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Self-narrative as a causal center of gravity

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Abstract The goal of this paper is arguing for a realist and narrativist theory of the self, showing that, *contra* many narrative theorists (such as Daniel Dennett), narrativism is compatible with realism about the self. The structure of the paper is the following: we start, in the first section, providing an outline of standard narrativist theories, explaining, in particular, why they are anti-realist. In the second section, we give a sort of empirical argument for a realist account of narrativism, based on a model of the genesis of narrative identity. The guiding idea is that the process underlying the ability of producing narratives has a crucial causal role. Then, in the third section, we defend the account from a possible anti-realist objection; we show that standard anti-realist accounts are based on a wrong premise. The main points will be summarised in the conclusions.

Keywords: Self, Narrative identity, Narrativism, Self-consciousness, Dennett

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1. Narrativist theories of the Self

In the words of Schechtman (2011), narrativist theories of the self hold that human brains are narrative-generating machines and selves are the protagonists of the narratives they generate. These protagonists are no more real than literary figures such as Ishmael and Sherlock Holmes.

There are essentially two main kinds of narrativism: the hermeneutical strand (e.g., Ricoeur 1965, McIntyre 1984, Taylor 1989) and the non-hermeneutical one, which aims to put together narrativism and a roughly naturalist view of mental phenomena. Here we shall be concerned exclusively with the latter.

The non-hermeneutical paradigm case of this view is Dennett's theory. According to Dennett, an amazing property of *Homo Sapiens* is the capacity to create a self: «out of its

brain it spins a web of words and deeds» (1991: 416). By means of this activity the biological organism produces a narrative, it posits a «centre of narrative gravity» (*ibidem*). The narrative is the result of the working of a «Joycean machine»: «a cobbled-together collection of specialist brain circuits, which, thanks to a family of habits inculcated partly by culture and partly by individual self-exploration, conspire together to produce a more or less orderly, more or less effective, more or less well-designed virtual machine» (*ivi*: 256). The Joycean machine is thus "software in the brain", which, together with the organism and its cultural *milieu*, creates the (illusion of the) self.

Dennett is deflationist about this created self. He takes it to be a "virtual captain" that is described in internal and external discourse as the owner of the organism's mental states and the actor of its actions and decisions, but in fact is just a *represented* entity, not the real player in the game of human behaviour. In fact, Dennett identifies in the subpersonal flow of distributed brain operations the real responsible, if anything is, of the mental life: «Who's in charge? First one coalition and then another, shifting in ways that are not chaotic thanks to good meta-habits that tend to entrain coherent, purposeful sequences…» (*ivi*: 228).

Note that in Dennettian narrativism there is a neat distinction between the entity that produces the narrative – the Joycean virtual machine and ultimately the brain –, and the entity that plays the role of self in the narrative. Hence, if we compare a narrative to a novel, say, Moby Dick, the brain is Melville, the self is Ishmael. When Dennett says that the self does not really exist, he is referring to the latter, which has the same ontological status of characters in a novel: it is a fictional entity. On the other hand, neither the brain nor the organism is the self, because they do not match the constraints usually imposed on the concept of self. A subpersonal process can hardly be said a self. We will go back on this point later, in the second and third section.

Dennett's view, which was developed in large part in the 1991 book on consciousness, when experimental data on consciousness were quite poor, has been recently confirmed by several studies in cognitive neuroscience. For instance, Dehaene et al. (2006; see also Dehaene 2014) GWNT model, which enjoys considerable support among the researchers in the field (see Wu 2018), establish, on experimental bases, that contents emerge to consciousness only when they are "broadcasted" to a "neurocomputational space" constituted by high distance neuronal connections. This view is very similar to Dennett's one, since in both cases the core idea is that there is no *locus* of consciousness, which is spread on distributed areas, and there is no self or "driver" at all.

Although the GWNT is not the only game in town and there are more or less different accounts that weaken the constraints on the emergence of phenomenal consciousness (see e.g. Block 2007), we are essentially in agreement with the thesis of the distributed character of consciousness and the self; yet we part company with Dennett in the interpretation of these results: it is not mandatory qualifying this model as anti-realist. In fact, Dennett overlooks some crucial ingredients of the self, focussing only on the brain. An alternative interpretation is available.

