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Shared Memory, Odours and Sociotransmitters or: "Save the Interaction!"

Joël Candau

University of Nice-Sophia Antipolis. Laboratory of Anthropology and Sociology
"Memory, Identity and Social Cognition"

98 Bd Edouard Herriot, F-06204 Nice Cedex 3

Abstract

Collective memory, social memory, professional memory: although these notions are in current use when we name the shared (or assumed to be shared) representations of the past, they are very ambiguous. The point at issue is to show how memories can become common to some or to all members of a group. In this paper, I shall base my arguments on the simplest situation imaginable: The sharing of a memory of an olfactory experience by two individuals, namely one of my informants – a gravedigger – and myself.
We can try to explain this shared olfactory memory, or the imagination of this sharing, by taking two facets into consideration. First of all, we must learn to take seriously those few seconds when a shared experience of the sensory world took shape between the anthropologist and his informant. Secondly, we must attempt to answer both of the following questions: what is the nature of this sharing? And what conditions make it possible? In the first part of this text, I examine the issue of the nature of sharing by weighing up its aspects as I consider protomemory, memory and metamemory. In the second part, I outline one of the essential conditions of sharing: the existence of what I call sociotransmitters. For the most part, my attention remains focused on that particular moment when the gravedigger said, "Smell this!", and when what was at stake was to save the interaction.

Memory can be defined as the discontinuous set of traces of the past (distant or recent) that we mobilize and reconfigure *hic et nunc* in order to project ourselves into a future (immediate or distant), by means of reasoning or imagination (Miller, 2007; Hassabis *et al.*, 2007; Dudai and Carruthers, 2005). Because every trace implies some loss - it is incomplete in terms of what left the trace (Candau, 1998a & 2002) - memory is always made of things remembered and things forgotten. Although the study of the forms of shared forgetting (Connerton, 2008) is neglected (M. de Miguel, 2004), it is easier to

establish their existence than the actual sharing of representations of the past. Indeed, the profound ontology of an absent phenomenon is precisely its absence, whereas that of a present phenomenon is less its presence than the way it is presentified. For this reason, it is much safer to claim that individuals have in common the forgetting of an event – for this purpose, one only needs to note the emptiness, or more exactly, the silence (Garcia, 2005) of their memory in the face of the event in question - than to hypothesize that they share a memory. In this latter case, the reference to the same shared memory does not guarantee the identity of the memory content. Therefore, the concept of "shared memory" does not go without saying. Though data on individual memories can be gathered relatively easily (the researcher can, for example, write on a notebook or record on a magnetic medium the way in which a person tries to verbalize her/his own, with all the limitations of the exercise: Bloch, 1995), the hypothesis of a shared memory is an inference expressed through metaphors (collective memory, or social/ familial/ national/ historical/ professional memory, etc.) that might account for actual shared memories, just as they might be purely rhetorical with no empirical foundation at all. In short, the point at issue is to show how memories can become common to some or to all members of a group.

I shall base my arguments on the simplest situation imaginable: The sharing of a memory of an olfactory experience by two individuals, namely one of my informants and myself. One may consider that this scenario is far too crude and will not help us to understand the nature of memories putatively shared on a wider scale. In my opinion, however, it would be a mistake to underestimate the scientific implications of our testifying to the intersubjectivity of this sensory memory, even when this inter-subjectivity only concerns two people. Indeed, if we can show that it can be shared although it is by definition very intimate, the hypothesis of memory sharing in its most mundane aspects (socialized, institutionalized) will gain credibility.

