

Theme: Diffusion and Consciousness.

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## **AGEING SOCIETY**

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During last century, life expectancy increased in a remarkable way but it shows no signs of changing. On the contrary, **it is estimated that in the year 2050 there will be another increase of 10 years and life expectancy will be around 90 years.** Importantly, this incredible increase affects the average life expectancy but not the maximum lifetime. That is to say, more people will live longer but no one (or almost no one) will reach more than 120 years. This limit can possibly dissolve in the next decades thanks to research with stem cells and perhaps the knowledge of processes responsible of the death of these cells in which the telomeres and siururines play an important part. Not everyone around the world shares this viewpoint. According to a recent study, it will never be possible to go beyond 120 years. But anyway, and as a consequence of this short reflection, it is interesting to draw attention to the fact that there will increasingly be more elderly people in our society and that this can have a series of consequences that are worth studying and come to terms with. Let's think about it...

Due to an increasing number every day, the elderly citizens over 65 will have a decisive political influence. Consequently, terms like retirement, Alzheimer, pensions, golf, Botox, or Viagra will become very familiar. Over 30% of the people older than 65 years will continue to be on the labour market, and more people will do so in the future. This will cause an important alteration in the actual dynamism of the individual: the sequence adolescence-youth-studies-work will be delayed by some years. Some psychologists say that the youth will end at the age of 35. Perhaps many of these eternal adolescences are already born. The technology of assisted reproduction makes it possible (it already does) to have children at the age of 70. People older than 65 years old can have their parents or grandparents living with them at home. Rich old people will be ever richer and the poor young people will increasingly become poorer. As a consequence, the society will be divided into three levels: the old and wealthy people at the top with an access to all the technical possibilities that can increase their lives, a mass of population is located in the middle and the poor and less influential will be at that bottom. A novel by Bruce Sterling situates us in a similar world.

It is not a matter of being an alarmist but this situation, which seems to be the ideal seed in the class struggle in the era of biotechnology, is not ridiculous. It is a matter of starting thinking how one can adapt to this new reality that is already visible. Perhaps, it would be convenient to start to develop politics of gradual adaption that does not cause trauma.

## **EXPERIENCED YOUNG PEOPLE**

In this context, it is interesting to reflect on the ideal age to leave the labour market. I will be told that it depends on the profession, the physical and mental requirements. All right, but, is it not correct that mature people produce less work? You will be surprised: for some tasks they are much better than young people. However, many activities tend to isolate the people of advanced age. The argument lies in their slowness, forgetfulness, being little flexible. This is a common misunderstanding and is based on the conviction

that every individual who gets old develops a deficiency, when the truth is that only some processes of the brain become affected. A brain of an old person restructures itself. Some circuits get more active in order to compensate less activity of others. Elderly people use different circuits to those employed by young people to realise a task.

The experience produces a series of benefits. Crystallised intelligence predominates the age of maturity that spans the general knowledge, pertinent lexicon and social preparation. Our environment, nevertheless, prizes flexibility and speed because the work is based on tasks that require alterations and continuous adjustments of attention. In this aspect young people have advantages because their intelligence is more fluid, less consolidated. Many neuron-physiologic experiments have proved that elderly people take longer in reacting to stimulus but they make fewer mistakes. Their brain is slower but more secure. This is due to the fact that the brain is conscious of its problems and it prepares itself with more strength and more in advance in order to compensate them. What does this mean in the field of labour? The tasks that require frequent decision-making without distractions (for example, quality control) can benefit with lower rate of errors and can be suitable for elderly people. It could be useful to study the activity of the brain when deciding the ideal configuration of jobs.

The age of retirement is an issue that repeatedly jumps out in the newspapers. Frequently, it appears like a “threat” of a delay. This time it seems that its delay is going to be prized. The limit of the 65 years is originated from Bismarck who fixed it in order to avoid having to pay the veteran soldiers of the Prussian war (at that time almost no one reached that age). Nowadays, it is interpreted as a social achievement. Undoubtedly it is. What has to be done?

## CURIOSITY

In order to become an “experienced young person” (I like this euphemism) with useful abilities for the society, it is essential to maintain a vital attitude filled with curiosity. Curiosity, together with wanting to know for the mere reason of wanting to know, is the drive of the scientific discipline. The curiosity for wanting to understand what lies behind the objects, and the eagerness of accumulating knowledge without any reason, are typical characteristics for the human being. I would dare to say that they are exclusive to the human being, although surely there is a mammal somewhere in a remote subaustralian forest that has developed similar behaviour. All right... but never in such an intense or sophisticated manner.

Azorí argued that old age is the loss of curiosity. There are some sociological studies that seem to demonstrate that as we accumulate years, we start to repeat behaviour patterns. We stop listening to new music, to read new kind of literature, to dine in different restaurants. An American neurologist and anthropologist, Robert Sapolsky, published an article that made an echo to these studies. To his surprise (of great pleasure), he received many letters from elderly people who disagreed with his results. These people were full of life and desire to discover new things. This is true. Today there are retired people enjoying a great physical and intellectual vitality. Take maximum advantage of them! **Maintain the curiosity and the desire to know and to learn. It is a good antidote against Alzheimer,** depression and other illnesses of this society that present themselves at a vast speed. Bless the curiosity; let's hope it never fails us.

“Scientists are not interested in facts. They praise ignorance. They undermine it, they are hungry for it, they attack it (select the metaphor you like) and in the process they

continuously find more ignorance. This is a great reflection made by Matt Ridley, a prestigious scientist. The popular proverb says that ignorance is the mother of science. It seems a paradox: the science as a form of reducing ignorance by increasing it. In fact, from the age of antiquity the best scientific investigation has been considered the one that opens up other doors. For this reason, the laws of science are not the truth. They are useful. This affirmation might seem as an intellectual heresy but it is the basis for advancement. As a result, laws increase as science and investigation develop and one day, are substituted by new ones. For this reason, knowledge is infinite. Behind all this process, there are two elements: Curiosity and an “I don’t know”. Einstein said: I do not hold any particular quality other than being fervently curious.” If you say so...

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