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The Dual Role of Inner Speech in Narrative Self-Understanding and Narrative Self-Enactment

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Abstract
Psychologists and philosophers agree that personal narratives are a central component of one's identity. The concept of narrative self has been proposed to capture this aspect of selfhood. In recent times, it has been a matter of debate how the narrative self relates to the embodied and experiential dimension of the self. In this debate, the role attributed to inner speech is that of constructing and maintaining personal narratives. Indeed, evidence suggests that inner speech episodes are involved in self-reflection and autobiographical reasoning. That is, previous works have focused mostly, if not solely, on the role of inner speech for narrative self-understanding. However, inner speech is also involved in enacting personal narratives. In such cases, the content of the inner speech episodes is not in the service of the construction of narratives, rather it implies the identification with the character of the personal narratives. I introduce two instances of the use of inner speech for narrative self-enactment: positive self-talk and stereotype threat. I conclude by considering the implications of the examples introduced for the debate regarding the relation between the narrative and the embodied dimensions of selfhood.

1 Introduction

Researchers in personality psychology and philosophy of personal identity agree that narratives are central to understanding of how we, as human beings, make sense of our life, ourselves and others. In recent times, a lively philosophical debate has arisen from the attempt to describe how the narrative, reflective and discursive understanding of one's identity relates to the unreflective and practical engagement with one's own environment (Dings 2019; Menary 2008). The aim of the article is to explore

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the roles of language, and more specifically of linguistic thoughts or inner speech, in relation to the narrative dimension of selfhood (or narrative self).

I distinguish two functions of inner speech in this regard: narrative self-understanding and narrative self-enactment. I argue, based on empirical evidence, that inner speech is involved in narrative self-understanding and in the construction of autobiographical narratives. Beside this role in the creation of autobiographical narratives, I argue that inner speech is involved in enacting these narratives. In these cases, the content of the inner speech episodes does not change the narrative self-understanding but presupposes and manifests it, and can affect the unreflective and practical engagement with one's circumstances.

In general, narrative self-understanding is the function which most of the related literature, both psychological and philosophical, has focused on. It amounts to the construction of narratives related to the self, either in interactions with others or as a solitary endeavour. As for the latter case, the concept of narrative thinking has been proposed to account for internally generated narratives (Goldie 2009, 2012), but little or no attention has been paid to the format of such cognitive processes. Sometimes the conceptual neutrality or vagueness regarding the representational format of narrative thought is held intentionally in order to end up with a more inclusive definition (Goldie 2009, p. 98). The result is that the specific expressive capacities of the different formats of mental imagery, i.e., linguistic or imagistic, in creating narratives are completely overlooked. The first part of the paper is occupied with discussing how inner speech is involved in narrative self-understanding.

Whereas narrative self-understanding typically involves a metacognitive effort in directing the attention to certain aspects of one's past, for example, in carefully choosing the term to be used in describing a certain episode, and in engaging in corrections and revisions of the narrative, narrative self-enactment does not. Narrative self-enactment, which I introduce and discuss in relation to inner speech in the second part of the article, involves the enactment or manifestation of those features regarding the self which have been established through narrative self-understanding. Contrarily to self-understanding, which contributes to form a narrative sense of self, narrative self-enactment presupposes and instantiates the previously established narrative self and imply the implicit identification with one's own narrative identity.

As we will discuss in more detail in Sect. 8, an example of narrative self-enactment through inner speaking can be found in cases of stereotype threat, i.e., "the fear or anxiety of confirming a negative stereotype about one's social group (e.g., women are bad at math)" (Casad and Bryant 2016, p.1). In such instances, certain elements of one's narrative identity are reflected in the content of negative verbal thoughts related to one's identity which impair performances. In these cases, inner speech enacts a certain narrative identity, its content reflects what would be said by the character of the narrative we identify with, for good or ill. As this and other examples of narrative self-enactment make clear, reflecting certain features attributed to the self in the content of inner speech has a measurable impact on performances in various tests, and can generally alter and even undermine the agent's skilled interaction with their circumstances. Thus, examples of narrative self-enactment can be taken as empirical support of the thesis that the narrative self can guide behaviour and alter embodied aspects of selfhood.

As for the structure of the paper: in Sect. 2, I present the debate on the relation between the embodied and narrative self, and in Sect. 3, I present narrative self-understanding and narrative self-enactment in relation to inner speech. In Sect. 4, I consider the evidence for the claim that inner speech is a means for autobiographical reflection which is functional to the maintenance of narrative identity. In Sect. 5, I discuss further support for the view that inner speech is involved in narrative self-understanding by discussing the evidence for the relation between some subtypes of inner speech episodes, as per the Variety of Inner Speech Questionnaire (Alderson-Day et al. 2014), and personality traits. In Sect. 6, I claim that inner speech episodes are not only a means for autobiographical reflection and narrative self-understanding, but that they may also enact an underlying narrative understanding. As such, they are underexplored examples of how the narrative self affects our experience and behaviour. Having argued for inner speech's role in narrative self-enactment, in subsection 6.1 and 6.2 I introduce and discuss two psychological phenomena to substantiate my claim. These are: positive self-talk – which, when covert, is also known as inner speech – and negative verbal thoughts caused by stereotype threat. The introduction of the concept of narrative self-enactment is crucial to show that the rigid distinction between a linguistic, deliberative and contemplative narrative self and a prelinguistic, bodily and experiential self is untenable. In Sect. 7, I conclude by highlighting some implications that can be drawn from the role of inner speech in narrative self-understanding and in narrative self-enactment.

