COMPETITIVENESS IN THE XXI CENTURY REQUIRES A FREE SOCIETY WITH OPEN ACCESS TO KNOWLEDGE

The economical globalisation iniciated as a resource exclusive to those capable to access tecnology and the most advanced knowledge, -what has been called “new tecnologies”-, has become universal, both from the side of access as from the side of the quantity of companies and institutions that can access. At least, this is true for most of the so called first world countries and certainly, it is the case for our economy. The reality of universalization is more and more possible thanks to the progressive democratization of telematic tecnology and aperture of knowledge, a fact that has incentivated the evolution from economical to social globalisation, not only from the hand of regulated communication instruments, but also through informal nets arisen thanks to the internet and other communication and educational channels that fill our relational field every day. Social globalisation leads to the apparition of cultural changes that for the first time don’t go along with comercial exchanges or with political interventions in other nations with episodes of violence. Examples of this could be the mediterranean culture identity with phoenician roots or the european colonisation of Asia and America that have modified their own culture.

Nowadays, the new scope in which social globalisation develops – accompanied by a certain cultural uniformisation and identity reaffirmation- is closely related to a double component: on the one hand the tecnological development and the productive delocation, and on the other hand, the aspects derivated from the ineducational flow, that doesn’t know timetables nor frontieres, and those related to the claim of welfare and hyperconsume of certain countries or collectives.

These days we can’t imagine this culture, which is characteristic for human collectives, enrooted in the economical and social globalisation, without considering another emerging culture thas has no limits. I’m talking about the cy*berculture,* a sociological reality, almost anthropological, that occurs in the cyberspace, a phenomen that cannot be handled as an isolated fact or as a “sociological curiosity”, but it is a reality that helps to root global culture and impel the social transeducations that push from east to west and from north to south. Transformations apparently based in the free flowing of knowledge in an open and plural society.

A new society, a new culture that is born free, independent, anarchic, deregulated and in certain aspects has much to do with newborn creation, but is sustained in the use of non natural resources, in knowledge often not public, subjected to distorsions and background noises, and therefore very sensible to policies that regulate the access to ineducation, resources and markets.

As for this, a society that to develop further than the voluntarism in its primary moments, needs resources, due to the fact that its development and expansion goes hand in hand with the capacities of prosper societies and those who pretend it to be. By that we mean capacities and a prosperity that go further than economical conditions and that have more to do with collective cultural capacities, in their formal and informal preparation for the new era, and in their capacity to understand and act coordinately with a common and clear perspective of the importance of the actual moment. Therefore, the capacity of investment, of generation of the resources and the willingness to solidarity will be crucial in the universality of access to services and knowledge, and in the assumption of the supreme good: the more you give the more you have. This leads us to the challenge to assume the new paradigm of knowledge society between the dares of productivity; investigation and innovation; and globalisation.

In this context we have to understand and assume that the irruption of the scientifical and tecnical revolution and the process of global internationalisation and liberalisation brings along new political, economical, cultural and social defiances. The paradigma that characterized the industrial society has slowly been changing according to the rhythm that the continuous innovation waves have marked, based on computational and telematic tecnology, accelerating the process of obsolescence of social and entrepreneurial organisations and the forms of influence that citizens authorise the administrations.

We all perceive that the rules are changing in which are based social relation guidelines, educational models, economical value-generating processes, the criteria for decision-taking, the behaviour and values. Now, with independence of the level of education and capacity of discriminating between what is fake or certain, the professionals and citizens dispose of more ineducation than any other former generation. The correct use of education determines the potencial of the people, as well as it entails the capacity of

generating welfare, progress and competitiveness in those human collectives who can access it and use it freely. We are submerged in a process of change, that conforms slowly but implacably the new culture that impregnates the citizens who are comitted with the evolution that the entire world, and especially prosper societies approach without having well defined the challenges and defiances to rise to.

