

# THE XXI CENTURY INTERNET: A SPACE FOR “EDUCATION AND COOPERATION”

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## **Introduction**

The receptionist and the concierge of the Chancery of my Embassy in Copenhagen, Carlos Alarcón and Brígido Jiménez, <sup>1</sup> have been receiving electronic mail via Internet on the screens of their respective Televisions for long time ago. That is due to the simplicity of using the TV that permits their respective wives and themselves to read the messages of their children and families for free. This is not so easy if they have to use a Computer, either portable or not.

Last May I visited the city of OULU far up in the North of Finland, where the 4 world most important factories of Nokia are located. This allowed me to closely examine the situation of their technology thanks to the exact explanations that Mr. Antti Hietala, Vice-president of “Nokia Telecommunications”, and leader in the telephone production, gave me. During four hours of thorough visit to the factory, I got to know the prototype of mobile phone that using the UMTS (Universal Mobile Telephone System) much more advanced than the present GSM (Global Mobile System). This new mobile system will allow us, as it is happening in Japan since the 1<sup>st</sup> of July, to have access and receive phone calls from any other similar telephone on the planet, foresee with an excellent quality the Vision of the person we are speaking to, see the electronic mail, navigate in the WWW, send and receive faxes ... etc. with only one number (#) and all this not even from television, a desktop or a Palm V, but just from a simple mobile phone.

## **I. The Internet from beginnings of the XXI Century**

The world of access and development of the Internet is in this moment ‘skipping’ Centuries and Millenniums, in a full speed run to the innovation of

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mobility<sup>2</sup>. In my opinion in very few years, maybe around year 2006 we will already have micro computers working as the ones in the Gardner Company in Connecticut, which we will carry on our suits and will become one of the ten advanced technologies of the next years. The Stanford University in its Wearable Computing Laboratory, the IBM company, MicroOptical company from Massachusetts, Xibernaut from Fairfax in Virginia, the MIT of Boston as well as other leading companies, guarantee that no matter what, the next step will be to integrate computers in suits and dresses.<sup>3</sup>

This is just a sample of what it will be, with no doubt, the Internet of the beginning and maybe of the first decade of the Century we are starting in only three months.

The fact of that an InterPlaNet is already been planed for year 2008 with a Backbone perfectly working<sup>4</sup> to receive and send data to the platforms around Mart and the Earth Planet, is a very encouraging and significant fact of the Internet and UMTS expansion at a Universal scale. And this is only the beginning. Our children know already a lot about it, not only through science fiction but from the simple (?) games they have fun with at the Net-Cafés<sup>5</sup>.

But there is more, in fact last Friday the 16<sup>th</sup> of July, the Magazine “Science”, published in the USA<sup>6</sup> that the company Hewlett-Packard in Palo Alto Ca. using a very intense and deep microscopic investigation had discovered the untaught properties of some super-fast computers with a low energy intensity which could increase the speed of the actual computers in about a 100 billion units more than the ones used by the most powerful machines know a days. So what until today only has been an speculation area is became a reality.

The significance of this statement made in the famous Laboratories of UCLA, introduces us in a realistic and pragmatically world of what the Internet of the XXI Century can be, which immediate consequences will be in words of the IHT (International Herald Tribune) “a world in which super-computing power is so pervasive and inexpensive that it literally becomes **an integral part of every man made object**”. But furthermore, during the next decade this new technology contains the promise of an enormous and vast data stocking capacity” what the physician Phil

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<sup>2</sup> One just have to see the article of the IHT (International Herald Tribune) from July 14<sup>th</sup>, page 21 in which under the stimulating title of “Expect a chip on your shoulder” Vanessa Houlder believes that “Wearable computers are more likely to evolve along the lines of mobile phones”.

<sup>3</sup> In an article published by Rhemi Post and Margaret Oprth from MIT, assure that whole computers might be made from materials people are comfortable wearing. The textiles will be made of a material which will be woven with a mixture of fibres of low resistance which are normally used for magnetic covers with a high resistance to carbonate fibres used to avoid static electricity.