2. An alternative account of narrativism: an empirical theory

In this paper we would like to offer a view of the self which, though maintaining the idea that narratives are an important part of our identity, assesses them in a different way, so to set the stage for trying to characterize the self in a realist way (or more realist, at any rate).

From a methodological point of view, the starting suggestion consists in shifting the focus from narratives to the ability to construct them. Let us to say, rather innocuously, that an organism able to produce narratives is something that possesses a narrative

identity. Ascribing to someone a narrative identity is attributing her the ability to construct an internalized and evolving story of the self that can provide a life with some degree of meaning, unity, and purpose. The question is: where does this ability come from?

To put it very sketchily, narrative identity is the most advanced, sophisticated stage of *psychological (or introspective) self-consciousness*. Psychological self-consciousness is the ability of attributing mental states to themselves, i.e. of objectifying one's own subjectivity. Self-attributing mental states can be described as the construction of a virtual inner space. It is by no means a trivial task: over and above the mentalization abilities largely discussed in literature, the constitution of an inner world evolves through an interplay of several other social, cognitive and affective factors to which we will return below.

Psychological self-consciousness, in turn, presupposes a *bodily self-consciousness*. In other words, the awareness of ourselves as subjects who are bearers of mental states is constructed from the awareness of one's own body. Therefore, narrative identity is the final stage of a process starting with the construction of a bodily self-image (= bodily self-consciousness). The development of a bodily self-consciousness can be described in purely naturalistic terms: it is something that takes place spontaneously, mostly instinctively, in the first 18-24 months of life (see e.g. Lewis & Brooks-Gunn 1979, Courage et al. 2004). Bodily self-consciousness is acquired when the child gains the ability to see herself "from the outside", through the eyes of her caregiver(s)[1]. Acquiring bodily self-consciousness is discovering that, among all possible objects, there is a particular, relevant, object: one's own body. The nonverbal, analogical, representation of the bodily self acts as a fixed referent around which autobiographical memories can start being organized.

The construction of an *introspective* (or *psychological*) experiential space takes place in two steps. First, the newborn child, while being able to cognize basic emotional expressions in others, enjoys no introspective knowledge of her own emotional states. Rather, such a knowledge is constructed through the caregivers' attuned and marked affective "mirroring" in repetitive episodes of nonverbal communication. This complex process progressively leads the child to internalize discrete emotions into her own inner life: the phenomenology of basic emotions is embedded into bodily self-consciousness, making the infant's bodily self-image an *affective bodily self-image*. The latter is then the first form of psychological self-consciousness (Marraffa & Meini 2019).

Second, the introspective experiential space expands through the process of turning one's mind reading skills – the ability to ascribe mental states to *others* – upon oneself. Thus, in the mindreading domain we find the same dissociation between other- and self-directed capacities that we found in the affective domain, where a hetero-directed affective competence scaffolds, in the protoconversational context, the development of a corresponding self-directed competence[2]. Indeed a positive attunement in proto-conversational infant-caregiver interactions plays a crucial causal role in the construction of the phenomenology of basic emotions (this is what can be called "*affective* mentalization"). Language is also a crucial ingredient of this process. The linguistic scaffolding consists in caregivers' talk about internal states that is appropriately attuned to the infant's thoughts and feelings. This attunement is termed "mind-mindedness" and foretells children's future mindreading performance (Meins et al. 2013).

[1] This reference to the interpersonal dimension does not contradict our previous claim that bodily self-consciousness is the result of a purely natural (instinctive) process. In fact the construction that takes place in the interaction is, so to speak, "more warranted" by psychobiological dispositions.

[2] See Carruthers (2011), who makes a strong case for the claim that mindreading has a functional and evolutionary priority over first-person metarepresentational capacity.

After turning her mindreading skills upon herself under the thrust of caregivers' mind-minded talk, at 5 to 6 years of age the child begins to understand that psychological states persist through time and influence current behavior (Lagattuta 2014). It is then that the child begins to grasp her self-identity in terms of *autobiography*: she begins to integrate memories of previously unrelated psychological states of the self into a coherent causal-temporal organization around a self-concept extended in time. This organized, coherent, and unified autobiographical self-representation is *narrative identity*. By the end of their teenaged years, individuals regularly engage in sophisticated forms of *autobiographical reasoning*. The latter is a constructive and interpretative activity that relies on the *life narrative* format for drawing connections between remembered events and enduring and current characteristics of the self (Habermas & Bluck 2000)[3].

