Identity and self consciousness: two separate phenomena

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Abstract

Identity, personality and self-consciousness are often seen in cognitive science as almost the same cognitive capacity. In this paper we will justify an alternative and in many ways opposite opinion: that identity, at least in its most basic way, is a non-exclusive protocultural factor that requires cognitive capacities that are linked to social competence and to organism cooperation, and that it is not formed from self consciousness, although in its wider expression uses it. Furthermore we will support that identity is widely exogenous in the sense that it involves the group social capacities and not only endogenous in the sense that our brain is by itself the generator of identity. For this we revise some observations from not human private behaviour.

Keywords: identity, self consciousness, personality, social interaction, environment, action, self.

Topics: Adaptive Behavior, Social cognition and interaction, Introspection and meta-cognition, Memory storage and retrieval, Understanding People, Theories, Concepts and Methods, Coordination and Collaboration.

Introduction

As human beings we plan for the future. We sketch in our minds for short-term plans and for long term ones and we also generate strategies to get to be real the things we imagined. That set of strategies is part of a mayor plan that runs in concordance with the attitude that constricts our behaviours, as they are part of our hopes and images of he future. When someone stops behaving in such a way, our near relatives start reproaching our behaviour and start hounding us with questions like "what do you want to pursue in life, where are you going to be if you don't start acting as you should?". Or advises such as " sometime what you don't like to do is what's good for you" or even threats as "time will give me the reason".

We all act and plan without the certainty that doing what we think right we will get what we want, knowing that the circumstances or the adversity could deprive us from the materialization of such plans. In other words, our capacity to imagine and to express behaviors that related to the future seems to be a mental capacity whose function is to achieve efficient conducts based on prediction in a moving world (Llinas, 2010). Memory and experience are the prime matter of successful planning and for that also exist some phrases as "remember what happened when you did that", or "have you forgotten what happened the last time you behaved in that way?" and "I am not making it up, I say so from experience".

Among these kind of sentences there are some that give glimpses of our knowledge about the ways we decide and behave in order to generate future planning entities that express individuality such as "he would never do that" or "she would be incapable of doing something like that to me" and "those words don't sound like them"; and viceversa, "you can expect anything from him" or "do you have any doubt that he would be capable of such a thing?".

In the last two decades cognitive sciences have studied the singularity of human behavior under the assumption that the capacity of being aware and the ability to reflect about or wakefulness, together with the introspection of the self as a generator of ethical, aesthetic and value judgments can be seen as the global phenomena called self consciousness, which would be the producer of our most impacting cultural products. Conscious subjective mind is explained in this way as the system that, while accessing our intimate experiences and the capacity to interpret them and select them as a biography, allow us to be portrayers of a personality that is constantly subject of value judgments that allow the emergency of our identity as social subjects. In other words, self consciousness, the cognitive capacity to imagine the future from our experience is the mental system that allows us the biographic and identity capacity.

Let us see, for example, Damasio's words:

"The conscious minds of humans, armed with such complex selves and supported by even greater capabilities of memory, reasoning and language, engender the instruments of culture and open the way into new means of homeostasis at the level of societies and culture. […] Justice systems, economic and political organizations, the arts, medicine, and technology are examples of the new deices of regulation" (Damasio 2010, p.26).

As we can see from the quote above it is possible to think about consciousness as the exclusive human mental faculty that is responsible for the origin not only of identity but also of culture. In what follows we will try to justify an alternative and in many ways opposite opinion: that identity is a non-exclusive protocultural factor that requires cognitive capacities that are linked to social competence and to organism cooperation, and that it is not formed from self consciousness, although in its wider expression uses it. Furthermore we will support that identity is exogenous in the sense that it involves the group social capacities and not endogenous in the sense that our brain is by itself the generator of identity.

First.

Mental life is expressed in our inner self, the one that we usually call the introspection of the self and it is achieved through a set of cognitive capacities that lies in certain nervous capacities which serve to generate similar phenomena , but at the same time different ones. Following de Waal:
"Cerebral images show that the same neuronal apparatus serves as for the recollection of autobiographic events as for making plans, perhaps assembling memories of past events to simulate the future. Then, episodic memory and planning go back to the same neuronal structures" (de Waal and Ferrari, 2010, p.203)

Damasio, for example, writes about levels of "the self":
"The self is built in distinct steps grounded on the *protoself*. The first step is the generation of primordial feelings, the elementary feelings of existence that spring spontaneously from the protoself. Next is the core self. The core self is about action - specifically about a relationship between the organism and the object. (…) Finally there is the autobiographical self. This self is defined in terms of biographical knowledge pertaining to the past as well as the anticepated future. The multiple images whose ensemble defines a biography generate pulses of core self whose agregate constitutes an autobiographical self." (Damasio, 2010, p.8)

