

## ALZHEIMER AND MORALITY

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**Abstract:** Actual data is showing that, besides its individual and medical dimension, Alzheimer has an unquestionable social importance in all Europe. In the following article, Norbert Bilbeny, Full Professor of Ethics at the University of Barcelona (UB), Dean of the School of Philosophy (UB) and Co-founder and former president of the Committee of Research Integrity in the Public Health Institute of Barcelona (IMAS), addresses this key subject from a philosophical perspective. Combining technical expertise with a non-expert format or accessible way of presenting the argument, the author makes a thorough analysis on the need of linking Alzheimer and morality. This is to say, based on the importance of memory for personality; the author states the transcendence of personality in the caring of those who have lost memory

**Key words:** Ageing, Alzheimer, morality, old people

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In the year 2002 more than 850.000 persons were suffering Alzheimer in France. It is also known that in the present time a 10% of more than 65 years old people have such syndrome too in Spain (60% of people aged more than 90). Given the fact that in this country a 20% of its population is now aged 65 or more -while in 1950 they were only 8%-, it is easy to conclude the social importance of Alzheimer in those countries, as well as in all Europe.

### Alzheimer as a challenge to Ethics

Many other similar statistics could be added to these. In fact, the loss of memory in elder persons represents one of the biggest problems of the European population and health institutions. The Alzheimer disease supposes not only a deterioration of the personal quality of life of patients but also that one of their families and other persons living close to

those.

Longevity and its effects was already an object of the philosophy of Marcus Aurelius in his *Meditations*: when a man lives a long time, he wrote, his mind is in danger of being unable to reasoning. So he would lose his excellence as man (III, 1). Regrettably, the loss of memory entails anytime the loss of personal identity. Today some doctors describe the Alzheimer's patients like "ghosts" of the persons they were.

In a whole, Alzheimer impacts on the physical, psychical and social conditions which are required for a healthy old age. Such impact concerns also the moral dignity of this increasing group of ill population, granted that personality and personal identity of patients, as well as the social conduct before them, are seriously transformed under the pressure of this neurological syndrome and its effects. Unfortunately, the advanced Alzheimer patients belong to such group of people who can no longer engage in a dialogue and no longer take anything in charge. In relation to this, some moral questions might be posted facing this mental illness. Thus, which kind of person is that one without memory? Does she or he have a personal identity? Where is the root of their dignity located? Should then society change or not its moral patterns before those members condemned to forget even the fact that who themselves are?

All the human cells are constantly renewed. For example the blood cells reshape three times every year. However, the nervous cells are the only that never are renewed. Moreover, as well as we get older the human brain gets smaller in size and its metabolism diminishes too. Between the 70 and 80 years old the loss of the brain cells increases its rhythm. Hence, humans in the age of 85 could have lost a 40 % of these nervous cells. As a consequence, the mental capacities are also reduced. Learning, remembering, recognition, language, even movement, are definitively impoverished. After all, between the 75 and 85 years old the brain deterioration has an effect on approximately one half of this population. Upper the age of 85 affects an 80% of them (seriously affected the 20%). In fact, it seems to exist then a kind of contradiction: even though the human brain is the latest organ to get old, such organ is, on the contrary, the first one losing its size and showing its lack of anatomic renewal.

Alois Alzheimer was a German psychiatrist who died young as a consequence of a heart attack. His last name is famous today due to the symptoms of his patient August D., aged 51, who suffered brain atrophy, cortical senile plates and neuronal degeneration. In future such settlement has been said the "Alzheimer's disease". Despite the unknown

cause of this disease yet, there is a clear relationship between its symptoms and the neuronal death, especially on the brain cortex and the temporal areas. Besides, the only certain diagnostic of this illness is given after the brain autopsy, when the loss of the brain weight, the widening of the brain wrinkles and the diminished white substance of this organ can be clearly observed. In life, some Alzheimer disorders appear soon, while some others do that later. Aside, in several occasions what is considered as an Alzheimer disease corresponds rather to other disorders, as the vascular dementia.

There is a characteristic evolution of symptoms related to Alzheimer. The first step of them is a typically amnesia. The patient falls into oblivion of nearly all: glasses, keys, rooms, places, personal names, use of devices, dressing, cooking... However, in this stage some degree of symptomatic treatment is still possible. This is not the case of the following steps, into which no medication could be effective. The next period is agnosia. Patients suffer then a diminution of the power to recognize familiar objects or persons, including their relatives. In fact, as a 50% of male patients exhibit, most of the Alzheimer symptoms entail much more errors of identification (words, objects, persons, places, dates) than hallucinations and other psychotic conducts.

