

## REVIEW ARTICLE

# Reality Monitoring and Autobiographical Memory: Negotiating the Self

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**Abstract**

The contemporary study of memory has greatly benefited from recent findings in neuroscience and psychology showing that memory is a highly flexible, contextualized and yet, reliable enough system, composed of different types of functions that contribute to the formation of a personal perspective that balances accuracy and personal relevance. How exactly is this balance achieved and what is the contribution of society, language and culture in its development? Although this paper discusses some of the recent findings on memory, its main focus is on evaluating them within a larger perspective. Memory has been a central issue in the humanities, literature, and the history of psychology. The dynamics of inner speech and narrative, analyzed from a theoretical and historical point of view, provide key insights for the interpretation of contemporary findings in the light of previous theories of memory, consciousness, and the influence of language on both. Collective memory, different forms of memory-monitoring, and the interaction between episodic and autobiographical memory are discussed. The main proposal of the paper is that episodic memory plays an intermediary role between collective and autobiographical memory. Previous views on memory suppression and intrusion are analyzed in the context of such intermediation.

**Keywords:** Collective Memory, Depersonalization, Autobiographical Memory, Inner Speech, Narrative

**Introduction**

There is a conflict, intensified in modern societies, between individual or private memory evaluation, and collective or public forms of memory control. There is, obviously, a lot in between. The individual is not “by herself” and the collective is not monolithic—they are both nested in a mul-

tiplicity of narratives and groups. Some of the collective controls on memory are now automated, global, industrialized, and largely dependent on commercial interests. Others are ancient, dependent on religious tradition, resistant to change, and powerfully engrained in the still diverse forms of life of millions of people. This conflict between traditional forms of collective memory con-

trol and new forms of corporatized memory will become more exacerbated with our increased reliance on technology and artificial intelligence.

Other areas of conflict regarding memory control concern the clash between governmental forms of memory regulation and the resistance or memory activism of civil society (e.g., the promotion of certain national narratives that are incompatible with historical facts; the imposition of certain memories at the cost of other memories, which are more important to unprivileged groups; the control over memory-evaluation and generational legacy). Here the conflict is between the State's bureaucratic power and civil society groups that have alternative ways to recount and explain the past. In between, here as well, there is a lot of nuance, including the valuable contribution of memory activists between States and individual groups (see Wüstenberg, 2017).

These are important issues that bear on our current political realities, and they present unprecedented challenges for the study of collective memory and its influence on the psychology of individuals. I shall focus on an issue that is more germane to psychology and neuroscience, and which is going to be crucial for future debates on these topics, namely, the way in which the re-contextualization of episodic and autobiographical memories balances two types of memory-monitoring: collective and private. The proposal defended here is that we monitor "what is real" in our memories through episodic memory, in highly complex ways, described below, and that besides this, we monitor "what is valuable for us", through autobiographical memory. It is because of the impact of autobiographical memories on the process of re-contextualizing memory that the overall monitoring of what is real in memory becomes intertwined with the personal significance of memory—we always reminisce in a place that is somewhere in between the personal and the collective.

How to resolve the tension between the private and the public in memory? This question has two answers. Empirically, the answer will depend on what exactly is the mechanism for memory re-consolidation and re-contextualization in the brain, and how this mechanism explains the negotiation between reality monitoring and personal meaning (see for instance Nadel, et al., 2000; Lane, et al., 2015). A variety of tradeoffs must be satisfied in order to achieve a stable balance between reliability and personal value (Montemayor, 2015, 2016, 2018a). Theoretically, the answer depends on how this conflict is resolved in a human being's conscious awareness. It is to this latter question that I devote my attention.

The question of how this tension is resolved in conscious awareness must be addressed with a careful examination of two topics, which are rarely investigated in relation to one another. One of them is the difference between autobiographical memory and episodic memory. A proposal that helps solve the tension between the collective and the personal aspects of memory is that autobiographical memory is necessarily conscious and that it constantly solves the problem of which memories are personally valuable; by contrast, episodic memory, with its temporally framed introspective function, verifies the collective and reliable aspects of memory (Montemayor, 2017, 2018a). This distinction is explained in the following sections, with a special emphasis on the role of narrative and inner speech.<sup>1</sup>

The other topic is depersonalization. For the present purposes this term can be defined quite generally, as a feeling of personal alienation or unreality (Radovic and Radovic, 2002). The advantage of this general

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<sup>1</sup> For the importance of inner speech in cognitive development see Vygotsky (2012); for a recent theoretical assessment of the extent and nature of inner speech see Hurlburt (2006).

definition is that it allows for different forms of depersonalization, regardless of whether they are considered normal or pathological. Some forms of depersonalization may actually play an active and positive role in the balance between individual and collective memory. Depersonalization in this sense, means that the process through which we “internalize” a memory might depend partly on changes concerning feelings underlying how a memory turns from a “neutral” event that simply occurred to one that acquires enormous personal significance, and vice versa.

I first address the difference between episodic and autobiographical memory, emphasizing the narrative and evaluative role of autobiographical memory reconsolidation in achieving a balance between two sources of control for memory-monitoring (personal and collective). I then examine the topic of depersonalization in memory, and explore the relation between these two topics, namely autobiographical memory and depersonalization, in the context of more general difficulties concerning consciousness, collective memory, and the mechanisms of suppression and intrusion.