There is, as we just saw in the quotes above what we call levels of consciousness; the self is the sensation of being a unity. There are human behaviors or mental pathologies that illustrate these differences, as for example when the core self can get lost when someone else moves your body, as when someone hits another human agent accidently. Or when certain illnesses as auditory hallucinations or the insertion of thoughts in schizophrenia patients occur, the subjects continues to feel their body as their own, but they make movements that they consider outside them, loosing their core and autobiographical self (Gallaguer, 2008). Another example, that notes Barandiaran (2009) comes from tremors or spasms that are present in an individual that suffers Parkinson or Hutchinson diseases. In these instances even though the subject is an identifiable entity and a genuine source of interactions with the environment, his movements are not intentional and they characterize him in a social group.

As for Llinás, the self is defined as follows:
"For optimum efficiency it would seem that prediction must function to provide an unwavering residency and functional connectedness: it must somehow be centralized to the myriad interplays of the brain's strategies of interaction with the external world. We know this centralization of prediction as the abstraction we call the "self"". (Llinás, 2001, p.148)

Furthermore:
"The thalamus-cortical system relates synchronically the properties of the external word referred by the senses with the motivations and memories that are generated internally. This event, coherent in time, that unifies the divided components as from what we call external reality as from the internal one, is a unique structure, what we call the "self"" (Llinás, 2001, p.147).

These quotes lead us to confuse conclusions. For example, the phenomenon that consists in making a narrative about our existence that supposes the chronicle of our life and the result of our personality require of our memory and serves to discern a future at least controllable at some level. We have the sensation that we can construct a future intervening in the present from the experiences we have lived and therefore, we see in our capacity to remember and planning the future an important extract of our self-consciousness. It is because of this that exists an approximation of the concept of the self that implies to conceive it in terms of the personal narrative, a notion that is very used in anthropological and psychological scopes, but it was imported into cognitive science by authors like Daniel Dennett (1991) who names it the "nominal self" and explained by Neisser (1994) as the "extended self". The narrative self extends in time and includes the memories of the past and the intentions towards the future. It is explained appealing that the subjects have memories and make planes and therefore it exists a continuum between past and future experience. From neuroscience Primbram (1999) suggests that this temporal continuity of the brain comes from the interaction between the frontal and the limbic systems (that includes the back poles of the temporal and frontal lobules). These systems would then be involved in providing the temporal sensation that is necessary when taking into account the episodic memory.

As we can see in the explanatory frames we exemplified, identity and self-consciousness have been joined into the same localized in the brain phenomenon. Philosophers such as Nagel (1986) appealed to a brain as necessary and sufficient criteria for the same phenomenon, the one that includes identity and self-consciousness.

From our point of view, the mistake does not consist in thinking that these phenomena are a necessary condition to talk about self-consciousness, instead we think that these capacities cannot exist apart of an autobiographic self. In fact, planning for the future from the memories of the past is a different characteristic than interpreting past situations to constrain our behaviours in the future and that this last capacity is privative of human beings. More specifically, what we want to say is that living in an enriched and complex situation in the present (here and now)- as we will sustain further ahead that occurs in chimpanzees life- does not imply the supposition that the information stored in the memory from lived experiences is just used in other animals

to react to a similar present or to anticipate the highly immediate future. As de Waal and Ferrari states:

"Furthermore, instead of looking at episodic memory and future orientation as advanced processes mediated by language as limited to humans, they must be considered as part of a general memory and action organization found in various degrees in a wide range of species" (de Waal and Ferrari, 2010, p.203).

Some observations suggest that it is possible that non-human primates can remember places where there they left food reservoirs with the intention of coming back to gather them and that they do not inform other members of the group because they intuit devastation; which is to say that in a certain sense they plan a non-immediate future. Following de Waal:

"Remembering specific personal experiences has been considered a sign of autonoetic consciousness that is uniquely human and includes the anticipation of future needs and drive states. Other animals, it was claimed, use stored information merely to react to present stimuli or anticipate the immediate future. Whereas autonoetic consciousness remains inaccessible in nonhuman animals, other aspects of the above claim have been challenged" (de Waal y Ferrari, 2010, p. 202-203).