2 Are Narratives All There is to Selfhood?

In order to properly appreciate the implications of the notion of narrative self-enactment, it is necessary to briefly delineate some points of contention in the literature. The recent philosophical debate on narrative selfhood has been focused on whether narratives can provide a sufficient characterization of the self. Studies on the narrative self move from the assumption that our personal identity is composed of narratives structurally and thematically analogous to those we tell each other or read in books (McLean et al. 2007). While the notion of narrative may appear intuitive, individuating a limited set of necessary and sufficient conditions to define it has proved to be a challenge. Some philosophers have proposed to define narratives as the description of a sequence of events and their causal or reason-based connections (Lamarque 2004; Hutto 2008). Other features of narratives, such as the meaningfulness and purposefulness of events narrated and their connections (Rudd 2007), as well as the social and distributed nature of narratives (Fabry 2021, Heersmink 2020), have also been highlighted.

Narrative accounts of the self are built around certain assumptions. One is the opposition to a Cartesian and substantialist understanding of the self: the narrative self is not a thing nor a substance, and it is not a given. Another one is the opposition to Neo-Lockean approaches based on the continuity of psychological relations over time, which, even though they are critical of the Cartesian view, present various shortcoming (see Schechtman 1996, 2014 for a discussion). Rather, the narrative self results from the continuous activity of making sense of one's past and planning one's

future from a socially and historically embedded perspective, while negotiating the products of this process with others. Indeed, a widely recognized feature of the narrative self is its permeability to social interactions: parents and caregivers, teachers and peers, during development, concur to determine both the initial narrative self of the child and the narrative self of the person throughout life. As Taylor puts it: "the community is also constitutive of the individual, in the sense that the self-interpretations which define him are drawn from the interchange which the community carries on. A human being alone is an impossibility, not just *de facto*, but as it were *de jure*" (1985, p. 8). Thus, the stories we tell to make sense of our experience are not completely of our own makings. As noted by McConnell, the "vulnerability to co-authoring is essential to developing a self-narrative" (2016, p. 29).

The narrative self is typically the result of the integration of our own and others' judgments about our identity. A widely shared assumption is that a certain degree of coherence in the narratives that define a person is achieved only late in the development (for a contrarian view, see Hyvärinen et al. 2010). As shown by Habermas and Paha (2001), while minimal forms of storytelling are developed almost simultaneously to language acquisition, it is only during adolescence that autobiographical narratives achieve some degree of coherence and consistency. This is not to say that the narrative self is thus achieved once and for all, nor that it acts as a single unifying framework through which we interpret our whole life and navigate every and each of our experiences. Although transforming and integrating the disorganized experience into a narrative is the main function of narrative self-understanding (Mackenzie and Poltera 2010), unresolved tensions, incongruity and fragmentation are never completely eliminated.

Following psychologists of personal identity, the narrative self can be analysed into two interrelated constructs: the self-concept, and the life story, (McLean et al. 2007). The self-concept is defined as the "conscious beliefs about the self that are descriptive or evaluative" (p. 263), it refers to the way a person conceives of themselves as having certain personality traits, certain psychological characteristics, and behavioural dispositions. The life story, also referred to as self or personal narrative, on the other hand, refers to the organized summary of (part of) one's life. Major events and important changes typically figure in the life story and such story also has a degree of thematic continuity and coherence. The self-concept and the life story are tightly related: on one hand, the self-concept is explained in terms of life events (e.g., "I am a failure, because I have ruined every chance I have been given in life"), on the other hand, life events can also be accounted for in terms of self-concept (e.g., "Being a hardworking person made me reach all my objectives").

Some scholars have opposed the view that narratives are all there is to selfhood: some have argued for a more basic and fundamental dimension (Gallagher 2000; Zahavi 2007; Thornton 2003; Newen 2018), referred to as embodied or experiential (or minimal, core) self. According to Newen, for example, the narrative self is the "explicit conceptualization and description of oneself" (2018, p.5), whereas the embodied self refers to a biological entity with the capacity for self-representation. In other words, the embodied self is the concrete agent whose actions are narrated, while the narrative self is the character to which these actions are ascribed to, the

"who" of autobiographical narratives (Atkins 2004), which is progressively elaborated in the act of narrating.

These two aspects: embodiment and narrativity, are not the only ones that have been suggested in relation to the self, Gallagher (2013) for example presents an incomplete list including eight dimensions of the self. Nonetheless, focusing on these two components of selfhood, the problem of describing their relation arises. This problem has sparked a debate in which we may identify three positions.

1) The Embodied And Narrative Selves do not Interact With Each Other
2) The Embodied self Unidirectionally Influences The Narrative self, Or
3) The Embodied self And Narrative Selves are Inextricably Interwoven

Proponents of 1), such as Dennett, argue that the narrative self is an "abstract object, a theorist's fiction" (1992, p. 105), a concept possibly useful in elaborating folk psychological explanations, but nowhere to be found in a naturalistic ontology. As noted by Brandon (2016), this thesis may appear paradoxical: if the narrative self is a fictional creation, who is the creator? Dennett's strategy to solve the paradox consists in claiming that the narrative self emerges from the bottom-up brain's capacity of elaborating a self-image. A robot, aptly configured, could also display the capacity for narrative self-understanding (Dennett 1992).

Bickle (2003) proposes a similar view. On the basis of a method for the localization of functional units in the brain, called double dissociation, Bickle argues that there is a mutual functional independence between brain areas involved in narrative thinking and in motor planning such that "the neurally realized narrative self, neither accurately reflects *nor causally affects* very much of what is going on" (Bickle 2003, p. 202). Thus, the embodied self does not interact with its narrative counterpart and vice versa. Delusions and confabulations are cited by Bickle as prime examples of narrative and corporeal dimensions parting ways. While differing in the details, proponents of this stance come to agree that the narrative self is an abstraction and, in turn, that the corporeal and experiential dimension has a secondary, non-constitutive connection to the (narrative) self.