### **Autobiographical and Collective Memories**

We share with many other species the basic mechanisms for recollection. For instance, the circadian clock system for time-keeping is fundamental for most forms of life, and it constrains the way in which we perceive time, remember the past, and plan for the future. The interval clock system is used by a wide variety of species, including humans. These are mechanisms that play a significant role in episodic memory, decision-making, motor control, and mental representation (Montemayor, 2010, 2013). We keep track of time in many automatic and unconscious ways, but our awareness of time differs because the metric features

of time (e.g., duration, time order and simultaneity) are integrated into an empathically and viscerally relevant unity of conscious awareness, rather than a merely metrically structured sequence of events (Montemayor, 2017).

Although it is not entirely uncontroversial, a similar distinction is justified with respect to the memory system. According to this account, conscious memory is narratively structured, and corresponds to autobiographical memory. Episodic and semantic memory give us conscious access to information, and they are components of the memory system with specific epistemic functions. In particular, the trace integration in those systems, based on the structure of external events and propositional contents, differs from autobiographical memory (Montemayor and Haladjian, 2015; Montemayor, 2018a).

More important for the present purposes, the memory system needs to satisfy tradeoffs concerning accuracy, detail and flexibility, but for autobiographical memory, the most important tradeoff is between personal value and strict accuracy. The memory system must be *reliable enough* for the purposes of communication and testimony, but also *insightful enough* for an individual and her personal context, in order for her to value these memories as something that really matters to her. This tradeoff involves the function of memory-monitoring at the personal level. The capacity to justify beliefs about the past, however, does not concern monitoring the personal value of memories. The fundamental constraint on episodic memory is that the control for its accuracy is publically determined, and it is the basis for collective coordination and testimony (Mahr and Csibra, 2017).

Reality monitoring (the reliable process through which the veridicality of a memory is determined) is a critical function of episodic memory. Episodic memory is “auto-

noetic” because it informs us about events that occurred to us in the past, but it cannot fully inform us about which memories are ranked as the most important for us, in terms of personal value. Mahr and Csibra (2017) have explained and documented extensively how the episodic memory system affords a specific type of epistemic attitude towards the simulation of an event, which provides knowledge of such an event and an indexed representation that such an event occurred to us. On this account, episodic memory is a source of epistemic justification, which serves to justify beliefs; it also plays the essential role of providing a personal type of reality monitoring, which is based on information that we collectively share with others. Autobiographical memory, on a different account in which it is not reducible to the functions of the episodic memory system (Montemayor, 2018a), must strike a balance between strict reality monitoring and the internal monitoring of what we value about our memories, in terms of a personal narrative. This is a personal tradeoff that might best be understood in terms of the dissociation between consciousness and attention (Montemayor and Haladjian, 2015).

These aspects of memory-monitoring, constrained by veridicality and personal value, present the possibility that episodic memory serves as the “intermediary” between individual and collective memory functions. Accordingly, the most truly private aspect of our memories can only be determined by the narrative function of autobiographical memory. The personal value of memories does not entirely depend on accuracy (for instance, we value dreams because of their personal insightfulness, even though the events in a dream are not real, and are identified as such by the reality-monitoring function—the work of Freud on this topic is discussed below). Thus, the risks of confabulation, if the narrative function is “left alone,” are significant. Human memory strikes a fine balance between accuracy and

personal value. But it does so in personal and collective ways, which involve types of memory depersonalization, as described in the subsequent sections.

Suppose the distinction between episodic and autobiographical memory is accepted, and that its role in memory formation and reconsolidation is verified. What is the role of collective memory in the interaction between episodic and autobiographical memory? Collective memory, as Maurice Halbwachs (1992) explained, is multiply layered (e.g., it involves memories of our family, religious group, culture, and social class). Our membership to groups, which has become more complex with the advancement of intricately connected modern societies as well as rapid means of communication, has a powerful impact on our memories, including our personal narratives. Here, collective narratives frame what we value and in turn, our personal narratives become adjusted to the values of the groups we are members of.

However, the most basic role of collective memory cannot be merely one in which we learn how to value certain events as parts of our personal narrative (this ultimately depends on the personal and private autobiographical function of memory, which is not dependent on collective forms of memory control). Rather, as Halbwachs emphasized in his important book, the central role of collective memory is to monitor the *veracity* of events that constitute the collective past. From families to entire nations, collective memories are systematically and even bureaucratically consolidated, repeated through rituals and public events, and confirmed through this ritualization and official repetition. They are also interpreted, according to historical, sociological and anthropological principles. This collaborative effort concerning the collective reliability of memory involves a *transactive memory* processes, a term introduced by Daniel Wegner (1987). The collective memory of groups and organizations is characterized

by this transactive and collective type of reality monitoring, from the small scale of families to the large scale of institutions and States.

Because of its essentially epistemic functions, the episodic memory system is ideally poised to function as the *intermediary* between autobiographical memory and various forms of collective memory. By serving as a source of justification for beliefs about the past, and as the basis for epistemic authority concerning what happened to us in relation to verifiable events we share with others, episodic memory is a fundamental ingredient in collective testimony, and it is crucial to create the fabric of trust that institutions and groups depend on. At large scales, it is this kind of trust that enables successful and reliable communication.