Economical, social and ineducational globalisation is a fact. However, globalisation and social crossbreeding is nothing new, as the first globalisation wave became a reality at the endings of the XIX century and beginnings of the XX century (a similar process to the actual globalisation occured between 1870 and 1914), and this is a fact to consider in order to learn from our mistakes and firmly step forward. The incentivating motor worked, like nowadays, using the different advantages of diverse territories with the finality of increasing the profit margin of the productive activity. At that time they looked basically for the advantages resulting from the cost of labor force and primary products. Now, to these, which continue to be important, we add aspects associated to policies that support the productive activity, environmental policies, the potencial of developing closer markets, the education of people, the attitudes of the population, connectivity and infrastructure, and the capacity to innovate. We can take note that the equation has become more complex, as there are every time more factors engaged.

In this period, the political and social tensions lead to two world wars which blocked the process not to be retaken till the second half of the twentieth century. Therefore, it is the second time that we confront the challenges derivated of economical globalisation and social interrelation. On the one hand it is true that many of the factors are new, basically those who derivate from the ineducational revolution based on the four tecnologies which invaded us in the last quarter of the XX century: digitalisation, informatisation, telecommunications and the multimedia format, which have made possible the transeducation from an industrial economy to a knowledge economy, and on the other hand, the outburst of guided or pre-established human relationships. It is also true, however, that the cultural guidelines and current social imbalances are not so different from those used at the beginnings of the last century, at the same time that cyberculture and its associated nets find themselves, at present, far away from the centers of real power in the planet.

In this continuous process of liberalisation and globalisation of economical, social, informative and cultural activity that characterises the knowledge society, the distances between the different collectives and territories increase in order to profit from the opportunities rooted in themselves as well as they also segment according to their capacities and tipology of products or sevices they generate. It is in this context where the capacity of access to knowledge and tecnological instruments becomes crucial to develop individually and collectively, reaching, or at least, maintaining the current level of progress and welfare.

Our present, plural and imbalanced society configures heterogeneous and assimetric human collectives, where its development goes through the competitiveness of each of them. Rising to the challenges of competitiveness is the base to progress and to consolidate an independent and free society. In this scenario and considering the developped countries, their economy should focus its efforts on improving their competitiveness, tranformating ineducation in knowledge capital and conducting it effectively. In conclusion, we have to assume that in developped countries the way to progress needs a competitiveness based on innovation rather than on costs, the latter reserved to those countries that haven't reached yet the levels of welfare and progress existing in the first world. Catalunya still suffers the consecuences of adapting their model based on lower production costs to a new one based on differentiation and on the success of this transeducation depends the futur of our country.

Taking the way of innovation, - understood as the procedure to reach new products and services optimising productive processes to gain higher levels of value-generation- is based in the tern "Science, Tecnology and Design", opposed to the industrial society that bases its development on productive resources and primary products. This fact varies significantly in the development and signification of labor, and shows the loss of hegemony of the parameters of the industrial society.

In relation with the tern "science, tecnology and design", it is necessary to remark the increasing importance of design in the current society, that reappears strongly in the last quarter of the twentieth century. To the traditional and avowed importance of the binomy Science-Technic of the industrial and pre-industrial era, we have to add the design which retrieves a differential value, understood as the "seduction of the form and

the richness in contents", together with the capacity of avoiding exclusion motivated by culture, education or gender.

An example of the fact that design is a topic that goes further than simply esthetical matters, can be the syntethical field of the cyberspace. In the cyberspace – be it a webpage, the electronical headquarter of a congress like ours, a system of electronical messenger, a system of electronical apprentizeship, a net of dispositives for videoconferences, etc.-, understood as a totally artificial space, the topic of design begins to be, without any doubt, an aspect of first order. The way in which we imagine and handle a cyberspace will determine who can access to it, who can benefit from it, who will profit from it and to what point it will be a space of social inclusion or exclusion.

It is more and more accepted that design is not only an esthetical, but also a strategical value for the companies and advanced organisations. At the same time it presents the basic instrument for the human collectives to make sostenibility possible, which is no more than focusing the solution of the problems without obstructing the development and progress of the next generations. Something that obliges both the minimisation of the environmental impact of the products and the optimal use of them. In the same way it is crucial to understand that it would be necessary to overpass the adjustments centered on the minimisation of the environmental impact of the industries, and the process and recycling of leftovers; the problems derivated by its use are those that need our major attention, as the biggest waste of resources and contamination occur in this phase of the lifecycle of the product, and not only at the beginning and ending where the impact uses to be between 10 and 20% of the total. Example of it would be the refrigeration equipments or the vehicles with a fuel engine.