This has been met with opposition from proponents of 2, amongst whom we may consider Menary's (2008) account. Menary claims that the two dimensions of selfhood are not fully insulated from each other; rather, embodiment is constitutive of the narrative self. In fact, personal narratives are not invented out of nothing but are shaped by lived experiences. The self engaged in storytelling is not abstract or fictional, it is rather an embodied, feeling and experiencing agent with their own personal history, psychological traits and cultural background.

As noted by Mackenzie (2014, p. 160), there is an ambiguity in Menary's account. If the narrative self is embodied, the distinction between the embodied and narrative dimensions of selfhood seems to collapse and the two become coincidental. But this is not conceded by Menary (2008), who seems to maintain the dualism between a narrative self and a pre-narrative embodied subject whose experience provides the "pre-narrative fodder" with which the narrative self is assembled (p. 73).

In fact, authors supporting view 2 do not concede that the narrative self influences the embodied aspects of the self. The claim is that our practical and skilled

engagement with the environment needs rarely, if ever, to be narratively structured. Navigating the environment does not require much thought – nor much narrative thought – in normal circumstances. For example, while driving, "I enact the skills without thinking about them, the fluid and flexible sequence of perceptions, actions and manipulations of steering wheel, gear stick, pedals, etc. is open ended and not easily captured as a narrative sequence" (Menary 2008, p. 70).

Zahavi (2007) notes that accounts of selfhood limited to the narrative dimension miss a fundamental aspect of being a self, that is, the experiential or embodied self, the first-person access to experience, "a pre-reflective and non-conceptual sense of ownership or consciously experienced "mineness" that accompanies bodily sensations, emotional states and cognitive contents" (p. 4). Thus, these accounts cannot be considered complete. He argues that this dimension of selfhood precedes the narrative self. Infants, for example, are universally endowed with a sense of selfhood (i.e., show signs of self-other differentiation) before they exhibit any form of narrative self-understanding, thus proving that there is a dimension of selfhood which precedes the narrative self. It is on the basis of this twofold aspect of selfhood, embodied or experiential and narrative, that we may say, along with psychologists of personal identity, that we are (embodied or experiential) selves creating stories, which in turn create (narrative) selves (McLean et al. 2007).

In this view, language, and narratives with it, comes to the fore only when we take a step back and "[…] remind ourselves of what we should be doing, or how we could do things differently" (Menary 2008, p. 70). Narratives only appear when one reflectively tries to understand and summarize one's own experiences, but they are also involved – according to Menary – in planning and envisioning future directions. In contradiction with this latter assertion, he maintains that narratives have no impact on experience. Supporters of views 1 and 2 thus come to agree on this point: narratives are post hoc entities, whose role is that of justifying rather than guiding, explaining rather than affecting actions. Yet that is the point of contention for supporters of view 3.

Albeit with variations and disagreements, theorizers of the mutual influence and interaction of the two dimensions of selfhood agree that personal narratives affect experience and contribute to guide behaviour. One key tenet is that the distinction between the two dimensions of the self is an abstraction, while the two are "inextricably interwoven in practice" (Mackenzie 2014, p. 161), are entangled (Brandon 2016) and are in a "dynamic and recursive interplay" (Dings 2019).

The conceptual core of these positions is that narratives can eventually direct our interactions with the environment and bodily attitudes. As Brandon, criticizing view 2, notes: "For, currently, the relationship remains unidirectional, that is, the narrative self is presented as the 'result' or the 'output' of the body and experiences. Yet the narrative self feeds back into our body, the upshot of which is that the relationship between the narrative self and body is interactive" (2016, p. 68). She illustrates her point by means of an example. She turns to the psychotherapeutic method of schema therapy to concretely show the entanglement of behaviour and experience on the one hand, and narratives and schemas on the other. The goal of this therapeutic practice is that of making the distorting schemas that influence self-understanding explicit in

order to change them. Once this step is implemented, "through this new framework, bodily and affective change can hopefully follow" (p. 80).

Additionally, while it is undisputed that the narrative self is subsequent to the embodied experience both ontogenetically and phylogenetically, some evidence suggests that the former is far from being a mere tinsel to the embodied self. For instance, there is a rich literature on how disruption either in the content or the structure of personal narratives are linked to pathologies such as depression and schizophrenia, respectively (Gallagher 2007; Lysaker and Lysaker 2001). Dysnarrativia, the incapacity of elaborating narratives, is a central symptom in some conditions, e.g., Alzheimer's disease or dementia (Zimmermann 2017), in which we observe a waning sense of self. Moreover, it has been suggested that the textual analysis of autobiographical reports may be a useful tool for assessing certain mental conditions (Gallagher and Cole 2011). Taken together, these findings give preliminary grounding to the hypothesis that the narrative self can affect embodied aspects of the self. This argument and support for it are present in more depth in the following sections on the role of inner speech in narrative self-enactment, but before going into them, let's consider the difference between narrative self-understanding and narrative self-enactment in inner speech.

3 The Voice Of An Inner Narrator And That of An Inner Character

Inner speech, sometimes also referred to as verbal thinking, covert self-talk, internal monologue or "the little voice in the head" (Perrone-Bertolotti et al. 2014), has recently attracted interests from psychologists and philosophers alike and has been investigated in relation to executive functions, decision-making, reading, memory, as well as various psychopathologies (Alderson-Day and Fernyhough 2015). Here and in the next two sections, I discuss the hypothesis that inner speech may be employed in the service of narrative self-understanding.

