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REGULAR ARTICLE

Why Narrating Changes Memory: A Contribution to an Integrative Model of Memory and Narrative Processes

Andrea Smorti[1] & Chiara Fioretti[1]

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Abstract This paper aims to reflect on the relation between autobiographical memory (ME) and autobiographical narrative (NA), examining studies on the effects of narrating on the narrator and showing how studying these relations can make more comprehensible both memory's and narrating's way of working. Studies that address explicitly on ME and NA are scarce and touch this issue indirectly. Authors consider different trends of studies of ME and NA: congruency vs incongruency hypotheses on retrieving, the way of organizing memories according to gist or verbatim format and their role in organizing positive and negative emotional experiences, the social roots of ME and NA, the rules of conversation based on narrating. Analysis of investigations leads the Authors to point out three basic results of their research. Firstly, NA transforms ME because it narrativizes memories according to a narrative format. This means that memories, when are narrated, are transformed in stories (verbal language) and socialised. Secondly, the narrativization process is determined by the act of telling something within a communicative situation. Thus, relational situation of narrating act, by modifying the story, modifies also memories. The Authors propose the RE.NA.ME model (RElation, NArration, MEmory) to understand and study ME and NA. Finally, this study claims that ME and NA refer to two different types of processes having a wide area of overlapping. This is due to common social, developmental and cultural roots that make NA to include part of ME (narrative of memory) and ME to include part of NA (memory of personal events that have been narrated).

Keywords Autobiographical memory. Autobiographicalnarrative . Relation. Emotion

* Andrea Smorti
andrea.smorti@unifi.it

Chiara Fioretti
chiara.fioretti@unifi.it

[1] Department of Educational Science and Psychology, University of Florence, Via di San Salvi, 12. Complesso di San Salvi, Padiglione 26, 50135 Firenze, Italy

The Problem: What is Known, or at Least, What Common Sense Knows

It is common sense that talking makes feel you better. Anyone knows what a pleasure it is to communicate one's own experiences to a friend and that it is useful to express emotions in a comprehensible language in order to be understood. In the first years of school, teachers stress the importance of language to express thoughts and recommend speaking aloud to learn by memory or to learn a topic. Moreover university teachers may become aware, just while giving a lecture, and so talking aloud, if there is something they themselves have not well understood. A number of experiences (casual, everyday, and naïve) show that language, verbal communication, speaking, and recounting not only affect the outside world (influencing the listener, creating an auditorium, followers, enemies etc.), but also affect the inside world on different aspects of the speaker's self (sense of self, emotions, identity, memory, reasoning, control on bodily movements).

At a more sophisticated and scientific level, the role of verbal language has always been stressed in therapeutic settings and its effects on emotional life are explained by means of different concepts and frameworks, such as abreaction, catharsis, mentalisation, and awareness processes. Recently, expressive writing procedure has been used to improve people's physical as well mental health (Pennebaker et al. 1997; Pennebaker and Seagel 1999). In cognitive science, and generally in psychology, verbal languagehas beenregardedasa powerful tool for the mindthatgetspeople in touch with others and with themselves. Vygotsky's (1986 En.Ed) theory on language and its relations with thought has underlined how it leads human action as well as the activity of thinking. In sum, it is well known that language's richness is an irreplaceable instrument and resource for a person and that not only gives the possibility of communication but also increases our capacity for thinking and interacting with our emotions.

In 1934, this concept was treated in depth by Vygotsky and later by cultural historical theory (see Wertsch and Bivens 1992; Valsiner 1998). In this paper we would like to address two specific aspects of the thought-language issue, namely autobiographical memory and the autobiographical narrative. Both terms involve verbal language to different degrees, and both terms have such intimate and intricate relationships that it is not easy to distinguish one from the other. Moreover, in the last 20 years autobiographical memory and autobiographical narrative have received growing interest from students of memory, language, self, identity, and emotions. By searching the scientific portal, Scopus, beginning in 1995 with the keyword "autobiographical memory", we found 3505 publications were classified; when we considered "autobiographical narrative" as a keyword, we found 1350 publication for the same period (1995–2015). However, when we looked at the keywords together, the number of

published works dropped to 490 in the last 20 years (www.scopus.com)

The main purpose of this paper is to examine the persuasive effects that narrating has on the narrator, be these effects observed in everyday context or assessed in experimental or clinical settings and to explain the interaction of narrating with remembering. Seen from the other side, to fully comprehend the role of the autobiographical memory we have to include an explication of its relationship with autobiographical narrative. We believe that these relations are not yet clear; the autobiographical narrative issue has been neglected by studies of autobiographical memory, just as autobiographical memory has not been adequately considered by studies on autobiographical narrative. The main aim of this paper is therefore to contribute to the construction of a possible model of the autobiographical memory-autobiographical narrative relationship. From this point of view, our work derived by the Vygotskian tradition on relation between thought and language and on the socio-cultural tradition which pointed out the influence of cultural model on the cognitive development (Shore 1996). However, our specific purpose was that of investigating how narrating can influence memory and we will try to demonstrate that this happens thanks to the process of communicative relation between a narrator and a listener.

Autobiographical Memory (ME)

Autobiographical memory (ME) is defined as a type of episodic as well as a semantic memory for specific life events related to the self in relation to others remembered from the present perspective (Pillemer 1998; Conway and Pleydell-Pearce 2000). Research on ME demonstrated that it constitutes an essential part of the cognitive resources of a human being. It is important in the activity of thinking, as well as in other important aspects of human life, such as emotions and identity. It also makes the experience of remembering the past important because it gives the opportunity to better understand events and experiences and, consequently, the self (Fivush and Baker-Ward 2005; Fivush and Nelson 2004). The expression "the experience of the past remembered from the present perspective" stresses the selective feature of ME. In fact, its primary function is not to retain accurate representations of all life events, rather to produce a record of important events, such as events that have personal relevance to one's goals (Conway and Pleydell-Pearce 2000).

According to Conway and Holmes (2004), memories of events that in a period of life were relevant for the self are highly accessible and have high fluency. This occurs because highly significant experiences, such as goal achievement, are highly associated even when those goals have been substituted by others (Conway 2005). Moreover, these memories keep traces of personal change throughout life, contributing to the maintenance of identity. Therefore, these memories become self-defining experiences. For this reason, according to McAdams (2001), selfdefining memories compose the self-story. To become part of the self-story, these memories must connect to the most important themes of the individual becoming "self-definitional" (Singer et al. 2013).

