



IRReality

The reality of unreality

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ISBN: 978-968-9304-60-9



The reality of unreality
(Reflections on virtual education)

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Original Name in spanish: La realidad de la irrealidad

Primera Edición en inglés: Agosto del 2016.
Editado en México
ISBN: 978-968-9304-60-9

Editor:

Universidad Juárez del Estado de Durango

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Prologue

Continued and rapid stage of knowledge construction and the use of technology applied to learning process makes us rethink old concepts and restructure again (a reconstruction) of our thinking for them and the next generation of new education forms and a new construct that allows us to understand this new process of teaching and learning from their new applications of technology without leaving aside the philosophical part that let us build these new concepts.

This book tries to give an approach to these concepts from what is virtuality until use in new technologies applied to education.

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REFLECTIONS ON THE VIRTUAL EDUCATION

VIRTUAL REALITY AS UNREALITY

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Resumen

En la actualidad, cada vez más se utiliza el término virtualidad, ambientes virtuales de aprendizaje, la virtualización de la economía, la virtualización del cuerpo, el ciberespacio, redes sociales virtuales, grupos virtuales de aprendizaje, entre otros, en todos ellos existe un común denominador, la palabra virtual, pero qué es lo virtual, qué es la virtualidad, la virtualidad es real o irreal, tienen el mismo significado estas palabras; este artículo trata de dar un acercamiento a lo que significa la palabra virtual y sus diferentes acepciones que ésta tienen, así como de donde proviene y la importancia que tiene esta palabra en diferentes ámbitos de nuestra vida, ya que no debemos conformarnos con la mera noción de que virtual se pudiera pensar que es lo que tiene la virtud o posibilidad de realizarse, de un acto aún cuando no se produzca, ya que si aspiramos a que esta tecnología nos ayude y no sólo se quede en la imaginación o en imágenes que no producen lo esperado, es así como se puede observar la importancia que tiene este concepto en los nuevos ámbitos de nuestra vida como lo son las redes sociales.

Palabras claves: virtual, virtualidad, realidad virtual.

Abstract

Nowadays the term virtuality is used in more than one way or sense. For example, words and phrases such as: virtual learning environments, virtualization of the economy, virtualization of the body, cyberspace, virtual social networks and virtual learning groups, etc. all of them have a common denominator: the term "virtual". But, what is 'the virtual'? Is virtuality real or unreal? As we can see, the word "virtual" has the same meaning in all these words. This article tries to give an approach to what the word "virtual" actually means and the different meanings that this word has, as well as its origin and the importance of this word in different areas of our lives. We should not be satisfied with the mere notion of thinking that something that is virtual has the virtue or chance of becoming a truth; or that "virtual" can be an action regardless of it being done or not. If we aspire for this technology to help us out and not just remain in our imagination or images, we could see the importance of the concept itself in the new aspects of everyday life, for instance social networks.

Key Words: virtuality, reality unreality.

In this day and age, with all the technological advances and new forms to relate with other human beings, a few new concepts have arised, which often are the same concepts that have been around for years. Sometimes these concepts are considered new because they have other ideas or new definitions. A tangible example is the use of the word virtual as unreal. However, not everyone agrees with this semantic difference of real and unreal. For example: "Today we have two economies: the real and the unreal". We can say that the real is the financial economy, but more often than not, economy is an unreal concept.

A good approach to the concept of reality is the definition of philosophy on the Herder (1997):

From the Latin root *res* (thing, object). Reality is what is or exists today in a factual or objective way, as opposed to an illusion which is an appearance or fiction (or what is merely possible or ideal, or subjective). Normally, and in a common sense, a real thing is understood as

something that belongs to the world in which we live in and, therefore, exists in space-time. But if we use the rigorous application of this spontaneous notion, this definition tends to confuse the concept of “real” with the independent virtues of the mind, or the material, or the empirical i.e. all the things which can be perceived by the senses, which would not have a quality of reality in the things that men are interested in, and even fight for.

In fact, the concept of real must be defined along the lines of the ontological and epistemological assumptions from which “being” are defined. It has to be understood with a determined theory, but overall, it has got to be able to be differentiated from what is only an appearance. For many, and most importantly for Aristotle, the study of the “real” is the responsibility of metaphysics. Metaphysics study what exists as long as it exists, and provides guidelines to separate what exists from what seems to exist. The use of "appearance" as opposed to actually "being" is not only common sense, but also a constant tradition in philosophy.

Greek philosophy, from the Presocratics to the large systematic scholars as Plato and Aristotle, raises the fundamental question of what we can understand with the word "real", either as *arkhé*, shape, substance or atoms. Heraclitus and Parmenides are two thinkers with opposite thoughts in the initial problem statement models: what we have is mere appearance, or on the contrary, the mere appearance is really all that can be known and so for this reason it just is. Plato builds his theory of ideas to combat the view of the sophist Protagoras, who claimed that things are what men think they are.

Nevertheless, it has always been clear that what things are necessarily come from a certain perspective, a perception, own experience, prior knowledge and even from time itself. Berkeley is the first one to note that the *being* of things is manifested only through appearance; that is, in the phenomenon; to the point that the real is no more than what it seems to be: "to be is to be perceived".

Kant was the first one to use the word phenomenon, the same configuration of the experience itself, in the sense that to know something is to establish it in order to experience it, under the conditions of possibility that the subject by itself determine. What things are cannot be isolated from the perception or understanding that we have of them, now can they be separated from being perceived or understood.

Later, the German idealism stretched the production of reality through the spirit: "all that is rational is and all that is real is rational". The 'new realism' and critical realism of the early century, tried to understand (unravel) the complex web between the real and the perceived. Analytic philosophy, the philosophy of language and new epistemological theories of philosophy of science, rethink the problem of reality, and seek new criteria for decision-making to determine when a statement (an empirical one) is true (an epistemological way to decide on what is meant by "real").

It would seem as if reality had no relation with the meaning of virtuality. H. Rheingold (1994) talks about the virtual. Who hasn't read somewhere that "virtuality" is a subject for "technological advancement"? Or a matter that addresses to the "last frontier"? *Even more*, there are those who have claimed that virtual reality is actually "the most important, promising and disturbing field of research. The *mysterium tremendum* that men will have to face..."

Although it isn't easy to use term "virtual" in Economy because it is quite subjective since it is a fundamentally metaphysical issue. The meaning of this word is something that is not real enough. It is something like being and non-being, a kind of spectrum as if it were a ghost or virtual Economy. Although no one questions this type of Economy, it is a vital form of Economy in this globalized world and its effects are extremely real. For instance, there is the case of bankruptcy of the AING, the oldest and largest insurance company of the United States of America. As Collin (2004) inquired: Are we facing the triumph of the spectral or ghostly Economy

while undeniably having "real" effects?

Levy (1999) shows us that virtualization takes part in all areas where subjectivity is produced. The market, Finances and the construction of knowledge and information also have a virtual character. Local and global economies are organized according to the changes that occur on a daily basis in different societies. This dynamic allows the movement of money, investments, debt repayment or acquisition, among many other activities in the market.

Wherever currency is a virtual object and monetary Economics rules, there is a manifestation of virtualization.

This process is carried out collectively to reach of agreements that allow all kinds of negotiations. The use of technology is imperative. The speed with which the operations are conducted will determine the profits or losses to be obtained.

That is why Levy (1999) tells us that "The international financial market is developed in close symbiosis with intellectual networks and digital media technologies and leans towards a kind of collective intelligence. This document highlights the great importance of building intelligent communities. The wealth of a community, group or individual will no longer be measured by their capacity of getting virtual money, but by their creative capacity to build knowledge. Nowadays information and knowledge are Economic assets, sources of wealth production."

Knowledge is no longer stable; the possibilities are endless. For that reason, you must go on new quests that reveal other types of wealth. Furthermore, our relationship with knowledge has changed. Everytime new technology is introduced or changes occur in the socioeconomic configuration, new types of hierarchy and order of knowledge are created. For this reason the knowledge must be a moving object that will be becoming in a flow.

