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Correlates and Phenomenology of 1st and 3rd Person Memories

Angelina R. Sutin and National Institute on Aging, NIH, DHHS Richard W. Robins

University of California, Davis

Abstract

The present research addressed fundamental questions about the visual perspective of autobiographical memories: Are stable personality characteristics associated with visual perspective? Does visual perspective influence the memory's phenomenological qualities? Participants in Study 1 (N = 1,684) completed individual-difference measures and indicated the perspective from which they generally retrieve memories. Participants in Study 2 (N = 706) retrieved a memory from their natural or manipulated perspective, rated its phenomenology, and completed the same individual-difference measures. Dissociation and anxiety were associated with $3^{\rm rd}$ person retrieval style; the Big Five personality traits were primarily unrelated to perspective. Compared to $3^{\rm rd}$ person memories, naturally-occurring $1^{\rm st}$ person memories were higher on Vividness, Coherence, Accessibility, Sensory Detail, Emotional Intensity, and Time Perspective and lower on Distancing; manipulating perspective eliminated these differences. Visual perspective is associated with clinically-relevant constructs and, although associated with the memory's phenomenology, perspective does not shape it.

Keywords

Visual Perspective; Autobiographical Memory; Personality; Phenomenology; Dissociation

Autobiographical memories can be retrieved from the 1st person perspective, in which the experience in the memory is seen through the individual's own eyes, or from the 3rd person perspective, in which the experience is seen through those of an observer (Nigro & Neisser, 1983). Most research on visual perspective has examined two questions highlighted by McIsaac and Eich (2002): (1) Which individual difference and situational factors determine the visual perspective from which a memory is retrieved? and (2) How does visual perspective influence the subjective experience of the retrieved memory? The present research addresses both questions by examining several individual-difference predictors of visual perspective and the influence of both measured and manipulated visual perspective on phenomenological features of the memory.

Individual Differences and Visual Perspective—One of the most basic and unanswered questions about visual perspective is whether stable characteristics of the individual are associated with the general tendency to retrieve autobiographical memories from the 1st or 3rd person perspective; for example, are certain personality characteristics associated with a person's modal visual perspective? As recognized by Nigro and Neisser (1983), visual

perspective is the end result of a complex retrieval process and many factors influence that process. Following Nigro and Neisser's seminal research, we have argued that visual perspective is a product of contextual and dispositional factors, and/or their interaction (Sutin & Robins, 2008). That is, even in the presence of the other, both contextual and dispositional factors likely contribute to perspective at retrieval.

Despite considerable interest in the role of dispositional factors in visual perspective, previous research has focused primarily on clinical samples such as social phobics (D'Argembeau, Van der Linden, d'Acremont, & Mayers, 2006), clinically-relevant types of memories such as intrusive (Williams & Moulds, 2007; 2008) or traumatic (Cooper, Yuille, & Kennedy, 2002), and clinically-relevant individual difference constructs such as depression (Bergouignan et al., 2008; Kuyken & Moulds, 2009). Although such studies are crucial to understanding memory retrieval processes in clinical populations, such studies may provide little insight into the personal characteristics that shape how individuals in general retrieve autobiographical memories. To address this gap in the literature, we conducted two large studies that explore the association between visual perspective and stable individual differences in normal personality functioning, as well as several clinically-relevant constructs. Below, we briefly summarize previous research on these individual-difference variables.

We know of no large-scale studies that have examined the relation between measures of normal personality functioning and visual perspective. One small-scale study did find that those who scored high on Harm Avoidance (a trait related to Neuroticism) were more likely to report positive memories from the 3rd person perspective (Lemogne et al., 2009). In addition, two studies have demonstrated that the Big Five traits – the primary dimensions of normal personality functioning – influence how individuals subjectively experience their memories. Rubin and Siegler (2004), for example, found that Openness to Experience and, to a lesser extent, Extraversion, are related to the phenomenological components that give the memory its reliving quality, that is, the subjective experience of re-experiencing the event in the memory. Sutin (2008) examined only the Neuroticism and Conscientiousness dimensions and found that Neuroticism is linked to the tendency to have emotionally intense memories and to distance the self from such memories, whereas Conscientiousness is linked to having vivid and coherent memories. Neither study, however, included a measure of visual perspective.