Memories connected to goal achievement are emotionally laden because the degree to which a goal is realised primes a positive or a negative emotion (see the goal relevance model of Levine and Pizarro 2004). Indeed, one aspect of our life that influences our way of remembering is surely the emotional tone of our memories. Emotions play a crucial role in autobiographical memory: particularly, experiences which are not lived with significant emotional engagement do not activate an adequate level of specific attention. As a result, they are registered as "not important", and thus are quite easily forgotten (Christianson 1992). On the contrary, events experienced with medium - high emotional involvement are registered as "important", and thus have a good probability of being remembered. However it is not only a matter of the intensity of the experienced emotion but also its valence. Positive and negative emotions seem to entail different type of cognitive elaboration.

Schwarz and Clore (1983; 1988; 1996) and Clore et al. (2001) have suggested that affections and emotions are information that can influence cognitive processes and the way of individuals solve problems. On the basis of their "affection as information" framework, the authors sustain that positive affects promote interpretive or relational (global) processing; negative affects lead to detailed, stimulus bound, or referential (analytic) processing. The perception of the world is the result of the interaction between top-down and bottom-up processes. When people are in a negative mood, bottom-up processes are stronger, the details of the surrounding world prevail, and these details are noticed and analysed; their attention is narrow (Wegner and Vallacher 1986). By contrast, when a person is in a positive mood, information is processed in reference to general schemas and the approach to reality will be more global and heuristic as the person is looking more at the general picture rather than at details (e.g., Clore et al. 2001; Fiedler 2001) and memory will be more reconstructive.

Which is the Life of a Memory?

Each autobiographical memory (in the sense of memory of an event) has its own life, different from the others. Schematically said, and not considering previous influences, we could claim that a memory was born in the act of encoding the experience of an event. Its life and development (how it changes and how it remains similar) depends on later processes and experiences, such as the number of times and the ways it is remembered, the activity of rehearsal, the opportunity to reflect on it, the life of other memories, and, as it will be clearly discussed later, the opportunity to communicate or to narrate it.

Some important developmental phases in the life of a memory are represented by those occasions of retrieving it or at least of rehearsal (Holland et al. 2010).

Past-Present Issue

The theme of retrieving puts a temporal issue on the table. Autobiographical memory's way of working seems particularly connected to the past-present issue, that

is, the relationship between the situation when the event occurs and is encoded and the situation of remembering when the memory is retrieved. The running time and the personal and social changes can make the two situations rather different. How they are different and what this entails in terms of remembering is a very important question. There are two main perspectives that matter (a) congruency perspective and (b) incongruity perspective.

Congruency perspective refers to the hypothesis supported by empirical evidence that memories congruent to one's present mood are more likely to be retrieved than mood incongruent information (for reviews, see Blaney 1986; Rusting 1998). The perspective of congruence implies a loop effect because remembering depends both on a self-scheme and the present mood. If people's self-schemas are positive, positive experiences may be more likely to be self-relevant and may also be more easily integrated into a person's conception of themselves. Consistency and coherence can make positive events come to mind more readily than negative ones (see Levine and Bluck 2004, for review) and therefore are more expected. If self-schemas are not positive (as in a depressed person) negative experiences may be more likely to be self-relevant and may also be more easily integrated into a person's conception of themselves. Therefore, consistently negative events are more likely to come to mind than positive ones. Congruency theory has contrasting results because in some cases this effect was not found (see Blaney 1986).

Mood incongruent recall refers to the tendency to recall information that is opposite in valence to one's current mood. Several researchers have suggested that moodincongruence effects are due to a mood-regulatory process by which people retrieve positive memories to repair negative mood to avoid prolonging a negative emotional state (Isen 1984). Several studies have underlined the function of the selection of autobiographical memories in mood repair (Rusting and DeHart 2000; Setliff and Marmurek 2002). For example, Josephson et al. (1996) have found that individuals deliberately recruit positive memories to counteract negative moods and accompanying negative memories. Participants of their study (106 students) first completed a measure of depression and two weeks later were assigned to either a sad or neutral mood induction with a videotape. After that, they recalled two memories and rated them on twelve emotions, both positive and negative. Finally, they explained why they chose the memories they did. The results have shown that participants in the sad condition reported sadder memories than those in the neutral condition; however, this relationship was mediated by levels of depression. Indeed, students with low depression scores tended to recall more positive second memories than others. Overall, those who followed a negative memory with a positive one reported a more positive mood than participants who recalled two consecutive negative memories. The majority of participants who recalled a positive memory after a negative memory had a conscious intention to lift their mood by recalling a happy experience from their past.

From these studies it turns out that we may recall memories that are congruent with our present state of mood (and therefore we depend on our state of mood), but we are able as well to influence this mood, employing a sort of mood repair activity. In support of this idea, there is the evidence for a delay in incongruence (first

congruency, then incongruity, see Sedikides 1994). The activity of mood repair people develop to protect the self from painful emotions is due to personal experience and built on the bases of past occurrences. Thus, it is the result of a learned capacity of how to treat own memories and in particular the painful ones. A capacity like this is differently distributed among people and it is connected to other capacities as, for example , resilience, coping strategies and problem solving. In this sense, on the basis of personal capacities and past life experience, people can reflect on past memories, repairing them and, finally, changing them in a more positive way. For these reasons, the activity of mood repair can be considered one of the sources of change in a memory's life.

Gist and Verbatim Traces

In general, there are two basic formats of autobiographical memories, verbatim and gist. The distinction between verbatim and gist memory was established in psycholinguistics (for an overview, see Clark and Clark 1977) and elaborated by Brained and Reyna (2002) in their Fuzzy-Trace theory.

Gist refers to the substance of a memory, a sort of summary or brief label of the remembered episode. Gist memory is a memory for essential meaning irrespective of exact words, numbers, or pictures. It is the meaning of the memory, but it misses details and can be imprecise. Retrieval of a gist traces gives a sense of familiarity; it is more reconstructive, slower and less accurate.

Verbatim refers to the surface of the memory, entails the use of exact words and specific details, numbers, and pictures. It generally implies the recollection of secure memories and is virtually exempt from mistakes. The retrieval of verbatim traces is direct.

If we follow Conway's (2005) Self-Memory System theory on autobiographical memory, gist and verbatim types of memory are close to general knowledge and eventspecific knowledge levels of memory or, according to a more classical distinction, to semantic and episodic memory. Because semantic memory works according to a coherence principle (coherence with self-schema), while episodic memory works according to a correspondence principle (agreement with reality data), we could assume that gist and verbatim traces of memory should accordingly follow the same principles. Table 1 below represents verbatim-gist format of memory in terms of dimensions. Verbatim memories are more likely to follow a correspondence principle than a coherence one or are recollected more often than reconstructed.