<sup>4</sup> Due to my participation in the Symposium of the Governments Presidency about “Everybody’s Information Society” on <http://www.Docuweb.ca/~pardos>

<sup>5</sup> See “Star-craft” which is very much in fashion among teen-agers.

<sup>6</sup> Source: International Herald Tribune 16<sup>th</sup> July, front page.

Kuekes from Hewlett-Packard in Palo Alto means could create a new kind of “Tacntasy Trips” in the machines way. We are for example talking about sensors which would travel in the peoples blood detecting problems and sending alarm messages if any kind of anomaly is found in the human beings health.

But let’s go back to the present and the reality of year 1999. We have to admit, with the importance and intensity that the matter requires, that we are in a unique and exceptional juncture of the power of knowledge and in many cases of the imagination that –as Albert Einstein very correctly said- is, in many cases, “more important that the knowledge itself”.

So in the specific case of Training and Co-operation on this Internet of the XXI Century we should be aware of what will be the importance and significance of the uses of this giant machinery of Information and Communications, from which we only see the top of the Iceberg. This importance and significance can be confirmed on the extension and seriousness that the Ministers of Industry and Investigation of the EU have given it in their recent meeting in Finland about “Competitiveness in the Information Society” at the University of OULU, the past 2<sup>nd</sup> and 3<sup>rd</sup> of July<sup>7</sup>. The most important subject after my point of view might be, not only the one about investments, which are with no doubt necessary<sup>8</sup>, but the “Investment in ICT is by no means a value as such and does not alone lead to the improvement of competitiveness and creation of a long-lasting competitive advantage”<sup>9</sup>.

## II. Active presence of the Internet in the XXI Century

Shortly, but based on specific and verifiable facts, we can state that the Internet, with some roots in the Trading and Economic world, that is functioning now a days is already starting to work in the Cultural world and will shortly be introduced beyond the politicians personal Web pages of what is already starting to be called, [Digit@l](#) Politics.

I will try to explain it better:

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<sup>7</sup> This can be perceived in the unanimity of the Ministers of Industry about the fact of “Investment in ICT is by no means a value as such and does not alone lead to improvement of competitiveness and the creation of a long-lasting competitive advantage. Adjustment and changes in the operating methods and structures of a company are inevitable next steps in improving its performance. The increase in electronic commerce is a good example of these effects” (Forth paragraph of the Declaration of the informal meeting of the Ministers of Industry of the EU about “Competitiveness in the Information Society”).

<sup>8</sup> See at the end of the above mentioned Report of the Symposium about “Everybody’s Information Society” on <http://www.Docuweb.ca/~pardos>

<sup>9</sup> See the forth paragraph of the above mentioned Declaration of the informal meeting of the Ministers of Industry of the EU in Oulu.

- a) In *Trade* the issue has such dimensions, with out mentioning successes such as the sale of books and in a close future of toys and electronic components on the <http://www.amazon.com> and other similar things, that it seems that even IBM wanted to patent the idea of the @-commerce, what I mentioned in the Opening Plenary Session of INET'99 in San José, Ca. <sup>10</sup>. In fact the electronic trade is already being developed by leaps and bounds to the extreme that this Internet activity of the @-commerce has been recently called by the Wired Magazine “The Digital Gold Rush”<sup>11</sup>. The Introduction of Fees for the electronic trade, its regulation by the Governments, the authentication of the signatures , the security and the transaction secret, confer the Economic and Trading area enough importance to be able to assure that they are already included in the Internet.
- b) In *Culture*, the issue is a little “tricky” if we have to be sincere, due to the lack of definition of the own word and the concept of Culture. In a matter of fact the different Languages spoken today on the Earth Planet, the different traditional dances, the gastronomy or the Education, not to mention other things, are all in the same “Box” or “Bag” of Culture in general. And you will agree with me that not all of them have the same significance, and absolutely not the same “Societal” effect among the Internet users or our fellow citizens.
- c) Finally, in *Politics*, the increasing steps are being very notorious. From the “invention” of the Internet apparently by famous politicians such as Al-Gore, to the attempt of presenting the modernity of the Internet on Webs and the endless home pages of the traditional politicians that not only say the same as others but also do like them. For this reason the attitude of the Spanish Senators about issues like the claim of the Right to have a horizontal and universal access for all the citizens to the Internet, are examples that encourage to continue this search. One day, the high or the even very high levels of the traditional power will begin to understand that after or before the own Greens, today already participating in the traditional politics, in its wars and battles, there will have to be admitted that a generation with no age to unify it, but with enough maturity to reach a proper self confidence, attempt to make a [Digit@l](#) Politics that breaks all the traditional diagrams of power which curiously are also started “bottom-up” as the traditional electoral processes, but in which exists an unanimous agreement about special matters as the SOCIAL SETTING, the ICT and the refusal to any kind of CENSORSHIP, not admitted previously or personally in its informative contents and by the own [Digit@l](#) users.

