

LANGUAGE, CULTURE AND INDUSTRY 4.0

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Abstract—The world is a place where power relations play in different ways, the same ones that depend on several very diverse factors such as economic (mainly) and on a different social, educational or cultural level. In this context, society has been developing economically in an accelerated manner from the first industrial revolution to the present, at which time the means of production are not equal, but the operating logic seems to be the same. This document makes an outline of what the industrial revolutions have been during history, and tries to find the connections between the power relations that are the product of the technological advances, and culture; The same that prioritize the market and capital over human relations. The proposed approach is that non-hegemonic societies, which are not within the first world countries, are the main ones affected by industrial revolutions; therefore it is proposed to local cultures and their languages as a way of trying to minimize the balance in favor of the disadvantaged during the history of mankind.

Keywords—big data; colonization; culture; industrial; language

I. PRELIMINARY IDEAS

It may not be academically correct to start talking about culture when the terms industry or commerce are on the table; since somehow (entails by the way), the global economic system has managed to displace several transverse axes of the life of societies to the background.

That we find it unusual to establish discussions that talk about culture and industry (not about cultural industry), is due to the fact that the industry obeys the technical aspects primarily, and these in turn are mainly governed by the economy; therefore it is understandable,

but not justifiable, that for a student of any type of engineering it is a requirement to learn during his university career how to make a budget, but not to learn about the culture that surrounds him.

This article seeks to establish the hypothesis about the need to prioritize the relationship between the languages and cultures that they inhabit; it means, justify the importance of the relationship between languages and their cultures at the juncture of global society and the economic system of over consumption that prevails today.

The basic question for this work arises from observation of development in technology from the first industrial revolution in the mid-eighteenth century. It is necessary to understand the current situation of technological advances, understanding that the industrial revolution marks the beginning of the consumer society based on the established capitalist system; A consumer society that was forged needed several processes and changes to establish itself to what we know today.

II. THE INDUSTRIAL REVOLUTION AND ITS CHANGES UNTIL TODAY

The industrialization of the means of production until today has three clearly defined stages and a fourth stage that is considered as a near future. The first stage was develop more or less between the years 1760 and 1840 and is defined by the mechanization process, the introduction of machines that facilitate the production, the use of water or steam to generate moving force for work. The second stage is between 1850 and 1914, curiously the beginning of the First World War, and is characterized by the conception of assembly lines, use of electricity at the industrial level and as a consequence of these two, the beginning of mass production. In a very general way it can be conceived that the third industrial era begins with the adaptation of computers to

the industrial area; around 1960 the automation of industrial production processes set a point of evolution of the manufacturing processes that evolved towards the use of machines completely controlled by software.

If we understand clearly the stages of the industrial era, the changes have been generated by the introduction of new technologies that give a completely new turn towards the future; steam to electricity, analog to digital, manual to automatic; the big changes are established in principle by the type of energy and the adaptation of new technologies to the industry. It would be impossible to understand the industrial revolution without the adoption of electricity, or computers; therefore it would be impossible not to consider the internet as the new engine of the industrialization today; This is due to the adaptation of new technologies for energy generation, which should differ from the use of products based on processed oil, or electricity.

At present we are witnessing the historical moment of the possible leap towards a new era of industrial production processes, which Industry 4.0 begins to be called; which implies a new moment of adaptation to the latest technologies by the industry, the expansion of the economic perspective in the industry at the hands of the latest technologies.

III. INDUSTRY 4.0, A POSSIBLE PERSPECTIVE

The current society has as a reference of technological development, the interaction at global level through the internet and its possibility of virtualizing the distances; It refers to the fact of understanding the capabilities that opens within the range of commerce and industry to be able to apply all the capacity that we have within reach of a cell phone, for example, but at the macro level, that is, at the planetary level.

For example, a shoe factory that has all its technology controlled by 5G in each country, or subcontinent, in which it would like to distribute its products; this would imply the possibility of lowering the production and mobilization costs of finished products on a large scale; adding to this the possibility of establishing very short supply

times of products of international quality.

There are already examples of state-of-the-art technologies applied to business, for example, the Amazon.com company, Inc. (ARMSTRONG, 2019), Is currently planning the delivery service using software-driven drones; or the so-called “adorna-bots” that are robots that have already begun to do diligence in certain cities of the United States.