Autobiographical reasoning is based on four social-cognitive capabilities: the ability to put past events in temporal order (*temporal coherence*); the ability to think about the self in abstract terms (i.e., as embodying certain personality traits) and account for changes or developments in the self over time (*causal-motivational coherence*); the ability to summarize and interpret themes within stories and apply these to one's own life (*thematic coherence*); and having an awareness of cultural norms regarding the major milestones and events one is expected to experience during the life course.

Two aspects of the ability of producing narratives deserve to be highlighted. First, it emerges in adolescence, to a large extent because individuals have the cognitive tools to represent the self in more abstract ways and to form a coherent life story. However, the coherence of this narrative (in all its dimensions) increases during the entire life-cycle: measures of temporal and causal-motivational coherence increase substantially across adolescence up to early adulthood, as does thematic coherence, which continues to develop throughout middle adulthood (Köber, Schmiedek & Habermas 2015). Second, and most importantly, autobiographical reasoning is an activity that has a clear *psychodynamic* function since, in times of biographical disruptions, it can compensate for threats of self-discontinuity through arguments that bridge traumatic change by embedding it in a larger life story context (Habermas & Köber 2015).

Now, for our purposes we do not need to enter in further details; the issue at stake is in which sense this view of the self can legitimately be considered as a realist view. Why do we take this naturalistic characterization of narrativism as a sort of empirical argument for a realist narrativist theory?

First of all, we take it as an *empirical* argument, insofar as the related account of the development of self-consciousness is an empirical model, essentially based on what we know from psychological sciences. The reason why it is an argument for a *realist* view is, essentially, that the process underlying the development of self-consciousness is causally efficacious, and causal efficacy is usually taken as a mark of existence. Clearly, this claim needs some elaboration. The starting point is that the self is not so much – not only, at any rate – the narrative, but, rather, the whole process that, starting with bodily experience, leads to the ability of constructing narratives. Therefore, the self is actually a *selfing process*, rather than a self-description or a self-representation. This view is somewhat reminiscent of William James, who introduced the distinction between I and Me, where the Me is a self-representation, and the I is what constructs the self-representation. On this view, the self is, properly speaking, the I; or, better, the I and the Me are both components of the self, yet the I is somehow prior, to the extent that it is

[3] This activity is termed "reasoning" to underscore three aspects: the constructive and interpretative nature of the activity, the both cognitive and communicative nature of it, and its normative aspect implied by its appeal to reason and logic. Moreover, the term "reasoning" also alludes to the Piagetian cognitive-developmental tradition, which the authors aim to wed to the narrative tradition.

the more dynamic component. We could say that the I-self is a process of objectivation which produces the Me-self, i.e., the process of self-representing of a psychobiological system.

As McAdams (1996) effectively put it, the I-self "is really more like a verb; it might be called 'selfing' or 'I-ing'", whereas the Me-self is "the primary product of the selfing process"; it is "the self that selfing makes" (1996: 302). We endorse McAdams' reading of James; therefore, we identify the self with the couple <I-ing, Me>, where the I-self (the I-ing) is the entire, dynamic and incessant process of construction of self-representations (the many different instances of the Me-self). The (not very significant) difference between our view and James' one is that the Me-selves for James are essentially what he calls "material", "social" and "psychological" selves, whereas we take bodily self-image, psychological self-consciousness and narratives the three fundamental kinds of Me. There seems to be an at least rough correspondence. For instance, the Me to which the infant begins to attach episodic memories –our bodily self-representation– is the Jamesian material self. In both accounts the Me exists as an evolving collection of self-attributions.

It is worth to note that the Me should not be regarded as something *detached* from the selfing process that engenders it. The Me has rather to be seen as an active component of the selfing process, insofar as it causally affects the process itself. This is the reason why the self is better to be conceived of as the couple <I, Me>, rather than the only I-ing. Therefore, we reject Dennett's strong distinction (cf. *supra*, §1) between the narrative and the author of the narrative, even though (admittedly) there is a sort of priority of the I in our account too. Yet, the causal retroaction of the Me on the I makes harder to disentangle, more and more over the years, the two facets of the self. Moreover, our selfing process is much more sophisticated than the Joycean machine, insofar as it involves psychological, psychodynamic and social ingredients.