The knowledge isn't anchored in a material support that allows you to travel, move from one individual to another, from one individual to a processor or a processor to another. The circulation of knowledge has expanded its object; I miss being locked in fields such as academia and experts to make citizens of your entire object. In this sense we can say that the knowledge and information are outside the area of the material and the immaterial but the order of the event or process. The information and knowledge generated possibilities of creating new problems and solve them, "any effective implementation of knowledge is an inventive problem solving."

Levy (1999) said that, In this sense, virtualization the distinction between consumer goods and virtual goods there is a very dramatic difference while the firsts ones are exposed to weathering, the destruction, the loss of potential for being Real -without it virtually denies it's origin between both the second (knowledge and information)-, not having a fixed material form to be deterritorialized, should be updated to continue to have value, meaning, and especially to continue opening

spaces interpretation and troubleshooting.

This postulate the idea of goods that can be consumed without destroying or without getting lost, it goes against the postulate of scarcity, which is based on the destructive nature of consumption, typical of classical economic theory. For Levy (1999), this seems to indicate the emergence of an economy of abundance as opposed to scarcity and practices deeply break the functioning of the economy.

In this contemporary times the work depends on the information and knowledge that is linked to a constantly updated and association with other knowledge. Previously, the work could be measured in units of time (possible category / real).

Although this practice is still maintained, in a cyberspace the forcé can't be sell *instead* the job competition and develop outside the classical measurement time, the creativity of individuals and their ability to build association apparently wealth and success are there.

The Mutations that generate new information and communication systems in the various dimensions of human life, suggest other types of economy, moving from an *exchange economy*, exchange for goods or goods for money to an economy of use.

In this manner, information and knowledge that are in the network are continuously updated when they are being reading, *this is one reason why constantly are emerging and creating new meanings and sense*. But there are a little problem; should we pay for use this information? This idea of payment is for the update of the information that someone has to pay for the hosting (*electric power, servers, memory, internet connection, etc.*)? For example, somebody can have so much information in a servers network, on the other hand arises update information that is circulated in the virtual space and it could be free. But, if it's free, who pays for it, email accounts, or example, who will pay for the Gmail hosting account, who pays money to Google, because we must know that Google has more than one million online

servers around the world, this Enterprise must pay over 31,000 employees, where they live, their money is real; users like us then we pay Google for using their services.

That is why to have a conception of economic reality and structure between financial economy and the real economy, it can have true if and only if it has a notion of the meaning of what the economy means, even more, factors as is the "mismatch", as this can lead to serious economic crisis due to the irresponsibility of the people due to the economy virtualization.

For other people exist the virtualization of culture in this age of information, but that culture can it be temporary and multifaceted as the experiences created inside computers.

In this regard, currently being built thinking society, for to Levy (1999) " intelligence is impregnated with a collective dimension, which is not only the languages , artifacts and social institutions who believe in us, but the whole human world, with its lines of desire, their emotional polarities,

their mental hybrid machines, landscapes of meaning paved image. We also understand why human groups, as such, may be called intelligent. Because the psyche is, by definition, collective, or whether it is a multitude of signs -interacting agents, value- laden, investing your energy in mobile networks and changing landscapes."

Human collectives are not individual but are a great mind, part of that mind or conglomerate is on the Internet, is a great thinking mass, making decisions and may even take up arms to overthrow a government, because as you can see, that thought is not perceive and emotionally committed by the people, but they can adequately modeled by a topology within an affective social game creates life, life networking. Previously, human consciousness was individual, but collective currently taking strong presence worldwide, these are now part of the political, religious and media structures, in contrast, live in individual subjects.

But this collective intelligence is not new; the concept of collective intelligence irresistibly evokes the functioning

of societies of insects such as bees, ants, termites, etc.

We can enjoy individually from the collective intelligence, which increases or modifies our own intelligence. We contain or partially reflect, each in our own way, the intelligence of the group. In insects, only society can solve original problems, while humans are more inventive than other groups, as the crowds and rigid bureaucracies.

People have their own way of learning how to use respectively (even if minimal) affective potentialities of social worlds and mutation that aren't interchangeable. Certain civilizations have tried to assimilate the collective human intelligence with ants, they treat people as members of a category, implying that this reduction of the human to the insect was possible or desirable, but this has never been possible, because the human being not based on a collectively but also can think for himself, is in this sense that humanity moves towards the construction of new forms of collective intelligence that is radically opposed to the concept of ant, or honeycomb.

That is why we must take into account not only the group consciousness, but to the individual conscience, as an individual consciousness can change the group consciousness, unlike the ant that follow well defined patterns in form of social consciousness here we can say that if there is a social intelligence that enables the integration and enhancement of individual subjectivities, it allows you to create collective cognitive and affective processes that may affect the collective intelligence.

At present, the society is being exposed to the phenomenon of cyberspace, although they are under construction; let a (dot com) *.com* media communication regardless of time and space, which constitutes a decisive step towards new and more sophisticated forms of intelligence collective, which would be intelligence. *Intelligence.net* or *network*, which in many ways this type of network thinks for itself, but always under the protection of humans, such as the message posted on the Internet promotes as a form of cognitive unification of the collective, establishing a common context.

This message reaches a large group of people, is a tool to work with collective intelligence, a kind of living link that takes place in the common memory or consciousness. Up to a point where can be a desired location, and then when the subject is a subject of collective cyberspace becomes.

New meanings that emerge from the collective activity are discovered, for example in the games MUDDS (Multi - users dungeons and dragons), which is an assessment of the classic role-playing game "Dungeons and dragons" (Dungeons & Dragons) was also discovered in players create a virtual character that evolves based on the decisions of the character decisions, this happend in the course of a story, this kind of games are based on the use of language and even more interesting is that they are made in real time by hundreds or thousands youth scattered around the planet. Thus, the person is encouraged to participate in the game and so is part of their collective intelligence of the most relevant way (Morahan -Martin and Schumacher, 1997).

The design of these applications allow anonymous Internet interactions, which makes the electronic communication has a characteristics that differentiate it from that you can give in real life, disinhibition (Greenfield, 1999), the which is a waste of shame and fear to speak freely, which provides a person a sense of security and freedom at the same time.

CYBERSPACE AS OBJECT

The expansion of cyberspace represents the latest appearances of large objects inducers of the collective intelligence.

It can be seen that cyberspace is a dynamic, constructed, or at least fed collective object, for all those who use it, creating a bond by the fact that, while collective object of their producers and users. Huitema (1995).

Cyberspace provides objects moving between groups,

shared memories, and use of hypertext for the establishment of intelligent communities. The electronic highway degrades thing appropriated what was once a passing object. If cyberspace is the result of a virtualization of computers, then the electronic highway that objectifies virtual Netizens do not need money, because the community already has a constitutive, virtual object, deterritorialized, producing links and cognitive by nature. The Net, by hosting links circulating intelligent communities, is an accelerator of objects, a virtual virtualizer. But, in your environment, these relationships work is temporarily suspended for the relationship with the object. Virtualization experience (Levy, 1999).

In this sense virtualization text is given in a gradual, but since the early Mesopotamian writing with text is an independent, abstract, virtual object of this or that particular support and virtual entity that is updated multiple versions the text passages virtually maintained in a correspondence. This analysis is probably applicable to the interpretation of other types of complex messages as diagrams, concept maps, mind maps, etc.

But before you understand what is a hypertext, we must realize that the "text" is a speech made with deliberate purpose but in hypertext is not only possible to read the text, but readers can also create links, add or modify (text, image) and thus make a unique hyperdocument two or more hypertexts, then you can say that all reading hypertext is an act of writing.

WHAT IT IS AN OBJECT?

Object is what exists independently and particularly and an object isn't what sticks to him like a property. Herder (1997).

Now is the time to extract the general features of the anthropological object, object-link or mediator of collective intelligence. However, the purpose, content and dominated by groups that is remains outside, "objective", and not belonging to the group as another subject. Finally, the object has only to be held by each and the group is constituted only by circulating the

object.

This virtuality with lens mount is usually updated on events, social processes, acts or affections of collective intelligence (passes the ball, set in a story, purchases or sales, new experiences, added links on the Web). Following the role play it's made, the same entity may be a thing or object.