One day in Nice, while I was conducting a survey on olfactory knowledge and know-how (Candau, 2000), a gravedigger, who worked for a local funeral services company, directed me towards the containers in which he and his colleagues placed all non-human remains recovered after a body reduction: tattered clothes, worm-eaten planks of coffins, shrouds, etc. He raised the lid of the container, quickly sniffed the contents and said, *"Smell this!"*. I complied. At that moment, I shared with him - or I believed I shared (I will come back to this point again) - a sensory experience which would enable me to form an olfactory memory identical to his. After smelling those remains, I was supposed, like him, to be able to recognize that smell when I came across it again. One can try to explain the sharing of this experience and of this olfactory memory, or the belief in this sharing: i) by taking very seriously the few seconds when a truly shared experience of the material world seems to be forged between the anthropologist and his informant, ii) by trying to answer two questions: What is the nature of this sharing? Under what conditions is it possible?

To answer these questions, I have imagined or made use of some conceptual tools. I do not claim that doing so will enable me to overcome all the difficulties related to the hypothesis of the inter-subjectivity of the memory. My goal is more modest: it is simply to be able to face these difficulties and to not pretend that they do not exist. In the first part of this text, I address the question of the nature of sharing, focusing on its memory, protomemory and metamemory related dimensions. In the second part, much shorter than the first, I discuss what in my opinion is an essential condition of sharing: the existence of

what I call sociotransmitters. For the most part, my attention remains focused on that particular moment when the gravedigger said, *"Smell this!"*.

I.THE NATURE OF MEMORY SHARING

First, let us say a few words about the relatively consensual model of olfactory memory. Once it has deposited itself on the olfactory epithelium in the upper part of our nostrils, the stimulus (a certain amount of odorant molecules) is processed by the human brain along with contextual information, which can be purely sensory or emotional (Proust syndrome: Chu and Downes, 2000). That stimulus is processed (recognition: Baccino *et al.*, 2009, denomination: Candau, 2003a, categorization: Candau and Wathelet, 2010, etc.) by using information that is already stored, old olfactory traces that are closely related to the cultural environment (influence of socialization, olfactory and gustatory experiences and learning, diet, cosmetic practices, etc.). When this process is completed, the stimulus is encoded as a new olfactory trace into the long-term memory. What does this trace consist of? Very roughly, one can describe it as a reinforced connection between a population of neurons, which is made possible by synaptic plasticity: the molecular bases of this process of increase (or possibly collapse) of synaptic efficacy are now well known[1]. This trace has the particularity of being persistent (Candau, 2001). Then, the question that arises is: how does this irreducibly singular trace - unique to an individual - lead to the assumption of a possible sharing of an olfactory experience? How is a shared olfactory memory (possibly) constructed ?

Let me begin with a very trivial observation: I can only suppose the existence of a shared olfactory memory if I am capable of smelling the odorant molecules that will cause the odour[2]. If s/he had been in my situation, an anosmic anthropologist would have had no chance of memorizing and sharing this experience with the gravedigger. Furthermore, we have to assume that like all human beings (Schepherd, 2004), both the gravedigger and I, have *roughly* the same physiological tools to perceive, in approximately the same way, the olfactory stimuli. I make this assumption almost reluctantly, because several elements lead me to significantly qualify it.

Firstly, standing next to the container are two unique individuals - unique because of the epigenetic and genetic uniqueness of each brain[3]. There is no evidence, therefore, that the mental scenes that we construct when facing the same event - the opening of the container and the release of odorant molecules - are perfectly super-imposable. In addition to this- or rather, combined to this is a difficulty intrinsic to the register of sensations. This is an old philosophical *topos*, but sharing sensations is very uncertain since ultimately it is the

[1] Long-term potentiation (increase of synaptic efficacy) and depression (decrease of synaptic efficacy) depend on the activation or receptor molecules such as NMDA or mGluR: see, for example, Berthoz, 2003, p. 254.

[2] In the natural language, the odour, which is the cognitive representation of the odorant, is usually confounded with the odorant itself, the latter being moreover never really cognitively dissociated from the scent-bearing source.

