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Perspective

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Abstract

The imagery we adopt when recalling the personal past may involve different perspectives. In many cases, we remember the past event from our original point of view. In some cases, however, we remember the past event from an external "observer" perspective and view ourselves in the remembered scene. Are such observer perspective images genuine memories? Are they accurate representations of the personal past? This chapter focuses on such observer perspectives in memory, and outlines and examines proposals about the nature of such imagery.

Perspectival Memory: An Introduction

Episodic, or personal, memory is central to many aspects of a rich and meaningful life. It affords us the chance to mentally revisit events and experiences from the personal past. Yet a peculiar and puzzling feature of personal memory is that it is typically perspectival. The imagery of memory often involves recalling events from one's original perspective, or sometimes (for some memories, and for some people), from an external vantage point, such that one sees oneself in the remembered scene. These points of view are known in the literature as field and observer perspectives, respectively (Nigro and Neisser 1983). Given the shift in perspective between one's original perceptual experience and subsequent memory, it is observer memory that is of particular interest, and memory researchers have provided different accounts of this phenomenon.

The first scientific studies of visual perspective in memory can be traced back to the late nineteenth and early twentieth centuries. Conducting his (in)famous breakfast questionnaire, on the imagery abilities of his scientific colleagues and male students, Francis Galton identified a "class" of people who have "the habit of recalling scenes, not from the point of view whence they were observed, but from a distance, and they visualise their own selves as actors on the mental stage" (1883/1907, 68–69). This phenomenon was also noted by the French psychologists Victor and Catherine Henri (see Nicolas et al. 2013), and by Sigmund Freud (1899/2001). But only since Nigro and Neisser's (1983) systematic study has there been rich and robust empirical research on perspective in memory.

This research has shown that there are, of course, individual and cultural differences in the prevalence of perspective (Cohen and Gunz 2002; Radvansky and Svob 2019). Nonetheless, a

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certain pattern, albeit complicated, has emerged. Field perspective memories tend to be more common overall, and a field perspective tends to be adopted when the remembered event involved a high degree of emotion (Robinson and Swanson 1993). The reduced affect of observer perspectives has led some researchers to propose that such memories serve to distance oneself from the emotion of the previous event (Wilson and Ross 2003), although others suggests that, especially in the case of traumatic memories, such perspectives may have a negative impact on the recovery process (McIsaac and Eich 2004; Williams and Moulds 2007); yet others emphasize that the relation between emotion and observer memory is complex (Libby and Eibach 2011).

Empirical investigations have also shown, however, that observer memories are more common under certain circumstances, such as in memories for events in the more distant past (e.g., memories of childhood), and events that involve a high degree of (emotional) self-awareness (e.g., giving a talk in public). In fact, there might not be such a strict distinction between the two perspectives (see below).

In terms of differences in the accuracy of field versus observer perspectives, the evidence is ambiguous (see Rice 2010 for a summary; cf. Dranseika et al. 2021). Given that there are no clear differences in accuracy between the two perspectives, the British Psychological Society concludes that an "image experienced from a field perspective should not be assumed to be a more accurate recollection than an image experienced from an observer perspective" (2008, 20). Despite this cautionary note, many researchers view observer perspectives as somehow defective or distorted. The point of view in observer memory is often thought to be an anomalous one.

An Anomalous Point of View

The writer Jenny Diski describes a scene from her childhood (2012). It is an ordinary memory, an image of her childhood self, seated on her father's knee, in the context of the family home. The scene she brings to mind is recalled from an observer perspective: she views herself in the remembered scene. Diski is confident that the image is accurate in all its details (spatial arrangement, color schemes, and her father's appearance). Nonetheless, despite its apparent accuracy, there is something that Diski takes as odd about this memory. The strangeness of the image, for Diski, stems from the observer vantage point from which she views the scene. Recalled from an observer perspective, the image involves an "anomalous point of view" (Diski 2012, 12). Indeed, this anomalous point of view leads Diski to reject this as a genuine memory. For her, the observer point of view is a sign of how false recollection can be.