After this it appears apraxia, which supposes a strong incapacity for any purposeful muscular movement, including such elementary actions as swallow. Finally is the time of aphasia, the partial or total loss of the ability to communicate. At this point the patient becomes silent and inexpressive, with a characteristic lost gaze to anywhere. The next and final step is the fall in a vegetative state. After this, the patient dies approximately in the following six months. All that said, the problem of Alzheimer, as for dementia in general, could disappear in the future if science were able to reach the knowledge and the control of the molecular mechanisms of the human genetic heritage.

### **The structure of memory**

Alzheimer is not the only disease involving forgetfulness. There are other disorders that condemn people to fall in oblivion. Let us remind shortly the most important pathologies of the shortage and loss of memory. Of course, the state of coma is one of them. Another group is amnesia and its different presentations. Amnesic patients suffer a total or partial loss of memory. It is to say, a serious difficulty for fixing and recovering information. In some occasions such loss is permanent. In some other is transitory. Amnesias generally are the consequence, on the one hand, either of

organic or traumatic causes, as accidents. Into the former could be found for example schizophrenia, alcoholism and brain discharge. On the other hand, amnesia could be the effect of affective or psychic disturbs of the sick person accompanied with their many forms: temporary, continuous, located, systematic.

Nonetheless, Alzheimer belongs to a third main group of diseases characterized by a severe loss of memory. We are speaking now on dementias. The several classes of them exhibit not only a common loss of memory but a shared damage of intelligence and personal identity as well. Under the general category of dementias should be included mainly Alzheimer (representing a half of these diseases), vascular dementias (approximately a 15%), the Parkinson disease, senile deterioration, and other less common pathologies. It is then to be concluded that dementia is not generally reversible, especially when neural death or maybe a deficit of neurotransmitters (molecules with proteins as glutamate or acetylcholine) are damaging that essential action of the brain which is called synapsis, so is, the active connection between the nervous cells.

All in all, in a future year 2025 dementias will represent a 25% of elder patients with one or another level of incapacity. But it is not necessary too much wait. Pathologic or not, the loss of memory in the elderly concerns right now patients and society due to its several and deep impact, then shall be attended today as well as prevented for future. In few words, the fact of the increasing depersonalizing process in the affected persons is the biggest problem related to Alzheimer and other dementias. It is clearly a fact that embraces personal and familiar negative factors, in the same manner that supposes negative social and economic consequences. Depersonalization firstly shows in those patients a cognitive impoverishment, into which the diminishing capacity for memory is the most typical sign. In this stage, worse than the fact of forgetting for example “where the keys are” is the fact of forgetting “for what are the keys useful”.

A second step advancing to depersonalization are the behavioral disorders. Finally the patient shows a lack of self-perception and the loss of his or her sense of personal identity. As a consequence, he or she becomes an individual without capacities and any autonomy, so a person absolutely depending on others, precisely those who the patients finally ignore who they really are (“prosopagnosia”). That is in fact a very difficult situation to manage from the relatives and health professionals side. Suddenly our perception of the affected person is deeply removed and some basic assumptions

about her or him are also put roughly into question. Equally important, our situation, identity and role before them are also suddenly transformed. Relatives and friends have to courageously invest time and effort in favor of their beloved but now really fade away father, mother or intimate friend. Such experience usually carries anxiety for all people around the patient, and depression for someone of them. A 40 % of 55 to 75 years old women with Alzheimer's relatives on their charge develop an important state of depression in relation to their hard new role.

The human brain, as a result of evolution, is a machine for adaptation, survival and so for prediction. Even so, none of those functions would be possible without our memories and the linkage connecting them. Furthermore, memories are founded on the architectonics of brain and its functions. Such engine does not explain by itself the content of memory, but is a necessary physical condition of the human remembering. Memories are materially dependent on a pattern of connections between neurons stored in our brain, into which perform 100.000 million neurons and their global 1.000 billion acts of synapsis. The neural architecture do not tell us what to think, but enables us to think and to have things to think. Long time science has been ignoring the narrow relationship between memory and the brain activity. Still, thanks mainly to neurosurgery we can nowadays place memory and its complex networks inside our brain. Aside, some places, as the limbic system, the hippocampuscenter, and the cortex, principally its front area, are specialized in order to register, fix and store all kind of memories, as a result of the reciprocity and exchange across those specialized zones.