[3] *"Every brain constructs the world in a slightly different way from any other because every brain is different"* (Carter, 2000, p. 175-176).

qualia[4] that are supposed to be shared: subjective qualities of the sensation defined as the phenomenal experience of the thing - e.g., the olfactory stimulus - or, as Thomas Nagel puts it, as "what it is like to be" (Nagel, 1974). Indeed, *qualia* are considered largely incommunicable. We are therefore justified in believing that the gravedigger's olfactory experience and mine remain, in many aspects, irreducible to one another.

If I carry on with the interpretation of the minor ethnographic scene I have described above, it is likely that my memory aptitudes in the field of olfaction - as probably in all other worldly experiences - are very different from those of the gravedigger. They are certainly so from a biographical point of view: my informant's olfactory experience, since infancy, is different to mine, if only because we did not grow up in the same environment, in the same house, in the same family, in the same school, etc. In their different ways, our own respective experiences (these different socialization processes) colour our olfactory experiences.

My memory aptitudes are also different from a professional point of view: in this particular register of death smells, my olfactory experience is vastly different from that of my informant. His experience has enabled him, for example, to compare the sensations arising from his opening the container with the memory of past sensations he has experienced in his work. There is here an olfactory culture (Candau, 2004a) that is specific to a profession I am completely unfamiliar with.

Beyond this professional, almost technical, know how there is one major difference between the gravedigger and I. If the discovery of the olfactory universe of the smells of death and of corpses can be a shock for the cultural anthropologist I am, this shock is only a short moment of my life. Because I am just passing through this world of death smells, I am not as familiar with it as gravediggers, mortuary employees, forensic scientists or embalmers are. All these professionals are on a daily basis, faced with the smells of dead people, people from all backgrounds, men and women, young and old, sometimes in an advanced state of decomposition. *"We have a lived experience of smells"*, says a mortuary employee. Therefore, *"we do not see things the same way" considers a funeral assistant. "you get used to it after a while",* adds an embalmer.

This experience induced habituation is so powerful that these severe olfactory universes almost become commonplace, or in any case, they are perceived as a given; and it prompts reactions and behaviours which are also considered as a given. We are here in the presence of what I call protomemory behaviours.

Let me now discuss this concept of protomemory more specifically. In my previous works (Candau, 1998b, p. 11-14; Candau, 2005, p. 77-78), I proposed to address the question of memory-sharing by considering three dimensions or three levels of memory: i)protomemory, ii)memory itself or high-level memory, which is the best known memory aptitude and the one that is the most often taken into account in studies, and iii)metamemory.

[4] According to Searle (1996, p.77), *qualia* is an inappropriate term because there is no qualitative aspect of consciousness; all consciousness is *quale* (all mental states are subjective). However, for reasons I cannot develop here, I think that the subjective event which we call an odour is a particular type of *quale*, a *"superquale"* so to speak, in that it refers to a thing in the world that is not "inter-subjectively observable" (Quine, 1977, p. 324), and, more accurately, to an intangible thing.

Under the term protomemory, I include the ethos and all the knowledge and behaviours acquired during early socialization; the procedural memory specific, for example, to a profession, the repetitive memory or habit-memory conceptualized by Bergson (1939, p. 86-87), the "acceptable" behaviours memorized without noticing (Zonabend, 2000, p. 510), or the *habitus* and its performative aspect, the body *hexis,* as defined by Bourdieu. All refer to this "mute experience of the world as a given which is produced by practical sense", or everything that concerns " permanent embodied dispositions", and becomes "embodied knowledge" (Bourdieu, 1997, p. 163). Protomemory activates the subject without him/her ever being conscious of it. In summary, this protomemory made of "whole systems of knowledge that automatically wake up at a given time" (Nicolas, 2003, p. 5), constitute the knowledge and experience that are the most resistant and the best shared by members of a group or of a society. As such, it gives a high likelihood to the hypothesis of a shared memory.