According to Brainerd and Reyna's Fuzzy-Trace theory (2004), gist and verbatim traces are activated in rapport with the available indexes and are processed in parallel, stored, and retrieved independently. Nevertheless, other authors have claimed that serial processing of gist and verbatim traces exists. According to Holland et al. (2011), remembering either specific and detailed events or general ones implies different cognitive processes and a different cognitive labour for the narrators. They identified two phases in autobiographical memory recall: The first begins by specifying a cue (for example, recalling an event associated with the word 'school')

with a consequent memory search process and evaluation of the search results. The second phase deals with elaboration of the event: the selected event is collocated in a specific time and the details appear (Conway 2005; Holland et al. 2011). Considering these phases, the gist of an autobiographical memory is recollected in the first phase of memory recall, while the specific details required for a long narrative also need the second phase to be recalled (Holland et al. 2011).

Retrieving gist or verbatim memory entails choosing a different level of specificity of the description of events. According to Holland et al. (2011) remaining at a general

Table 1 Main dimensions of verbatim and gist memories

VERBATIM MEMORIES	GIST MEMORIES
Correspondence	Coherence
Recollection	Reconstruction
Fast	Slow
Less lasting	More lasting
Direct access	Indirect access
Realistic	Familiar

level of specificity during autobiographical retrieval avoids recalling specific, negative, and painful details. Over time, repeated avoidance of painful memories leads one to adopt a retrieval style that involves moving across the level of general memories in the autobiographical knowledge hierarchy; this style has been termed mnemonic interlock (Williams 1996).

This is connected to information theory claims about affect. In fact, positive emotions seem to be analysed through a top-down reconstructive process of retrieving, while negative memories need a bottom-up, recollective process of retrieving. This was confirmed also by the research of Peterson et al. (2010) who found in a study of university students that positive adolescent memories of relationships to parents and friends were expressed in a more generic way than the negative ones.

In conclusion, what we have learnt from ME studies is that some memories are conserved longer than others because they are more important, and they are more important because they are more connected to the self-defining memories that in turn are connected to the self-story. We have learned also that the importance of an autobiographical memory is determined by its emotional valence and that emotions are derived from the goal attainment—the extent to which a self-relevant aim has been accomplished. Moreover, memories that are connected to negative or positive emotions are elaborated differently, either in terms of bottom-up, verbatim, and a narrowly attentive and referential process of recollection or in terms of top-down, gist, largely global and relational process of reconstruction. But we have learned also that a person can actively interact with his or her memories though a mood repair attitude or by using a type of cognitive elaboration of memory, consisting in

modifying the level of generality as, for instance, transforming a verbatim memory of a negative experience in gist.

So the life of a memory, through its process of congruence and incongruence, has moments of continuity and discontinuity and this can explain stability and changes in our memory of the past, such as how different the memory of an event becomes after 1, 2, and 3 years after the event. The process seems having loops, as so happens in mnemonic interlock, where the typical way of recalling with a general level of specificity during the autobiographical retrieval helps to avoid recalling specific, negative, and painful details. Over time, this repeated avoidance of painful memories leads one to adopt a retrieval style that involves moving across the level of general memories in the autobiographical knowledge hierarchy. In sum, autobiographical memory represents the single most complex type of human memory (Conway 1997) and is a process of continuously transforming our sense of the past. This transformation appears to be due to retrieval activity.

This type of account gives only a partial version of the story of a memory. In fact, looking in depth, all we have described seems to remain inside the brain of the person considered a monad. However, a new and important event occurs in a memory's life when it is narrated.

Autobiographical Narrative (NA)

Like ME, NA also contributes substantially to build the individual's sense of self (Ross 1989) and personal identity. Moreover, by creating the building blocks of a life story
(Habermas and Bluck 2000; McLean et al. 2007), NA gives a sense of coherence to our lives (Conway 1997; Conway and Holmes 2004; McAdams 2001, 2006; McAdams et al. 2006). Narrating a memory is one of the most important activities of rehearsal. This makes the ME-NA dichotomy really special, but it also a puzzling affair, for three reasons.

First of all, a linguistic misunderstanding may occur when we use the term autobiographical narrative. Its meaning is something different from autobiography. If we use Bruner's (1991) definition of autobiography as "an account given by a narrator in the here and now about a protagonist bearing his name who existed in the there and then, the story terminating in the present when the protagonist fuses with the narrator" (p. 121), we must admit that autobiographies are rare (as Bruner himself recognised in 2002) because in everyday life people need to recount personal narratives, referring to pieces of their life without the necessity of reconnecting those pieces to the present or of demonstrating how the narrator became what he or she is now. What we actually encounter are narrative episodes that compose the life story. Bruner stresses as the "episodes are Labovian in structure with strict adherence to sequence and justification by exceptionality but the larger story [autobiography in strict sense] reveals a strong rhetorical strand as if justifying why it was necessary (not causally, but morally, socially, and psychologically) that the life had gone a particular way" (1991, p. 121). Nonetheless, autobiographical episodes can be considered pieces of an autobiography

if they have some characteristic, such as "an account of what one thinks one did in what settings in what ways for what reasons" (Bruner 1991, p. 119), that is, it respects the narrative formula of Burke's (1945) penthad.

Curiously the same misunderstanding does not occur when we use the term, autobiographical memories, that just refer to remembered episodes and not the memory of one's whole life. The use of autobiographical narratives, of course, may lead to the construction of an autobiography through the selection of self-defining narratives, but not every autobiographical narrative is included in an autobiography. In this study, we use autobiographical narrative(s) as synonyms of Bruner's autobiographical episodes (1991) or Labovian personal narrative (Labov and Waletsky 1967).

The second basic problem that arises when we study this topic is that it is very difficult to study autobiographical memory (as opposed to other types of memories) without making use of language and of narrative in particular. But if we as researchers use narrative or language it is very difficult to demonstrate what we have described is memory (or internal memory) because we have observed memory "in" a narrative. Finally, when we study personal narratives or autobiographical narratives, it is also difficult to sustain that what we have studied is only narrative and not memory and narratives. So even if theoretically and methodologically ME and NA must be kept distinct, they actually live together, and if we want to understand both memory and narrative, we have to be able to discover their interconnections. ME and NA are socially interconnected processes, primarily because they share common social roots.

The Mutual Relation Between ME and NA

ME and NA have Common Social Roots

Public narratives (Sommers 1992) and collective memory (Halbwachs 1950) are clear examples of this interconnection. Public events are a fundamental part of the social identity of a people and are mediated by public narratives that are a form of collective memory of a society. Individual memory is actively connected to collective events (such as a war, a natural disaster, or a football championship) and also by means of narratives. A "reminiscence bump" in adolescence (people tend to recall more personal events from adolescence and early adulthood than from other lifetime periods: Rubin et al. 1986; Rybash 1996; Setliff and Marmurek 2002) is a basic process for identity development that includes not only autobiographical memory but also the memory and narratives of public events (Holmes and Conway 1999). This reminiscence bump in adolescence is an example of the social intertwining of memory, narrative and culture and many other examples exist.

