reality except the reality that can be represented. Consequently, forms that do not have a place in the electronic framework are outside of reality.

The intention is to reduce the plural reality to a single unit by means of concepts or ideas. The process is completed in an opposite direction in the attempt to reconstruct or recover reality. The cancellation of pluralism is completed. Furthermore, multicultural identity attempts to construct the 'other' from the 'self'.

Culture is in the order of things. To demarcate is to build imaginary barriers. Transversal languages for communication within the community of meaning could also arise. The human mind processes information by means of programmed mechanisms, which can be called Theory, Culture or Religion. Meaning is standardized within a restricted conceptual framework. A given community does not require that this framework be shared interculturally and therefore lacks shared transcultural categories. And to subvert this order would be an act of rebellion against meaning and the mindset that goes with it.

5. CURRENT ORGANIZATION OF KNOWLEDGE IN THE CONTEXT OF GLOBAL ELECTRONIC INFORMATION

In the origin of language lies an externalization of power. On the basis of this *pathos* of distance is built the right to create values and establish rules. The theory of the classification of knowledge ultimately implies that all classification stems from ethical or value systems (Garcia Gutierrez). During their period of gestation, language, hierarchy and classification vie for prevalence in domination or imposition and these parameters have contributed towards the configuration of systems for the organization of knowledge.

Reality would be such that, when associated to a subject, it would be no more than what was constructed by that mind. So all reality is a construct or a representation; facts are transformed into realities by axiological means; the mere act of naming is now equal to classifying. There is no reality outside of consciousness. Reality remains intact only if untouched by construction or the mind or not transferred to language. It will always imply conceptual conventions, so that culture will remain in the order of things, and that order is conceived as something given or imposed. There is no reality that can withstand continuous self-defence in order to avoid the other's interruptions. Demarcation sets the model, animals demarcate their space and man stakes out his own space; he builds fences around his traces or his legacy. An exclusive demarcation is created by distinct ways of thinking. Consequently, classification is more perishable than interpretation (Garcia Gutierrez).

Traditional classification of knowledge is as limited as Western epistemology insofar as the demarcationism that characterizes them exacerbates the difference between each other. Demarcationism is a method for recognition and representation; its classificatory structures restrict, build walls and fortify its position. As with other forms of power there is no discourse without counter-discourse, so a deconstruction of demarcationism is essential.

Classification is carried out by setting up frontiers that are always invented with segregational objectives in mind. Political science with regard to memory and the organization of knowledge is based on dominant ideas. Knowledge is reduced to structure and hierarchization even though it gives the appearance of including the 'others'.

The Revolution of Lights, otherwise known as the Enlightenment or Modernity sustained that reason was the most powerful tool for overcoming the darkness of the Middle Ages. It also proposed alphabetical organization for ordering knowledge in the Encyclopedia. As far as the construction of electronic knowledge is concerned, however, it will be necessary to create more humane rationales and ethical values and include many other perspectives, even forgotten ones. Therefore, a new way of organizing knowledge is needed.

Within the methodology' that sets up the organization and representation of knowledge, classification is the most perishable, even more so than interpretation. Deconstruction implies thinking about de-classification, or in other words, the search for other organizational orders in the universe of knowledge. The tree as an organizational structure transfers power structures, and transforms chaos into order. Or as the quote claims: *the chaos that order imposes upon us*.

The act of naming is a superior act that leads to conceiving language as an exteriorization of power by the dominant group, who establish and give names to different realities as they arise. Power that functions results in its own transgression. Dominant ideas do not belong to anyone but the dominators, because power generates resistance and if the dominated are not identified the dominators cannot assert their domination. As a result the dominators make the ideas of the dominated their own, as in the case of the discourse regarding equality and poverty; or in the ideology of the Catholic Church, which needs rhetoric to impose its intractable hegemony, hierarchy and sexism (Garcia Gutierrez). Society is built around a closed discourse that is constructed from distinct explicatory segments, and the centre, as well as power itself, is created as a fallacy that establishes itself as a hierarchical structure incapable of controlling its perimeters.

Deconstruction searches for recognition in its attempt to make evident a deficiency, or rather the complacent

classification of logical positivism, in its bid to find an alternative order of knowledge. Consequently, the great encyclopaedic classification, despite its apparently rigorous order, is subject to a fractal structure, that is, repetition or resemblance. Fractality implies chaos; therefore the hierarchy that belies classification systems lacks the stability that it purports to have. Classification has undoubtedly been a demarcational and segregation^ too(Garcia Gutierrez).

6. CONCLUSIONS

If classification systems have derived from scientific classification, then the organization and representation of knowledge, in terms of global electronic information, will produce a hypertextual form for organizing this (electronic) information. In this context, if *the medium was the message in the information structure is the medium in the organization.*

Writing systems derived from the phonetic alphabet lead to a radical departure from the consolidation of ancient European times, the detribalization of societies and the linear conceptualization of reality. The printing press got deeper into visualization and this influenced the linear conceptualization of reality, which paved the way for the Renaissance. Electronic information delves into this visual reality (*par excellence*) even more so and will doubtlessly increase its influence in consolidating other linear forms of reality.

The subject-object relationship pertaining to the positivist school reached its vinculation zenith in the understanding of meaning. These forms are more transferable to representational forms in global electronic information than ever. In the context of such diffusion and retrieval of information contemporary technology tends to reduce thought, even though this might seem paradoxical. All materially symbolizing forms of knowledge in existence have reduced reality, despite the fact that they had huge capacity to harness and store information.

The very nature of the communications media that prevails in a society and in a given moment of its history will decisively influence the way that that society thinks. The belief that the medium is the message, later modified into the medium is the message, actually confirms that the effect that technological media has on society is decisive.

The exclusive and socially segregational aspects of the new electronic information technologies are apparently not being engaged with, in comparison to the diverse visual surfing possibilities on offer in cyberspace. The prospect of exploring this dimension of space seems to eclipse a social reality that lies dormant behind a universe of information. The effects of informatizing society should be investigated. Cultural and social

aspects, in terms of access to cybernetic information should not be ignored. It is not only the markets that have been organized, consolidated and globalized but also messages, telecommunications and education programmes, and most of all, the universe of our culture.

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