Among professionals who are confronted daily with the smells of death, these protomemory dispositions are at the origin of singular olfactory experiences which remain inaccessible to an anthropologist who is just "passing through". A memory is constructed and shared (generally, without being verbalized) simply by being a member of the profession long enough. Thus, upon opening a cold store where a dozen children's corpses lay (mostly stillbirths or sudden deaths), a mortuary employee of the city of Nice suddenly lowered his voice, and said: *"There are children here. Well, here it doesn't smell, it doesn't smell". Yet,* to me the smell seemed as strong as the smell in other cold stores, where corpses of adults were kept. At that moment, my informant seems to "deny" the olfactory stimuli, possibly as a result of his professional habitus: it is as though in this environment saturated with "*odours that mustn't be looked at"*[5], it were important that the odour of children be inherently "invisible". A child "*doesn't smell"* or else *"s/he smells good",* as a gravedigger told me. An anthropologist is incapable of sharing this denial; essentially I believe because at that particular moment (when the cold store is opened), s/he suffers an emotional shock, which her/his informants do not feel in the same way, either because it is less intense (a phenomenon of habituation), or because they activate defence mechanisms that enable them to keep it far enough from consciousness or even to repress it.

These nuances notwithstanding, let us admit that the gravedigger and I felt roughly the same sensation when he raised the lid of the container. In this case, the risk of overestimating the sharing is real but limited given the nature of the odorant. Indeed, there is every reason to believe that there exist invariants in olfactory perception, at least for the negative side of the hedonic space. Researchers studying chemosensory sensitivity in newborn humans have observed that the latter make facial expressions of disgust when exposed to the odour of butyric acid, odour considered unpleasant by adults (Soussignan and Schaal, 1996 and 2001). In the field of taste, which is closely related to smell via the retronasal way (Small *et al.,* 2005), we know that newborn babies react negatively to bitterness (Steiner, 1979). Moreover, in the case of hedonic judgement, the so-called

[5] These are the exact terms used by one of my informants: Candau & Jeanjean, 2006, p. 51-68.

unpleasant odours are processed more quickly than any other[6], with the resulting increase in the subject's heart beat rate (Bensafi *et al.*, p. 193 and 198)[7]. And we also have every reason to assume that our sense of smell is naturally (Anderson et al., 2003; Bensafi et al., 2001, 2003; Kosslyn, 2003) inclined to discriminate these odours. This might possibly be an adaptive phenomenon (Hamann, 2003; Shah, Ben-Shahar, Moninger, Kline, & Welsh, 2009). It is in our best interest to rapidly detect bad odours so that we can immediately get away from them in case they are toxic, or emanate from toxic products as, for instance, putrid food (Prescott, 2004). Although the connection we make between a stench and toxicity is not a direct causal link, it is nonetheless real from the statistical standpoint (Holley, 1999). This being the case, it is preferable – as in many other domains of cognition (Sperber & Hirschfeld, 2004) – to overestimate the risk than to underestimate it. In our case, it is better to be overly sensitive to a bad odour than to ignore a foul smell that actually signals toxicity. For these reasons, it is not unrealistic to think that the gravedigger and I, endowed with the same physiological ability to detect nauseating odours, have collected and memorized in similar ways the odorant substances that are kept in the container. This hypothesis is all the more plausible as those substances were relatively neutral, emotionally and symbolically, or at least less saturated with cultural representations than in the case of the corpses of newborn babies.

Is this common physiological aptitude sufficient to give rise to and justify the feeling of a shared memory? Obviously not. First, this requires that each of us be aware of his/her sensation. We manage, on a permanent basis, in the shadows of our memory, and even in its darkest part, countless messages (*e.g.*, interoceptive or proprioceptive) which, as long as they remain unconscious, have no chance of generating a sense of sharing. Without this consciousness which, during the evolutionary process, might have first emerged from primordial emotions (Denton, 2005) or from the ability of our brain to build, first rough, and then more and more complex mental scenes (Edelman and Tononi, 2000), there can be no shared mental representation. Secondly, just like the gravedigger, I must be conscious of my conscience in order to be able, possibly, to talk about it, a skill which "signs" the identity of our species (Candau, 2004b). Thirdly and fourthly, each of us must be aware that: i) the other is aware of her/his sensation, ii) that this other - the sensory partner - is himself aware that each of us is aware that the other is aware of his sensation.