Collective memory constitutes a historical type of reality monitoring about events that are important because of the groups we belong to. This is genuine “reality monitoring,” as defined by Johnson and Raye (1981) and Johnson (1991): the vigilance and maintenance of reliable information concerning the causal origin of the content of memories. Two types of monitoring are at work in the mediation of episodic memory between collective and autobiographical memory. On the one hand, we value collective memories because of reliable communication, and also because of how we share them with the groups we belong to, which partially determine our place in these groups and how we are perceived in society. On the other hand, we most fundamentally cherish memories that we find personally valuable, because of their autobiographical individuality—they define who we are at a *personal* level.

These unique aspects of human memory pull in opposite directions and this constant tension justifies an analysis of human memory in terms of tradeoffs concerning

accuracy and narrative value (Montemayor, 2015, 2016; Montemayor and Haladjian, 2015). This analysis must include the functions of collective and personal memory-monitoring. In particular, reality monitoring of a collective kind may be experienced by the subject as an *alien authority* on the personal monitoring function of memory, which can suppress memories or intrude in the processing of a personal and private memory, as explained in more detail below. Suppression or intrusion of this kind may have a powerful and potentially damaging effect on the autobiographical function of memory and yet, they are indispensable for collectively keeping track of accurate information about the past.

The psychologist Julian Jaynes (1976/2000) proposed a controversial view of consciousness, which I do not endorse, and which is understandably unpopular in consciousness studies. It is unfortunate, however, that Jaynes is narrowly interpreted as a scholar of consciousness (particularly, what philosophers call “phenomenal consciousness” or the subjective character of experience that gives it its unique phenomenology) because Jaynes provided very important insights concerning the uniqueness of human memory.<sup>2</sup> He was especially interested in the experience of alienation

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<sup>2</sup> There are many other problems with Jaynes’ theory, besides its implausible account of consciousness. Perhaps the biggest scientific difficulty with his theory is its incompatibility with what we know about the evolution of the human brain and what he says about bicameralism. I shall not delve into these difficulties here, which would just distract from the merits of Jaynes’ view with respect to the issue of memory. To be completely clear: I do not endorse Jaynes’ account of phenomenal consciousness; however, I believe Jaynes made important contributions to the topic of collective memory, particularly with respect to the issue of depersonalization in memory.

that comes with collective forms of memory-monitoring, suppression, and intrusion.

In particular, Jaynes emphasized how once memories became less *depersonalized* in the evolution of human psychology, they opened possibilities that transformed the way we think about the world and ourselves. According to him, for most of our evolution, we probably had no genuinely personal or autobiographical recollections, and operated in a largely depersonalized fashion, in the sense that even though recollections were framed by collective narratives and accurate information, they were not framed in terms of a meaningful personal narrative—we simply responded to recollections. Interestingly, Jaynes (2000) proposed that we experienced collective and historically determined memories in terms of a paradoxical kind of *inner speech* that was, in spite of being internally produced, experienced as alien or external to us. He gives examples of divinities talking to people, with abundant sources from literature, as illustrations of this phenomenon. The accuracy or inaccuracy of what was simply given to us in our minds was not the result of collective reality monitoring. We were merely following these messages almost automatically, tagging events in terms of a succession that was commanded by external sources. Jaynes associates this depersonalized type of memory with unconsciousness.

Jaynes thought that once we overcame this situation, a complex combination of much more personal memories—now genuinely personal memories associated with *authentic inner speech*—and *genuinely collective* ones that we reliably shared with others, radically modified all of our cognitive functions, putting some of them under tremendous stress and at the same time, optimizing new ways of planning and thinking. This is, according to Jaynes, a staple of *human conscious memory*, namely the tension between

the uniquely personal and the vastly collective.

Jaynes described the lack of conscious memory capacities as follows: “Ancient man did not live in a frame of past happenings and future possibilities as we do. He had no notion of a lifetime stretching between birth and death as we do [...] mankind learned on the basis of linguistic metaphor a new kind of mentality, consciousness.” (Jaynes, 2012, 199-120). The new human mentality, according to Jaynes “consciousness,” is described here as the result of new memory capacities, which involve our *personal* lifetimes and the openness of the *collective* past and future.

It is interesting that this new type of conscious memory is also described in terms of the capacities for language and metaphor. This is, as I shall now argue, Jaynes’ deepest insight. On the one hand, language allows for reliable communication, assertion, and epistemic authority based on knowledge of the past, in relation to the future. These are the reality monitoring functions of episodic memory. On the other hand, metaphor and language, in the form of genuine inner speech, provided the possibility of generating a meaningful narrative in which a *person* lives through vivid and important memories that are richly relevant to her alone. This is the narrative function of autobiographical memory. The transaction between collective forms of memory and this personal function of autobiographical memory depends on the mediation of episodic memory, as an epistemic control for the accuracy of the narrative function.

### **Language, Memory and Depersonalization**

As mentioned, formats for temporally representing time in episodic memory exploit old systems, such as the circadian and interval clocks, which have non-linguistic

and metrically based formats of representation (Montemayor and Balci, 2007; Montemayor, 2010 and 2013). With language, humans acquired an enormously powerful format of representation, with syntactic-recursive functions that map onto a vast number of contents, and immense possibilities for communicative nuance. The influence of language does not affect the early forms of time perception, concerned with sensorial duration and simultaneity, but language has a powerful effect on our memories—incidentally, this might be the right way to interpret the scope of the Whorfian hypothesis, namely the claim that language determines thought (Montemayor, 2018b; see also Montemayor and Haladjian, 2017).