This worry is shared by many. It is sometimes suggested that observer perspective memories are simply impossible (Vendler 1979; Wollheim 1984), or that, even if they are genuine, they are nonetheless distorted. These worries stem from three assumptions. First, that it is impossible to see oneself during a perceptual experience. Second, genuine memory preserves the content of perception. Putting these two together leads to the conclusion that only a memory that preserves one's original viewpoint – a field perspective – can be genuine. Further, even those who grant that observer memories may be genuine nevertheless tend to take them as inevitably involving some degree of distortion (De Brigard 2014; Siedlecki 2015). Implicit in this view is the assumption that observer memory involves construction and that construction entails error. Again, the idea is that the content of an observer memory diverges from the content of the corresponding perceptual experience, and is hence distorted in some sense (Fernández 2015; cf. Trakas 2020).

If these assumptions about observer perspectives in particular, and about construction in memory more generally, were true, then this would indeed seem to leave observer perspectives as somehow defective. These assumptions will be examined and assessed throughout this entry.

A Retrieval Phenomenon

It is now a truism that episodic memory is reconstructive rather than reproductive (Bartlett 1932; Roediger and DeSoto 2015). One of Nigro and Neisser's key proposals was that observer memories diverge from one's original experience and are hence the products of more reconstruction than field perspectives (cf. Conway 2009); this enhanced reconstruction in observer perspectives is thought to explain why they are more common in older memories. For example, information that was initially encoded as a field perspective might become semanticized over time, where contextual details are lost, and is eventually reconstructed from an observer perspective (Piolino et al. 2006). It might also help explain why emotional memories are recalled from a field perspective, in that they have "resisted reconstruction" (Nigro and Neisser 1983, 468).

The idea that remembering from an observer perspective involves more extensive reconstruction than remembering from a field perspective has guided most subsequent thinking on perspective in memory. On this way of explaining observer memories, information that is initially encoded from a field perspective switches or changes to an observer perspective when the memory is retrieved. In this way, the dominant explanation of observer perspectives in the philosophy and science of memory is that such memories are the products of reconstructive processes at memory retrieval.

Emphasizing the context of retrieval acknowledges the multiple causes that may influence memory content at the time of recall. On this understanding, memory content can change, and new memory content can be generated, often due to the context of retrieval. Observer perspectives would reflect a change in the content of memory that occurs at retrieval. On such an understanding, all visual memory imagery is encoded from a field perspective, or perhaps no perspective is encoded (see below), and the observer perspective occurs because of reconstruction at retrieval.

There are a number of views from philosophy that emphasize this reconstructive approach, and stress the importance of change for observer memories between encoding and retrieval (e.g., Goldie 2012; Bernecker 2015). For Peter Goldie, the content of memory can be influenced at the point of retrieval by present knowledge and emotion. Observer perspectives, in his view, are more likely to occur when there is an epistemic, emotional, or evaluative gap between the past and the present (Goldie 2012). In other words, what one *now*, in the present, knows, thinks, and feels is different to what one *then*, in the past, knew, thought, and felt. It is this gap that opens between the past and the present that often affords the possibility of observer recall (cf. Zaman and Russell 2022). Observer perspectives are related to thinking narratively about the past, and are reconstructed at retrieval because of the difference between the contexts of the past and the present.

It seems clear that many observer perspective memories are the products of reconstructive processes at retrieval. Does this mean that they are somehow defective or not genuine memories? This may depend on the relation between reconstruction and error. Sue Campbell notes that many theorists operate with an (implicit) "alliance of construction with distortion and error" (Campbell 2004/2014, 20). If construction is conflated with error or invention, and if observer memories are more reconstructed than field memories, then it seems that there is reason to view observer perspectives with suspicion.

This line of thought is much too simple, however. First, if episodic memory is reconstructive, then *both* field and observer perspectives are the products of reconstructive processes, and it is not clear that observer perspectives involve more reconstruction than field perspectives (Sutton 2010; Michaelian 2016). That both field and observer perspectives memories involve constructive elements is acknowledged by Dorothea Debus (2007). For Debus, both field and observer memories require the reconstruction of their spatial perspectival properties; the shift in point of view between the original perceptual experience and the subsequent observer memory results from a *systematic* modification of the spatial information available at the time of encoding. Spatial information available at the time of the original

experience – and hence appropriately causally connected to the past (cf. Martin and Deutscher 1966) – is systematically manipulated into an observer perspective image, and hence these memories can be genuine.