In relation to the narrative self, it has been suggested that inner speech plays a role in autobiographical reflection. Morin (2018), for example, argues on the basis of empirical results that inner speech allows to engage in self-storytelling, which in turn "allows one to reconstruct one's autobiographical past and imagine one's future, which leads to a sense of unity, purpose, and understanding of the self" (p. 285).

Similarly, Menary (2008) proposes a Neo-Vygotskian reading of inner speech as the internalization of intersubjective discursive practices which prompt the emergence of the self as a narrator (p. 79–82). In Menary's view, by internalizing discursive practice, for example giving and receiving orders, the child progressively gains mastery over cognitive functions such as problem solving and decision making. Moreover, he argues, internal or egocentric speech episodes involve "the representation of the embodied perceptions and sensations that the embodied subject is having" (p.82). These perceptions and sensations, by being verbalized, become structured and communicable. Lastly, by repeating this process over and over, the child develops an increasingly complex narrative point of view on her experience, thus finally evolving a form of narrative self-understanding.

Indeed, most accounts of inner speech in relation to the narrative self focus on the role of inner speech for narrative self-understanding, i.e., the embedding of events "in a larger stream of experiences with which they are meaningfully, rather than causally, connected" (Brandon 2016, p. 76). After all, assuming that (1) narratives are, at least in some cases, linguistic entities, and that (2) self-directed speech is equally capable to serve as vehicle for them as other-directed speech is, then (3) it is plausible to suppose that talking to oneself creates the possibility of generating narratives. In other words, self-directed talk can consist in the use of language to impose narrative order on experience. As for premise 1), although language may not be the sole format for narratives, there is no disagreement that it is an apt format for them, more on this in Sect. 4. With regards to premise 2), I will justify it by considering empirical research on the role of inner speech in self-understanding and autobiographical reflection in Sects. 4 & 5.

Besides, as anticipated, I want to discuss another, overlooked, function of inner speech in relation to the narrative self: inner speech episodes can also be the enactment of an underlying autobiographical narrative, meaning that inner speech, in some cases, can be interpreted as the voice of the character constructed through autobiographical reasoning and social interactions. In these instances, inner speech is not reflectively employed to construct narratives; rather, it can be seen as the voice of the character of self-attributed personal narratives, the protagonist's direct speech.

Ideas similar to that of narrative self-enactment, although not in relation to inner speech, can be found in the works of the authors who argue for the interaction of embodied or minimal and narrative dimensions of selfhood. Roy Dings proposes the notion of narrative self-programming to account for some of those cases in which the narrative self-understanding affects embodiment. He defines narrative self-programming as "a conscious effort to establish an embodied responsiveness (or to alter an existing one)" in line with one's narrative self-understanding (2019, p. 194). Another example is from Kim Atkins' work. She writes: "the relative stability of character – its sameness over time – is an enacted stability" (2004, p. 351). A few sentences below she adds:

"As the subject of a life, the question of a person's identity – "who?" – must ultimately be resolved in an act rather than by a fact: who I am is something *that I must attest to*. In doing so I recuperate the identity presupposed or implied in the narrative I endorse and, thus, effect permanence in time of my identity" (p. 351, emphasis added).

The sense of continuity of the self is not only achieved by narrative self-understanding, but, at the same time, it is also reinforced by translating such understanding into actions, and so enacting or attesting it. The acts through which one's identity is attested are cases of narrative self-enactment, according to the taxonomy I introduced.

By focusing on instances of inner speech for narrative self-enactment, I aim to show how the narrative self can then inform experience and the practical engagement with one's own environment, since these linguistic episodes have a measurable (and in fact measured) impact on our behaviours and performances, for good or ill. As such the cases I will discuss in relation to narrative self-enactment provide support for the thesis that the narrative self does indeed influence our embodied responsiveness, thus contributing to advance the debate presented above.

To illustrate this claim, I focus – in subsections 6.1, 6.2 – on two types of inner speech episodes to explore how inner speech is unreflectively activated to enact rather than construct personal narratives. These are: positive (covert) self-talk in various performances and negative verbal thoughts caused by the stereotype threat. Before that, in Sects. 4 & 5, I discuss the role of inner speech in narrative self-understanding.

4 Narrative Self-understanding in Inner Speech

Narrative self-understanding can be broadly defined as the activity of giving a narrative structure to one's life, by focusing on certain events and their connections as relevant for one's identity, while discarding others. This activity can be conducted in interaction with others, in conversations for example, but also in solitude. In the latter case, it can involve various cognitive processes and different kinds of mental imagery. While it is not to be taken for granted that providing a narrative account of one's self is mainly or solely conducted through language, language certainly plays a crucial role. Support for the use of inner speech in autobiographical reflection come from data obtained through brain imaging techniques (Morin and Hamper 2012; D'Argembeau et al. 2014), as well as from a priori arguments regarding the expressive capability of language, compared to other format.

Data collected via Positron Emission Tomography (PET) and fMRI show the activation of the left inferior frontal gyrus (LIFG), a cortical area strongly associated with both overt and covert speech production (Alderson-Day and Fernyhough 2015) during self-related tasks (Autobiography, Emotions, Agency, Self-recognition, Traits and Various). Morin and Hamper (2012) produced a meta-analysis comprising 127 studies to examine data on the activation of the LIFG – and thus presumably on the use of inner speech – in self-related tasks. Overall, the LIFG was active in 55.3% of the cases, while in the case of Autobiography tasks the percentage was higher: 76.9%. According to the authors, these results strongly support the view that inner speech is involved in autobiographical reflection. The authors also controlled for non self-domain activation of LIFG. Out of 213 studies in non self-domain tasks, only 16% reported the activation of the LIFG, excluding working memory and verbal tasks (since both presumably require the use of inner speech).