The function and need of design, understood as the third component of the innovation process and as an element that harmonises the development of today and tomorrow, is proved when we analyse the climatical change ignoring the fact that its origin is the human being, the overexploitation of the planet, the squandering of the resources and the periodical adjustments to which we submit our planet, an "animated element" after the Gaian theory.

Nowadays it is assumed that the climatical change is a reality with inmense economoical implications and impredictible consecuences for the human development. Although, if the importance of the impact is undeniably according to the informs and studies published, it is also true that humans can and should work to avoid it, trying to minimize the negative effects it may have on health and social and economical development.

I've wanted to state some aspects that surely permit and require some discussion, but which demonstrate the importance of design, and that allow me to declare that design, which has become the connecting point of the inclusion of scientifical and tecnological progress in products, sevices and processes, is now the clue to defy the current multiproblematic. A problematic only approachable with a systematical, continuous and rigorous innovation process, developped by plural and heterogeneous equipments that assume their potential when they conduct symbiotically scientific advance, tecnological development and design. The way in which we imagine and construct "things" to be used, is a task of big responsability and design will be important to determine the model of access to knowledge we will have and the society we will live in. Depending on how we do it we'll construct a socially and ecologically balanced society or the complete opposite.

Assumed the importance of design in relation with the construction of the future, used symbiotically with science and tecnology, we should accept that , innovation is not sufficient to compete in the knowledge society despite the potential it retrieves to the innovative process. We have to apply it with the objective of the continuos improvement in a complex, asymmetrical, changing and deregulated context. It is in this sense that the tern "globalisation, productivity and innovation" becomes the key to reach competitiveness. A complex tern regarding its conduction, which requires searching the optimal balance between the different components for each level of competitiveness, as the composition of the components conditions the level of competitiveness in the future in a speficic moment . Identifying the components and giving them their optimal value in the equation to solve is the objective to win the defiance of competitiveness, as well as it represents the way of generating resources that guarantee the free progress of societies.

It is necessary to understand that **globalisation** overpasses the concept of internationalisation as it was known before, as the interdependence, the aperture of the markets and the liberalisation modified the scenarios and obliged to understand it as the capacity to distribute the process all over the planet, and simultaneously dispose of products accepted and recognized in different markets. Therefore, assuming globalisation and extracting advantages involves simultaneous conduction of tangible and intangible concepts that define first of all the location of production and the associated logistics, secondly the internationalisation of the product, and thirdly the capacity of becoming a reference in services and products, thanks to their value and quality.

Productivity is based on: infrastructures and its contribution to the interrelation and connection all over the world; a professional team that configures the organisation of coexisting leaderships, compromises, abilities, knowledge and attitudes; and finally the context or territory where the activity is developped and where people grow professionally and socially. Only with harmony and balance between the different components that configure the infrastructures, the professional team and the territory, productivity reaches optimal levels.

Referring to **innovation**, we have to planify it as an integral innovation, which implies applying it to product, organization and process, which obliges to conduct and consider scientifical and cultural aspects, knowledge and education of the people, mecanisms of decision-taking, capacities of interrelation and cooperation, etc... A whole bunch of facts that focus on the capacity of people, as innovation requires a specific attitude which envolves assuming risks, being aware that everything has an expiry date and that maybe the utopia of today won't be the same tomorrow.

We can conclude that competitiveness based on the concepts exposed before, the only possible way for prosper societies, requires disposing of highly educated professionals, empowered in abstract knowledge, in order to enable them to continue developing, and by the same time understanding and integrating scientifically advances; as well as instrumental knowledge which permit them to extract efficiently the potentialities of technological tools. Not to forget the attitudinal values in order to facilitate the interdisciplinary work in heterogeneous and plural teams that defy with freedom the

obsolescence and with compromise the improvement of the existing and the creation of the new.

Therefore, I'd like to end remarking the complexity in which competiveness enroots, but at the same time it becomes the key in a globalised society with independence of the dimension of its country or organization. A competitivity based on the human factor, or social capital, simply the people's talent. A talent, though, that can only arise if it develops freely, plurally and with open and shared access to knowledge.

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17.11. 2006