The concept of "collective intelligence" (Baigorri, 2005) is just as important now for the twenty-first century because in the last thirty years of the twentieth century has been a especialitacion, everyone has become very specific and I think, for this reason, a general overview has been missed of what has been the general evolution of culture, digital media and the impact these have had on teen culture and on the next generation. So what I do with my film with my music and my writing, for example the remix I'm doing or I did with film Griffith, is an extension of the philosophy of which I speak in my book Rythymn Science and refers to that people should think about using digital media as a creative act. But that involves a

continuous dialogue between communities, which is related exactly to your festival.

In this sense, the object may be a mediator of collective intelligence that involves having a game rule or convention, an object can be created if the object is itself a collective subject, where the object has a particular style of intelligence collective and all social change involves an invention of objects, moreover in cyberspace than anywhere else in anthropology, collective and its objects are created from the same movement. Since the community has the intelligence of objects, and that is why humanity should upgrade its own objects created, even invent new ones in order to cope with the new scale of problems.

These world-objects bring vectors collective intelligence should sensitize each individual over the collective effects of their actions. Now the object, cross, comes to complete and unify the three virtualizations relationship with the beings, the relationship with the signs and the relationship with things.

For Levy (1999) "This virtualization process only ends with the construction of the object, an object independent of the perceptions and actions of the individual subject, an object whose sensitive imaging, management, the causal effect or concept can be shared by other subjects. The objective world that emerges in language far exceeds any other material world that is populated only things.

Finally, the technique virtualizes action and physiological functions. Now the tool, appliance, are not only effective things. Technical objects are passed from hand to hand, body to body, as witnesses. Thus, the object passes through the three fundamental virtualizations anthropogenesis, is constitutive of the human as a social subject, a subject cognitive and practical subject.

But keep in mind that programs which are cognitive modules through the same artificial intelligence that overlap those of humans and that transform or enhance their computing capabilities, reasoning, imagination,

creation, communication, learning or automate 'navigation' in the information. Each time you create or update a program, the collective nature of intelligence is accentuated. But this can lead to what is proposed in the Matrix movie, we live in a mutation of collective intelligence, in which the machine governs us.

One of the most important constructs that allow us to have the collective intelligence is the quantity and quality of individual intelligences. For example, in some types of virtual realities and allow you to express real-time mapping and topological components, semiotic, axiological, the collective psychic energy.

It is in this sense that now that we are in the third wave is the information, you can say it's a quick and transient culture where the virtual has taken great presence and this is due to the use of computers manmade that allow us to have a reality that it is for the sensorium, as in cyberspace reordering of reality becomes, not a fantasy, which allows mobilization of forces such as economic and education and enforced in life in the Internet, but if

we reflect, how long this will last, because where information is staying in the computer memory.

For example, companies begin to live in a virtual world as it says Castells (2000) and there is no doubt that we are currently governed by the virtual of the technological, the creation of virtual worlds, which are simulated on the computer.

These systems computer simulation called "virtual reality" and that through the use of technological equipment allows our senses generate new experiences, an example is the case of interactive games, whose support is the computer, that is why we can say that these experiences come from a virtual world that is unreal, and that going to deny what is real and if it is real but subjective, because it is an artificial way to produce experiences which can be unlimited.

For example, in biology, virtual reality is related to vital processes, other interpretations virtual approach extends to the whole experience, because even to survive

(biologically) need to generate a virtual reality, this leads us to see that we are technologically before biologically virtual.

In this sense, the virtualization of human beings is carried out first with his presence, as seen, thanks to the techniques of communication and tele-presence, we can be here and there at the same time-this is very common today day education with distance classes that are conducted with videoconferencing, and in this sense Levy (1999) speaks of the virtualization of the body where we can divide it into four sections, reconstructions, perceptions, projections and hyperbody.

- Reconstructions: grafts, prostheses, we mingle with artifacts. Today invent, remodel (cosmetic surgery, diet) alter our metabolism through drugs, biotechnology finally leads us to consider the current zoological or botanical species is a new stage in the adventure of self creation.

- Perceptions: consists of bringing the world here, ear phone, television for the view, so these devices virtualized way.
- Projections: The symmetric function of perception is the projection in the world of both action and image, the projection of the image of the body is usually associated with the notion of tele-presence.
- The hiperbody: virtualization insita body to travel and all types of exchanges. Transplants between humans live either alive or dead to the living, implants and prosthetics blur the boundary between the mineral and the living. Each individual receiving body becomes part of a huge hybrid hyperbody the hyperbody of humanity echoing hipercorteza.

But because we say that man is virtualized to (Levy, 1999) humanity was created through three fundamental virtualization processes: the language, the art and the institutions and complexity.

The language opens the time to the past, the present and the future is denatured. It helps us to make a separation from the present (the "here and now"). He - Levy- says that look for possible answers to problems experience by appealing to evidence for that trouble exists in time. With the emergence of social processes take language faster.

The technique as another important aspect that created the human is perfect in a process of virtualization. The technique is virtualization action. From the art movement, and then crystallized tool and this in turn is updated with each new use to solve different problems is virtualized. Tools virtualize turn motor and cognitive functions. It is important to say that the tool undergoes wear potential, but the technique has only to be virtual potential mutation or transformation.

The social construction is also an ongoing process of virtualization. Systems such as religion, morality, laws are social devices (control) to virtualise the balance of power, instincts or immediate desires.

We can ask the question is there a recipe for the virtual? And to test a hypothesis in this regard Levy shows three operations of language (grammar, dialectic and rhetoric), which themselves contain operations that are almost always used in the processes of virtualization.

These operations are the key to virtualizing power of language and characterize the technical and social relations: they are capable of doing to escape the here and now. Apparently the language refers to the world of significance while the technique gives a sense of belonging only to the field of action. However, the technique also builds meaning and significance for operations of substitution and abstraction (like the sign language).

Grammar (Levy, 1999) is foundation for virtualization breaks, creates virtual particles, which then bind in writing. Writing and printing then continue this process of virtualization, to separate the text from the direct footprint of muscle movements. Then with the information that

standardizes components for compatibility between different information systems.

On the other hand, dialectic, by substitution, can give a real identity a different function, another identity, another meaning, a second non-static and receptive to otherness world.

Grammatical, dialectical and rhetorical devices also extend to the processes of virtualization of social relations through fragmentation, substitution and creation of new aims and significance.

Humans are creatures of language that promotes greater collective dimension, i.e. at the time when ideas from language are virtualized and crystallized tools which in turn become public, begins to weave a smart grid from last. The creations of our ancestors are still with us even that without keeping the original form because each generation engages a different dialogue with them, updating them on a continual movement of changes and mutations of forms and meanings.

Indeed, the social dimension of intelligence is closely related to the languages, techniques and institutions, as well different places and times.

That is why if we reflect back virtuality brings us back to the objective reality, which is why those who deal with the subject of virtual reality have come to think that this is a new "Copernican revolution." If before we turned around images, now we turn into them.

Current writers on the subject consider that "virtual images" shape the world and could disfigure, producing innovative "virtual worlds".

Recall that Nietzsche addressed this issue.

Virtuality is no longer a simple game, as is having a growing increase among men and its use becomes wider each time as the virtual reflected in our lives, as it has lots of information of the virtual and this is affecting our worldview and our way of life, as in the background is

changing our experiences and is providing real satisfaction from something unreal, it is in this philosophical sense in which we understand and study whether this new experience of reality is a representation in the world or because of their own particular it is not, since apparently access to the virtual world is not only simple observation of images, but is that our exteroceptive make us to be within that subjective reality from a simulation is carried out on a computer, this implies a deep philosophical reflection.

Many authors have suggested that virtual images are not a real images, as for example, the image of fire does not heat and that is why we can say that virtual worlds are not representations of objective reality that can produce some sense more a mere image of reality.

WHAT IS VIRTUALITY?