The development of autobiographical memory takes place in childhood through a process of social cooperation between adults and children and among peers (Fivush and Nelson 2004). Studies in this field are numerous and focus on conversations between parents and children in the first years of linguistic development (ages of 4, 5 and 6). In their very first years of life, children develop memories about past events

through the repetition of daily routines provided by their parents who help their children to store them by attributing a specific time and location to every event (Tulving 2002).

Autobiographical memory starts to develop at the age of three or four, when children begin to verbalize their memories, giving them a story structure based on Burke's (1945) pentad of agent, action, scene, goal and instrument. It is through "cooperative discussions" with their parents that children internalize the narrative structure of shared conversations, using it to guide their own recollection of significant prior experiences (Nelson and Fivush 2004). These so-called "memory talks" between child and parents are considered crucial for the developmental process of the autobiographical memory (Farrar et al. 1997). Studies in this domain, in fact, have pointed out that the different interactive and communicative modalities of caregivers imply differences in the content of their children's narrative (Nelson and Fivush 2004; Sales et al. 2003).

Other studies have explored the development of autobiographical memory in later years, highlighting the role of peers and school. When growing up, children or adolescents employ narrative schemas learned from their familiar environment in other important contexts, such as school, through their relationship with peers. In this case, too, feedback received from interlocutors during the narrative of one's own life events plays a decisive role in the construction of autobiographical memory, in its interpretation, and in the process of making sense (Pasupathi and Hoyt 2010).

From what we have shown so far, it is apparent that autobiographical memory and autobiographical narrative are deeply interconnected and that they share a common social root and context of development. However, though ME and NA share common social roots, it is clear that they are not the same thing.

ME and NA have a Different Language

From a certain point of view, NA constitutes a sort of elaborative rehearsal of ME (Tulving and Craik 2000), in which information about the narrated event is "meaningfully related to other information [...]: the general finding is that the greater the elaboration of one's encodings, the better the subsequent memory" (Tulving and Craik 2000, p. 96). In this way, narrating keeps memories alive. However, it changes them, too. In fact, narrating is not simply a way to retrieve memories, refreshing them and making them conscious. NA is a way through which memories are transformed. What does narrative add with respect to the other forms of elaborative rehearsal we have discussed so far? How does narrative transform memory?

A possible starting point is that NA has social aspects that ME seems not to have because NA is likely to be told to someone (even if in some cases it can be written in a secret diary). Because personal memory is individually located, while narrative is by definition sustained by a communicative act, we could say that NA is an externalized form of ME. However it is necessary to specify what we mean by the term, externalization.

Since Bartlett's (1932) seminal work War of the Ghosts that focused on the act of retelling, telling memories has been considered quite a different matter from simple reminiscing (Marsh 2007). NA has a richer linguistic format, which provides new semantic, pragmatic, and communicative features for memory. NA permits ME to became visible, a "concrete act and fact", for its physical nature. At the same time, NA renders ME a semiotic and fully social and cultural artefact for becoming a communicative act, according to a language that respects the format of the story (see Smorti 2011). This externalization, therefore, has important consequences. The first is that this type of communicative act is a narrative. But when we say narrative, we include different things, such as creating a story (fabula) with a particular way of telling the plot (sjuzhet) and a discourse (the act of telling) (Chatman 1978; Genette 1972). The format of the story, the final product of narrating, is both a fabula, as content of what happened and a sjuzhet, as a way of narrating what happened. But these two aspects (and in particular the sjuzhet) are strictly connected to a third, the discourse, that is, the act of telling a story. Telling a story is a form of communication that must interest and convince, and this implies conversational devices, such as those Labov (1997) has defined through the concepts of 'tellability' and persuasiveness. Bruner (1986; 1990; 1991; 2004) uses the word narrativization to indicate a particular transformation of an event (and therefore of a memory) into a narrative form that follows definite narrative characteristics (such as specificity, diacronicity, normativity, hermeneutic composability etc.). Narrativization gives ME an organizational structure that puts memories into a comprehensible, chronological, and causal sequence of individual events (Bruner 1991; Fivush 2011).

In a Memory Fluency Task, Fioretti and Smorti (2015a) asked participants to remember as many memories they could in a short period of time (about 3 min). After that, they had to associate to each memory with major emotions chosen from a list. Finally, they had to pick out one memory, narrate it in detail and, afterward, attribute one or more emotions to the narrative, choosing from the same list as the memory task. Results showed that when participants narrated their memory, their emotional tone changed complexity: While in memory, emotions were either positive or negative, in narrative positive and negative emotion could stay together. Narratives were more complex than memories.

For example, for a male study participant, the memory of "last day of school" evoked the emotion, "happiness". When the boy narrated his memory, he considered new details and new meanings:

> I remember the last day of high school. From the first moment I arrived that morning I felt that it was a singular day. I could not decipher my emotions, but I perfectly remember that something was stabbing in my stomach. To enter my classroom for the last time made me sad. It was strange, because I had been impatiently waiting for that day for a long time! [...]"

Thus, the participant associated both the emotions "happiness" and "sadness" with his narrative, showing the complexity of the past life event. All these transformations

that arise by narrating a personal experience radically change self-conception and the perception of events.

This integration of personal events into one's life stories provides a sense of narrative continuity, through the connection between past events and present selves (McAdams 2001), and this provides a coherent integration of the changes and developments occurring over the course of one's life (Conway and Pleydell-Pearce 2000; Conway et al. 2004). On the other hand, narratives are also specifically appropriate devices that take into consideration problems, incongruences, and violations of normality and can be used to solve them (Bruner 1991). This labour carried out by the narrativization process is extremely useful for self-definition (Habermas and Bluck 2000; McAdams 2001).

As we have stressed, narrative includes aspects of story, sujzhet, and discourse and differentiates between these components. Although this paper does not have the scope to classify narrative genres, it is useful to remind readers of two different types of narratives. "Big Stories" and "Small Stories"

The narrativization process or the act of transforming a memory into a narrative is not an all-or-nothing variable. There is no such thing as a story as opposed to something else, such as memory. The difference between the two, though qualitative, may be very subtle.