Jaynes emphasized the importance of these new, linguistic formats of representation, as well as their interaction with previous and more ancient forms of memory. He was particularly interested in how language (with its public accuracy functions, for instance through testimony and the speech act of assertion) and narratives (with their impact on personal autobiography) created an entirely new type of conscious mentality—a vastly new “space” for action. Jaynes wrote:

For the first time, a man could “know himself,” could remember, not simply *know that* or *know how*. For the first time, he could “see” what he had done and grope for what he should do in a mind-space generated out of metaphor. [...] But with this new ability to reexperience the past in a spatialized time, to remember and plan and narratize, comes a troop of new complications, some of which are still erupting into the difficulties of modern conscious life. Our innate genetically determined emotions that we share with most mammals are

changed dramatically (Jaynes, 2012, 120).

Jaynes is right about the importance of language and metaphor, but he did not distinguish between phenomenal consciousness (the subjective character of experience) and other forms of cognition, such as accessing information for control, thought and action (Block, 1995, 1997). The dissociation between consciousness and attention helps elucidate how these new capacities evolved and interact in the human species (Haladjian and Montemayor, 2015). However, the most important point Jaynes is making is quite valid, namely, that the influence of language on memory is extremely important for *both* the reality monitoring function of memory and the personal value we assign to autobiographical memory. This is an extremely important issue that needs to be studied in more detail.

The episodic memory system has its ancient foundations in the capacities of animals to represent the past and predict events in the future (Gallistel, 1990). So how exactly was language—arguably a uniquely human capacity (see Berwick and Chomsky, 2016)—such a major factor in the development of new forms of reality monitoring that transformed episodic memory? One possibility is that episodic memory became a collectively shared form of evidence-updating by means of the propositionally-framed format of representation that language provided. This new format offered access to a vast amount of cognitive contents that can be publically verified to be true, through testimony and assertion, and which can be challenged, updated, and confirmed by others through *joint attention* (Bruner, 1983, 2015). Thus, access consciousness, or access to information, is epistemically normative: one should believe the reliable information of adequate perceptual and memory processes (Fairweather and Montemayor, 2017). This function is properly

executed by episodic memory, which does not necessitate phenomenal consciousness, and must go beyond subjectivity and autobiography.

Autobiographical memory, however, was the most dramatic result of the impact of language on human memory, and cognition in general. Jaynes is not exaggerating when he says that this transformation set humanity apart from the rest of other species, and created a gulf between our hominid ancestors and ourselves. But it was not by generating an *epistemic framework* for shared testimony and assertion that this cognitive revolution occurred. It was by means of an *opposite process: an “inward turn of narrative”* to use Erich Kahler’s (1973) brilliant expression—the title of his remarkable book on the subject of introspective thought in the development of literature. Humans managed, through this inward process based on language, to create an inner realm vast enough to spin the yarn of autobiographical narrative.

Incidentally, Jaynes was not alone when he thought that this process was deeply associated with human awareness. As Joseph Frank says in the foreword to Kahler’s book: “...Kahler views the internalization of narrative—the movement from external action and epic adventure to the ever-deeper and more intense exploration of character and personality—as part of the general evolution of human consciousness as a whole.” (Frank, 1973, xiii).

An effect that this inward turn of narrative produced is that human cognition had to compensate for other crucial ways of experiencing the linguistic aspects of memory. The voice of the other’s testimony; the voice of the universal “commanding reason;” or even the voice of God or of various deities (the way Jaynes saw it)—they all had now to be balanced with the inexorable inner voice of autonomy and privacy. As this inner voice gained complexity and au-

thority, aspects of memory became *depersonalized* in the sense that by monitoring them as external, inner speech became “Janus-faced”: outwardly determined-inner speech is there to remind us of something we need to do, and it is public in nature, while inwardly produced-inner speech is there to “comment” or “resist,” along with many other cognitive activities that determine character and personality, all of which are private and shielded from the collective vigilance of testimony and assertion.

This type of depersonalization in memory created stress in our cognitive system, and it is patently present in disorders that involve memory intrusion and suppression. It also could be related to cognitive disorders which might have to be reevaluated as perhaps side effects of our evolution toward inward narrative, although this is a complex and controversial issue that I shall not discuss here. It suffices to say that authors like Jaynes, and Kahler in particular, have identified this development in the history of literature, and that certainly similar historical patterns may be identified in other cultural and artistic domains.

Much of our mental lives hinges on the balance between inward and outward subvocalized speech—inner speech that is experienced as authentically private, as opposed to inner speech that is experienced as external in origin or as publically imposed on us. Our very notion of *autonomy*, as Jaynes also emphasized, depends fundamentally on this balance. The ancients, according to Jaynes, simply followed the voices they heard, as an external and unconditioned *dictum*. We normally appeal to memory routines in which we do something very similar: we repeat things to ourselves in inner speech in order to guide our actions and not forget something important that has been determined collectively, but we do not necessarily experience this as an outward command. However, the dividing line between inward and outward is thin. Kant

famously defined the categorical imperative in terms of the obedience to a maxim or command that qualifies as universal and which is *given by the subject to herself*, so that the most private and unconstrained autonomy of the self, and the universal force of moral obligation, are one and the same—universally valid and deeply private.