The Herder dictionary of Philosophy (1995) defines the virtual as it follows: (from the Latin *virtus*, strength, and virtue), the capacity of provoking an effect even though it is not happening at the present time. In general, it opposes to what is real or effective. For scholasticism, the notion of what virtuality is was equivalent to its potential since Thomas Aquinas was alive. Just as well, virtue supposes perfection in potentiality that is oriented towards action. Virtuality was conceived as a potentiality with a high degree of perfection that is also capable of updating itself.

For Leibniz, virtuality designates the way inherent ideas are, the ones that reside in the soul and those who possess all its determinations. Therefore, it is enough for ideas to be thought so they can be updated and transformed into actions. He also conceives anything virtual as the substance, which is not only potentiality (as matter is), but is not a pure act (as God is).

In contemporary Philosophy, this notion occupies a privileged place in Bergson's thoughts, who also thought that virtuality was opposite to what is possible, but who at the same time opposes to what is actually happening. Deleuze has insisted in the importance of this notion in the Bergsonian school; something that is possible is not real, and something that is virtual is not currently happening but, as for the virtual thing, it possesses reality. Virtuality creates through a process in which an unforeseen novelty is brought to life and then sets it apart. This is how Bergson interprets the evolutionary process governed by the *élan vital*: evolution goes from virtuality to actual, and this is a process of pure creating, not of repetition of the possible as understood as an image of what is real. The possible is only duplication of what is real, which is projected into the past and from which reality is subtracted, whilst something virtual is real but not identical to the product of its update. The confusion between what is possible and what virtual generates pseudoproblems such as the ones that lead to traditional metaphysical misunderstandings. Virtual=virtualis = strength-power.

Virtual is that which exists in potential but not in action, with all philosophical rigor, a virtual thing does not oppose to what is real but to what is actual.

Updating is creating; the invention of a way starting from dynamic configuration of forces and the virtualization is the inverse movement to updating that consists in the change from actual to virtual. Virtualization is not a de-realization but an identity mutation. So we can affirm that the virtual it is not unreal, nor potential, but that it is in the order of reality. In that case, can we question reality? What is real? What implications does virtuality have over reality? How can we give our virtual experience and turn it or apply it to reality?

Nowadays it is thought that “virtuality is way to access reality”. Ph Quéau (1995) says that “the virtual visualizing systems provide us with the illusion of an immersion into an image, which could provoke that the progress of the virtual imagery has as a result a new way to represent and interpret the world, as well as the relationship

between virtual images and the abstract models that generate them". It is important to notice that virtual worlds tend to eliminate the real bodies that generate virtual worlds which can contain a great number of scenarios that can be inhabited by us.

When we try to define a virtual environment, we abstract ourselves from real time and then time becomes so long that we no longer perceive it as we are used to in reality. We depend in such great measure of computers to be able to simulate those virtual worlds that if the computer is too slow to render those virtual worlds, the virtual experience becomes boring and we set it aside.

This is why we depend of technology. For instance, when we are in an airplane flight simulator, generated by a virtual reality, our ability to access it depends in great measure of the capacity of the computer to generate all possible scenarios in a real way. If, for any reason, the computer is slow, that virtual reality is lost.

Husserl's phenomenology shows us that an entity has a

peculiar reality (quite far away from being nothing). Let us not forget that the fundamental principle of phenomenology states that eidetic intuition is as fit as in-fact intuition when it comes to apprehend essences. The apprehension of ideal objects does not imply the position of any individual existence or the affirmation of facts; therefore, this intuition allows reaching the knowledge of an essence of the forms men take.

Ortega y Gasset's work goes against "reality" since for him, reality is linked to the poetical capability and knowledge obtained from different perspectives. Ortega y Gasset thought that the culture of the last 60 years is "fixed on the virtual" because he claims that "once I have seen what is real, I look back and see that the virtual is still there because it is, in some way, another reality where I feel invited to stall".

VIRTUAL REALITY IN ZUBIRI'S WORK

First phenomenological approach: virtual character of being intentional, in the first written pieces (1921-1926) in the dissertation (The problema of objectivity according to Husserl) and in the doctoral thesis (Essay of a phenomenological theory of judgement), Zubiri utilizes the term "virtual" to characterize the "intentional being". It is not reality, it is virtuality.

For Husserl, the proble of objectivity is really the issue with the "nature of the conscience" and how it deals with it as a purely intentional problema; that is, an intentional relationship that if taken from our developmental environment, can be refered to as a purely virtual reality. This means that in the context the object loses its ontological character and "acquires a character of pure virtuality", (Zubiri, 2002) finds a pure essence. Zubiri think this is Husserl's point of view in his intentional theory of the conscience that continues in the dissertation titled "Essay of a phenomenological theory of judgement". In this context he makes it clear that

conscience “is not a reality; it is pure virtuality” and that “even better than just possible, the essences are virtual beings”.

This virtuality can exist in two different lines or classes: imaginary objects, ideal objects and real beings. It is important to define what an object is. Because it may lead us to confusion: an object is anything that constitutes a conscient act.

First, the term object comes from ‘object’ which means “what is out of me”, therefore, if it is out of me, anyone else can verify it. Objectivity is a characteristic that is part of science but there is also another dimension which is “subjective”.

For González (2004), the subjective dimension means that it has its origin in the subject himself, and this subject generates that.

Now that we have made a distinction between what is a subject and what is an object. When can we, from the

outside, see something that is different from us? We can say it is an object because it is palpable, displayable, tangible, etc. But, when it has its origin in itself, it is subjective.

In History, the word “subjective” disappears because for several centuries when everything was made and caused by God, we stopped being subjective for the metaphysics dimension.

The objective is what is not in me, it can be verified, the subjective is pejorative, but the subjective is assigned to that we can assume has an origin source, common to all living beings, be it God, nature, a supreme being, etc.

The subjective is focused on beliefs. The word *belief* has the radical meaning of origin, and we are talking about subjectivity. Beliefs are subjective while science is objective.

At this moment we can see two poles of scientific tradition: the objectivity of science and the belief that

comes from the origin and which refers to the basic sources of things. So, where is the subject? The subject disappeared for over 1500 years, which led to the birth of the term "Genency".

Genency is something that is built up, originated in the subject, and so there are great dimensions:
Science-Belief-Genency.

Belief is bound to be subjective. It is anything that is commonly believed, it is not controversial, it is accepted or not, period.

Talking about language, one of the first conclusions is that synonyms do not exist. There are similar words, but no synonyms. If phonemes change from one word to the other, the meanings of words indicate different things from each other. As a result, we can make synonyms, but for science synonyms do not exist. In genency, the arbitrary use of a word instead of other word is valid for me but it will not be objectively valid. It will only have validation for those that are sharing with me or that had

agreed with me.

Because we talking about language, it is important to understand well these three terms: science, genency and belief.

The translation in spanish for each word is as you can see: science is ciencia, genency is genencia and belief is creencia, so we can see that these 3 word have the same ending, encia, but the word ciencia begins with ci, in this case ci is the particular object, the word creencia begins with cr and cr means the origin and genencia begins with gen and gen means the thing that occurs in the source and refers to the subject as the core of things, bit the end or word, encia means the human being, it means, the thing or concept on wich we are thinking.

When we talk about science we usually say that “science is a constant relationship between what we think and a common being”. Science comes from the latin *scientia*, the *scie* is a particular objective, and *entia* is what we think about that objective. So then, entia is the how that science is showing us and belief is when we think of the

origin. We must know the subjective of genency in order to know the subjective of faith.

We should have it very clear that conscience is made out of two terms *con* and *science*, *con* refers to the attributes that science have and that is why in the object we have to distinguish two important relations: the “pure essence” and its executive character. These two aspects are not physically separable, but they are separable by intention, through a conscience.

We can then say that a being of pure essence, out of all objectivity, is unreal. This is what we calla an intentional being which is purely virtual.

For example, when I say that I have a headache and I am aware of it, even when I do not feel pain, it is a pain that aches but does not ache. I mean, it is a pain that is there in essence but it does not really exist. We can say that it is a virtual pain; we can say that it is a pain that exists, it's subjective, but does not exist. It is purely being

while not being. That is conscience, when you are being intentional.