We have already seen two types of memories: gist and verbatim memories. When they are narrated, they entail a different use of language. Gist memories are likely to be more similar to scripts (i.e., generic stories) because the events do not have a definite time. When they are told, narratives are more similar to timeless recitations and regard events that were going on for a period of time in the past or were repeated multiple times. Such memories have also been termed 'generic' or 'summary'. Verbatim memories, whentheyare narrated, are madeofwords,direct voices, details; theyare about one-time events that happened at a specific time and place and include specific details about those events. These are 'episodic' or 'specific' (Peterson et al. 2008; Nelson 1996).

Fioretti and Smorti (2015b) tested two groups of study participants on different narrative tasks. After a memory fluency task on memories about adolescence, participants had to classify each memory in terms of type of emotions. Afterwards, they had to choose one memory and narrate it: one group (short narrative group) had to write not more than 5 lines, while the other (long narrative group) had to write not less than one page. Later, they had to respond to a memory fluency task again. Results showed that memories of the long narrative group changed more than the memories of the short narrative group between the first and second memory fluency tasks, following the same complexity effect described in the previous paragraph. Longer narratives were better able to affect the content of the emotions in memories.

Talking of "more" episodic stories, or more semantic or generic ones, permits classification of both children's narratives as well as adults' narratives. However, it does not catch another aspect of the problem, that is, the particular way of telling. A

step forward in this direction is given by the Bamberg's (2006) distinction between big and small stories.

Big stories (Bamberg 2006) are narratives where there is a coherent temporal progression of events located in some past time and place. They have a plot line and those characteristics stressed by Bruner (1991). They may entail exact wording, use details, be coherent and connect the event with others present in the autobiographical memory. To produce this kind of story, speakers can be requested to recall an event with a particular opportunityforreflection.Theinteractionthatleadstobiggerstoriesrequiressomeonetoask the speaker fordetails,clarifications,andexplanations. In otherwords, the narrator perceives that the story is interesting and that someone cares about it.

Small stories are an "umbrella term" that encompasses a variety of underrepresented narratives we tell in everyday settings (Bamberg 2006); they are often related to not very interesting or particularly 'tellable' occurrences.

This kind of story usually comes from an interaction in which the listener asks for a brief report of the event. Small stories can be about very recent or still unfolding events, thus immediately reworking slices of experience and arising out of a need to share what has just happened or seemingly uninteresting tidbits. They can be about small incidents that may (or may not) have actually happened, mentioned to back up or elaborate on an argumentative point occurring in an ongoing conversation. Small stories can even be about – colloquially speaking – 'nothing'; and as such indirectly reflect something about the interactional engagement between the interactants, while for outsiders, the interaction is literally 'about nothing' (Bamberg and Georgakopoulou 2008, p. 5–6).

Small stories do not necessarily respect the narrative canon (they can follow temporal ordering of events but not the tellability criterium, for example). According to Bamberg (2006), small stories and their study address the research on identity, stressing and considering something that in a long coherent story is not easy to observe, that is: "the inconsistencies, contradictions, moments of trouble and tension, and the tellers' constant navigation and finessing between different versions of selfhood in local contexts more than the coherence by narrative approaches ... Small narratives are capable of getting closer to identity as a process that is constantly under re-construction: constantly changing but at the same time resulting in a sense of sameness" (p. 17).

Positive Effects of Narrating

While the distinction between small and big stories appears necessary to build a more differentiated notion of narratives, studies on narrative have so far mainly considered big narratives rather than small ones. In this context, a copious trend of research into big narratives demonstrated that the transformation from memory to story can produce beneficial and even therapeutic effects on the narrator.

Narrating may have a smoothing effect on the emotions: positive and negative emotions may lose their intensity through narrative (McLean et al. 2007). The

opportunity to narrate an experience and to give it a meaning has, indeed, a "restoring" effect on its recollection (McAdams et al. 2006). By narrating an event, and so producing a story, a person refines some details, which become more significant, for the benefit of others. The need for coherence and continuity, which characterizes the narrative of an autobiographical memory, helps to rebuild the missing parts and to repair the initial fragmentation
(Conway 1997). Just at this point, the event can be forgotten or obtain a different emotional tone: for example, the stress associated with emotions related to memories can wane or disappear (Pennebaker and Seagel 1999). So the need of coherence (the coherence principle as opposite to the correspondence principle) we have considered in theautobiographicalmemoryisstrengthened innarratingthathasthepowerofconvincing the narrator of a new version of the facts and/or their interpretation

Pennebaker and colleagues (e.g., Pennebaker et al. 1997; Pennebaker and Seagel 1999) have repeatedly demonstrated the therapeutic benefits of expressive writing, a technique of writing without interruptions. Participants were requested to write about their own experiences of past negative or traumatic emotional events for three four times in 10 days. The researchers found that repeated disclosures of the same negative emotional events are associated with a reduction in the use of negative emotion words. In turn, a reduction in negative emotion words is associated with positive physical, personal, and social outcomes. Repeated recalling of past negative emotions leads to the extinction of the negative thoughts and feelings associated with negative events. Similar results were accomplished by means of oral narratives. These results show that repeatedly recalling emotions allows individuals to reconstruct how they feel about past events, thereby allowing them to integrate negative events into the self-schema
(Frattaroli 2006).

This trend of studies showed the importance of two possible causes for the beneficial effect of narrating. The first is that repeating the act of recalling and narrating emotions integrates negative events into a self-schema. The second is that the reduction of negative emotions leads to a reduction of negative words and this in turn has an effect in reducingnegative emotions. We donot claim a primate ofthe wordonthe emotions or vice versa, and so we are not interested in determining which is the "first cause". We want just to stress that this second hypothesis reimagines the Sapir-Whorf theory on the role of language as a reality organizer and shows how expressive writing, or other forms of narrative expressions, can have an impact on mental states because language changes when it is used under certain conditions and because these changes impact emotions. Renaming one's experiences can be a powerful tool or, at least, a starting strategy to change their meaning. But which conditions are these? As far as we know, there are no studies that have investigated how expressive writing, elicited through making a diary or engaging in a monologue, turned out to have the same results as those accomplished in a dual situation (verbal narrative interview and expressive protocols).

Relation (RE), its role in ME – NA relation

We would not completely understand the transformation of memory to narrative if we do not seriously consider that narrating an autobiographical event entails a significant change consisting of moving from a "language for the self" to a "language for the others". In Vygotsky's (1986 En. Ed) words, "It is evident that the transition from inner speech to external speech is not a simple translation from one language into another. It cannot be achieved by merely vocalizing silent speech. It is a complex, dynamic process involving the transformation of the predicative, idiomatic structure of inner speech into syntactically articulated speech intelligible to others" (p. 248–249). This means that telling a story is a complex act. Sharing past events with others may entail negotiation and interpretation of these events in new and perhaps unexplored ways and develop intimacy with others (Alea and Bluck 2003; Pasupathi 2001).