According to Nigro and Neisser (1983), the individual's motivational and emotional state at the time of retrieval may, in part, have an effect on the visual perspective of the memory. As such, the motivational and emotional tendencies associated with personality traits may shape how the memory is retrieved. Individuals high in Extraversion, for example, have a dispositional tendency to experience and maximize positive emotions and visual perspective has been found to increase positive affect (Holmes, Coughtrey, & Connor, 2008). In contrast, individuals high in Neuroticism are prone to experience a wide range of negative emotions and may use a variety of cognitive strategies, such as visual perspective, to regulate their negative mood states. Finally, individuals high in Openness are motivated to feel a wide range of emotions and have phenomenologically rich inner lives and individuals high in Conscientiousness have a strong need for order and coherence in their internal, as well as external, worlds. These dispositional tendencies are reflected in the content and structure of autobiographical memories (McAdams et al., 2004; McLean & Fournier, 2008; Sutin, 2008). Thus, given that 1st person memories are more strongly associated with the reliving qualities of memories than are 3rd person memories (Berntsen & Rubin, 2006) and that the Big Five traits are theoretically linked to retrieval strategies, we expect that individuals high in Openness, Extraversion, or Conscientiousness would be more likely to retrieve memories from the 1st person, whereas individuals high in Neuroticism would be more likely to retrieve memories from the 3rd person.

In contrast to measures of normal personality functioning such as the Big Five, research on visual perspective has directed more attention at clinically-relevant constructs. For example, individuals suffering from depression (Lemogne et al., 2006; Williams & Moulds, 2007) and anxiety disorders (D'Argembeau et al., 2006) tend to retrieve memories from the 3rd person. Other clinically-relevant traits that have clear ties to visual perspective, such as trait dissociation, have received less attention. Given that dissociation involves a tendency to step outside oneself and watch oneself as an observer would, high dissociators should be characterized by a general tendency toward 3rd person retrieval. Surprisingly, no studies have directly tested this question. Instead, previous studies have examined the more specific question of whether dissociation is associated with 3rd person retrieval of traumatic memories in clinical samples. For example, Cooper, Yuille, and Kennedy (2002) found that prostitutes who reported dissociating during a traumatic experience were more likely to retrieve memories of that trauma from the 3rd person; there were no effects, however, of trait dissociation. Other studies have found that, among individuals high in depressive affect, high dissociators tended to retrieve intrusive memories from the 3rd person perspective (Williams & Moulds, 2007). It is unknown, however, whether the disposition to dissociate in non-clinical populations is associated with a general 3rd person retrieval style; we expect that individuals who score high in dissociation will be more likely to retrieve memories from the 3rd person perspective.

In addition, research suggests that individuals with social phobia (chronic social anxiety) tend to retrieve memories of social experiences from the 3rd person perspective but do not show the same tendency for non-social experiences (D'Argembeau et al., 2006; Wells, Clark, & Ahmad, 1998). It is not clear, however, whether chronic generalized anxiety is also linked to retrieval of memories from the 3rd person perspective or if 3rd person retrieval is distinctive to social anxiety. Following the social anxiety literature, we expect those who are high on general anxiety will report a general tendency to retrieve their most self-defining memories from the 3rd person perspective.

Visual Perspective and Memory Phenomenology—The subjective, or phenomenological, experience of the memory is what allows rememberers to travel back in time, re-experience the event in their mind, and claim the memory as their own (Tulving, 2002; Piolino et al., 2006). In particular, to relive the experience, the memory must be placed in time and context and the sensory experience recreated. These reliving qualities appear to be more strongly related to 1st person than 3rd person memories. For example, 1st person memories tend to be more vivid (Nigro & Neisser, 1983), more emotionally intense (Talarico, Labar, & Rubin, 2004), and rated higher on the subjective feeling of reliving, visual imagery, and sensory experience; such memories are also more likely to be believed as true than are 3rd person memories (Berntsen & Rubin, 2006).