However, in contrast with other mammal animals, the human brain works not only through the biochemical and instinctive ways, but through a constant stimulation coming from the individual experience and the social surrounding. Our brain is not any organ already computerized from the very beginning. Mental activity is permanently shaping and rebuilding this organ. Without those no chemical and no electrical stimulus the human brain would not grow in size, inner plasticity and readiness to work into an evolutionary efficacy. So the more we know about the physical grounds of mind and behavior, the more the life of the mind becomes an open question to us. Thus, what else for example constitutes the cause and display of memories beyond the organic processes that allow those amnesic functions called "memory"? Let us also ask how synapsis and its molecules and electrons in our brain could be transformed into memories, ideas or desires in our mind. Mind is brain, but not only brain. Where is mind stored in it?

The knowledge of what happens in our brain does not completely contribute to

the understanding of what is valuable and wealthy for our brain. Then to some extent, memory, as well as other brain capacities, still is a kind of mystery for us. In the meanwhile we may at least assert that cultural activities as interest, motivation, attention or emotional tone are the extra-biological base of an active human brain. No culture means firstly a less plastic and computing brain, but means lastly a less healthy and evolutionary one.

### **Memory and personal identity**

None the less, the physical fact of the extraordinary plasticity of neural cells and areas in our brain, as well as the relationship of this fact with the experiential activity of mind and its biological impact, could help us to understand to some degree the mystery of how memory is produced. For in one hand there is the semantic memory and in the other hand there is the episodic one. Both are permanently interconnected thanks to the transitions granted by the phenomenon of neuroplasticity.

The former class of memory is essentially cognitive and usually intentional. Its duty consists of explicitly to memorize, where strict location of data in time and space is generally required. It is just “memory”. In contrast, the latter is basically emotional and unconscious, even though automatic in matter of habits and mechanical skills. Its work is many times, as remembrance does, to evoke and subtly recall those informations and experiences that we suppose “past” or “gone beyond”. The French philosopher Henri Bergson wrote many brilliant pages about such “independent” memory in *Matière et mémoire* (chapter 3, “La mémoire et l’esprit”).

It is the case of the so called long term or old memory. Some authors, as Edward Casey, separate between “keeping memory in mind” and “pursuing memory beyond mind”, which is now our case. Moreover, this second form of memory, which includes “memories” –*praeterita*, according to the Latin classics–, is stronger than the first one in the making of our personal identity. It is also the less automatic form of memory and the most open to transformation in time, therefore adopting a structure similar to the stories one. Consequently, when both forms of memory are lacking there is no possibility to get and shape this identity. In other terms, deep amnesia, so is, to forget the old data (retrograde amnesia) and the new (anterograde amnesia), stops into the individual all possible way or level for his or her self-identity. In coincidence with the French psychologist Th. Ribot, who underlined that “the new dies much soon than the old” (Les

maladies de la mémoire) the Spanish neurologist Santiago Ramón y Cajal was one of the first authors insisting on the dependence of personal identity in relation to the power of memory. Synapsis, he said, is the last refuge of human personality. So memory, he insisted, is “the only consolation of the elderly” (El mundo visto a los ochenta años). Personality and oblivion are contradictory.

The link between memory and personality is a clear and not discussed evidence. Even though it is philosophically difficult to assert that we are always the same person, the fact is that any step or state of our personality is in correspondence with the work of our memory, which includes, let us say, both loyalty and treason to our truly past. In any case, memory remains beyond the changes of personality and doubtless is the main cultural assumption in order to believe that an individual is permanently the same all along the time. Human personal identity is the sum of heredity and memory. On the one hand, heredity makes us individual beings. Then, a person will depend from the beginning on his or her genetic constitution and also on his or her cellular and molecular indemnity along life, which supposes a living and a more or less healthy body ready to survive. On the other hand, a person is a derivative of memory. Still, memory itself is a derivative of experience. When experience stamps an imprint on our mind we refer this as memory. When it is not so, there is no memory but unconsciousness or forgetfulness.