Overall a good numbers of studies have deepened the role of the narrator (McAdams et al. 1997; Fivush 1998), of the interlocutor (Pasupathi et al. 1998; McAdams 2001; Pasupathi and Hoyt 2010), and of their interaction (Pasupathi 2001). The kind of changes which have not been adequately addressed is, for instance, a conversation affecting autobiographical memory. However, some scholars have studied how narrating is influenced by the way interlocutors listen to the narrators' modifications of their stories (McGregor and Holmes 1999; McLean and Pratt 2006; Pasupathi et al. 2007; Thoman et al. 2006; Pasupathi 2001; Tversky and Marsh 2000). Other scholars have studied how the storytelling setting is important for an individual's recall of autobiographical memories (Skowronski and Walker 2004).

This trend of research points out the role of the present relationship between narrator and listener roles. The listener contributes to the reorganization of the story by providing insights and points of view. In doing so, she or he becomes part of the elaboration of the narrator's personal history. The relationship between narrator and listener, therefore, allows the occurrence of a "new" story that differs from what the narrator may have told others, because it is modified by a new interactive situation. Skowronski and Walker (2004) have argued that the listener can influence the act of narrating and, consequently, the narrator's subjective goals. Indeed, individuals may bias the emotional details of past events when expecting to meet with an individual in a determined state of mood. Individuals who thought they would be meeting with a sad individual increased the amount of negative emotional language they used in reporting past events. In comparison to a baseline recall of the same events, those who thought they would be meeting with a happy individual demonstrated the opposite trend. Pasupathi (2001) takes into consideration the social construction of the personal past, starting from the assumption that much learning and development begins in recounting past events in conversation. According to this author, two principles govern conversational recounting: co-construction and consistency.

Co-construction deals with recalling a past event that can produce small and progressive changes in autobiographical knowledge. Pasupathi (2001) pointed out the importance of previous knowledge about the topic of conversation, the non-verbal

behaviour between the partners of interaction, the disinterest or disapproval about what is toldaswellasthemotivation to tell. In astudy wherepairs of individualswererequested to recall memories about films seen together, the author demonstrated that collaborative coproduction of memories implies richer and more detailed narratives than for persons who recalled memories individually (Pasupathi 2001). Thus, the meanings people give to the events of their life are not individually processed through the narrative alone—as if it were a verbal thinking; they result from the joint and co-constructed activity of partners involved in the conversation. In this sense, different narrative styles elicited from narrator could lead to different elaboration processes of autobiographical memory.

Consistency deals with the way speakers and listeners jointly produce memories retold in their conversation; retelling autobiographical memories is a way to increase knowledge about them in terms of interpretative content (Pasupathi 2001). Memories are often rehearsed, both mentally and conversationally; this involves the application and the construction of a scheme of the event. Such schemes can improve the comprehension of many details or exclude inconsistent information.

Positive Effects of Narrating Revisited

Extending ME-NA relationships to social context permits reconsideration of the effect of narrative on memory. In fact, one would ask if narrative influences memory just for the simple act of narrating, that is, for constructing a story, or because this narrative includes an "other".

Fioretti and Smorti (2015c) asked two groups of oncologic patient to choose an episode of their experience of illness and tell it in detail. One group was requested to narrate a positive event, and the other, a negative one. Both groups described the event in terms of emotional content before and after the narration. The results showed that participants that had to narrate a negative event decreased negative emotions and increased positive ones, while no difference emerged in the other group. The authors interpreted this as confirmation of the repairing mood attitude stimulated by narrating to an empathic interlocutor. Moreover negative narratives were longer and more related to the past and were significantly more organized through more total and temporal connections. Furthermore, positive and negative narratives had a different narrative structure: While negative narratives required an explanation, leading to the elaboration of the memory into a coherent story with a personal meaning, positive ones did not require that and dealt more with a sort of present, general reflection on the illness experience. Thus, an example of a negative memory of illness is Participant #30:

> I was at the beach 2 years ago and I urinated blood for 4 days in the morning and night. I spoke to my daughter-in-law and she called the doctor [...], then I came back home and did all the examinations [...], then they found cancer and I was very shocked, so that they removed it [...]. After 15 days I met the doctor again and he emphasized my improved condition, saying that now I just had to do lavages once a month for a year".

The plot of the story focused on a temporal sequence of what had happened. He introduced the first perception of his illness ("I was at the beach 2 years ago and I urinated blood for 4 days"), the complication ("I did the examinations, then they found cancer") and the resolution of the story ("the doctor emphasized my improved condition, saying that now I just had to do lavages once a month for a year"). Temporal and general connections such as "then" and "so that" gave cohesion to the story, a reelaboration of the past story that also considered the present consequences. This is not new to the literature: To paraphrase Fivush et al. (2003), "an emotionally negative event creates some problem that begs for resolution, leading to a more story-like structure. Positive events in contrast, can be a simple listing of interesting things [...]" (p.25).

In contrast, positive narratives dealt with a general reflection on the narrative experience, such as a gist. Participant #16, a 54-year-old female patient, gave an example by narrating her memory, Back to my Natural Optimism. She said,

> I have a serious and chronic disease; I only have a bit more time. If these are my last moments, I want them to be mine and not the disease's. I want to be the sunny and optimistic person of always: I want my daughters to remember me like this.

In this case, the autobiographical memory did not make the experience of illness the plot of a story, but introduced a reflection about the narrator's present condition and the expectations about her remaining lifetime. It is possible, by comparing these two types of narratives (negative and positive) to catch some clear similarities with verbatim and gist memories we have discussed in previous sections

Pasupathi (2001) found that talking about experiences leads to emotional benefits in particular when a listener empathetically shares with speakers'stories. Participants were requested to remember a recent experience they had narrated to other people. In the first step, they had to report their emotional reactions to the initial event. In a second step, as they narrated their experience to others, participants were requested to remind listeners of their specific emotional reactions while they were narrating and refer to their main reasons for talking about the event. Results showed that participants, when recalling their experience of the event to the time of recounting it, didn't change their evaluation of the emotional content of their event when it was positive. In contrast when the emotional content of the event was negative, participants changed their evaluation significantly. Their emotions became less negative at the moment of retelling and they reported that they had chosen to retell just those memories to alter their emotions. For instance, they said that they had told about that particular event "to feel better or different" and that it was considered a goal of emotion regulation.