IV. THE HARD SIDE TO BE SOLD FROM INDUSTRIAL REVOLUTIONS

The concept of Industry 4.0 still an unexplored world today, we could say that the capacity of current technologies have a certain taste of fiction for the population that was born before the 1970s. Its capabilities may seem endless, despite the Industrial revolutions have always had their great counter, which are usually the societies that are left out of that “dream” that can be considered living in a world of distribution drones and excessive consumption of products less than 6 months useful life.

The specific question is what does customer-product-industry relate to? And the answer is simple: Big Data (DW Documental, 2019); This term refers to the entire amount of data stored by the different applications and web pages that users of different internet platforms use. The process by which data is collected, and by which users agree to deliver all the information of their lives to these platforms is simple: every time a user creates an email account accepts that their browser saves every action that is performed under the name of that user; at the same time the user enters under the same name in the different devices that owns, whether it is a tablet, phones, personal computers and desktop computers.

If we think carefully we will notice that we spend a lot of time in different internet browsers, at the same time different apps on our portable devices do the same, plus the GPS location used by our phones; the result is simple and, in a way scary: all our information has been delivered to companies that through this amount of knowledge of us are ready to produce, induce and sell everything.

The United Nations Development program (UNDP) states that: 1 in 7 people do not yet have access to electricity; most of them live in rural areas of the developing world (UNDP, 2019). So who has the possibility of having access to the benefits of industries with greater technological development? With around 800 million people in poverty, and countries that fail to meet the basic needs of their populations; It can be concluded that the benefits of an industrial system with state-of-the-art technology only reinforce an economic-social model that displaces those who have less.

V. ALTERNATIVES TO COPE WITH AN UNBALANCED SYSTEM

Unequal power relations, policies devoid of a social perspective, economic power not regulated by states in the hands of multinational companies; These are some of the reasons why the system has completely lost a balance between developing countries and so-called first world countries.

These power relations are not a recent history, several authors such as Enrique Dusell (DUSSEL, 1995) attribute the principle of the phenomenon to Coloniality, this as the precedent of the capitalist system and in turn as the germ of the industrial revolution; coloniality as the generator of a whole world order born from the invasion, plunder and colonization of the American continent.

The proposal of the thinkers who support decoloniality as an alternative to the capitalist system, proposes that the wealth that Western Europe, achieved during the colonial era was of such magnitude, that until now it maintains the well-being of the countries from the first world (GALEANO, 1971) already helped to create wealth to a large extent, and therefore, the power relations that dominate the so-called first world countries.

VI. THE CULTURE AS PART OF THE SOLUTION

Culture is the framework that includes the expressions of the peoples, the same ones that symbolically represent the social, political, economic and religious context of a social

group; therefore the basic expression of culture is language; Through this, all the knowledge of a people is disseminated, therefore the importance of the languages or dialects of a social group is that it is the medium that generates factors that identify identities on which other cultural components such as education, religion, etc, are based on (BACA, 2010).

During the process of colonization of America the imposition of the colonizer language was an elementary factor of the subjugation process; its importance lies in the fact that through the language the imaginary of the people is constructed (MIGNOLO, 2005); those concepts that are not part of formal teaching, but that are dispersed through stories, legends or myths. From the above derives the main justification for the importance of the dispersion of English today, an argument that innocently raises the need for a language based on the need for the contemporary global system, however, normally, this allegation never speaks of the cultural subjugation that goes hand in hand with the imposition of language¹.

Education plays a fundamental role in the phenomenon described above; While societies are richer, access to bilingual schools or International schools becomes a requirement; if your economic capacity is above average, the social circle in which an individual operates pushes him or her to have their children studying on schools that handle a “first world” language; The justification for this? The possibilities of labor insertion of the child in the future, totally reasonable; The difference lies when every day and in all living spaces of this child is forced to use a language that has no cultural or genealogical relationship.

¹ What is stated in the previous paragraph should be understood in a broad way, we do not want to raise the fact of refusing to know other languages; The author understands the great need to know several languages because of the need to know the others, alien to my own culture and language, a need based on the understanding of the other as a means to raise social relations to levels where solidarity and common welfare.

VII. LANGUAGE, CULTURE AND INDUSTRY 4.0

How to ensure that areas, which appear to be diametrically distant, find a connection point? The first step is to understand language as a broader tool than the communicative fact; understand languages as a means of creation-propagation of the cultural facts of people. It refers to the ability to relate the cultural processes that arise in a society and turn them into active elements of society, turning culture into a palpable element, the same that can be interpreted in words and therefore communicated to the rest of the population of a society, beyond being static as a museological element or of simple aesthetic value.