Memory is the capacity and the effect of acquiring, fixing and recover experience starting from its traces in our mind. Simply, the classic empiricist philosopher John Locke wrote that memory is “the store of our ideas” (Essay on Human Understanding, X, 2). Such power of memory, which is in general necessary for all human activities, rational or not, is also a condition of personality, in as much as this essential individual mark requires to connect by one’s own a certain class of data collected across the time until reaching the idea of being actually “oneself”. The above mentioned Locke argues in his book (XXVII, 11) that personal identity is not “identity of substance” but “identity of conscience”, which is provided from the continuity of experiences guaranteed through the faculty of memory. Because of that, Mnemosyne, memory, was considered in the ancient Greece the mother of all the Muses. In contrast, the statement “thinking is forgetting”, by the modern writer Jorge Luis Borges in Funes el memorioso, might be taken nearly as a joke.

However, the Alzheimer disease and dementias in general interrupt and erase this long life process of the identity building. It seems then a kind of ironic situation, because one has required a long period of his or her life to learn and now in contrast it is

necessary only a short period to unlearn. In this sense it is really dramatic the description of the last weeks of the prominent philosopher Immanuel Kant in the Thomas de Quincey's book. Likewise, criticism says that signals of Alzheimer could be detected in the novel of Iris Murdoch Jackson's dilemma.

Moreover, most of clinicians say that those patients, especially in their final steps, have no sense of his or her personal identity. Even say that they have "no personality". Simply they are human beings, even persons. For law and moral at least usually concede that they are for different reasons still persons. But often this is not the clinical assumption. A nearly or absolute lack of memory is considered a clear sign of a vanishing self-identity. Conversely, someone could ask which class of "personality" would be then the existing in these persons.

### **Morality facing persons without memory**

Alzheimer is an outstanding socialized disease. It implies not only the affected sick people, but professionals of health, as well as families and social assistants. Aside it is always under the focus of medical researchers, public authorities and journalists as well. Each stage of such disorder shows us how much it does contain a social significance. Firstly it is necessary to hear from the own patient. But soon it will be equally essential the testimony of the relatives and other people close to him or her, as nurses or social attendants.

In some moment the patient will lose the capacity to talk and exchange, and of course for orientation, as well as will also lose his sense of personal identity. In some moment later, the relatives shall assume those vanishing roles in the benefit of the beloved damned person. As a kind of substitution, they will hold inside and spread to others the lost social identity and the diminished powers of perception, conscience and memory of the person under their care. Indeed the human species is the only one who is able to hold an affectionate relationship in absentia with members who are already absent or without agency. Caring for Alzheimer's patients does include also the caring for their memory, which is now transferred to us, these who became the guardians of the memory of others. Our memory is now their identity.

Relatives have to consider their opportunity to reminding others who the patient is and, so important, who this absent man or woman was. This opportunity could and

must include, in our opinion, the duty of acting into such mentioned way, displaying then the memories of those with no memory and trying to substitute to some extent their own memory. So is, reminding others who the patient is and was, and helping her or him to find, in spite of all, their own even though limited way. Thus, since an autonomous person is taking on his charge a heteronomous or dependent one a new strong moral relationship is starting to happen there. Hence, the four main principles of Bioethics ought to be applied: Justice, Non maleficence, Beneficence, and being respectful face to the Autonomy of patients. In future, the life, capacities and dignity of patients will depend on the life and qualities of others. And this relationship depends on the class of personality that people accompanying the patient are performing.

Moreover, face to the Alzheimer such moral tie between patients and relatives is usually nurtured not only by the duties of respect and responsibility --on the ethical grounds that patients are human beings and possess then dignity. More important than this, the fact is that relatives facing Alzheimer mostly behave beyond the duty, following rather the forces of their truly compassion and love. Those qualities also belong to personality. Sentiment makes us sure that a patient without memory and distant look could never be an empty being. He or she is after all looking to our eyes, and when not, they still could press tender our hand. They do not recognize us, but our presence helps them to live better. They still feel. And they are similar to us, because we all are not only beings of memory, nor subjects of reason. Nobody is only a "reason-person", according to the reflection of Max Scheler in his Ethics. Indeed we are subjects of sensibility, emotion and sentiment too.

So there is in fact an involuntary and implicit transference of identity and powers from the patient towards the relatives around, and a voluntary and explicit acceptance of it from this other side. That non symmetrical agreement is based on social and human values out of discussion and clearly points out the highest moral significance of caring the Alzheimer patients. What is then happening is the voluntary disclosure of the personality of one in favor of the involuntary lack of personality of other.

In conclusion, the Alzheimer disease make us pay attention and think about the importance of memory for personality and the transcendence of personality in the caring of those who have lost memory. Caring others is the checking test of which class of human persons do we are. Despite the hard circumstances surrounding it, Alzheimer brings to us the opportunity to confirm that the human life is a life lived in community.



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