Recently collected data suggest that social rehearsals occur at least as often as, and perhapsmoreoftenthan,otherrehearsaltypes(SkowronskiandWalker2004).Forexample, in each of two studies participants were asked to list either four or six autobiographical eventsthatoccurredwithinthelast6months.Afterlistingtheevents,participantswereaske

d to estimate the numberof times thatthey had rehearsed each event for one of several reasons (e.g.,toremember thedetailsoftheevents,to re-experiencetheemotionsassociatedwiththe events, to better understand the events, or to talk about the events to others—some events were thought of involuntarily). In both studies, the most frequent reason that people rehearsed events was for the purpose of talking to others, and its reported frequency was significantly greater than any other reason.

Indeed, talking of one's own experiences to a sincerely interested "other" who participates in what is told, awakens the sense of intimacy and provides the narrator with the feeling of being listened to, understood, and accepted (McAdams 2001). By reviewing knowledge about social interaction's impact in the development of autobiographical memory, some authors have also suggested the role of the closeness and similarity of the listener to the narrator. For instance, individuals who recall past events together with a friend tend to remember more information than when they have a recall task with a stranger (Alea and Bluck 2003). The relationship between narrator and listener influences not only the kind of story that is told, but also the listening act itself (Bluck et al. 2013). According to Pillemer (1992) and Bluck et al. (2013), sharing autobiographical memories, such as those related to the disease that arise in patientphysician communication, greatly increases the listener's empathy toward the narrator of traumatic events.

In conclusion, narrating own experiences to others can have an impact on memory and hence on the narrator's sense of self, but, in turn, narrative effects depend on the conversational situation. Now, which conversational conditions are more likely to influence narrating and modulate its impact?

Rules of Conversation in Autobiographical Narrative

Grice (1975) stressed which maxims a conversation must follow to be cooperative. These are the maxim of quality ("Do not say what you believe to be false"), of quantity ("Make your contribution as informative as is required" and "Do not make your contribution more informative than is required"), of relation ("Be relevant"), of manner ("Avoid obscurity of expression", "Be brief, "Avoid unnecessary prolixity").

Of course, Grice's maxims are connected to the narrator's need to have a listener's response and modulated in rapport to the received feedback. As we will better explain in next paragraphs, narrating a story the most of times is a relational act: the narrator needs to share him/her story with someone else and to feel that the interlocutor is carefully listening to him/her. In doing so, he/she also waits for a listener's feedback.

Without cooperation, human interaction would be far more difficult and counterproductive. Therefore, the cooperative principle and the Gricean maxims are not specific to conversation but to verbal interactions in general.

Autobiographical narratives are a specific type of verbal utterances and have a different characterincomparison;forinstance, toa request such as "Wouldyou please passthesalt?". Skowronski and Walker (2004) argued that these follow similar but not exactly the same conversational maxims. Some of them bring to mind Grice's maxims but others not so.

"Keep it fresh". When engaging in social discourse with others, one of the rules that a speaker needs to follow is to be informative, that is, telling something that is supposed to be unknown to the listener. This is close to the quantity maxim ("Make your contribution as informative as is required").

"Keep it relevant". In conversations speakers might "know" that each memory reported should be relevant to the agreed-upon topic in the social discourse. This norm requires that the speaker understands the goals of the listener and provides input that meets these goals. This is close to the relation maxim (Be relevant).

"Keep it real". That is, to be honest. When this norm is active, it can affect the content of an event description. This is close to quantity maxims ("Do not say what you believe to be false"; "Do not say that for which you lack adequate evidence").

"Keep it brief". This does not mean that listeners do not want a richly detailed narrative, but they do expect that the discourse will proceed in a timely manner. This is close to quantity maxim ("Do not make your contribution more informative than is required").

"Keep it understandable". When conveying an event, a speaker has to take the characteristics of the audience into consideration. Often, this means that an event has to be communicated in such a way that the audience can understand the event. This is close to the manner maxim ("Avoid obscurity of expression", "Avoid ambiguity").

"Allow for feedback". Evidence suggests that feedback is important in conversation and has benefits for both the speaker and the audience. The listener who provides feedback has higher levels of comprehension of the narrator's story.

"Have a point". The narrator in an attempt to be maximally informative might recount certain "critical" incidents from one's life that one thinks are especially indicative of one's traits or goals.

"Allow for feedback" and "Have a point" add something more to the classical Grice's maxims perhaps because they introduce two typical narrative characteristics. The first is that to narrate you need to have a listener's response (allow for feedback) and the second is that the point of view ("positioning": Bamberg 1997) is one of the features of narrative (see also Bruner 1991).

Conclusions

So, what are the main results of our work on the ME-NA relationship? We can stress four main points.

1. If we consider this relation in terms of diachronicity, we can represent it as a path thatstartsfrom memoryandgoestonarrative andthat in turn is communicated to another person within a relation. Memory brings to narrative its content, expressed at a determined level of generality with its charge of emotional affect provided in a positive or a negative tone. Narrative brings to conversation a story (in its aspects of fabula and sjuzhet) and a communicative and pragmatic intent meant to modify and influencing the interlocutor state of mind. Summarising, this representation is a

memory→narrative→relation process. This rather naïfrepresentation ofME-NA-RE connections contains only apartof the truth. Itisas if we catch a photograph of a person while running. It is clear that he or she is moving from one place to another but we do not know why.

2. We can take a step forward to answer "why" if we consider the ME-NA-RE connections intheoppositesense:relationmodifiesnarrativethatmodifiesmemory.Arelationalsituation where a narrating act occurs has at least a narrator and a listener (meant as rules in the conversation). The act of narrating and the story change rapport with this situation. This situation has its own conversational rules and the listener's reactions depend on how the narrator respects these rules, together with many other variables, such as his or her interest, empathy, etc. In this situation narrative expectations are also included because narrating is influenced by the image the narrator has of the listener.

In turn, narrating transforms memory in multiple ways. It gives memory the concrete, physical reality of a phonation act, the semiotic quality of becoming verbal language, the structure of a story format, and the social and relational property of being a communicative act. The final product, the story, cannot help but interact with genre, or another type of language inserted in the culture. In this transformation process, narrative uses all language devices, such as building final causal as well as temporal, conditional, and conjunctive concessive propositions as well as all the lexical paraphernalia to express emotions and cognitive states. Moreover narrating also transforms memory from an emotional point of view.Providinganarrativestructuretomemory,promotesmorecomplexemotions,evoking new feelings and new point of view about the past life event. If memory is affected by narrative that in turn is influenced by relation, we can represent a sort of direction: relationnarrative-memory (RE-NA-ME). This means that memory contains not only the encoding of the events but the rehearsals and the elaborative rehearsal represented by narratives in situations. In this sense, our model could be an interesting way to study false memories: sharing memories with others through a narrative act and receiving the listener's response, could contribute to modify remembering and create false memories, as Brainerd and Reyna suggested in 2002 (Brainerd and Reyna 2002).