I shall stop here, so as not to fall into a pointless *mise en abîme* of truly mutual knowledge, and I shall limit myself to stressing the importance of this meta-representational level[8] of the feelings of sharing. This level also conditions the possibility of claiming a shared memory. In this case, this metarepresentational level is that of metamemory.

At the individual's level, metamemory is, on the one hand, an individual's own representation of her/his own memory (which may be a memory of the present or of the immediate past, as in the case of the scene of the container), her/his knowledge of it, on

[6] Furthermore, we sniff more deeply when we image a pleasant odour (*e.g.*, chocolate) than when we imagine an unpleasant one (urine): Kosslyn, 2003 ; Bensafi et *al.*, 2003.

[7] Neuro-anatomical, electro physiological and psycho-physiological data « argue for the existence of two separate subsystems in neural processing of pleasant and unpleasant odours » (Bensafi *et al.*, 2001, p. 192).

[8] About our ability in daily life, to think and talk about our mental states and, more broadly, to theorize about the mind and language, see Sperber, 2000a.

the other hand, what s/he says about it. The metamemory level is that of a reflective look on the memory process that an individual is able to – or thinks s/he can - summon up when performing a task.

When one moves from the individual to the group, metamemory is an essential dimension of the sense of memory inter-subjectivity. It is because we are conscious of what we share, and speak about it, that we are able to claim a shared memory. Note, however, that the consciousness of sharing does not necessarily have to refer to actual sharing in order to lead to this claim. Indeed, though the *claim* of a shared memory is always based on the premise of sharing, this sharing can be real or imaginary, which is the reason why the *feeling* of a shared memory is often illusive. In contrast to what I said above about the plausibility of sharing an unpleasant olfactory experience, I cannot exclude that the odour that I smelled standing next to the container, and that I then memorized, had nothing in common with the odour perceived and memorized by the gravedigger, although I firmly believed - like him – that we smelt the same smell, which leads me to claim that we have a common olfactory memory.

It would be wrong to underestimate the importance of this claim of metamemory in the so-called "collective memory" phenomena. We often confuse the fact of saying, writing or thinking that we share a memory - memories, experiences - with the idea that what is said, written or thought reflects a real shared memory. In short, we confuse the discourse with what this discourse describes or is supposed to describe. Yet, this confusion has an important social function: it reinforces, in the consciousness of individuals, the feeling of a shared memory. To the subjective feeling of a shared memory is added the objective sharing of a discourse (a narrative actually) expressing the belief that this subjective feeling is based on a real shared memory. We do not just believe what we believe, we think and we also say that we believe it, which gives more authority to what is believed. Cohesion in a social world, of whatever kind (even the "small world" the gravedigger and I form) does not only hang on the precarious thread of "shared illusions" (Dosse, 1995, p. 147). It also depends on what the members of one group say about this sharing, either in the form of a claim - this was discussed by Halbwachs in *The Social Frameworks of Memory* -, or in the form of a lament when the loss of a supposedly shared memory (national, or professional, or family memory, etc.) upsets us. Therefore, when the gravedigger and the anthropologist (me in this case) claim that they perceive and memorize the same odour, what is remarkable is the shared expression of the belief in a shared experience and a shared memory.

Obviously, this shared claim is much more likely to occur in cases where individuals live permanently in a common world than in cases when a world is only occasionally shared, as happens in the context of a survey. Professionals who work daily in an unpleasant olfactory environment, for their part, claim almost unanimously that they share their olfactory experiences. *"We all have almost the same sense of smell, I think",* says a mortuary employee explicitly. In their discourses, the numerous occurrences of *"us", "for us", "we",* etc. suggest the importance of this meta-discourse which, like any language, has very powerful effects: it feeds the imaginary of the group members by helping them to think of themselves as a community, and strongly performative, it plays a great part in shaping a world where the phenomenon of sharing ontologizes itself, particularly in its memory forms.