There is no space here to examine the enormous importance of inner speech and memory in spiritual and philosophical traditions. It suffices to point out that this is a very rich topic, concerning the practices of confessing, praying, and repeating texts (both for remembrance and for ritualization). It is also deeply related to the religious interpretation of texts and to the metaphor of *listening* to the voice of the prophets or of God, which is written in order to be heard and obeyed. In a different, although not entirely unrelated context, judicial interpretation is frequently thought of as an exercise in understanding the intentions of the legislator, and of interpreting the text of the law as accurately and reasonably as possible—a process of “listening” as carefully as possible to the voice of the law and to the intentions behind it.

Episodic memory was expanded beyond its temporally framed structure towards the epistemic needs of our linguistically organized community. Here episodic memory became part of our epistemic practices of justifying claims about the past and imagining how these facts may affect the present and future. This is the outward aspect of episodic memory. Its inward aspect is that it mediates collective memories and narratives with the deeply personal narrative structure of autobiographical memory. Although autobiographical memory is independent in its function from episodic memory, it depends on episodic memory to accurately perform the functions of reality monitoring. But only autobiographical memory remains *essentially* private; it is the

main source of personal value in the memory system.

### The Inner Realm

The inner realm of conscious autobiographical memory and its narrative structure is not uniform. More precisely, the perspective of the first person is not uniform because of the complexity of narration and it is, in fact, constantly in the turmoil of the present. Memories experienced as unwanted, or as if from an alien perspective, are important ingredients of how our personal narrative becomes articulated and entrenched with collective memories and with events we might value or reject. There is a fair degree of intrusion and suppression in this negotiation, of daydreaming, planning and reinterpreting. We remember dreams in connection with our most cherished memories. But we keep the inner realm in good epistemic balance by the routines of reality monitoring, the mediating role of episodic memory and the regulation of adequate levels of intrusion and suppression.

Some memories feel less personal than others, in the sense that we either do not place any value in them or feel like they are not genuine parts of our narrative. The term “depersonalization” is defined in a specific way here: to refer to aspects of memory that are important for our daily lives but which we do not experience as part of our personal narrative. The more depersonalized our memories become, the more alienated our perspective becomes, leaning exclusively towards public evaluation. In the spectrum from full selfish-autonomy to complete lack of a personal narrative we find the struggles and negotiations of autobiographical memory. The risks of confabulating our narrative are significant, so different forms of reality monitoring must be in place. At the same time, a significant degree of flexibility must

be given to the narrative functions of autobiographical memory.

The way in which Jaynes understood these issues of balance and flexibility was through the varieties of inner voices that guide, and ultimately determine, our personality. Inner speech that was originally perceived as external is turned inwards, and eventually becomes *the source* of our autonomous and engaged first person perspective. Our attention became capable of being oriented towards “outer” and “inner” speech, through the functions of reality monitoring and narration. This divided self, half trapped in privacy, half exposed to the public (or some other combination within the spectrum just mentioned) generates a situation of cognitive stress. But this dissonant chorus of voices generated a vast landscape, a large theater of life, which Jaynes described in spatial terms as follows:

...With time metaphored as space, so like the space of our actual lives, a part of us solemnly keeps loitering behind, trying to visit past times as if they were actual spaces. Oh, what a temptation is there! The warm, sullen longing to return to scenes long vanished, to relive some past security or love, to redress some ancient wrong or redecide a past regret, or alter some ill-considered actions toward someone lost to our present lives, or to fill out past omissions—these are artifacts of our new remembering consciousness. Side effects. And they are waste and filler unless we use them to learn about ourselves. (Jaynes, 2012, 121)

The inner realm is spacious enough to accommodate many voices, scenarios and perspectives. The demand to learn about ourselves instead of accumulating the waste of recollection is a moral one: the proper function of autobiographical memory is to

provide a narrative we value, in large part because it is what gives us *moral standing*: it is what makes us morally significant and unique.

Ultimately, Jaynes concluded that we must confront these memories in the vast theater of recollection in order to find who we are. The manner in which this is done allows for enormous flexibility and transformative power. One can say, in confronting the past: “I was a different person back then, how could I have done that”? What was perfectly familiar at some point becomes foreign, alien, and depersonalized later. These are the personal encounters we have not only with our past selves, through recollection, but also with what we value about ourselves in general, from a moral point of view. But in this vast inner realm, one can also find the dramatic and surprising origin of the aesthetic value of recollection. The inner realm finds its finest expression. It is not waste and filler; it is recollection in the totality of time, hypostasized, turned into moral and aesthetic contemplation. Vladimir Nabokov (1951/1989), in his autobiographical book *Speak, Memory*, wrote:

I confess I do not believe in time. I like to fold my magic carpet, after use, in such a way as to superimpose one part of the pattern upon the other. Let visitors trip. And the highest enjoyment of timelessness—in a landscape selected at random—is when I stand among rare butterflies and their food plants. This is ecstasy, and behind the ecstasy is something else, which is hard to explain. It is like a momentary vacuum into which rushes all that I love. A sense of oneness with sun and stone. A thrill of gratitude to whom it may concern—to the contrapuntal genius of human fate or to the tender ghosts humoring a lucky mortal. (Nabokov, 1989, 139).