Zubiri (2000) noticed that Husserl referenced the unreal. It is conceptualized as “intentional” and “purely virtual”. For example, when we represent ourselves or when we have conscience of something “without its character of reality”, such as the case of a pain that does not really hurt, Zubiri supported on Husserl’s intentional theory of the conscience, shows that “it is not a reality, it is purely virtual” and that “even better than just possible, the essences are virtual beings”.

Virtuality as potency (Potencies or virtualities).

Another form of seeing virtuality is in nature. In nature, God is virtual, a potency. Virtualities are potencies and potencies are virtualities. We can observe that this scenario has many possibilities and that in this case virtuality is potency and does not relate to possibility.

But a new way to see the concept of virtuality (virtual reality), relates to the concept of possibility. It is

understood that “virtual” is unreal.

One of the fundamental problems of western metaphysics according to Zubiri (2000), History is not mere “dialects of virtualities” and it is not mere evolution (Entwicklung), it is an opening to the order of possibilities.

That is the reason why what we refer to as a “virtual reality” does not have to do with the objective reality with a potential character, but talks about a reality of the quasi-creator character in the order of objective things, and so, “virtual” is understood as unreal.

It can be said that a thing which is possible is not real. It is unreal because the possibility is not real. The possibility is a thought of what it could be, or what can be projected into the future. Men is unreal in many aspects because he lives in a possible and unreal future, a future of what can be and will probably be. Therefore, men cannot subsist in an objective reality if he has not passed through an unreality. There is no other reality other than the one I imagine in a future while being at my present

state; or in other words, it is a possibility that may come true. This explains how an unreal reality occurs only in the subjective, within me, without it having to be real at some point.

It is important to notice that what men plan to do in a future is actually a part of unreality because what is unreal is not real if we know that un stands for a no; but if unreality is true, then unreality is as real as reality. For instance, if I think that a tree is real but I am not looking at it, then it would technically be unreal even though it is completely real. In fact, this is subjective reality. We can say that unreality is necessary to be able to live in reality. So, what is unreality? The unreal is a part of humanity, of mankind. It is part of the experience of men dealing with reality. But reality can be learned from our senses. Through our different senses we can perceive reality.

To talk about what is unreal, it is necessary to talk first about what is real. We can say that we need virtuality to be able to see reality.

Levis (1997) said “virtual reality can be defined as the basis of interactive graphic data, generated by a computer, which can be explored and visualized in real time in the form of three-dimensional synthetic images that give the sensation of being immersed in the image”.

Quéau (1998) says that “the virtualization of reality consists of the disruption of the power that category gives it, and leans in favor of the empowerment of the possibilities that language possesses”. This situation generates many consequences. In the first place, there are consequences for the representation of the world (for art, which becomes more fluent, plastic, and uses metaphors), but also for diverse life forms.

For said autor, reality can be acknowledged as long as what is visible and tangible (the world) lose ground to the invisible and the intangible (which in this case is virtuality). Then, how can people free themselves from the spiritual dimensions of men or from creativity? This is the way the spirit sees its path, and how it can act from far away. We can break barriers of what we had

conceptualized as space-time and we become invisible people that are visible in the virtual world.

Queáu goes beyond the human and it refers to a concept that might be new to many: the hypertext; such concept is a digital creation that has a particular inseparable space from technology, bits, bytes and any other information in which hypertexts exist and that without those elements, will cease to exist in a digital space called virtual space. The peculiarity of this space is that its representation is only possible through the use of ICTs, which makes it completely different from any other type of representation. Queáu talks about this: “Unlike basically analogical techniques, such as photography or video, numerical images do not directly participate in reality. They are created entirely by men, or more accurately, by symbolic manipulations, logical-mathematical languages, models, etc. For the first time, they are not physical phenomena, but symbolic operations that create something visible”.

Virillo (1989) wrote in “Vision machine”: “the expansion of

the logic of perceptive illusion technologies showed its terrible potential of manipulation as a consequence of the destruction of perceptive faith.” In the art of the engines, acceleration and virtual reality, broadens a study he calls the last of the technological revolutions: the technotransplants, invasion of microphysics that knocks down geophysics.

For him, ICTs are the technology of the internet, where there are relations and interrelated information is brought up to existence by human beings that communicate and stay in touch with each other. This is called connectivity. This connectivity allows us to be closer through the same basis. These common bases are shared around the world, but they also imply a globality that has been developed through the use of technology. They also carry a kind of global accident, but this accident, as Virillo calls it, is a phenomenon that can affect all of us simultaneously.

Up until a few years ago, History took place in only one place and space. It was a really local type of History, and

it was particular to every country, which made the interaction between countries very difficult. Therefore, the communication between people was as complicated as in among countries. There was barely any communication back then, but now this is a real possibility with instant interactivity, which leads to the possibility of having a unified concept of time. This fact may have positive or negative results at the same time in different parts of the world.

Holtzman (1997) wanders through worlds he calls wired worlds, virtual worlds, software worlds and animated worlds, where each one illustrates some qualities of the digital worlds.

In the introduction of his book, Holtzman posed the necessity of developing approaches to a future culture that is based on digital worlds. Holtzman thought that when the time came to change predictions and projections for actions that may enable this approach.

Holtzman defines digital worlds as worlds that emerge by

renovating mental images from other worlds (that for some authors may be virtual) and claims that they only exist in cyberspace. Holtzman says this digital world does not exist without the use of technology, which is real for the subject that lives in it and experiences it, but not for the others that are isolated and not a part of this digital world.

To Holtzman (1997), digital worlds are not natural worlds, but artificial worlds made by human beings and which are based in the use of ICTs. These worlds have the potential to express amazing ideas and deep emotions in a way that no other form of human expression can. Digital worlds cannot exist without a computer, and could not even be conceived out of digital technology.

It is important to highlight that Holtzman was conscient that nowadays it is impossible to talk about digital masterpieces, but they start to have some vestiges of this art, such as virtual writing, expression through animated artificial life in a computer, interactive musical experiences, etc. The author offers a description of the

characteristics of these types of work that make the new vehicles for expression.

Nowadays, digital worlds are still in their infancy and only the development of powerful tools that are on the verge of being created will allow the appreciation of the quality and wealth of these expressions. Holtzman is confident that digital tools will soon be used to expand human expression towards the things that had remained uncommunicated and that will allow us to discover fantastic worlds that could not have been fathomed without the existence of computers. The discovery of that digital cultural “soul” that will reform the logic we humans use or thinking.

METAPHYSICAL AND NOOLOGICAL APPROACH.

It is possible to say that unreality is comparable to a virtual reality philosophy in present terms because men possess that duality of thought: real and unreal. Life is made of unrealities and we can say that humans are animals full of un-realities. About this, Conill (1991) said that:

“Men is an <animal of un-realities>... that is comparable to <a fantastic animal>”.

Unreality to men is necessary because from it, it can become real, which would get it done. The same thing occurs to virtuality, which is inevitably necessary to make it real. This is how we can find an exclusive and reciprocal relation between reality and virtuality. It can be said that there are several types of virtuality and that fact allows people to believe that men believes in the concept of virtuality because it is necessary to be within the virtual world in order to reach reality. At this point it is

necessary to adequately define virtuality in contrast to reality. And we need to check if virtuality is attached to reality or viceversa in order to reach an objective, or subjective reality.

Nowadays there are many areas of knowledge where the term "virtual" is utilized: from bio (life, biology, etc.) to technology. It is also present in any area that is studied by the humankind.

All those applications might be why virtuality is a form of the unreal since they both use perception, fiction and certain concepts. Virtuality is either a void or nothingness, nor an unreality. If it were unreality we would use the same word to refer to that phenomenon, but virtuality is not merely an idea; virtuality is a "something" that came out of a possibility, or an action that takes place through the senses. Otherwise, virtual reality is something that exists and can be learned from through our perception or sense. We could say that virtualization is the content of a reality and that the object is virtual reality.

We observe that there are realities that are presented with virtual content, so in those cases virtuality wraps around the physical moment of reality. The virtual world is within the physical moment of reality and said reality is the one that is presented in a virtual way.

THE UNREAL.