So far, so good. But, what is exactly the causal role of the selfing process? There is a sense in which even Dennett's Joycean machine might be said to have a causal role. What is the extra-ingredient that arguably makes our account realist? The answer is that (self-)awareness of the Me produces two kinds of actions: externally oriented actions, aimed to regulate the physical and social intercourse between the organism and its environment, and internally directed actions, aimed to the Me maintenance. Both actions have effect to (the fine tuning of) the selfing process. Most importantly, the incessant construction and reconstruction of narrative identity is the bedrock of psychic balance and mental health. Breaking with a long-standing intellectualist tradition that has viewed self-consciousness as a purely cognitive phenomenon, dynamic psychology and infant research showed that the construction of affectional life, over the course of infancy and, subsequently, throughout one's entire life, is closely linked to the construction of a personal identity that is well-defined and accepted as valid. For the subject cannot ascribe concreteness and solidity to one's own self-consciousness if it does not possess (as a part of its essence) a description of identity that must be clear and, inextricably, "good", in the sense of being "worthy of love" (Balint 1937). Our mental balance rests on this feeling of solidly existing as an "ego". If the self-description becomes uncertain, the subject gradually loses the feeling of existing. Intrapsychic defenses, interpersonal maneuvers and cultural interventions allow us, in the relationship with other people and with our environment, to defend our self-describability and, indissolubly, the solidity of our self-conscious being. It can be said therefore that the construction and defense of an acceptable and adaptively functioning identity is the process that produces those intra- and inter-personal balances underlying

psychological well-being and mental health[4]. Unlike the self-rewriting autobiographies of the Joycean machine, identity as a story of the self is by no means contingent and evanescent; it is *a layer of personality that represents a causal center of gravity*[5].

To sum up, we have outlined a picture in which the self is the result of the evolution of a complex psychobiological system that constructs, over the years, several self-representations whose more mature versions are narratives, coming in different, constantly updated versions. This process is articulated in three main stages – three kinds of Me. First, the brain produces, over a period of about 18-24 months, a representation of the body as a whole – what could be called a "bodily self". Then the process, enriched with bodily self-awareness, constructs an introspective experiential space, endowing the subject of a psychological self-consciousness. Psychological self-consciousness is the result of the "affectivation" first and then the mentalization of bodily reflexivity. Finally, with the development of autobiographical memory, psychological self-consciousness evolves in the ability to construct narratives. Clearly, each developmental stage presupposes the previous one[6].

The selfing process can be said to be causally efficacious in a twofold sense. In a first, weak, sense the causal efficacy consists in the production of self-representations, specifically of narratives. Yet this is roughly shared also by anti-realist theories. In a second, robust, sense the self, i.e., the couple <I, Me> is what guarantees psychological well-being and mental health. Crucially, in this picture narratives do not create selves. There is no autobiographical self without the bodily self and the psychological self-consciousness –even though it is the psychological unity (notably, the unity of an autobiographical narrative) that constitutes our *practical identity*, namely personal identity considered in its connection to ethical concerns, as John Locke's theory of person does (see Shoemaker 2015). Dennett's Joycean machine becomes, within our view, a robust, real self.

3. A conceptual defense of realist narrativism

As we saw, in positing a "robust", i.e. real, Joycean machine, we are exploiting the same kind of cognitive science findings that Dennett invokes, together with many other data from developmental, dynamic, social and personality psychology, in order to build a realist theory of the self. This is basically the reason why, though starting from similar assumptions, such as a distributed view of consciousness and a bottom-up methodological approach, the Joycean machine (and in particular the Me component of the self) become in our hands (more) real.