Some studies, however, have failed to find a relation between 1st person retrieval and greater reliving of the experience. Terry and Barwick (1998-1999) found the opposite pattern—3rd person memories were rated as more vivid, detailed, and emotional than 1st person memories—and McNamara, Benson, McGeeney, Brown, and Albert (2005) found no differences between the two perspectives. Inconsistencies across studies may be due, in part, to small sample sizes and the idiosyncrasies of specialized populations, types of memories retrieved, and differences in how memory phenomenology was measured. In the current research, we use a large sample, a comprehensive and psychometrically-sound measure of phenomenology (the Memory Experiences Questionnaire; Sutin & Robins, 2007), and memory prompts that probe the individual's most personally-meaningful memories. To date, no research has examined how the full range of memory phenomenology is associated with visual perspective in self-defining memories. Rather, previous research on visual perspective has used either emotional memory prompts or specific types of memories and has focused primarily on a subset of phenomenology, such as vividness and emotional intensity.

Researchers have also attempted to directly manipulate the visual perspective from which a memory is retrieved. In general, these studies have failed to replicate the phenomenological differences found when visual perspective was measured rather than manipulated. For example, Robinson and Swanson (1993) had participants retrieve and rate the same memories twice, two weeks apart, the second time from a visual perspective specified by the experimenter. In contrast to the pattern of findings observed for naturally occurring 3rd person memories, participants who were instructed to retrieve their memories from the 3rd person reported less emotional intensity than when they retrieved the same memory from the 1st person; there was no change in phenomenology when participants switched from the 3rd person to the 1st person perspective. Berntsen and Rubin (2006) replicated the decrease in emotional intensity when shifting from a 1st to a 3rd person perspective and also failed to find any effects when shifting from the 3rd to the 1st person. Likewise, Williams and Moulds (2008) replicated this pattern with intrusive memories among mildly dysphoric students.

In these previous studies, participants were asked to retrieve the same memory twice, with visual perspective manipulated at the time of the second retrieval. However, the repeated retrieval of a memory may change its phenomenology, which may interfere or interact with the effects of visual perspective. Although this within-person design helps control for individual differences in memory retrieval style, it conflates visual perspective with the effects of repeated retrieval. To help clarify this issue and to complement previous research using within-person designs, we manipulated visual perspective between-persons and examined its effects on memory phenomenology in a large sample of participants.

The Present Research—The present research reports two studies that (1) examine stable individual differences associated with visual perspective and (2) test for phenomenological differences between 1st and 3rd person memories, both naturally occurring and experimentally manipulated. In Study 1, participants completed several theoretically relevant individual-difference measures and indicated the perspective from which they generally retrieve their memories. In Study 2, participants retrieved a personally-meaningful memory, either from their natural visual perspective or from a manipulated perspective, rated their phenomenological experience of the memory, and completed the same battery of individual-difference measures as in Study 1.

Study 1 Method

Participants and Procedure—A total of 1,684 undergraduate students (69% female) participated in this study in exchange for course credit. Participants completed a series of individual-difference scales (described below) as part of an online survey. Embedded within these scales was a question about their typical visual perspective when retrieving memories (described below).

Measures

<u>Visual perspective:</u> To assess their general tendency to retrieve memories from the 1st or the 3rd person perspective, participants were presented with a description of the two perspectives, drawn from Libby and Eibach (2002):

"Sometimes we "see" a memory from a first-person perspective. In a first-person memory you see the event from the same visual perspective that you originally did; in other words, in your memory you are looking out at your surroundings through your own eyes. However, at other times we "see" a memory from a third-person perspective. In a third-person memory you see the event from an observer's visual

perspective; in other words, you can actually see yourself, as well as your surroundings."