In other words, it is entirely different to extract from the memory a set of situations that are interpreted to construct constraints of attitudes based in the duties (or musts) as strategies of survival for the future. And this capacity is entirely and privative of humans and it is based more in a life project than with future acts. In other words, the capacity to remember events and places to prevent subsequent scenarios is different from the capacity to interpret situations and make of them introjections in the form of values that constrict what we can and cannot do when we plan our lives. This last point, we want to insist, is a fundamental requirement of self-consciousness in the sense of an autobiographic self that provides us with a concept or a construct of our personality and it can contribute but not determine as a whole the social reference phenomenon that is supposed in identity.

Up to this point we just wanted to say that memory linked to the planning of the future capacity is different and it is not enough for the construction of an autobiographic self, which is loaded not of experiences but of subjective interpretations of experience, and it does not allow us to plan the future but to draft the kind of future that we can allow ourselves. In what follows we will explain why the interpreted and narrated introspection of the self is in itself distinct of identity.

Second.

In this section we will talk about social organization and differential access to non-human primates resources through organization into hierarchies and power asymmetries.

For culture primatologists, extra somatic learning followed by group isolation generates behavioural diversity that cannot be treated as a uniquely biological phenomenon; but the majority of researchers that study social primates life coincide in the conclusion that in the taxonomical order we belong to there exist many species whose cognitive equipment is enables a hierarchical social organization that has as a norm inequality and where individuals are referred by morphological and behavioural characteristics that determine the interaction of the members of a group. These behavioural characteristics vary according to the range and the role they play in the group, and the other members that at the same time provide and ration them with resources recognize those more hierarchical individuals, expecting benefits and anticipated behaviours. In other words, monkeys are particularly identified in their social background.

"…The old chief of the macaca troop, Spickles, was a completely realized brad, he never felt not even a little intimidated by the other males, although they were young and vigorous. He had seen them grow and had played with them, and he had also punished them for their juvenile infractions.
Maybe because of this the other young machos felt psychologically inhibited in Spickles presence, although he had lost his physical strength and the majority of teeth. In a wild state, however, an old leader has to deal with other stranger males that want to get in the group and obviously have fewer scruples at the time of challenging him… Because the collective support of the females can make him stay in the power although its splendour time has passed. Normally they prefer a predictable leader" (de Waal, 2002, p.253)

The interesting observation followed by this quote is that without mattering the morphological characteristics the males that pretend to enter the group don't have the respect for the dominant male, in the sense that they don't know his *identity,* which is referred from relations in the group. We can say it in other words: they don't know him in that specific context.

It is important to mention that there is some evidence that shows that if up to some point we can say that among the hominoids can plan the future, their mental lives basically passes in the here and now. In a conference imparted at Mexico City in the National Museum of Antropology and History the primatologist Tsetsuro Mastusawa related a story about a chimpanzee of his natural laboratory in which he said that after suffering a back lesion the chimpanzee had

lost the mobility from the neck downwards. What took the attention of Matsuzawa and his collaborators was the particular patience the ape showed during the treatment (it was longer than six months). Matsuzawa concluded that the null capacity of anxiety or frustration in front of the potential loss of its faculties deprived the chimpanzee of a depressive or anguished scenario. Therefore, because of a mental life that only lives the present, the chimpanzee could deal without existential drama his healing.

But the truly interesting observation came only afterwards when he was 80% healed and although he was slow and weakened, he could recover the leadership through the recognition that the others showed according to his hierarchy. This is the case of a big ape whose self-consciousness allows him to live the here and now and whose identity depends on the social order, product of gregariousness and of its place in a hierarchy made by identities. In the terms we are referring here we can say that the chimpanzee never lost its identity and was never conscious of the drama he was living.

On the other side there has been proof of human pathologies as the congenital damage of the right hemisphere and the frontal cortex, described by Primbram (1999) and Aherm et al (1998), in which the patient suffers episodic memory amnesia and therefore loses the ability to quantify the passage of time or to appreciate the meaning of temporal unities and therefore is not able to formulate essential structures of his narrative, that is, sequential structures and beginning and ending demarcations. With these loses the patient loses the capacity to reflect about himself and nonetheless is still identified in his particular group.

It is clear that in the second case we refer, the human one, we have an enriched cultural apparatus that makes useless the argument that someone is identified in the group. The interesting thing with non-human primates is that the rest of the group observes differential behaviours aside the reflection and the evaluation of the physical capacities, they "know who he is" the animal that just got reinserted in the social community life. Cognitive capacities as theory of the mind, the differential attachment to the interests of females that belong to a hierarchy and previous alliances are more important for the formation of identity than consciousness itself.