As we have seen in the previous paragraphs, men live submerged in un-realities that are connected to a Husserlian phenomenology, where unreality is similar to the Husserlian eidetic reduction, where unreality is a construction, an idea that real but only subjectively.

There may be several forms of unreality that our senses can perceive, since human experience cannot be separated from reality. The experience of the unreal is an inseparable aspect of the theory of reality.

Zubiri sees reality and unreality in men, and besides,

identifies three different meanings of experience that do not fully satisfy him:

1) Experience is only feelings.

2) Experience as a construction of the object (Kant).

3) Experience as life's elaboration (Dilthey).

"Experience of life" -recovered by Ortega y Gasset (1949)-, is important to allude to that knowledge that is also part of living, which is crucial to life itself and therefore, it is personal and untransferable.

We can say that experience is anything that we have in reality although we never really have what we really understand as real. It is not formally defined, and we only have definitions that are close enough, but it is important not to confuse experiencing with feeling even if feelings are sensed.

Experience has to be proven, not only the things, but the principle behind those things. Experience teaches us to devise and not only to apprehend things, so that we prove both its existence as well as its figurations. The real and the un-real have to be understood as an experience we can only get through our senses.

Zubiri's work proposes a conflict if we compare what we have discussed in this document about the "ways we experience" to the later exposition of intelligence and reasoning. For Zubiri, there are four fundamental ways of experiencing: experimentation, blending, testing and conformation.

Zubiri references the theory of figuration. Figuration is a form of access to reality that orientates us, but also, since we are open to figuration, there is the possibility of the figuration of the creation, to make life itself.

Forging the unreal (figuration) belongs to the process of being a part of reality, the process of experiencing. If there is no figuration, there cannot be any experience.

The main structure of figuration exists for human orientation and contributes to the understanding of experiential character of the conceptual capability, opens up the possibility for creation.

On the other hand, Conill (1997) makes a reference of this concept of figuration that allows us to understand the relevant moral function of unreality. Producing unreality means figuring out how things are and to self-configure, leaving a real imprint in the sense of the self. Taking this concept of figuration to the extreme, we find a problem that leads to recurrent philosophical difficulties.

So, if unreality is blended with what is perceived, it is alright to ponder whether everything is unreal. We may also wonder if do not live in a distorted and distorting world where “pretending” seem to be the same as “faking”. We arrive to the question of perception having already altered –in a hopeless way- reality, or if every figuration (Bild) is not already a disfiguration (Trugbild. Trug=deceive, illusion; bild=image), as the genealogical hermeneutics of Nietzsche shows.

Unreality is an important reinforcement of “fantastic thinking”, not only because it is from a literary creation, but because it comes from scientific thinking since fantasy consists in moving freely through reality.

The figure of the “fantastic animal” is not only understood as an animal of realities, but as an animal of unrealities and ideals, which has repercussions in all philosophy and makes us creatively re-think ethics.

THE NOOSPHERE

We set off from a general approach on the birth of a net society and the changes this phenomenon of net communication has on human beings. It is of vital importance to see the origins of human thought and the organization of its mind. Also, we have got to see the basic difference between concepts that appear to be synonyms when they are not, as in the case of information and knowledge.

We will focus on the meaning of those concepts and the use they have nowadays, in order to end the change in the concepts of space and time in the net, as well as how these changes affect the concept of power. We will also see some fears and realities that affect each and every one of us and which are difficult to leave behind if we wish to keep living in society and so to open debates to end these problems.

Internet is a fact for today's social reality. The net has arrived to most areas of social activity. Whoever wants to keep living in our time, will have to deal with this net society. One way or another, we are affected by it.

It seems unavoidable that our future will take place through global communication on the net. This logic of the nets transforms all its areas of social and economic lives, and implies changes that are bound to affect human beings in all levels and dimensions of its existence.

Although we are affected by it, not everyone participates actively in the net. There are many users of the internet if we look at the number of users from the perspective of internet being a business, but there are few internet users if we see it from its accessibility to the world's population. The access to the internet is also affected by the lack of technology, poverty, economical development, language and technophobia.

This division on digital media occurs because of mainly two causes. The first cause is that the advance of technology is a part of the everyday's life of many people, and it is easy to obtain at any time or place due to wireless connections or satellites. This has been a reality in Mexico or many years, and also for the world in general. This will allow global elites, as Castells says, to escape to a superior social circle in cyberspace, thus creating a new technological division.

Nowadays we are living a revolution; particularly a revolution of telecommunications that forces society to adapt to a new cultural, social and working society where

social relations have changed drastically. For example, in the past mail took about a week to reach its destination, and nowadays an email takes only seconds. However, not all of us have been able to adapt to this rapid changes on paradigms. For example, the President of the United States of America used telecommunications part of his campaign for presidency.

There is a great breach in this digital gap. Castells talks about the “knowledge gap” that is palpable when observing people with access to all kinds of telecommunications, especially to the web, data, voice, video, etc. but that do not really exploit its benefits to the maximum. This generation ought to be called the “society of knowledge” because they are able to learn a great amount of information about any topic at all, and be informed of anything that is happening anywhere in the world.

According to Martinez (2004) a net is defined as: “In its more elemental level, a net consists of two computers connected through a wire that allows them to share

data. Networks, no matter how sophisticated, come from this simple system. Whilst the idea of two computers connected via wires may not seem extraordinary, in retrospect, it was a great achievement for communications”.

Networking was born from the need to share data in an easy way. Personal computers are good working tools to produce data, spreadsheets, graphs, and other forms of communication, but they do not let you share that information fast. Without a net, documents have to be printed so others can edit or use them. In the best cases, you can give away floppy discs so the others copy that information to their computers. If changes are done to that copy, there is no way to share that automatically. This was, and still is, called stand alone work.

If an isolated worker were to connect his computer to other computers, he could share his data with the other computers and printers. A group of computers or other devices that are interconnected are called a net, or network. And the concept of interconnected computer

sharing their resources is called “networking”.

The computers that are part of a net can share the following information: data, messages, graphs, printers, faxes, módems, and other hardware resources. This list continues to grow with the new ways of sharing and communicating through computers.

As we had previously observed, it is of vital importance to highlight that there is a great amount of information flowing through the internet, but this information is not the knowledge itself. This information is just bytes or electrons that flow through optic fiber or copper wire. We cannot say that information is the same as knowledge because knowledge is the product of knowing, where there is intention in the object that is studied, and the result of this assimilation of the information becomes knowledge.

Before the brain stores knowledge, the information needs to be assimilated, arranged, processed and relate it to the information the subject already possesses. This

is why it is accurate to say that the human brain stores not information, but knowledge.

Where do we find knowledge? We are living in the era of information, the society of information, but we also live in the era of fragmentation and complexity.

On the concept of evolution, it is important to mention that Thomas Kuhn, in his book "Scientific revolutions", states that we must have clarity in the three meanings of the following concepts: revolution, involution, and evolution. They have similar meanings but different prefixes. An involution implies a step back to previous stages. An evolution implies an advance to following stages. A revolution implies re-taking things that already happened to revitalize them.

Tielhard (1947) uses the term noosphere to refer to men's thinking and culture. Lotman created the term semiosphere to refer to that atmosphere in which culture flows by through the passing of time. In the evolution of the word noosphere, Tielhard first spoke of

the earth's population, from the hominids to civilization, where we found heterogeneity of cultures and characters.

The idea of a living world created by thinking and culture is what Teilhard called the noosphere. In this noosphere, culture had the task of organizing the elements and the relations in our environments. This is an informative action, and therefore, a dynamic action that is constantly adapting. In the noosphere there is not just information and culture, but because information is power, power is all around too.

Javier Candeira (2001) claims that:

“If the world is as Teilhard de Chardin claimed, that it is covered by a noosphere that is a layer of thinking matter with a conscience. Until that moment, it seems as if we were alone in this world of ideas, where the subject has its own thoughts that are shared with others; but nowadays, the internet has become an artificial nervous system that allows us to think as a community, to have a global culture and to have global information that everybody can get to. But these facilities we get from the

internet are surpassed every day and this knowledge (qualitative or quantitative) surpasses the previous knowledge in either quantity or quality”.