Participants were then asked to complete the following statement, "In general, the visual perspective I have in my memories is..." The response scale ranged from 1 (*completely* 3^{rd} *person*) to 10 (*completely* 1^{st} *person*). Thus, higher scores indicate retrieval from a more 1^{st} person perspective. In the current sample, visual perspective had a mean of 6.70 (SD = 2.22).

Personality: Participants completed the 44-item Big Five Inventory (BFI; John, Naumann, & Soto, 2008). Participants rated how much they agreed with a series of statements that started with the sentence stem: "I see myself as someone who...," which assessed their level of Neuroticism (e.g., "worries a lot"; alpha reliability = .81), Extraversion (e.g., "is outgoing, sociable"; alpha reliability = .85), Openness to Experience (e.g., "is curious about many different things"; alpha reliability = .77), Agreeableness (e.g., "is helpful and unselfish with others"; alpha reliability = .78), and Conscientiousness (e.g., "is a reliable worker"; alpha reliability = .80). Participants rated these statements on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*).

Dissociation: The 28-item Dissociative Experiences Scale (DES; Bernstein & Putnam, 1986) assessed participants' general tendency to dissociate. Participants reported how often the particular experience described by the item happens to them; for example, "Some people have the experience of driving a car and suddenly realizing that they do not remember what has happened during all or part of the trip. Check the box that shows what percentage of the time this happens to you." In the current sample, the DES had an alpha reliability of .97.

General anxiety: General anxiety was measured with the trait subscale from the State-Trait Anxiety Inventory (STAI; Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). Participants were asked to judge how they generally feel on 20 anxiety-related items (e.g., "I am jittery"; "I am calm" [reverse-scored]). The response scale ranged from 1 (not at all) to 4 (very much). In the current sample, General Anxiety had an alpha reliability of .89.

Results and Discussion

Table 1 shows the correlations between visual perspective and the individual differences measures. Visual perspective was most strongly associated with dissociation: Individuals who are prone to dissociation tend to retrieve their memories from the $3^{\rm rd}$ person perspective. In addition, participants who are prone to anxiety also tended to retrieve their memories from the $3^{\rm rd}$ person.

Of the Big Five personality dimensions, only Conscientiousness was related to visual perspective; conscientious individuals tend to retrieve memories from the 1st person perspective. Contrary to our expectations, Neuroticism, Extraversion, and Openness were unrelated to visual perspective. It is possible that personality differences are more strongly related to the visual perspective used to retrieve specific memories than a general retrieval style.

Study 2

In Study 2 we sought to replicate and extend the findings from Study 1, but with several important changes in the design. First, visual perspective was assessed in the context of a specific autobiographical memory rather than as a general retrieval style. Second, visual perspective was manipulated, as well as assessed via self-report. Third, we assessed the key phenomenological characteristics of autobiographical memories using the Memory Experiences Questionnaire (MEQ; Sutin & Robins, 2007), which allowed us to compare the

subjective experience of 1st and 3rd person memories, both naturally occurring and manipulated. Participants retrieved a recent self-defining memory either from their natural visual perspective or from a perspective specified by the experimenter. We chose memories that are particularly meaningful to the self because of the strong links between the self and autobiographical memory in general (Conway & Pleydell-Pearce, 2000; Conway, Singer, & Tagini, 2004) and between the self and visual perspective in particular (Libby & Eibach, 2002; Libby, Eibach, & Gilovich, 2005). Participants then rated their phenomenological experience of the memory at retrieval using the MEO. We expected that 1st person retrieval would be associated with the MEQ dimensions related to the reliving of the memory, specifically the spatiotemporal-contextual components that put the memory in time and place (Vividness, Coherence, and Time Perspective) and the perceptual components that give the memory its sensory qualities (Sensory Detail and Emotion Intensity). We further expected that these dimensions and the Accessibility and Sharing dimensions would be rated higher for natural 1st person memories than for natural 3rd person memories, whereas natural 3rd person memories would be rated higher on Distancing. Although the same pattern should hold for manipulated perspective, because previous research has failed to find these differences, we did not expect the phenomenology of manipulated 1st person memories to differ from the phenomenology of manipulated 3rd person memories.