Second, even if observer perspectives do involve *more* reconstruction, skepticism is apt only if reconstruction is equivalent to error. But reconstruction does not inevitably distort your memories of how things happened. Rather, "the point of the reconstruction is more typically to keep your memory images on track; to ensure that they are credible images of what actually happened" (Campbell 2001, 182). Reconstruction in memory is ubiquitous and occurs "even when the reconstruction is quite accurate" (Roediger and DeSoto 2015, 50).

The mere fact that observer perspectives involve reconstruction, perhaps even more reconstruction than field perspectives, does not on its own entail that they are false memories. One needs the further (unsupported) claim that reconstruction necessarily involves error.

In fact, it is now widely accepted that memory is not just reconstructive at retrieval, but that it also involves constructive processes at encoding (Alba and Hasher 1983). If one acknowledges the wholly constructive and reconstructive nature of memory, one must also consider the possibility that some experiences are *encoded* into observer memories.

An Encoding Phenomenon

Observer perspectives are memories in which one sees oneself in the remembered scene, from an external or detached point of view. Intuitively, because there is a divergence between the original visual point of view and the point of view when remembering, observer memories seem to be distorted. One way of thinking of this is that observer perspectives typically cannot satisfy an authenticity condition on accuracy in episodic memory, where authenticity is understood as involving a match between one's memory representation and how one originally *experienced* the event (cf. Bernecker 2015). Given the divergence in visual perspective, it seems hard to account for observer perspectives in terms of authenticity, because there is a (seeming) mismatch between how one experienced the event and how one remembers the event. Nonetheless, following a claim made in Nigro and Neisser's (1983) foundational study on perspective in memory, such that observer perspectives may have actually been encoded in this format, some have argued that some such memories can satisfy the authenticity condition (McCarroll and Sutton 2017).

The idea is that, at least in some instances, observer perspectives may be constructed from information that was available at the time of the original experience, but that was translated into visual imagery in which one sees oneself from the outside (McCarroll 2017, 2018). One's present observer memory hence matches one's past experience. This claim begins from the observation that (re)construction in memory is not just about retrieval. There are *reconstructive* processes that operate at memory retrieval, but there are also *constructive* processes that operate during memory encoding (Michaelian 2011). The constructive processes involved in memory encoding involve selection (where only certain stimuli are encoded), abstraction (where meaning is abstracted from the information selected and some content is lost), interpretation (where relevant prior knowledge is invoked to interpret the event), and integration (in which a holistic representation is formed from the products of the selection, abstraction, and interpretation processes). Importantly, these same constructive processes will be employed in the encoding of both field and observer perspectives, but may select for the salient information in both cases. Perhaps most experiences will unfold while we are attending to information that is apposite for the construction of field perspective memories, such as the visual information from perception which is from one's own point of view. But sometimes, in some circumstances, the information that has been selected, abstracted, and interpreted from an event will be integrated and encoded into an observer memory.

Observer perspectives differ from field perspectives in virtue of their spatial perspectival

characteristics. Two elements of observer perspectives need to be accounted for: the external point of view and the representation of the self in such images. The constructive encoding view of observer perspectives (McCarroll 2018) does so by appealing to the way in which we process spatial information. The external point of view can be explained by appealing to allocentric representations – which involve a detached point of view – that were available during the original experience; this potential link between allocentric representations and observer perspectives in memory is also highlighted by Arzy and Schacter (2019). This leaves us needing to explain how the representation of the self in observer perspective experiences is constructed (Lin 2020; Dings and Newen 2021). Again, the answer might be found in how we process spatial information. One key idea is that spatial representations based on one sensory modality can be translated or transformed into a different modality. For example, tactile or kinesthetic information may be translated into visual imagery. Such cross-modal transformation of information can lead one to generate a visual image even without the input of visual perception: a nonvisual source of information may be translated into a visual representation of that information. In other words, the visual representation of the self in observer memory may be constructed from nonvisual information that was available at the time of encoding (McCarroll 2018).