The parts the quote refers to us, are humans, or better said, we the people who are connected and active in a net society (Candeira, 2001).

COMMUNICATION USED TO BE ORAL.

Through time, the human being has bolted down his ideas, first in an oral way from generation to generation, and through images on rocks, metal, paper and now in digital formats. But before the invention of writing, men used symbols to transmit ideas and emotions, as well as transferring knowledge. Humans achieved something extraordinary by unifying written and spoken knowledge, and so being able to appropriate and interiorize it in a better way what they had learnt.

Being able to speak represents the power of language. In first intention languages, we can identify two realms, one is denotative and the other connotative. The denotative part is what we can show, verify, or what we can show for evidence to anybody and anybody could see it. The denotative is objective.

The connotative is what the subject names and it is not necessarily explicit or able to be proven. It corresponds to an internal dimension of the subject, according to its experiences, affections, emotions, feelings, that lead to giving it a personal meaning.

The problems of language have two great perspectives: Cratilo's in his dialogue, and Hermenogenes'.

Hermenogenes and Cratilo are the two characters that first gave us a quite complete approximation of how language can be used. Hermenogenes sustains that we created language and we use it as a helpful instrument for making sense of words. We baptized objects with a name, and that name means the reference we want to

give it in relation to the object which we use it with or against. In other words, Hermenogenes claimed that men are the one who decides what words mean.

It is of relevance to mind that we use a voice for language. For instance, being able to read is the power of “my” interior voice and to think is the power of the mind: the silence of reading, the thinking process.

This subject-exterior relation has allowed oral culture to establish a space of thinking which takes place in the mind. Previously, this way of mental thinking was collective and intolerant. Voices were not personal or autonomous. This autonomy was only shared to another person, who was responsible of forwarding said information, but books ended up becoming a haven for knowledge, the places where to find knowledge.

Seen this way, evolving towards new forms of storing and transferring organization, has made humans integrate in superior units where they have had the opportunity to have a better development in their brain. This

development has permitted the transmission of values in a more effective way that has made it easier for connections within society.

These connections we are talking about are the connections on the net. This has lead to the creation of a “net society” as Castells (2000) has predicted. In this net society we observe a rare type of influence, with the use of computers, that have lead to a strange creation we have named a society in a net.

Even though nets, especially social networks, have existed for a long time (as institutional nets, social nets, etc.), the concept of networks is strongly linked to the technological infrastructure of software and hardware, which allows the communication between two or more computers that are connected through wires or wirelessly. These networks have a protocol (a language that lets communicate and it can be a software or hardware) that enables them to share information with other equipments. We must make it clear that networks are not only through the internet, but the internet does

show how connectivity works and how important it is.

It would not be wrong to say that the noosphere is a term that was developed by many authors as a sphere of ideas, myths, ideologies, cultural products, etc. Kerckhove (2010) writes: “connectivity is a human state that is almost the same as collectivity or individuality”, and “The net, the connectivity médium by excellence, is the technology that makes human interaction explicit and tangible”.

The bases, the thesis statement, are the principle everyone knows something about. Therefore, it is a Project to have access for everyone to know what everyone knows: an Exchange of knowledge. Fernando R. Contreras (2000) says that “the subject is a “worker of knowledge”. We recycle the capital-work principle and turn it into an information-knowledge principle. Every human being becomes a source of knowledge and this knowledge flows through social relations in the net. Power resides in that exchange of information, in the flow of data, in the limits of an individual.

For Leach (1993) “individuals do not live in society as isolated beings with marked limits; they exist as interrelated individual in a net of relations of power and dominance. Power resides in the contact zone of individuals, in ambiguous limits”.

Independence remains in these connected minds. Independence is relative because our autonomy is in the intellectual dependence of a determined society and culture. This is why we can never be sure we are thinking what are thinking by ourselves or if we just think what our noosphere, society, tells us to think. This relative Independence is what allows private individual identities to develop within a new space of communication, the internet that breaks the space of media.

Currently, with the use o technology on one side and with classic media (cinema, radio, TV) on the other, there is a ratio of one transmitter to many receivers. There can be one transmitter and millions of receivers, and this shows a unidirectional communicative process that is never the

other way around. In other words, it only goes in one direction and this creates a separation between the transmitting centers and isolated and passive receptors. This technology has allowed us to create a new tool for communication, a communicative device that lets us create a relation of many with many. "In cyberspace, every user is a transmitter and a receiver, in a qualitatively differentiated space, not a fixed one, that is shaped by the participants. It is explorable".

Nowadays, the internet is main form of connectivity but not the only one. We also have mobile phones which has the advantage of being more used than the internet because of their features of texting. The problem with this kind of communication is that it goes from one to one. Internet is not the ultimate form of connectivity, but it is the newest space of communication in which we move. Levi (1998) says that the internet "is an instrument in service of social cohesion through the exchange of knowledge and the use of capacities". This is, a new space for communication that also involves a new concept of space and time where there is a new type of

power, as well as new trends, all within this new net society.

INTERNET: THE NEW MEDIA FORM.

At the present, many experts on social issues think that the internet is the end of geographical barriers, as Castells (2001) proposes:

“The era of the internet has been announced as the end of geography. In fact, the internet has geography on its own; a geography that is made out of nets and nodes that process flows of information generated and controlled from a certain place. The unit is the net, so then the architecture and dynamics of several nets constitute the sources of meaning and function of every place. The space of the resulting flows is a new form of space: it establishes connections between places through telecommunicated informatic nets and information systems. It redefines the distance, but it does not suppress the geography”.

Men currently live in communities that are outside of cyberspace. When men form communities, he looks for the same standards, so we can identify one of our kind. It is when then when the connection of minds in cyberspace is in a way a form of quitting your body. Kerckhove (2010) shows four of the impacts that interactive technology may have on body image, and also what he calls physical wrap.

The following are four concepts he claimed:

- Teleception: makes reference to the sensory reach that interactive thecnologies provide us, and adds a new dimension to our biologic sensory life.
- Expansion: is a phenomenon that is produced at the same time and that is based on how interactive technologies give us a sense of loss of our concrete corporal limits.
- Multiple personality: It refers to how the loss of a sense of our physical limits, the expansion of our

mental frames, the online redistribution of our power to act, it all contributes to build ourselves a confusing image of our bodies. We cannot be sure of where we begin nor where we end.

- Proprioception: It is a response to that very human doubt we have about corporeity. The need to know that the body is still there, makes men perform activities that allows them to be back in touch with their own body so they can enhance their access to physical sensations, and so know what is their situation.

- Overmodernity: According to Augé, it is the situation in which we are, and in it, new spaces appear. Augé coined the term “no-places” for the situation of overmodernity. This situation, he claimed came from the three figures of excess: excess of time, excess of space and excess of individualism. These figures of excess are clearly manifested in the media and the internet.

Cyberspace gives us the possibility of seeing and living the events that occur in other parts of the world in real time by using the media. Cyberspace turns Mc Luhan's global village in a reality. Thanks to ICTs, events that we would have had to wait a long time to see are now instantaneous. These same events are updated day to day and better yet, the Blogs existence gives more credibility than TV shows.

This shows how nowadays, distances seem to have had disappeared.

It seems as if present History is reduced to information, and that this information flows everywhere: in physical places, non-physical places, and cyberspace. But in cyberspace, the speed with which History happens, accelerates and loses its marks.

At the present there are some places (not physical places) where the user or consumer gets lost, and they are lead to a strange feeling of solitude even though they

are surrounded by people. In the case of the internet, a user, a web surfer, is almost a synonym of loneliness. In many occasions, the solitude provoked by the internet is alluded. Young people are isolated from society because they prefer to be on the internet where they feel as a part of a society.

Therefore, many activities from human life have been modified due to the use of the internet to what Castells responds: “[The internet] is generating a new social class, and a new class of misfits: the uninformed. The fear of this frantic change in society might be a result of the birth of net societies makes people resist to the speeding up of their lives and the sensation of loss of control that these societies bring along with them.