Method

Participants and Procedure—A total of 706 undergraduate students (63% female) participated in this study in exchange for course credit. Participants retrieved a recent autobiographical memory from either their natural (n = 450) or a manipulated (n = 256) perspective. Because recent memories are about three times more likely to be retrieved from the 1st person (Nigro & Neisser, 1983), the natural perspective was oversampled to ensure a sufficient number of 3rd person memories. After retrieving the memory, participants rated its phenomenological features. Several weeks prior to the experiment, participants completed the same individual-difference measures used in Study 1.

Self-defining Memory Measure

<u>Instructions:</u> Participants were asked to write about a personally-meaningful self-defining memory. Self-defining memories are a particular form of autobiographical memory, perceived to be especially important and relevant to a person's identity and sense of self. The self-defining memory instructions were adapted from Singer and Moffitt (1991-1992):

Please describe a memory that is personally meaningful to you. It can be either positive or negative, but it should convey the most important experience you have had that helps you to understand who you are and how you arrived at your current identity. It may be a memory about any kind of experience, but it should be something you have thought about many times and is still important to you, even as you are recalling it now. Please describe the memory in detail: what happened and when, whom you were with (if anyone), and how you felt or reacted.

Participants had as much space as they needed to write about the memory.

<u>Natural condition</u>: In the natural condition, visual perspective was measured with the Visual Perspective scale from the Memory Experiences Questionnaire (MEQ; Sutin & Robins, 2007). Participants rated six items related to the visual perspective of the memory (e.g., "I see the experience in the memory through my own eyes.") on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). In the current sample, Visual Perspective had an alpha reliability of .89.

<u>Manipulation condition:</u> Participants in the manipulation condition received the same memory prompt as participants in the natural condition, but were randomly assigned to retrieve

the memory from either the 1^{st} person (n = 128) or the 3^{rd} person (n = 128) perspective. Participants received the following instructions, drawn from Libby, Eibach, and Gilovich (2005); 3^{rd} person perspective instructions are shown in brackets:

"Please visualize the event FROM THE SAME VISUAL PERSPECTIVE THAT YOU ORIGINALLY HAD [FROM AN OBSERVER'S VISUAL PERSPECTIVE], in other words, LOOKING OUT AT YOUR SURROUNDINGS THROUGH YOUR OWN EYES [SO THAT YOU CAN SEE YOURSELF AS WELL AS YOUR SURROUNDINGS IN THE MEMORY]. Please try to make your memory image as detailed as possible."

During a separate session, participants in this condition also indicated their visual perspective general retrieval style, using the same single-item measure of visual perspective as in Study 1. In this sample, visual perspective had a mean of 6.63 (SD = 2.24).

Phenomenology: In addition to the Visual Perspective dimension, participants completed the remaining nine MEQ scales: Vividness (e.g., "My memory for this event is very vivid."), Coherence (e.g., "This memory is of an event that occurred once at a particular time and place, not a summary or merging of many similar or related events."), Time Perspective (e.g., "My memory for the day when the event took place is clear."), Sensory Detail (e.g., "As I remember the event, I can hear it in my mind."), Emotional Intensity (e.g., "As I am remembering the experience now, my feelings are very intense."), Accessibility (e.g., "This memory just sprang to my mind when I read the instructions."), Sharing (e.g., "I often share this memory with friends or family."), Distancing (e.g., "When I recall this memory, I think, 'that's not me anymore."), and Valence (e.g., "The overall tone of the memory is positive."). Participants rated each item from 1 (*strongly disagree*) to 5 (*strongly agree*). Alpha reliabilities were .85 for Vividness, .78 for Coherence, .82 for Accessibility, .85 for Time Perspective, .72 for Sensory Detail, .86 for Emotional Intensity, .89 for Sharing, .87 for Distancing, and .97 for Valence.