Based on the data summarized in their meta-analysis, Morin & Hamper also note a statistically significant difference across self-related domains: perceptual self-related tasks, such as self-recognition, showed a lower activation of LIFG compared to conceptual self-related tasks. Taken together, these results suggest that verbal thought may not be necessary for all self-related tasks: it may not be recruited for tasks such as recognizing one's own face reflected in a mirror, or for proprioception, but it is a key component for more abstract and cognitively demanding tasks, such as autobiographical reflection.

A clear limitation of this meta-analysis – as noted by the Morin and Hamper (2012, p. 85) – is that the activation of the LIFG may be reflective of cognitive mechanisms not related to the use of inner speech, although they deem this possibility unlikely. From this study, we can conclude that inner speech is very plausibly involved in auto-

biographical reflection, but is it enough to argue that it is also involved in narrative self-understanding?

To secure this further argumentative step, it is useful to introduce the distinction between autobiographical remembering (i.e., re-experiencing the situation in its original context) and autobiographical reasoning (i.e., reflecting on the broader meaning and implications of one's memories). Where the term reasoning underscores the constructive and interpretative nature of such activity (Habermas 2010, p. 3). D'Argembeau and colleagues (2014), using neuroimaging techniques, have shown the prominent activation of the LIFG (presumably indicating ongoing inner speech) in autobiographical reasoning compared to autobiographical remembering. Based on these results, they conclude that inner speech may be "a cognitive tool for processing self-related information" (p. 650).

One could be sceptical about the identification of autobiographical remembering, as opposed to autobiographical reasoning, with narrative self-understanding, since its content may lack some of the characteristics typically attributed to narratives, namely the identification of causal (Currie 2006; Mackenzie 2014) or reason-based (Hutto 2008) connections between various events narrated as well as the emotional import of the story (see Fabry 2021, for a general discussion of the features which define narratives). Conversely, these elements are typically present when one uses language to reflects on the broader meaning and implications of their memories as in autobiographical reasoning, since the broader meaning and implications are inferred by connecting singular events of one's life to others and the self, in order to find recurring patterns and establish features of one's identity.

This is not to say that autobiographical remembering cannot at times result in narrative self-understanding nor that other mental imagery modalities (visual, olfactory, haptic, motor) cannot contribute to the elaboration of narratives. Indeed, as suggested above, not all narratives are in a solely linguistic format. Episodic future thinking (D'Argembeau 2021) and imagined interactions (Honeycutt 2019) may sometimes (i.e., when their content falls under the definition of narrative) be considered as involving multimodal narratives, based on both imagistic and linguistic mental imagery.

Moreover, recruiting various representational formats may contribute to achieve effects not elicited otherwise. This point is generally overlooked in the literature on narrative thinking. For example, Goldie (2009) is careful in proposing a definition broad enough to accommodate various kinds of imagery, with the result of putting under the same label various formats of mental imagery and ignoring the different cognitive effects and end-products which can be elicited by each format when employed for narrative thinking.

Picturing a scene rather than using language to describe it, may lead to a more intense and vivid emotional response. Similarly, watching a video provokes reactions different from those prompted by hearing an aural account of it. Conversely, the linguistic format of mental imagery may provide psychological distance from the incoming stimuli, thus fostering self-control (Kompa and Mueller 2020).

Personal variability regarding styles of thinking is also observable: some persons tend to think linguistically more than others, while some tend to recruit more imagistic mental representations. Individuals who frequently experience thinking in a linguis-

tic format tend to "show more categorical processing on a variety of domains such as reasoning, mental imagery, and patterns of errors in recall" (Roebuck and Lupyan 2020, p. 2067). When applied to narrative thinking this could mean that linguistic thinkers may produce narratives in which, for example, evaluative considerations may be more categorical and less nuanced, compared to the narratives of imagistic thinkers. For example, telling or thinking in a natural language about my happy childhood is different than perceptually reconstructing some scenes from my happy childhood. In the latter case the perceptual details imagined are more informative (e.g., where was I happy, with whom) but also more ambiguous (e.g., is 'happiness' the right word to describe what I feel in the imagined scene? Does it fully capture the full spectrum of emotions felt in that episode?). So, variation in representational format of mental imagery to conduct narrative thinking may impact its end-product (i.e., the narrative self) and this may also be true for variation in the content rather than the format, as we will see in the next section.

Having suggested that not all instances of narrative thinking involve inner speech, the converse is also true: not all cases of inner speech are narrative. Just as not all overt utterances are used to convey or elaborate personal narratives, the same is true for inner speech. For example, labelling, which is a form of inner speech consisting in one or few words recruited to categorize stimuli, may not count as narrative thinking. To do so, the content of inner speech episodes must involve a narrative, or part of it. In the next section, I consider how different kinds of inner speech episodes relate to the construction of the narrative self.

5 Subtypes of Inner Speech Episodes in Relation to Narrative Self-understanding

The evidence presented so far suggests that inner speech is involved in creating a narrative identity through its role in autobiographical reasoning. Whereas in the previous section I contrasted linguistic to imagistic mental imagery, here the focus is on inner speech and the various forms it can assume. In fact, inner speech is a protean phenomenon, distinguished in many subtypes. In this section, the focus is on how different kinds of inner speech episodes relate to variations in the development of a narrative self, to provide further support to the hypothesis that inner speech may be involved in narrative self-understanding.