Antirealists are unable to acknowledge the causal efficacy of the self for at least two reasons:

(*a*) They do not take into account the psychodynamic ingredient in the selfing process with its related teleology of self-defense, which turns out to be much larger and much

[4] To give just two examples, schizophrenia patients have difficulties to organize and extract meaning from their past experiences in order to create coherent personal narratives (e.g., Raffard et al. 2009). Disturbed identity is one of the defining characteristics of Borderline Personality Disorder manifested in a broad spectrum of dysfunctions related to the self, including disturbances in meaning-generating self-narratives (e.g., Jørgensen et al. 2012).

[5] We are following here McAdams' (2015) personological view of the narrative identity. According to this view, during personality development, "internalised and evolving stories of the self" layer over "adaptations", which layer over "traits".

[6] The first stage presupposes merely an objectual form of (phenomenal) consciousness. See Di Francesco et al. (2016), §3.2.

more important than they suppose. Dennett, for example, affirms that the self only serves «to solve the myriad little problems of interpersonal activity we encounter every day, from the moment of our birth» (2016: 16).
(*b*) Eliminative or antirealist theories render the existence of a Cartesian Ego (or its material counterpart: the "Boss" hidden in the Brain), whose characteristics are not matched by its neuronal counterpart, highly implausible.
As to the point *a*, our reply is that, in view of what has been argued in the preceding section, the construction and protection of an identity that is solid to the greatest extent possible is the mainstay of all our life. Indeed identity self-construction is so important that it can be regarded as the keystone of the development of the whole existence of the individual. Antirealists may admit the causal efficacy of the selfing process (the "I" component of the self), but not of the Me, which is taken to be a fictitious entity deprived of a real psychobiological *function*[7]. According to us this is a serious underplay of the fundamental role of the Me in contributing to the organism's well being, to the success of its social relations, and the pursuit of its ethical goals (such as the respect of the "know yourself" precept, and the pursuit of the full flowering of our human nature – which are made possible only by the acquisition of our full fledged capability of self-representation).
As to the point *b*, the point is that the antirealist criticism has no impact on our naturalist, bottom-up and relational view of the self. Take, for instance, Dennett, who can certainly be considered, in light of what we said in section 1, as an anti-realist about the self. We can put his argument for antirealism in an explicit form, as follows:
P1) the self (in his ordinary, pre-theoretical characterization) is an internal *substantial* identity that exercises a top-down centralized control on the observable behavior of the organism. Yet
P2) there is no scientific evidence for the existence of such an entity.
P3) There is evidence of a different neural, bottom-up and distributed architecture of consciousness and self-consciousness (think, for instance, of the above-mentioned Global Neural Workspace Theory, GNWT).
Conclusion: The self does not exist (or, at least, the self in his ordinary, pre-theoretical characterization does not exist).

We believe that premises P2 and P3 are correct. By contrast, P1 is not justified: there is no necessity to narrow the concept of the self to substantial entities. On our view, scientific evidence (such as GWNT) is compatible with a realist theory of the self, such as the theory outlined in the previous section. Indeed, the GWNT model just suggests that there is no a centralized entity, as the architecture of the brain and of the mind is distributed. Yet, this is just anti-realism about the centralized control, not anti-realism whatever. As we saw earlier, we take the self to be a process, the process of constructing a collection of self-representations. To the extent that this process has a crucial causal role, we take it to be genuinely real.
Two objections can still be raised, at least *prima facie*. First, processes are not the proper kind of things that constitute the (fundamental) furniture of the world. Second, even if one conceded that processes are ontologically fine, a subpersonal process could not be

[7] A (arguably stronger) reason to deny the causal efficacy of the self seems rather to come from metaphysics and is connected to a reductionist view of mental causation. This view, however, rests upon a quite dubious premise, that only bottom-level (neural) processes may be endowed with causal efficacy. We suggest instead sticking to a "negotiation model": the construction of a metaphysical picture of mental causation should involve a trade-off between metaphysical considerations and explanatory practices. See Di Francesco & Tomasetta (2015); Di Francesco et al. (2016).

the right kind of thing to be identified with the self, since, roughly, the concept of self is intrinsically personal. Here we reply to the first objection and just give a sketch of an answer to the second objection, that we discuss extensively in another paper (Di Francesco et al. 2018). Let us start with the first objection.