Memory age: Participants also reported the age at which the event in the memory occurred.

Individual-Difference Measures—A subset of participants from the natural condition (*n* = 357) completed the same individual-difference measures as in Study 1. In the current sample, alpha reliabilities were .81 for Neuroticism, .87 for Extraversion .77 for Openness to Experience, .75 for Agreeableness, .78 for Conscientiousness, .97 for Dissociation and .87 for General Anxiety.

Results and Discussion

We first examined whether the correlations between dispositional factors and visual perspective found in Study 1 replicate when perspective was assessed in the context of a specific memory rather than as a general retrieval style. In addition, we examined whether other phenomenological characteristics of the memory predict the visual perspective from which the memory was retrieved. For this first set of analyses, we limit the data to participants who retrieved the memory from their natural perspective. We then address phenomenological differences between the perspectives, both natural and manipulated.

Predictors of Visual Perspective: Characteristics of the Person and the Memory

—Consistent with Study 1, individuals high in dissociation and general anxiety tended to retrieve their most important memories from the 3rd person perspective (see Table 1). None of the Big Five personality dimensions was related to retrieval style in the self-defining memory.

We next turn to whether phenomenological features of the memory are associated with visual perspective. For this analysis, we used multiple linear regression to predict visual perspective, measured as a continuous dimension, from the other phenomenological dimensions assessed by the MEQ. Due to concerns about multicolinearity between the Vividness and Coherence dimensions (in the current sample they correlated .74), we combined the two scales to form a composite Vividness/Coherence score. We entered the eight phenomenological dimensions (Vividness/Coherence, Time Perspective, Sensory Detail, Emotional Intensity, Accessibility, Sharing, Distancing, and Valence) simultaneously into a linear regression equation predicting Visual Perspective (see Table 2). Consistent with expectations, the dimensions related to reliving of the memory were associated with 1st person retrieval of the memory: Memories that were vivid/coherent, with greater sensory detail, and a clear time perspective were retrieved from the 1st person perspective. Consistent with the idea that 3rd person retrieval may help serve to distance the individual from the memory, the Distancing dimension of the MEQ was associated with 3rd person retrieval.

Phenomenological Differences Between Perspectives—We next turn to the phenomenological differences between the two perspectives, both natural and manipulated. For participants in the natural condition, we dichotomized the MEQ Visual Perspective dimension (i.e., the mean response to the 6-item Visual Perspective scale) to classify memories into 1^{st} and 3^{rd} person perspectives. Memories with a Visual Perspective score between 1.00 and 3.00 were classified as 3^{rd} person (n = 115) and memories with a Visual Perspective score between 3.01 and 5.00 were classified as 1^{st} person (n = 335).

As a manipulation check, we tested for differences in the Visual Perspective dimension of the MEQ. These analyses revealed that, indeed, participants in the manipulated 1^{st} person condition were more likely to have retrieved their memories from the 1^{st} person (M = 3.71; SD = .98), whereas participants in the manipulated 3^{rd} person condition were more likely to have retrieved their memories from the 3^{rd} person perspective (M = 3.43; SD = .97); F(1,254) = 5.40, p < .05). In addition, as expected, naturally occurring 1^{st} person memories were more likely to be retrieved from the 1^{st} person (M = 4.22; SD = .61), whereas naturally occurring 3^{rd} person memories were more likely to be retrieved from the 3^{rd} person perspective (M = 2.44; SD = .59); F(1,448) = 740.25, p < .05).