II. SOCIOTRANSMITTERS, ONE OF THE CONDITIONS OF SHARING

We can define the singular moment when the gravedigger opened the container and prompted me to smell the content, as a strategy to promote the sharing both of an olfactory perception and of its memory, or at least the belief in this sharing. It is, in fact, a cooperation strategy (Candau, 2009) - at the heart of most human activities (Henrich & Henrich, 2007; Tomasello *et al.*, 2009) - that will or will not make the sharing of the perception and its memory possible. The efficiency of this strategy depends on the existence of sociotransmitters, a point which I shall discuss briefly here.

I call sociotransmitters (Candau, 2004c) all the human productions and behaviours that help to establish a social or a cultural cognitive causal chain[9] between two minds. Metaphorically, sociotransmitters between individuals perform the same function as neurotransmitters[10] perform between neurons: they promote connections. Many anthropological and sociological works provide detailed descriptions of these sociotransmitters (even if they are given a different name), which are indispensable for the cultural transmission and memory sharing. We think, for example, of Yvonne Verdier's work on the women of Minot (Côte-d'Or), which "make the custom" (Verdier, 1979), of Anne Muxel's research on instruments of transmission and of intergenerational memory (jewelry, photographs, toys, family furniture, etc.) (Muxel, 1996), or of the vast literature that highlights the importance of language in socio-transmission, particularly when trying to build a shared memory (Bilhaut, 2003).

In the case of the olfactory experience putatively shared by the gravedigger and I, what are the sociotransmitters? First, of course, there is the institutional framework: I was allowed into the gravedigger's workplace in my capacity as a scholar, that is to say as a member of an institution that serves as a key to my field of survey. On this ground, I encounter employees who have been authorized by their employer to share information with me. Then, there is a body language that facilitates the process of sensory and memory accordance: gestures, body postures, exchange of glances, facial micro-expressions (Porter and Brinke, 2008). Moreover, during the interaction between the gravedigger and I, several objects play an essential role in the socio-transmission. There is the container, its contents and, more generally, the environment's cultural objects (Julien and Rosselin, 2005): the gravedigger's tools, the vehicle used to transport non-human remains, protective clothing, gloves, etc. All these objects, which we talk about, which my partner shows me, and which I can see, touch and feel, partake of the sharing of the experience that we both wish to achieve. Finally, emotions (when they are common) and language (Candau, 2003b) are obviously fundamental sociotransmitters, that cannot be reduced to the gravedigger's first injunction *("Smell this!"*). Immediately afterwards, we continue to talk and to make use of words and emotions to try and strengthen the sharing of the experience and of the olfactory memory. This whole mechanism serves social cognition - that is to say, "an individual's ability to interact socially in an intelligent way"

[9] About the distinction between cognitive causal chains (CCC), social CCC and cultural CCC, see Sperber, 2000b.

[10] The neurotransmitters are amino acids or their derivatives that play in the synaptic space, and facilitate the tranmission of information between two neurons.

(Zuberbühler and Byrne, 2006), that can also be defined as all cognitive and sensory aptitudes (Candau, 2007) that we mobilize to maximize sharing, or more often than not, the illusion of sharing. In both cases, at the aim is to save the social interaction between the gravedigger and I.

Sociotransmitters are therefore the vectors of social interactions and human cooperation or of the belief in the efficient nature of the latter. As such, they adjust any memorizing act to the collective conditions of its expression. However, this role,varies according to the three types of memory that I have distinguished above: protomemory, memory, metamemory.