If the reader concedes as sufficient the argument that a consciousness without introspection of the self, or narrative of a life that projects a future, or a biography generated through the interpretation of situations and experiences as generator of personality can have identity, then non of the above are necessary condition for an organism to have identity. With that identity it can be referred to conserve its hierarchical condition and to provoke differential behaviours in the members of the group. Then we would just need to add a reinforcement hypothesis: that changes in identity are transformers of personality, life narrative and behavioural patterns in our species, and not the other way round.

Third.

In this last section we explain that for the human case the transition rites generate new commitments and rights and pass by identity ruptures that are part of the autobiography, that is, not the autobiography that generates identity but the social transactions and the identity change (the association and belonging to other part of the group) that transforms identity and determines the existential narrative of the member of a cultural group. In other words, the biggets changes you had are associated to the events that mutated your identity in different social groups.

An emergent logic tends to state that a set of cognitive capacities would give the mental processes that would allow the emergence of an autobiographic self and personal identity. Furthermore, that an aggregate of organisms equally equipped with these capacities could finally generate identity and culture. A more careful analysis can take us to the opposite opinion: that it is the different identity adscriptions that human have all their lives that allow us to construct an autobiography and a personality. In the research of human groups whose culture is completely ritualized one can observe that the individual's localization within the group with its differentiated rights and commitments and that are given by the group itself promotes the personality change and transforms decisively his behaviour.

In particular the English anthropologist Victor Turner (1980) has observed that the social structures deduced from the explanation of the interaction of the processes transform the individuals during different states of the social and ontogenetic life. This study contemplates the possibility of the cultural transit and the subject's behaviour parting from loosing one identity and acquiring a new one thereafter disaggregation, liminality and aggregation of the individuals into new social spaces in which they acquire commitments, responsibilities and rights, and that go along with a new way of being and a new way to be referred by their group members. From this point of view, human organisms are social actors that obtain different privileges in their group hierarchy through ritual structures that transform their thought, limit their behaviour and constrict their conduct permissiveness. Those are the social act that irrupt in their personal narrative and transforms in a determinant way their biography. Identity in this sense is the responsible of the adjustments and transformations that generate the mould of our narrative as individuals.

With the arrival of ethology in cognitive sciences, one can think that communication of social conduct could constitute one of the origins of self-consciousness. Its function would be one of entitling individuals to provide others and receive

from them information about mental states. Then authors like Nicolas Humphrey (1987) consider self-consciousness as the capacity to express conducts, emotions and experiences that are inserted in certain regulations. For Humphrey expressive animal influences in the others conduct for its own advantage and inversely, that is that the same animal must have the ability to model the behaviour frim other's states. For him humans search new experiences in the company of others, so they can wide up their consciousness and their understanding of the world. As José Luis Díaz states (2008), diverse happenings as dreaming, playing, scenic or ritual representation are explained by that need to expand consciousness, to prepare it to possible novelties and to experiment how would it be to be the other.

All this said we consider that there must be taken into account diverse explanatory references to fundament the conceptualization of terms that have wide repercussions in many senses such as ethical criteria between healthy and sick people. The demarcation of the concepts of identity and self-consciousness through facts about their phylogeny and ontogeny is a very relevant duty for the cognitive sciences of our contemporary world. These theoretical concerns can be applied to more practical concerns and to the understanding of social cognition in general.

Conclusions.

Let us finish remarking that considering that the capacity to take advantage of memory and experience with the object of planning a future that is not the immediate one does not seem to be privative of the human being and it is very different of that which interprets situations and values experiences to condition attitudes that will intervene in a life project.
Considering that there must be taken into account diverse explanatory frameworks to conceptualize the foundation of terms that have wide repercussions in ethical criteria in medical and mental ways. The demarcation of the concepts such as identity and self-consciousness, explaining them through its phylogeny and its ontogeny becomes a very important duty for the diagnostic and therapeutic forms in the contemporary world, as well as to learn how to programme machines that act more in the ways humans do.

To summarize, we consider that this distended capacity in a personal narrative and constructed in a ego manner is privative of our species but it does not constitute the foundation of identity, which seems to be necessary in primates species that have an enriched social life and that is based in cognitive capacities such as empathy and mind theory, among others, and that they constitute the access to hierarchical roles that individuals have in specific groups. Thus, identity is a projection that depends on the rest of the parts of a gremial system and that in a certain way the individual knows without being conscious of his future or his past, because he is immersed in an immediate life. At last we think that it exists sufficient information to suppose that in the case of the human being it is the change of identity positions and of behaviours subject to social commitments that vary in the history of individuals that contribute in the first place to the perpetual transformation of his autobiographical consciousness.

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