3. What appears, therefore, is that from one hand, memory influences narrative andnarrative influences relational situations. From the other hand, it is the relational situation that affects narrative and from there, memory. In Fig. 1 we represented all this relation as a complex process consisting in an successive and alternate encapsulation between ME and NA.

So if we hypothesise that after an event a memory of that event is formed (ME) and that later that memory is narrated to someone ($NA\text{-}RE_{ME}$) the memory occurring after the narration of the memory is no more, simply, the encoding of the event, but something that, includes the previous narrative of that memory. It is a memory already narrated to someone in a context ($ME_{NA\text{-}REME}$). The same is true for narrative: it brings to the relationship a special confectioned memory already assessed in a previous social context. The figure represents this process as a successive (diacronically) and alternate (between memory and narrative) incapsulation, We could

also use the word metarepresentation if the narrator or the reminiscer is conscious that is giving to a listener one of the possible narrative versions of the memory he/she has of that event or whenever he/she remembers how the event was narrated the last time.

This model is consistent with Vygotskian theory on thought and language that is structured as a two-way process, In fact external speech "is the turning of thoughts into words, their materialization and objectification. With inner speech the process is reversed, going from outside to inside. Overt speech sublimates into thoughts." (Vygotsky 1986, p. 226). In Vygotsky's theory the language used after the interiorization of the language in thought is not the same of the social language used by a 2–3 years old child who lack of interior language. This second type of language is a language that is the result of a transformation of language into thought and of thought into a new form of language. This iswhatwemeanwiththeexpressionof 'anarrativeofamemoryofanarrativeofamemory' (see Fig. 1). The results of our study constitute a first step for the implementation of memory and narrative studies in a socio-cultural framework. Starting from these results, we believe that is possible to draw all the consequences of the use of socio-cultural framework in relation to narrativization process in memory. In the clinical and therapeutic fields, for example, many authors suggest the importance of the process of social construction in therapy (McNamee and Gergen 1992). The social relationship, in this case the therapeutic relation, has got an important role in the re-elaboration of past memory through narrating.

This model is consistent also with what Skowronski and Walker (2004) have proposed. They claim that (a) rehearsal influences recall—and social rehearsal (retelling) is one of the most powerful type of rehearsal; (b) retelling autobiographical stories often involves elaborative rehearsal of a memory and builds shape-distorted memory for an event (Tulving and Craik 2000); (c) in retelling events a speaker is selective in the retelling—some event details might be emphasized in preference to other details, some might be altered, while still others mightbe omitted.Suchselectivity obviously has thepotential to shapean individual's

ME= MEmory of the event (The event occurred in the past and it is felt in the present)

NA-RE= NArrative in the RElation (The narrative occurs in a relational context, it has goals and it depends on the partner's role)

$$ME \rightarrow NA\text{-}RE_{ME\ (1)} \rightarrow ME_{\ NA\text{-}RE\ ME\ (2)} \rightarrow NA\text{-}RE_{\ ME\ NA\text{-}RE\ ME\ (3)} \rightarrow \cdots\cdots\cdots$$

(1) Narrative of the memory
(2) Memory of the narrative of the memory
(3) Narrative of the memory of the Narrative of the memory Fig. 1 The alternate encapsulation of memories and narratives

memory for an event. Details excluded from descriptions should be less likely to be remembered, and false event details that are inserted in such descriptions should be more likely to be erroneously "recalled" as being part of the initial event; (d) the

process of describing events to others might alter the memory representation or might provide a memoryrepresentationthatcompeteswiththeoriginalmemorytrace.Forexample,consider the phenomenon of verbal overshadowing (Dodson et al. 1997). Thus, an event memory mighthavedualrepresentation.Oneofthesewouldbethememoryfortheeventdescription; the second would be the episodic memory of the original event. At recall, memory for the description might compete with the original memory trace. Hence, while the occurrence of an often-described event might be easily remembered, the specific perceptual details of the event might become increasingly difficult to retrieve.

Our proposal is consistent with Pasupathi's (2001) line of research: In narrating, a person can refer to the way he or she has already narrated the memory rather than to the way he or she has encoded the original event (Fioretti and Smorti 2015d).

What wewanttostress is thatthe self transforms in relationtothecontinuous memory→ narrative→relation→narrative→memory process, so that memory becomes endlessly a memory of a narrative in relation to a memory of a narrative and so on. Transformation does not mean necessarily positive or negative, but at least it entails an increasing involvement of all those social situations in which narrative occurs. Memory, self-defining memories, and autobiographical memory become a form of social memory.

4. One point more has to be stressed in this model. Memory changes happen also "inside" memoryduringrehearsal,retrieving,andmoodregulations.Wehaveunderlinedpersonsc an intervene on their memories in function of building a self-scheme. One of the cognitive mechanisms to manage memories is the generality-specificity regulation. This is not only important for the organization of memories (see hierarchical organization of Conway 2005) or their schematization in terms of script or semantic memory, but also it is important for choosing the right level of analysis to face painful past experiences. It is more adaptive in terms of survival to remember details of negative experience in order to avoid repeating them in future. However, remembering details of negative experience entails the capacity of tolerating the sense of pain, anxiety, and fear linked to that memory. So, on some occasions, people prefer to forget or to remember in terms of generic (gist) memory, which is a compromise between the need for forgetting and remembering. Remembering is a tradeoff between the need to be consistent to the self-scheme and the need to respect the corresponding reality (Conway 2005). To this aim, autobiographical memory tries to adopt a sense of "adaptive coherence". On the other hand, autobiographical narration must also adopt a compromise between opposites: the need to relieve impinging memory and of the need to respect the social situation features and rules.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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Andrea Smorti is full University Professor in the Department of Education Sciences and Psychology at the University of Florence. He currently teaches Developmental Psychology in the School of Psychology in the same University where he also co-ordinates the Joint Laboratory META-ES (methods and techniques to analyse illness experiences). In the last three decades he has been working on Narrative thought and on the use of autobiographical narrative in sickness situations. Address for correspondence: University of Florence, Via di San Salvi 12, Padiglione 26, 50135 Firenze, Italy.

Chiara Fioretti is currently a Post-Doctoral researcher in the Department of Education Sciences and Psychology at the University of Florence. She is a member of the Joint Laboratory META-ES (methods and techniques to analyse illness experiences) and is a teaching assistant in the field of developmental

psychology in the School of Psychology of the University of Florence. She is engaged in the development of research and intervention projects in illness experiences following the Narrative Based Medicine Approach. Address for correspondence: University of Florence, Via di San Salvi 12, Padiglione 26, 50135 Firenze, Italy.