In such cases, observer perspectives may accurately reflect some nonvisual aspects of the content of the original experience. In this sense, at least for some instances of observer memories, despite the appearance of an apparent divergent point of view, there is in fact no mismatch between encoding and retrieval and observer perspectives can be seen as authentic memories. The idea that observer memories may be the result of encoding processes has started to attract the attention of empirical research. Using a novel immersive virtual reality paradigm to bring about a *visual* observer perspective at encoding, Heather Iriye and Peggy St. Jacques investigated how visual perspective during encoding influences memories. Their results suggest that adopting an observer perspective at encoding results in memories that are recalled from an observer perspective. In terms of accuracy, they found that there is no difference in the accuracy of visual information in memories of events that were experienced from a first-person versus a third-person perspective, but they did find that the latter increased spatial memory accuracy (Iriye and St. Jacques 2021; cf. Bergouignan et al. 2014).

In spite of this empirical support, however, the view that observer perspectives may match the content of perceptual experience has been challenged. According to Michaelian and Sant'Anna (2022), while observer perspectives may in principle involve the kind of translation necessary to satisfy authenticity, in practice this is extremely unlikely. The general idea is that an observer perspective image in which one sees oneself from the outside either involves content of the wrong kind for the translation process to work, or would require much more information than will actually be available during the original experience. The idea is that there is always going to be some additional information in the observer memory image that wasn't encoded from the original experience, and so authentic observer memories, while perhaps possible, are extremely improbable. The precise mechanisms of the generation of observer perspectives, and whether such memories may be constructed from allocentric information at encoding and the integration of multisensory information, is ultimately an empirical question (Andonovski 2022).

As the next section shows, the question of how such detached perspectives arise in memory has started prompting answers that emphasize the multidimensionality of observer memories. Indeed, it is not just memory in which such perspectives arise, and research in distinct domains may help shed light on the nature of perspectival imagery.

Dimensions and Domains of Perspective

Much research on perspective in memory has assumed that each memory experience must adopt *either* a field *or* an observer perspective. Recent work convincingly challenges this assumption, suggesting instead that field and

observer perspectives may be independent. There are three reasons for this. First, some memory experiences seem to involve both perspectives, either through rapid switching or simultaneously holding both perspectives (Rice and Rubin 2009). Second, the perspectives seem to vary separately: when people are asked to rate separately the clarity, vividness, or detail of their memory from the two perspectives, we find that in some experiences both perspectives are rated highly, in others both low, as well as the expected cases in which one perspective predominates (Kinley et al. 2021). Third, the perspectives are not necessarily single, unified, or stable: in the case of observer perspectives at least, we can adopt many different external viewpoints on a remembered scene and on ourselves in that scene. In general, for example, while people tend to remember giving a presentation as from above and in front of their past speaking selves, they tend to remember swimming in a pool as from directly above, and running as from behind (Rice and Rubin 2011). Experimental procedures now typically allow for the independence and multiplicity of perspectives by deploying separate scales for field and observer perspectives, rather than one single linear scale.

Research on perspectives in remembering is still thus in a state of some flux, because these are difficult phenomena to pin down, subjectively as well as objectively. Many people are surprised to discover that they sometimes adopt these different perspectives on the remembered past, or (in the case of the relatively small number who appear only to experience field perspectives) that other people can have such different experiences. The perspectival aspects of our memory experiences are not often explicit in our awareness, the direct objects of our attention: rather they are pre-reflective structural features of *the way we remember* past events. Indeed, the notion of "perspective" itself is complex, and recent work seeks to do justice to the multiplicity of phenomena involved.