The inner realm can also be the source of endless joy. Our memories can become tender internal ghosts instead of rabid external monsters. The inward can turn sublime. The lesson from Jaynes about morality, therefore, holds for the aesthetic realm as well. Our inner lives are nothing but a “dumpster of memories” if we don’t *seek to encounter* the good in us, as well as the beautiful. If we are trapped in the public struggles of collective episodic memory, we lose track of what is morally good in ourselves and also of what is beautiful in our lives.

The psychological findings analyzed below show that the general structure of autobiographical memory indeed involves complex tradeoffs, forms of intrusion, suppression and emotional biases. These findings show how regret, narrative effects, and personally meaningful memories are balanced with reality monitoring. This balance determines a ranking of memories that constitute who we are in terms of what we value the most.

### **The Accuracy and Personal Value of Memory**

Reality monitoring in episodic memory provides accurate information about the past, from our perspective, so that we can plan for the future by, for instance, simulating those events. These are crucial aspects of episodic memory that allow it to serve as the interface between collective memory, including collective forms of reality monitoring and autobiographical memory, the deeply personal type of memory that provides moral and aesthetic value to memories we cherish, fear and consider essential aspects of who we are.

The event-ordering and agent-involving functions of episodic memory interface with language through explicit judgment, and with autobiographical memory through subjective experiences, producing interest-

ing effects for short and long-term personal evaluations. For example, there is an asymmetry between judgments concerning regret, which shows that our inner voice concerning remorse changes with time. Short-term regrets are about actions; long-term regrets are about omissions (Kahneman and Tversky, 1982). This “fading affect bias” focuses our attention on external consequences and frames autobiographical memory accordingly. Interestingly, this regret-effect varies if it is experienced privately or in interpersonal contexts, and it seems to vary culturally as well (Komiya, A. et al., 2011).

Regarding accuracy, Loftus (1975, 2005) showed that people report false information if they receive misleading cues during recall. We seem to be biased toward meaning-completion, many times at the cost of reality monitoring, but clearly within safe enough bounds. Findings confirming this effect show that recollection depends on overall plausibility and narrative coherence (Brainerd and Reyna, 2005; Goff and Roediger, 1998; Hyman et al., 1995; Lindsay et al., 2004).

There are two possible interpretations of these findings. One of them is that human memory is unreliable. An alternative interpretation is that this kind of “unreliability” is actually the result of a vital function of human memory: the narrative function of autobiographical memory described above. Healthy patients systematically distort memories—significantly more than impaired patients with amnesia and other impairments (Schacter, Verfaillie and Pradere, 1996). It is plausible, therefore, that memory distortions based on narrative effects are beneficial (Schacter, Guerin and Jacques, 2011), even if they lead to forms of confabulation that are tolerable if reality monitoring works adequately in general. One can go further, following Jaynes. It is in virtue of these effects *that one can find moral and aesthetic value in memory*.

It seems perplexing to postulate that memory would have the function to confabulate in beneficial ways. Confabulation is, after all, a cognitive deficiency. But this is not so perplexing if there is a tradeoff between accuracy and personal value that human memory is designed to balance. Human memories need to be accurate enough to provide reliable guidance, but they also need to be insightful and vivid enough to provide meaning to our lives. The tradeoff is between entirely accurate memories without value and very insightful memories that are fully confabulated. Two different types of value are at stake here, as Jaynes noticed. On the one hand, we can have very accurate memories, satisfying an epistemic type of value, but such a repertoire of memories may amount to nothing but “waste and filler.” On the other hand, we can find meaning and moral value in our lives, but without reality monitoring, we do so at the risk of living a confabulated life. Episodic memory can play, as mentioned above, the very useful role of intermediary between, on the one hand, the purely epistemic functions of memory and the value-making properties of conscious autobiographical memory.

Collective memory influences personal narratives at different stages and, as the findings have shown, certainly interacts with the fading affect bias. Salient action is what we tend to regret the most in the short-term, but what we avoid to do is what we tend to regret the most as our personal narratives are evaluated more thoroughly. The pressure of collective memories on autobiographical narrative depends on the extent and depth of the interpersonal context. If we are part of a group that constantly consolidates memories through rituals and cultural practices, the pressure to shape our narrative according to these collective memories will be more significant than the pressure from a group without a strong sense of memory and ritualization. Too much pressure from collective memory signifies too

much intrusion into the formation of a personal narrative, even if it guarantees strong forms of reality monitoring and accuracy. Group cohesion is important for human flourishing, but too much of it corrodes the narrative function that leads towards *personal flourishing*. This is ultimately a balance between *heteronomy and autonomy*.

Public forms of reality monitoring are very important contributors to the reality monitoring function of episodic memory. Groups generate the expectation that personal narratives of group members will be compatible, and add complexity, to the collective. These expectations are heteronomous and publically available. But there are inward forces (the truly “inner voice”), which must ultimately counterbalance such expectations. Good things come from group-influence, such as collective reality monitoring; but it also has bad effects, such as collective narcissism (see Putnam, et al., 2018). Collective memory opens our minds but it can also narrow the scope of what matters to us, depending on the type of biases and quality of reality monitoring of the memory-culture of a group. Some members are privileged, and have group-supported license to exercise their relatively unrestrained autonomy, while others are expected to restrain their autonomy in favor of the group narrative. This type of group bias makes regret and dignity depend frailly on the balance between heteronomy and autonomy.