At protomemory level, sociotransmitters are the *effectors* of shared memory: they contribute, on a daily basis, to an interindividual (intersubjective) focalization of the recall or of the recognition of past events, especially because the relation people have with them leads them, in a very concrete way, to adjust to and synchronize with one another, to share situations, to make almost similar or similar experiences, particularly under the influence of emotional expressions. To come back to the ethnographic example, which I use as the guiding thread of my argument, we are here in the realm of what I called above - for lack of a better expression - the olfactory world and experiences of death professionals: day after day, they are immersed in a particular environment made of objects, sensations, various interactions, etc. If we now consider the memory level, we can view sociotransmitters as *a* memory *triggers*: they induce memory inferences or fulfil the function of recall indices. In the olfactory register, the most famous memory trigger is of course the Proustian madeleine (Proust, 1987, p. 57-59). One might talk, with these first two levels, of memory *affordance* (Gibson, 1979). Finally, at the last level, sociotransmitters are resources for metamemory, they are its *fuel*: they promote verbalization (that of a group – *e.g.* of a professional group like the gravediggers - but also the history of a country, the family romance, etc.), they give consistency to a shared memory imaginary, they contribute to the effects of narrative enlightenment or, more modestly, they underpin the discourse on the characteristics of shared memory. A large part of the content of my interviews with death professionals belong to this memorial discourse.

Conclusion

Let me conclude with a remark of general anthropological significance. The inter-subjective sharing of mundane experiences and of their memories is not a given. Paradoxically, the belief in this sharing occurs easily, the reality of sharing notwithstanding. How can we explain this paradox? It is possible that because we are often in situations of cooperation and cooperative behaviour (as I was with the gravedigger), we feel that as a result, we share something with our partners. Only, in ordinary times, we are often mistaken about the nature of this thing. For reasons which anthropology must explain, we tend to dwell on primordial (and sometimes primary) forms of sharing - those related to birth, to primary socialization and to education: practices that consist in identifying with our parents, with the group to which we belong, the territory, the language, etc. - forgetting that these forms, though robust, are meant to be constantly transformed by our social practices, including our cooperative practices. Sharing is always a process and from this process develop new bonds of belonging, which often undo the old ones, or at least modify them. As Tarde pointed out (1993, p. 78) " We are not born alike, we *become alike*", and if we become alike, is it not because, by cooperating (as I did with the gravedigger), we firmly imagine that we are becoming

alike? If memory intersubjectivity becomes possible, is it not because in our everyday social practices, we routinely engage in practices that are based on the belief that this intersubjectivity exists, making it real by the mere fact of believing in it, but under a form other than that we have imagined: while we believe in a shared memory, we share, first and foremost, the belief in this shared memory and, at the same time, we actually share a way of being in the world. In doing so, we save social interactions or we believe we save them, but by sharing this belief we partly save them. If this proposal has any truth value, it is up to the reader to imagine its implications in the field of religion or politics[11].

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[11] For example, when the belief in roots and shared destiny is maintained (something the nationalist and communitarian ideologies, or those which supposedly defend the "heritage" do very well). In this case, the -real- sharing of this belief should not be underestimated, as it can have extremely powerful and even deadly social effects, as shown by some agonistic expressions of what is called "ethnic" or "national" identities. On this point, refer to: Candau, 2004d.

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About the author

Joël Candau is an anthropologist at the University of Nice-Sophia and Director of the Laboratory of Anthropology and Sociology "Memory, Identity and Social Cognition" (E.A. 3179). He has published a series of books about Memory in French and is currently interested in the Anthropology of the Senses.

Contact: U.F.R. Lettres, Arts et Sciences Humaines, Laboratoire d'Anthropologie et de Sociologie "Mémoire, Identité et Cognition sociale" (LASMIC, E.A. 3179), 98, Bd Edouard Herriot, 06204 NICE Cedex 4, Tel: +33.493.375332, Fax: +33.493.375447, Email: candau@unice.fr.