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<sup>10</sup> See on INET'99, Wednesday, 23. June, Opening Plenary Session, Keynote address, by Dr. Irving Wladawasky-Berget, General Manager, Internet Division, IBM, United States <http://www.isoc.org>, when I pointed him that the e-commerce belongs to all the Internet users and not only to IBM, as well as that in the developing conditions of the Internet, the UMTS and mobility should be included together with the e-mail and the Web.

<sup>11</sup> See Wired Magazine, July issue, 1999, front page.

Moreover, there must be admitted that, though with some difficulties, some Digit@l Internet users Politics which dare to talk with no restrictions against concepts as territory, currency or international politics as marks of the ancient nation-state model or against a sovereignty with small letters, when the sovereignty lies in those people and regions that, with their language, culture, gastronomy and even their leisure, have been able to generate a Planetary interplay beyond the conventional borders to directly influence on the ENVIRONMENT and on the ICT to which we all should have equal access to and without censoring and on which development and improving we all have to agree.

However, due to the issue of this Congress which will take place in the paradigmatic popular and magic interplay city of Seville, the part about Education and Training requires special acknowledgement and should be treated more deeply.

I am going to try to give the above mentioned matter a special acknowledgement to provoke you with the purpose of starting a discussion and ‘push’, according to my possibilities, the ‘snow ball’ about the uses of the XXI Century Internet, that is to say the one from today and tomorrow, the Everybody’s Internet and moreover the Internet which is mainly used for Education. This is what the EU Ministers of Industry were referring to on the last meeting about “Competitiveness in the Information Society”.

There are 3 facts which I find relevant to introduce the debate:

1. The fact that Training *should abandon* the traditional ways or moulds. Though there is no doubt about it will have to share them, during a long or short period, with the personal interactivity and furthermore with the teaching groups interactivity, and specially civic Networks as well as in contact with the training period, leisure, the old peoples loneliness, the disabled isolation or the lack of knowledge of the uncultivated people. It is necessary to increase the intensity of the work of Researchers, Educators, Teachers and Professors, as well as the students of the Primary School in some areas in which we can educate each other. I think that the Report of the Club of Rome from 1979 “No Limits to Learning”<sup>12</sup> is a, innovating book and its authors, Professor Malitza from Rumania, The Mandhara of Rabat and James Botkin from Harvard, are authentic visionaries of what it is happening today: because *one has to learn from the future*, with an innovative and anticipating frame of mind as it is happening in many places on our Planet, but specially and paradigmatically in places that gather people, results, assets, projects, researches and achievements as the one from Silicon Valley, from its beginning in Palo Alto, Fremont, Santa

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<sup>12</sup> See “No Limits to Learning” book translated to Spanish by three members of three very famous Universities at that time in the middle of the Cold War, Harvard, Bucarest and Rabat and edited by the publishing house Santillana, in Madrid, with the participation of. It is an essential book for those who want to get into these fantastic arcane

Clara or San José and what is been called the “San Francisco Bay area”. In this area a very peculiar phenomenon is happening with a new multiracial, multinational, multi-linguistic, and almost planetary generation that is starting to be called an “Equity Generation”<sup>13</sup>.