Literature captures this tension in various ways, and it illustrates lucidly the development of group biases in relation to the integration of personal narratives. A powerful example is given by Kahler, in his excellent discussion of Madame de La Fayette’s *La Princesse de Clèves*. In his analysis of a scene in which the Madame de Clèves is reacting to a comment by her lover, which “pleased and offended her almost to the same degree,” Kahler writes:

The paradoxicalness of the situation leads even further, and the actual tragedy of these three persons arises out of it. For it becomes evident that in such a predicament preserving one's dignity outwardly is not compatible with preserving it inwardly. Outward dignity demands dissimulation, but inner dignity the truth. (Kahler, 1973, 27)

Inward dignity collides with outward dignity, in one of the first appearances in literature of the torn nature of regret, the demands of autobiographical integrity, and self-edification. Inner voices give depth and context to polarized reactions, inwards and outwards. The pleasure of a lover's attention is experienced with equal intensity as the disgust and offensiveness of the situation the Madame de Clèves finds herself in. This polarized regret cannot happily coalesce into action or omission.

It is not very common to find oneself in such an unfortunate dilemma, but the structure of the conundrum is quite familiar. As the findings described above show, regrets are biased towards action, only to later be biased towards important things we didn't do in life. Some regrets are experienced more intensely when our culture places constant requirements on our self-edification. These are the difficulties of autobiography. Biases and contextual cues frame the negotiation between the inner voices, some of which request privacy, while others demand publicity. The psychological findings confirm that this autobiographical negotiation is indeed a complicated process in which memories organize themselves around potent emotions and considerable social pressure.

Relief and regret, personally structuring episodic memories and converting them into autobiographical narrative with the forge of emotional vividness, can be experienced independently of the accuracy of

the information contained in such memories. Dreams have a powerful impact on our personal self-evaluation. In dreams we are also confronted with a vast realm of experience in which we not only relieve the past, but in which we seem to profoundly encounter it anew. Memories about dreams do not satisfy the basic epistemic constraints of episodic memory, but we still value them.

Halbwachs (1952) proposed that it is impossible to remember anything in dreams, but this claim needs clarification. According to Halbwachs, memory in dreams is so "inert and drowsy" that the dreamer cannot remember that a person they see vividly in the dream died a long time ago. This type of dream, in which one "interacts" with the person long gone is one that we value personally, especially if the person was close. Sometimes we spend time interpreting what those "appearances" could mean; why are they so powerful and why do they "keep coming to us"? The failure here is not one of personal or *autobiographical evaluation*, but of accuracy. We cannot remember anything in dreams because the reality monitoring function of memory is not operational and without it, there is no way to guarantee that it is not all mere confabulation.

But previous cultures placed great significance on dream recollection for collective spiritual reasons. The emphasis in these archaic practices has, obviously, never been on the accuracy of dreams with respect to the past. In ancient cultures, dreams were considered accurate omens about the future, as well as important messages from a transcendental realm. Dreams, for a very large part of our history, were considered a crucial place of communion with the transcendental realm of spiritual meaning—the keystone of what truly matters, or of ultimate reality. Sigmund Freud (1899/1997), who dedicated one of his major scientific works to the interpretation of dreams, commenting on the deep connection between the conception of the dream in pre-

historic history and the supernatural, explained:

A reminiscence of the concept of the dream that was held in primitive times seems to underlie the evaluation of the dream which was current among the peoples of classical antiquity. They took it for granted that dreams were related to the world of the supernatural beings in whom they believed, and that they brought inspirations from the gods and demons. Moreover, it appeared to them that dreams must serve a special purpose in respect of the dreamer; that, as a rule, they predicted the future. (Freud, 1997, 6)

The personal significance of the dream is in *interpreting* what may or will happen to the dreamer (at least in ancient cultures, although some of this mysticism still surrounds dreams). This “interpretation” is the kind of analysis Jaynes encouraged—it is a kind of moral edification by recollection. About dream memory, Freud said that the pre-scientific conception of dreams “accounted for the main impression made upon the waking life by the morning memory of the dream; for in this memory the dream, as compared with the rest of psychic content, seems to be something alien, coming, as it were, from another world.” (Freud, 1997, 7). The views of Halbwachs and Freud are compatible if we distinguish “remembering” as a success term (one remembers only if the memory is accurate) and “remembering” as autobiographical personal narration (which can occur, and very powerfully, in dream memory). The first is guaranteed by reality monitoring, the second by autobiographical memory.

Dreams are a central part of the inner realm even though they can be experienced as “alien” or depersonalized. But if memory value is shaped by personal narrative and

vividness, it is fundamental to understand the inner workings of vividness in relation to memory orchestration. Two fundamental, and also polar opposite mechanisms, are the processes of suppression and intrusion. Dreams, for Freud, had great psychological importance precisely because of their intricate connection with these mechanisms.

### **Suppression, Intrusion and Depersonalization**

The personal tradeoff between accuracy and personal value requires a fine balance between suppression and intrusion. If, for instance, a memory from a dream keeps interrupting into our waking life and dominating our attention, our psychology would start leaning towards confabulation. Waking memory must suppress this type of memory. In general, reality monitoring depends on balancing intrusion and suppression, with critical consequences for the stability of our personal narratives. Dream memories, as Freud indicates, provide a constant dosage of autobiographical alienation, even though they have a substantial impact on our personal narratives by revealing surprising information about ourselves, both positive and negative.