We do not see any plausible justification to rule out processes from the furniture of the world. An ontology restricted to objects, for instance, can hardly be proven to be better than a rival ontology. After all, endorsing an ontology of processes is not significantly different from being committed to an ontology of events. If we are able to mention a case of ontology that includes processes, this will be enough for our purposes. Dupré (2014) is a recent case at hand. According to Dupré, processes not only can legitimately be considered as part of the furniture of the world, but they are fundamental "bricks" of the biological reality. Note that such a process-based ontology is strongly required by our empirical theory of self-consciousness to the extent that it draws on the ethological and evolutionary framework of the theory of attachment. For this is a *contextualist* and *systemic* perspective, in which psychological phenomena are investigated by putting them in the inter-individual and social context in which they arise and obtain a sense; and with the adoption of such perspective, the naturalistically oriented dynamic psychology has drawn inspiration from a long tradition of ideas about the systemic character of development put forward by biologists, primarily by researchers in the field of developmental psychobiology, which gave rise to the so-called "Developmental Systems Theory". Now, here's the point, the fundamental unit of analysis in developmental systems theory is a *process*, namely the "life cycle"; moreover, the key concepts of the theory, epigenesis and developmental dynamics, both also suggest a *process* view of the units of development (Griffiths & Gray 2001).

As to the second objection, its leading-idea is that the selfing process has not the properties we ascribe to the self as we ordinarily conceive it; in particular, being a *subpersonal* process, it seems to miss a crucial feature of the ordinary self. Here the answer depends on the degree of tolerance one is disposed to concede to a revisionist account as regards the self. The more one is disposed to accept that the self is not what it seems to be, the more one will find our approach palatable. That said, we bite the bullet, in the sense that we acknowledge that the pre-theoretical notion of self is personal in character. Hence the challenge is to find a way to make at least a bit "personal" our self.

A first step in this direction is to develop a model in which the personal and the subpersonal components of the self work together. As we said in the previous section, taking the Me to be a fictitious entity deprived of a real psychobiological function is a serious underplay of the fundamental role of the Me in contributing to the organism's well being. On our view the self is better to be identified with the *couple* <I, Me>, rather than with the selfing process or I. And this is the more true the higher the stage of development. So the idea is that, over the years, the Me plays an increasing causal role in the elaboration of our of (self-)conscious thoughts and reflections. In doing so it becomes more and more personal, retroacting to the selfing process, so that the role of the personal in the selfing process becomes more important. From a slightly different point of view, we could say that, when the organism attains the narrative identity stage, the selfing process becomes aware of itself (acquiring the ability to entertain a cognitive self-representation)[8], so that, in a way, it is a self. The distinction between the I and the Me somewhat fades. The one who represents and the represented entity tend to overlap.

[8] Moreover, if we allow that the selfing process may manipulate inner representations endowed by phenomenological content, we can attribute to the selfing process, taken as the <I, ME> system, *consciousness of itself.*

It is as if the self acquired the awareness of its own existence, and came to "know" that its own existence depends on the existence of its body, believing at the same time that it is different from its body. The partly personal character of this self can be vividly appreciated by taking into account the way Parfit's style famous thought experiments can be treated within our framework (Parfit 1984): if the same (e.g. identical) selfing process could be "transferred" or "replicated" in another organism, should we speak of the same individual in a different body? In our theory the answer is negative, since the dynamical self representation of the body is a fundamental tenet of the very existence of the narrative self. Besides, in order to achieve the narrative self, complex causal affective and motivational processes are required. Therefore, in order to reproduce the self, we should also reproduce its physical and social environment.

4. Conclusions

The self is a *real* process. Processes can legitimately be considered as part of the furniture of the world. The GWNT model only shows that consciousness requires highly distributed activation and there is no entity that plays the role of central control. This is just anti-realism about the centralized control, not anti-realism across the board and, in particular, about the self as such. Our view could be described as a non-standard narrativist account, where, on the one hand, full selves require narrative identities and, on the other hand, the self fully constitutes itself in the narrative. Scientific evidence, therefore, offers an at best shaky defense of an *eliminative* narrativism.

Our self is an integrate sequence of mental states, more or less like the Lockean subject (cf. *supra*, §3), which acts for its purposes (including the unconscious ones, the typical object of the psychodynamic unconscious). And it is the entity we identify with ourselves, we interact with when we interact with our peers, we try to give relief to in the affective relationships.

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