Arguably, like "point of view," there is a visual bias built in to the notion of "perspective": in the study of memory perspectives, we are typically addressing the visuospatial aspects of experience and cognition, rather than the broader senses of "perspective" by which we sometimes mean our capacity to understand something from our own or from other people's position. While visuospatial perspectives are rightly at the heart of the study of memory experience, researchers now also ask how these visuospatial dimensions of memories relate to other dimensions. A number of writers suggest that there are related forms of "internal" and "external" perspectives in embodied and emotional dimensions of memory experiences, as well as in their visual dimensions (Sutton 2010; McCarroll 2018; Peeters et al. 2022). These dimensions can vary separately: for example, I may adopt a field perspective visually on a past event even while now feeling emotionally distanced or alienated from that past self, or recall the past event from an observer perspective while feeling emotionally connected. Likewise, evidence from sport psychology suggests that expert practitioners in open-skill domains like rock climbing, slalom skiing, and some forms of elite dance practice often remember their past actions from the outside visually (adopting an observer perspective in the basic sense) while actively engaging *from the inside* with their movements, decisions, and technique, just because their performance benefits from this kind of integration of internal and external perspectives, of how it looks with how it feels (Morris and Spittle 2012; Sutton 2012).

So far, just the visuospatial, emotional, and kinesthetic or embodied dimensions of memory experience have been considered. But memory is by no means the only domain of experience in which we can adopt internal and external, "field" and "observer" perspectives. One can see oneself as from the inside or as from the outside in a number of other domains of cognition besides memory, with which memory researchers are increasingly considering similarities and connections. In imagining possible actions and events, I may adopt a field or an observer perspective. Some dream reports clearly indicate an observer perspective on the dreamed events: "I was seeing my body lying on the bed, and it was completely white" (Cicogna and Bosinelli 2001, 31). Gesture researchers distinguish "character viewpoint" gestures, in which a speaker's own body depicts a

described event as from the inside, from "observer viewpoint" gestures, in which an action is depicted as though from afar, perhaps by tracing a path with the hand that maps what a distant viewer would see (McNeill 1992). But they then study "dual viewpoint" gestures, in which either the two hands or one hand and the body (or another body part) take on different perspectives: dual viewpoint gestures "suggest that a speaker is taking multiple spatial perspectives on a scene at the same time . . . a rather impressive cognitive feat" (Parrill 2009).

When we remember places we have been or routes that we have taken, we deploy memory alongside spatial cognition. In finding our way through the world, and in communicating with each other about places and directions, we can adopt a "route" perspective on space, in which we mentally journey along an experienced pathway, representing it as from our own eyes within the scene, or we can adopt a "survey" perspective, which presents a more objective tableau, perhaps as if from above. Navigation researchers find that people preferentially or strategically adopt these spatial perspectives depending on the task and the context, but also as more or less stable cognitive styles. But as for the parallel distinction in memory, it is perhaps possible for these distinctive ways that we think, draw, or talk about space to "coexist in a single description" (de Certeau 1988, 119), or speak in terms of both route and survey perspectives in the same expression (Tversky 2011, 507).

While the mechanisms and operations of perspective in remembering have different constraints, with, for example, questions of accuracy not arising in the same way in these other domains, further research is likely to identify common neural, cognitive, and phenomenological features of these distinctive contexts in which we adopt such perspectives. These complications reflect growing awareness across the disciplines of memory studies and memory science that we cannot understand remembering on its own and in isolation from the cognitive, affective, embodied, and environmental contexts in which it occurs.

Summary

The interest in perspectival remembering has blossomed in recent years, and a variety of questions about the nature of observer memory in particular have been posed. Can we genuinely remember from an observer perspective? Can such perspectival images accurately represent an event in one's personal past? What is the function of such memories? The answers to these questions depend in part on how one understands the nature of episodic memory more generally. If one takes reconstruction to necessarily involve error or distortion, then skepticism about observer memory may arise. If, on the other hand, one views perspective as a change in the *form* of remembering, as a shift in *how* one remembers the past event, which may help one think narratively about the past event, these worries may carry less force.

Given the complex, context-dependent nature of episodic remembering, understanding the perspectival nature of the imagery we use to remember the personal past may involve incorporating research from different domains and disciplines. Such multidisciplinary research will offer us new and exciting points of view on the nature of perspectival imagery in memory.

Cross-References

- ▶ Bartlett
- ▶ Dreams
- ▶ Emotions
- ▶ Narrative
- ▶ Psychoanalysis

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