It has been shown, using questionnaires, that different kinds of inner speech episodes correlate with various psychological traits. More specifically, the Varieties of Inner Speech Questionnaire (VISQ) and its revised version (VISQ-R) identify four (five for the VISQ-R) categories for inner speech: (1) *dialogicality*, i.e., how much the episode resemble a conversation; (2) *evaluative/motivational inner speech*; (3) *other people in inner speech*, i.e., when it assumes phonological features of known or unknown persons; and (4) *condensation of inner speech*, i.e., when it lacks some components present in outer speech (the fifth, added in VISQ-R, is *positive/regulatory inner speech*).

The findings of the VISQ show a positive correlation between *other people in inner speech* and anxiety and depression, *evaluative inner speech* predicts lower global

self-esteem (Alderson-Day et al. 2014) and it is positively associated to anxiety and depression, while *dialogic inner speech* predicts auditory hallucination-proneness (McCarthy-Jones and Fernyhough 2011). These results have been confirmed in the Non-WEIRD population in other studies (Ren et al. 2016)[1].

Moreover, results of the VISQ are not the only empirical measures to show the relation between inner speech and psychological traits. Verbal rumination, a kind of inner speech characterized by frequent, intrusive episodes with negative content, fosters the development of and exacerbates depression, anxiety, binge eating, binge drinking and self-harm (Nolen-Hoeksema et al. 2008). So that rumination has been targeted in modern cognitive and behavioural therapies (Watkins 2016).

These studies are far from establishing definitively a causal relation between the factors taken into consideration and psychological traits, and more empirical evidence is required to avoid jumping to conclusions. Moreover, as with most studies based on introspective data, one could question the reliability of self-reports given the variety of reasons to be sceptical about introspective methods, even when refined (see Hurlburt and Schwitzgebel 2007, for a discussion).

With this proviso, these results, if further corroborated, may be suggestive of the different roles played by various kinds of inner speech episodes in the formation and maintenance of a narrative sense of self. A good example of this provided by the VISQ is the noted correlation between evaluative inner speech and low self-esteem. Speculatively, an above-average number of evaluative inner speech episodes may be reflective of, and in turn reinforce an overly critical attitude towards one's identity and one's past. This attitude – reinforced by frequent critical self-judgments – contributes to the construction of overall negative and pessimistic self-narratives, which result in what is classified by experimental psychologists as low self-esteem. In other words, the narrative self may mediate the relationship between some inner speech episodes and some psychological traits.

6 Narrative Self-enactment

So far, the discussion has been limited to the role of inner speech in narrative self-understanding, i.e., its role in structuring the description of one's own life and identity as a story. In relation to the narrative dimension of selfhood, there is another function of inner speech and language, to take into consideration. Rather than telling one's own story and playing the part of the narrator, language can also be used to express an underlying self-narrative and interpret the role of its main character. While materially the same, in such cases, narrator and main character are functionally distinguishable: the former tells the story, whereas the latter is part of it. Narrative self-understanding plays an interpretative and constructive role, it leads to a broader understanding of significant events "by embedding them in a larger stream of experiences with which

[1] In recent times, psychologists have turned their attention to the fact that most of the experimental studies - around 9% - are done in WEIRD countries (Western, educated, industrialized, rich and democratic), while their populations amount to around 12% of the global population and are generally non-representative samples (Arnett 2008).

they are meaningfully, rather than merely causally, connected" (Brandon 2016, p. 76). For example, coming to understand a painful breakup as a necessary step to then meet your soulmate.

Narrative self-enactment, on the other hand, is about playing the part that you attribute to yourself, for example by continuously making jokes because you are the prankster of the group. The concept of narrative self-enactment is captured in everyday language in expressions such as "behaving or saying things in/out of character", which refers to the (non-) adherence of the agents' behaviours to their narrative identities. In this sense, the notion of narrative self-enactment serves to illustrate Brandon's claim that "Our narrative self-understanding often functions implicitly, but it can become (partly) explicit, for example, upon questioning – either by someone else or by oneself" (2016, p. 76).

For what concerns instances of inner speaking, narrative self-enactment does not involve the rehearsal of an autobiographical narrative, but only of some characteristics or features attributed to the self-concept on the basis of previous acts of narrative self-understanding. Turning to the distinction introduced in Sect. 2 between life story and self-concept, what is enacted are typically features of the latter. Whereas in narrative self-understanding the interrelation between these two constructs is explored explicitly, in narrative self-enactment the narrative remains implicit, having done, so to say, its job in influencing one's self-conception.

An overly simplified and abstract understanding of the relation between narrative self-understanding and narrative self-enactment is that of considering the former activity as the cause or creation of a narrative identity, while the latter as its effect or manifestation. But there are various elements that complicate this picture. One is that some actions labelable as narrative self-enactment may provide the material for further elaborating and confirming one's own self-image, thus creating a feedback loop, that is, a circular – rather than linear – process.

Moreover, not all behaviours are aligned with one's perceived identity: some may be transgressions of one's own self-image and some may be trivial and irrelevant. More generally, while cases of narrative self-enactment confirm one's narrative identity, there can be experiences that are neutral or even challenge it. Neutral experiences are simply not deemed relevant and do not make a difference with respect to the narrative self. These may be habitual and routine actions such as taking out the trash or driving a car. Challenging experiences are those that resist being integrated in one's narrative identity. They can either be ignored or require engaging in narrative self-understanding to accommodate the challenging experiences. If I believe myself to be honest and loyal, for example, but I find myself cheating all the time, it may be time to reassess my narrative self. Generally, it is safe to assume individual variation in the degree to which persons act in accordance with their narrative self, as well as in the degree they are sensible to inconsistencies.