In this complex relationship that involves language and industry, we must emphasize that it is increasingly necessary for marketing to understand its customers as individuals who belong to a defined geographical space; Big Data has enough information to direct us towards what might interest us (DW Documental, 2019); Obviously, this based on habits algorithms when surfing the internet or using mobile applications.

What still does not happen, is that algorithms can collect information from our cultural imaginary; the machines are not skilled in interpreting something that humans do not understand either. Cultural imaginary is formed during individuals life, and they are fed by the cultural expressions that develop in the environment in which it grows, however this depends basically on each individual, but there are group cultural imaginaries, for example: certain foods, popular songs, popular legends, rituals or festivities; and these are the imaginaries that peripheral societies must be worth in order to establish the value of their knowledge in the face of the massive hegemonic cultural influence that accompanies the sale of mass consumption products offered by the global system.

The industry, unlike culture, is very clear about its main objective, which is the sale of all the products that are produced, and every time more products are sold and the consumption cycle increases its profit levels, it means that the industry has managed to get closer to its goal. Contrary to culture, which does not belong to

a multinational, it is clear that the desire on the part of multinationals is present, but it is a very complex terrain so that it can generate the same economic returns; A clear sign that the consumer system has very well possessed its factories within the cultural field is pop music.

So, if we establish as a real fact that the industry is not interested in understanding the cultural differences of its consumers beyond understanding them as a commodity; it refers to the fact that in certain circumstances marketing does take cultural differences into account; For example, in the American fast food chains that exist in Asia, rice, the staple food of Asian food, has been added to the menu. This data does not show interest in local gastronomies, but on the contrary, it is a sales strategy that makes fried chicken, soft drinks and hamburgers more compatible with societies that do not have these foods within their gastronomic preferences.

VIII. CULTURE AND LANGUAGE AS STRATEGIES

The importance of local culture and languages within this complicated relationship of powers is very high; we must accept that non-hegemonic cultures have lost their space in the face of a constant bombardment of information that has been handled by multinationals and their centers of power, which means that strategies to regain lost space have to come from the area that hegemonic culture does not handle, that is, local cultures. Local cultures understood as the spaces of study of traditions, and creation of new cultural trends based on traditions, accepting the historical moment in which they develop, understanding the challenges of developing cultural expressions objectively connected to societies that produce them.

Therefore language fulfills the function of bridge between local cultures and the societies that consume them; the fact of inhabiting a society does not mean that we inhabit the cultural expressions that develop in it. One of the mistakes that culture producers have commonly committed is to try to "raise" the discourse in cultural expressions, simply managing to get away from the society that inhabits that cultural

expression, and finally they become expressions of varied aesthetic value, only appreciated for the academy, but that has lost its social values, therefore it has stopped connecting with its environment, which ends up becoming a cultural expression with a very subjective assessment that does not collaborate with the cultural imaginary of a society.

The language itself, without a cultural function would closely resemble the example of the previous paragraph, if it fails to connect with its surroundings it becomes a simple communication tool; making a bold analogy, we could say that without the cultural burden of languages, these would resemble an online translator, the same that serves as a communicative tool, the same that translates without understanding a complex context, which is the cultural burden of words. The value of language lies primarily in this, the cultural burden of words that define in one way or another the meaning of expressions.

Societies in developing countries cannot create and less compete with the economic capacity of multinationals that have power in the age of 4.0 industries; not even countries and their governments could compete against a multinational company, because this, in addition to needing economic resources, needs the technology to start developing an industry, and it will undoubtedly have many internal interests against it, for which would result in the internal political conflict against the government that decides to try these types of strategies.

The least ambitious strategy that can be considered in this unbalanced scenario would be to begin to strengthen local cultures by understanding local traditions and cultural expressions; return to the basics of knowledge that is the investigation of the own. The creation of knowledge based on qualified research standards will generate solid basic knowledge, these have to serve as pillars of construction of new cultural expressions closer to the realities of societies, therefore here the work of language as a tool for transferring knowledge and creation of reference material on local cultures.

It is worth mentioning that these processes, unlike marketing strategies that are based on ROI (Return On Investment), need a lot of time to be visible and be able to feel the effect within a society; besides that by history the developing countries or third world, have a delay caused by the economic powers; therefore it is essential to understand that these processes must be developed with solid bases, which do not depend on people or institutions, but on social movements that handle a shared vision on the cultural rights of peripheral societies against the global consumption system in which we are currently immersed.

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