For many people, the fact of not being able to utilize or to have access to the technology can lead to great problems. For instance, this person may not be hired on new kinds of jobs where technology is a fundamental part of. Castells (2001) says: “Being disconnected is the same as being condemned to being outcasts”. Although

for many, technology is just a way to have power; this new type of power is not material because it is only a matter of having the right information at the right time. This creates a great division between those that use and those who do not get to use it.

It is not only about having technology, but it is about being aware that computers are a powerful tool that you need to learn how to operate. There are lots of virus spreading in the OS Windows of people that do not know they have them and that they are being robbed of personal information.

The best case scenario is that we could have only one society where every first world country has a developed and modern infrastructure, and where a developing country's worst possible conditions were similar to New York, Washington, London, Sweden, etc.

We cannot say that the best economies have to be the only societies where everybody uses technology and they communicate through them. But there are areas in

developing countries where people are too poor to get technology. We have to create the conditions for most people to be able to have access to the net and so provide them with what they need to live connected to the rest of the world.

VIRTUALITY IN EDUCATION.

Not only virtualization has been a part of philosophical works, but they have also go beyond. Especially in educational fields where the use of TICs has permitted distance education.

Virtual education may be seen as a new learning and also as a knowledge transmission process that is shared through networks. This particularity has made it easy to observe its effectiveness by analyzing the hits and failures that have occurred in different educational studies. Just like everything else, things are not absolutely good or bad; there are advantages and disadvantages that it is permitting the fast evolution of this teaching mode.

It is necessary to define virtual education in order to have a general view of it.

Although for many people virtual education is the same as online education, the concepts are different. But even when they are different, both are good opportunities to study for those that cannot take classes in a traditional way. These non-traditional forms to study teach students to develop their own knowledge, and the professor just provides it with the tools to build said knowledge.

One of the principal consequences of globalization is that it has brought new adjustments, technological and educational, like the creation of new activity fields.

These learning environments facilitate the teaching-learning process where the student and teacher do not have to interact in the same space-time continuous.

CITs are spread out around the world, and they are being incorporated to educational institutions, both

private and public, to support their extracurricular activities, activities of research, and cultural activities. It has also enabled the fast communication between teachers and students are it in the form of voice, texto or video.

This new type of communication has been incorporated to the new pedagogical models to teach in classrooms. Teachers in these new models need to develop their functions as tutors and leaders, and they plant ideas, theories, and virtual collective methods in order to improve the teaching-learning process. At the same time, the tutoreé needs to be highly responsible and have good studying habits in order to be able to do the independent studying that is required.

Nowadays, hundreds, or thousands of institutions, from elementary education to doctorates, are developing and offering programs based on the use of technology; and they are even virtualizing classrooms in higher education institutions. This development is seen principally in public education facilities, but it can also be observed in private

institutions such as ITESM, UNID, etc. where they sometimes use dated equipment.

CONCEPT OF VIRTUAL EDUCATION.

Technology has never stopped. On the contrary, it seems as if humans were the ones falling behind in their evolution. We have seen changes through History that will forever transform the structure of society and our life styles. We have witnessed great advances in microelectronics, informatics, telecommunications and genetical engineering thanks to the use of ICTs.

Most of us are submerged in a digital world where information can be generated, stored, recovered, processed and transmitted at all times; where technology impacts and influences every human activity. ICTs are to us what the steam engine was to the industrial revolution.

There have been great advances through History in the field of knowledge. For example, it was unthinkable that

people could be able to fly, which came true in the twentieth century; but Education had not had such impressive changes. You could have imported a math teacher from 200 years ago to a present day classroom and you would not have seen much difference. Virtual education has changed this fact because now teachers are able to teach in other places without having to be there physically.

Those of us who teach must be aware and open to what CITs are capable to do, so we can apply those findings in education; especially continuous education. A clear definition of virtual education should be known by the teachers.

Some authors present some definitions that were combined and taken from Unicolombia (Colombian virtual education): "Virtual education: A system of education in which the students and the teachers are virtually in contact through the use of media that can be synchronized or unsynchronized.

Those approaches of study are not directly guided or controlled by the presence of a teacher in the room, but it does benefit from the planning and the tutoring via a gadget that allows the relation professor-student (José Luis García Llamas, 1986).

It is a group of procedures whose objective is to provide instructions via press and electronic media or people that participate in a learning process with rules, location and different schedules that are different from the professor's (Michael Moore, 1990).

Having those definitions in mind, we can say that virtual education is a new educational model based on the use of ICTs, and that has flexible operational structures and pedagogical methods that are based on competences, and which is efficient in the teaching-learning process. This form of education breaks barriers of time, space, and it does not mind age, gender, occupation or social or economical level.

THE FUTURE OF VIRTUAL EDUCATION.

According to Miller and Miller (2000) we can identify four crucial factors in the future of virtual education: research on its effectiveness, technological advances, costs and competence, and their response against the stock market.

The results that investigations have on the effectiveness of virtual courses as a teaching and learning format will determine its place and success in the future. Technological advances in equipment and programs for the net communication will offer new tools for virtual education.

Internet explorers will have more and more sophisticated options to control different audiovisual mediums, and the internet service providers will offer more complex and powerful services that will simplify the exchange of information and collaborations, the distribution and the access to courses with a high level of interactivity (Miller

and Miller, 2000).

According to the Department of Education of the United States of America in 1978 the number of distance College courses was 52 270, and the number of users was 710 000, which was 5% of the total of enrolled students of the registered students for presential classes in that country. It is important to say that these courses used regular mail, email and lists. A few of them used informatical applications, audioconferences or videoconferences. Nowadays, the International data corporation says that the number of students that are taking online courses may reach 2.23 millions, which is 15% of the total number of students in College (Ko y Rossen, 2001).

It is reasonable to believe that the growing number of services in training and information, sales and money transactions that occur online will encourage large investments in a better infrastructure of broad bands. Virtual education might lean on more synchronized estrategies. So then, instead of chatting with teachers,

the student will be able to use video and audio to talk directly to them, or make presentations, or work in teams.

(Ko y Rossen, 2001).

High speed connections influence greatly in asynchronic work which can also incorporate video, audio and animations. In broad band, where teacher-student interactions are more fluent and direct, teachers have the opportunity to create and manage their contents and they are able to control the development of their classes, which will impar con the quality of their teaching (Ko y Rossen, 2001).

Course management platforms such as WebCT, Blackboard, e-College, o Learning Space, Moodle, Sakay, among others, are fundamental asynchronic systems. Even if they include chat features, and some even include videoconference features, an asynchronic tool assumes that the students are connected at a certain time of their choice, examine the available material and do most of the work without having to be

connected to the net. However, in places with a high speed connection and synchronic communication the experience of attending a virtual class is perceived differently because they start at a determined time and interact with the teacher and classmates by using tools that allows that synchronic interaction. These type of platforms allow the teacher to teach their class live and have the students ask questions, have discussions and observe and collectively discuss a video.

Virtual education may be a considerably cheaper option of teaching. They need fewer instructors, less classrooms, and less staff to coordinate a large number of students. This reduction in the cost is making these virtual courses more attractive in many institutions.

As Universities offer more and more online programs, the competence to attract the bigger number of students will start. This competence, plus some extra costs, can produce a great pitfall in the number of students that register in regular presential classes. Higher education will have a shocking number of transformations in their

philosophies and organization (Miller and Miller, 2000).

Although the media, the governments, or academic institutions claim that the new technologies of communication are essential for modern education what really gives it importance is the stock market. As virtual education becomes the norm, Universities will be forced to have drastic reforms that will allow them to survive financially. They will take measures such as cutting down on the number of teachers, diminish their physical infrastructure, cut back on research budgets, etc. (Miller and Miller, 2000).

We could consider the new model of virtual education to be fully working. Its use will increase every year. As an example, higher education in our country is using virtual education in both public and private institutions, and they offer more and more courses in this format.

Virtual education centers learning in the student and in his active participation in the construction of knowledge, which will result in long lasting learning. Professors are

no longer focusing their work on oral presentations on the contents of the books; they now assume the students can read this information and so use their classes to stimulate collaborative and autonomous work.

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