Intrusion occurs when an unwanted memory recurs involuntarily, but what counts as voluntary and involuntary in memory, as the previous discussion on regret shows, is an intricate problem. Spontaneity can be beneficial, by confronting us with new contexts in which memories need to be reassessed, helping us relive, reevaluate and reframe our personal perspective. This type of spontaneous, involuntary intrusion, if it occurs within the proper bounds that allow for the integrity of a personal narrative, is very important for consolidating and re-consolidating memories.

Intrusion, however, can have the opposite effect—instead of helping consolidate a

memory with narratively beneficial purposes, it can either prevent such a narrative from integrating or become so disruptive that it can be a sign of cognitive disorder. Intrusion, typically, at least as it is conceived of in contemporary psychology, is of this negative kind, producing *intrusive memories* that might be quite vivid and feel present (this phenomenon should be distinguished from so-called “memory intrusion,” the process in which partial information leads to an error of memory, without producing intrusive memories). Intrusive memories, even if they are not of the fully vivid and traumatic kind, disrupt the balance required for proper memory function. Depression, for instance, has been associated with intrusion, but not specifically with suppression (Schmidt et al. 2009). The influence of culture, collective memory, and the type of outward pressure discussed in the previous section, associated with regret, certainly play a role in intrusion.

Suppression is the opposite of intrusion. It occurs when even voluntary effort fails at retrieving a memory. It is also, like intrusion, a critical requirement of the transactions concerning autobiographical narrative. The way in which suppression interacts with intrusion is not only antagonistic (one of them retrieving what is unwanted, the other one preventing us from obtaining what we need), but it is also related to voluntary attention, in self-defeating ways. For instance, findings have shown that conscious effort to intentionally suppress a thought (e.g., “don’t think of a white bear”) exacerbates intrusiveness (Wegner 1994). The term *ironic processing* was proposed by Wegner to explain this phenomenon. The proposed mechanism behind ironic processing is that resources for suppression highlight the suppressed thought for targeted recurrent-attention processes, resulting in intrusion.

This interesting process provides a window into the larger battle between intrusion and

suppression. Induced intrusion through voluntary attention, for example when one repeats constantly a phrase in inner speech, is a typical strategy for learning. The selective inhibition of attention to certain memories through dominant narratives, is a form of suppression that is deeply rooted in group dynamics and society at large. For instance, certain cultures may favor memories related to initiation rituals and constantly cast a bright light on events that the individual may not have found joyful at the time, and might still inwardly resent today. Outwardly, however, the pressure is to remember this event with pleasure and pride. Like the example above by Kahler demonstrates, outwards dignity and inwards dignity may collide. Other cultures may avoid such practices of consolidating memories, leaving the individual to “her own” at the risk of becoming too indifferent about the relationship between collective memory formation and autobiographical narrative—something that the individual in that group may resent. Thus, like so many aspects of memory, intrusion and suppression can be good or bad. In pathological cases, they both are extremely disruptive.

These are important themes in the work of Freud and Halbwachs (as well as Jaynes). Suppression features centrally in Freud’s theory of memory (and dreams). Repressed memories generate conflicts concerning layers of personality, which the individual, in her role of autobiographer, has to overcome by revisiting constantly her own narrative. Suppressed memories associated with the behaviorally-dominant deep unconscious, must come to the surface for the individual to arrive at a therapy-induced understanding of herself.

Dream memory-suppression is an important form of reality monitoring. But the inwards and outwards aspects of this process are also complicated. Myth and narratives share a lot with the dream world. Although myths and collective narratives may originate in

dreams and confabulation, Halbwachs distances himself from dreams. For Freud, dreams play an important therapeutic role that reveals forms of suppression that are imposed by society. For Halbwachs society plays a constructive role by consolidating memories through collective accuracy; for Freud, it plays an oppressive role by impeding natural tendencies to form personal narratives. As the previous discussion shows, these are not necessarily antagonistic views: the very mechanisms behind autobiographical memory and the mediation of episodic memory are themselves antagonistic.

### Conclusion

The contemporary study of memory in psychology and neuroscience, which has confirmed the flexibility, context-dependence, and integrative nature of memory, can benefit from previous views on memory. I have argued that the flexibility and context-dependence of integrative processes, such as memory reconsolidation, depends on the fragile balance of polarized tendencies towards accuracy and narrative. An interpretation of some of the recent findings, in the light of the historical analysis presented here, reveals that previous views on memory can help explain these findings and help us identify deeper connections with traditional themes that have interested psychologist, sociologists, philosophers, and literary critics.

A central conclusion from this historical and theoretical analysis is that episodic memory plays a very intricate and critical role, mediating between the private, highly personal evaluations of narrative and the public, socially enforced forms of memory integration. Reality monitoring is part of the main functions of episodic memory, but although episodic memory guides the formation of personal narratives, it cannot sufficiently capture the process through which

episodic efficiency turns into personally valuable meaning. Future research should explain in more detail the vast scope of linguistic mediation in all these processes. An important insight of the traditional approaches to memory, analyzed in this paper, is that the emergence of linguistically formatted cognition altered decisively the ways in which we narrate the past, inwardly and outwardly.

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