Another complication is that some instances may be interpreted as both cases of narrative self-enactment and narrative self-understanding. By forgiving somebody for example, I may be demonstrating my self-attributed benevolence – thus enacting a certain narrative –, but I am also recasting a past event in a different light, thus engaging in narrative self-understanding. It follows that, while conceptually the two may be easily distinguishable, and so are the paradigmatic examples of each, in

practice they often overlap. As such, pure self-understanding and pure self-enactment can be seen as two extreme poles on a continuum. At one extreme there is armchair autobiographical reflection and at the other unreflective, online action through which one's own self-image is manifested. In the middle, there are instances such as ruminative episodes, which can be considered as forms of self-reflection but are also the inner expression of a (negatively connotated, in the case of rumination) narrative self.

In the following two sections I consider two examples of narrative self-enactment in inner speech, the first one drawn from the literature on positive self-talk in various performances and the second from experiments on stereotype threat. The aim is two-fold: (1) providing empirical grounding to the concept of narrative self-enactment; (2) attesting to the effects of narratives on behaviours and embodied responsiveness.

6.1 Narrative Self-enactment Through Positive Self-talk

Most empirical research on the effect and role of self-talk has been conducted in sport psychology starting from the early 1980s. Curiously, until recently, these studies have proceeded almost in parallel to research on inner speech. The aim of this research has been that of measuring the impact of self-produced verbal cues on performance. Given the number of studies conducted on the topic, it is now possible to conclude that some forms of self-talk have a positive effect on performances (Kahrović et al. 2014).

Many factors that may alter the effectiveness of self-talk have been identified in the literature (Hatzigeorgiadis et al. 2011). According to a meta-analysis of 37 studies, these factors are: task characteristics (novel or learned tasks and tasks requiring fine or gross motor skills), self-talk characteristics (overt self-talk or inner speech, assigned or self-selected cues, motivational or instructional self-talk, positive or negative content), characteristics of the participants (novices or experts), and characteristics of intervention (whether participants were trained in advance to use of self-talk and if so, for how long). The same meta-analysis showed that overtness is a non-significant factor on performance, thus I take inner speech and overt self-talk as functionally equivalent in this regard (p. 352) and I will use them interchangeably in this section.

As for the content, only positive/negative self-talk episodes are instances of narrative self-enactment, since both positive and negative self-talk often concern aspects related to personal narratives. On the contrary, instructional self-talk (i.e., statements employed to facilitate performance by eliciting desired actions, e.g., "move the left pieces 90 degrees to the right") clearly is not, since no elements of one's own identity are involved.

An indication that these episodes of self-talk are a form of narrative self-enactment comes from empirical research showing that in order to be effective, self-talk needs to be truly reflective of the person's self-image. For instance, a series of experiments measured the effect of positive self-statement (e.g., "I am a lovable person") in a group of people scoring high in self-esteem measure and in a group of people scoring low (Wood et al. 2009). What emerged is that people with high self-esteem felt better after rehearsing positive self-statements, while the contrary was true for the other group: people with low self-esteem not only did not benefit from positive

self-statement, but they reported feeling worse as a result. This phenomenon, akin to that of self-talk dissonance (Van Raalte et al. 2016), suggests that self-talk needs to be genuinely expressive of the person's beliefs about herself (which are part of her narrative self) to be effective. In other words, the evidence suggests that, contra to the aphorism 'fake it until you make it', narrative self-enactment is not beneficial when faked.

Indeed, one suggested underlying mechanism is that by rehearsing positive self-statements when the content does not match one's own perceived identity, the difference between the implicit self-image and what is told becomes salient (Wood et al. 2009). This means that, for example, telling yourself "I am a wonderful person", when you know this is not the case, makes the difference between what is told and what is the believed target of attentional resources. This does not happen when the content of verbal encouragement refers to the activity itself rather than to personal qualities. This explanation is supported by experiments showing that children engaging in self-talk focused on effort (e.g., "I will do my best"), which does not relate to their narrative identity, improve their mathematical performance. On the contrary, self-talk focused on children's ability (e.g., "I am very good at this"), which relates to their narrative identity, has no effect or even causes a drop in performance, particularly when children have negative competence beliefs, i.e., they do not really believe they are good at math (Thomaes et al. 2019). This suggests that when the narrative enactment of a positive self-image is forced, rather than genuine, it may lead to counterproductive results.[2]

Moreover, since the narrative identity is to some degree dependent on our social interactions, narrative self-enactment is too. This is especially evident in the case of children, who are yet to elaborate coherent personal narratives (Habermas and Paha 2001) and are thus particularly influenceable. Empirical evidence seems to be at least preliminarily supportive of such a view: Burnett (1996) collected self-reported data on self-talk from a sample of 675 school children in grades 3–7. He concluded that the use of appraisal or negative comments from significant adult figures (parents or teachers) is predictive of the type of self-talk used by children. This experiment suggests that receiving frequent negative remarks may result in a higher frequency of negative self-statement. When one's identity is often depicted negatively by others and the negative remarks are integrated within the narrative self, narrative self-enactment reflects it.

6.2 Narrative Self-enactment in Stereotype Threat

Another example of narrative self-enactment in inner speech can be found in cases of stereotype threat. It is "the fear or anxiety of confirming a negative stereotype about one's social group (e.g., women are bad at math)" (Casad and Bryant 2016, p.1). The typical experiment to measure it unfolds as follows: before the completion of

[2] This is not to deny that it is possible to modify the beliefs about one's identity and personal narratives by enacting the desired self-image. Indeed, schema therapy briefly discussed in Sect. 2 is based on the idea that such changes are possible. Over time one may manage to convince herself or himself: 'Fake it until you make it' approach may work, but it takes time.

the task, the condition group is reminded about a stereotype involving a group that the person belongs to and the task to be performed, then the results of this group are confronted with those of a control group. For example, a common experiment is that of asking women to perform mathematical tasks after having reminded them that men are (allegedly) better at mathematics. In such cases, women typically perform worse than the control group (i.e., women who have not been told about the stereotype beforehand).