2. The Education, as the Latin American emigrant, Ernesto Galarza who got the first PhD. at the University of Columbia said, for a Mexican emigrant in the US, Education, I repeat, “can be considered as the individuals progress supported by his own experience, observation, feelings, curiosity and biological talent, and not the power that the adults should have on him”

3. I believe that the meaning of this concept and Education’s new tendency is one of the basic and essential issues which we should face openly and with courage, with no fear for the utopism critics and other paralysing and devastating “isms” from our rich and different Cultures. A deep analysis and debate must be done about the “**images**” published in the Wired Magazine while talking about the “Digital Citizen” what I modestly mentioned in my speech at the Spanish Senate<sup>14</sup> -maybe the Congress in Seville is to serve this purpose-. This speech was mainly about promotion, expansion, immersion, apprehension, comprehension and furthermore, about the experience and practice of Optimism, Tolerance, Civic Mentality and about the Drastic compromise with the Change this “values” take us to. As I said in my book from 1984<sup>15</sup>, I am still afraid to use this word “**values**” for the preconception this word has and its co-lateral meanings due its submit, during centuries, to the ecclesiastic manipulation of many different religions and sects.

### **III. The Co-operation in an Internet for everybody**

As Professor Mario Bunge says, the expression ‘international co-operation’ can have 3 meanings: unilateral aid, the powerful countries blackmail to the weak countries or as multilateral collaboration. In the first two meanings the word ‘co-operation’ (as well as the word “exchange”) is just an euphemism that disguises: pity and dominance respectively<sup>16</sup>.

Then with this Congress and the Internet **as an area** for Training it is only possible to talk about the third kind of Co-operation and never about the two first

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<sup>13</sup> See the Article “The Equity Generation” on page 113 and following, of the Wired Magazine from July 1999.

<sup>14</sup> See <http://www.senado.es> or <http://www.Docuweb.ca/~pardos> in the Speech at the Spanish Senate.

<sup>15</sup> See “Growth and Development in the 80’s” (“Crecimiento y Desarrollo en la Década de los 80”) from Tecnos publishing house, Madrid, 1984, pages 171 and following.

<sup>16</sup> See the Presentation from Professor Mario Bunge, Foundations & Philosophy of Science Unit. McGill University, Montreal, to my above mentioned book “Growth and Development in the 80’s” (“Crecimiento y Desarrollo en la Década de los 80”), page 11.

euphemisms. So we are referring to the *multilateral collaboration* or “different” Co-operation, since never before in the human beings history it has been possible to talk about an education and training in which there is a national and international co-operation through a multilateral collaboration.

We are facing a “*different*” kind of *co-operation* from the one we have known until now and this is due to several reasons which we are going to describe very superficially so you can analyse them and, if necessary for a deeper study, break into pieces in this Congress of Seville:

1. Internet Learning is always inter-active.
2. It is based on approved assumptions and experience.
3. It is base on absolutely new models.
4. It has special characteristics such as inter-action and the perception of a new and constant training.
5. Which is usually produced in inter-active equipment on a local scale or even a suburb, town, regional, national or global scale.
6. Why when there is inter-activity, the drought invades the ground and the motive power disappears becoming pure bureaucracy and pseudo formation-education what it is equal to routine ?
7. Because of this, it is necessary to maintain the windows of receptivity and reformation open at any time anticipating, with the help of creativity, the future.
8. Understanding that the adaptation process to the new needs of formation goes through so evident assumptions so they normally are accepted by the majority.
9. And among these assumptions we find the ENVIRONMENT, the knowledge about it, its protection and enjoyment.
10. And a constant valuation of the ICT’s development and its total applications, with the support of all the now a days powers, some of them very innovating such as the virtual citizens Network which are the *real Schools of the XXI Century* in which we have to achieve a “different” national and international co-operation so we can progress.

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