How does it happen? According to a well-supported hypothesis (Cadinu et al. 2005; DeStefano and LeFevre 2004), stereotype threat affects performances by causing intrusive and negative thoughts which tax the working memory system and more specifically the phonological loop. The phonological loop, being so occupied, cannot be used for goal-directed and task-relevant purposes. This hypothesis stems from the fact that the more a task relies on the use of inner speech (or verbal thought or the content of the phonological loop), the more it is affected by stereotype threat (Beilock et al. 2007). Additionally, by asking subjects to write down their thoughts during the task, Cadinu and colleagues (2005) have shown that most of those thoughts are negative verbal thoughts regarding personal qualities in relation to the task, such as "These exercises are too difficult for me", "I am not good at math" etc.

From these results we can conclude that: "stereotype threat likely affects a combination of phonological loop functioning (via verbal thoughts and worries) and probably some central executive functioning (via attempts to suppress such thoughts and to focus on the task at hand)"(Beilock et al. 2007, p. 273). Accordingly, anxiety and fear, during the task, manifest themselves through inner speech, in the form of intrusive verbal thoughts which often refer to one's abilities, or lack thereof. The result is that inner speech (or the articulatory component of phonological loop) is too busy with negative thoughts to be available for goal-directed, task-relevant use and the performance suffers from this.

7 Implications for the Debate on Selfhood

The aim of this paper is to provide an overview of the functions of self-talk or inner speech in relation to the narrative self. Besides discussing the role of inner speech in composing autobiographical narratives, I have proposed another function of inner speech: that of enacting personal narratives. The distinction between the two functions is similar to that between narrator and character: the former elaborates a narrative; the latter embodies, enacts and displays those characteristics that the narrative attributes to it.

In order to substantiate this proposal, I have provided two cases of narrative self-enactment through inner speech, drawing from the existing psychological literature. Such cases consist in empirically grounded instances of autobiographical narratives affecting experiences and behaviour; thus, they provide a positive answer to the question on which part of debate has been focused on: whether the conceptualization or description of one's self (i.e. the narrative self) influences the embodied self.

Although the studies cited in relation to narrative self-enactment are focused on measuring behaviour and thus do not directly show that the lived bodily experience

of the subjects involved (or embodied aspect of the self) is affected, it is plausible to think that the measured effect on behaviour are concomitant with changes in the lived experience and embodied responsiveness. For example, in the case of stereotype threat, the anxiety caused by the stereotype manifests itself in form of intrusive thoughts which obscure other possibility for actions and make it hard to freely think in a task-sensitive manner, but it plausibly also manifests itself in the form of other embodied and phenomenological aspects associated with anxiety and fear, such as emotional and physiological aspects. In other words, although the literature on stereotype threat and positive self-talk referred to is more concerned with measuring the impact of inner speech on performances or behaviours, it is plausible to think that in both cases, such effects on behaviour take place jointly with shifts in lived experience, of which intrusive thoughts formulated in inner speech is one aspect.

Indeed, episodes of stereotype threat are good examples of how the narrative self relates to the lived bodily experience (or embodied self), in so far as elements of one's own narrative identity (i.e., group membership) mixed with a cultural construct (i.e., the stereotype) become salient and disrupt the normal functioning of working memory in performing the task, causing a change in felt, bodily experience. Indeed, a condition for stereotype threat to arise is that the person self-identifies as belonging to the group mentioned in the stereotype, i.e., that the stereotype is relevant in relation to her own narrative identity. In other words, in both the examples considered a certain underlying personal narrative is a necessary background condition for stereotype threat to arise, as well as for positive self-talk to be effective. In these cases, the narrative self prompts inner speech episodes and shapes their content, while also being a relevant factor for the effects produced by these episodes.

Moreover, the two examples of positive self-talk and stereotype threat show an important difference between narrative self-understanding and narrative self-enactment: the former is typically a reflective, deliberative, offline and metacognitive endeavour, whereas the latter is often unreflective, unintentional, online and involuntary. Consequently, narrative self-enactment hardly fits into the distinction between a linguistic, deliberative and contemplative narrative self and a prelinguistic, bodily and experiential self. It appears insufficient to distinguish between a "pre-narrative embodied experience" (Menary 2008, p. 65) and the linguistic narrative self. Instances of narrative self-enactment through inner speech are linguistic, but not contemplative nor deliberative, and the experiential and affective components are crucial in the description of the phenomenon. They show that it is not only the case – following Menary (2008) – that the narrative self is embodied, rather than an abstract entity, but also that the embodied experience is – at times – tightly interwoven and affected by underlying autobiographical narratives.

Ultimately, this paper intends to complement existing work on the role of inner speech for self-understanding while also introducing the novel idea that inner speech can enact self-narratives. In doing so, I surveyed the empirical literature to exemplify both concepts, while contextualizing their implications in the philosophical debate.

Further research is needed both on the empirical and theoretical side. In the former cases, the challenge will be that of assessing the usefulness of the notion of narrative enactment in, e.g., explaining behavioural and experiential differences between genuine and faked cases of narrative self-enactment or to assess the effect that repeated

narrative self-enactment can have on the narrative identity. As for the theoretical debate, more work needs to be done in order to answer recent skeptical challenges to the concept of narrative thinking (Fabry 2021) as well as to consider other, ignored ways in which self-talk and inner speech relate to personal identity.

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