To test for mean differences in the phenomenology of memories retrieved naturally and manipulated from the 1st and 3rd person perspectives, we conducted a Multivariate Analysis of Variance (MANOVA) with the 9 phenomenological dimensions as dependent variables and visual perspective as the independent variable separately for the natural condition (two levels: natural 1st and natural 3rd) and the manipulated condition (two levels: manipulated 1st and manipulated 3rd). Tables 3 and 4 show the means, standard deviations, and effect size differences for each MEQ dimension in the natural and manipulated perspectives, respectively.

Consistent with our expectations, naturally occurring 1^{st} person memories were rated higher than naturally occurring 3^{rd} person memories on the spatiotemporal and perceptual dimensions related to reliving of the experience: Vividness, Coherence, Time Perspective, Sensory Detail, and Emotional Intensity. These memories were also more accessible. Consistent with the theorizing on visual perspective as a distancing mechanism (Sutin & Robins, 2008), 3^{rd} person memories were more likely to be distanced from the self than 1^{st} person memories. The two perspectives did not differ on the Sharing or Valence dimensions. In addition, consistent with the literature showing that 3^{rd} person memories tend to be older than 1^{st} person memories (Nigro & Neisser, 1983), participants who reported that they retrieved their memory from the 3^{rd} person perspective retrieved events that occurred at an earlier age than those who retrieved their memory from the 1^{st} person perspective (Mean age of event in the memory = 13.58 [SD = 4.90] versus 15.35 [SD = 4.03] for 3^{rd} person and 1^{st} person retrieval, respectively, F

(1,447) = 14.68, p < .01). Finally, controlling for memory age did not have an effect on the mean differences in phenomenology between naturally-retrieved 1st and 3rd person memories.

A different pattern emerged for manipulated perspective. Manipulated 1st person and 3rd person memories only differed on one of the nine MEQ dimensions: Participants in the manipulated 3rd person conditions reported memories of a more positive valence than participants in the manipulated 1st person condition. Manipulated 1st and 3rd person memories did not differ, however, on any of the phenomenological dimension related to the spatiotemporal and perceptual dimensions of autobiographical memories. Similarly, age of the event reported in the memory did not differ between memories retrieved from the 3rd person versus the 1st person perspective (Mean age of event in the memory = 14.04 [SD = 4.98] versus 15.12 [SD = 4.73]for 3^{rd} person and 1^{st} person retrieval, respectively, F(1,254) = 3.15, ns). Finally, to determine whether participants' natural retrieval tendency interacted with the manipulation, we split participants' ratings of their natural perspective into primarily 1^{st} person (n = 117), primarily 3^{rd} person (n = 35), and mixed (n = 102). There was no interaction between manipulation condition and natural retrieval tendency for any of the phenomenological dimensions (Median F(2,245) = .67, ns). Thus, although our visual perspective manipulation was successful based on the manipulation check, it did not produce the same effects on phenomenology as naturally occurring visual perspective.

General Discussion

The present research reports two studies that examine whether stable individual differences about the person are associated with 3rd person retrieval of autobiographical memories and how visual perspective, both naturally occurring and manipulated, influence the phenomenology of the retrieved memory. Study 1 showed that individual differences in dissociation and general anxiety are associated with a general 3rd person retrieval style. Study 2 replicated these findings with the visual perspective of a specific autobiographical memory. Study 2 also showed that the phenomenological dimensions related to the reliving of the experience were associated with retrieval of the recent memory from the 1st person perspective, whereas greater distancing from the memory was associated with 3rd person retrieval. Finally, Study 2 demonstrated that natural 1st person memories were rated higher on the phenomenological characteristics related to the reliving of the memory than natural 3rd person memories. No phenomenological differences emerged, however, when memory perspective was manipulated.

Visual Perspective and Individual Differences—A 3rd person retrieval style was most consistently associated with stable, clinically-relevant individual differences, but not with individual differences in normal personality functioning. Individuals high on dissociation and general anxiety reported a 3rd person general retrieval style and, in an independent sample, these traits were also associated with retrieving a specific memory from the 3rd person perspective. Individuals who are prone to experiencing negative emotions, especially anxiety, employ a number of cognitive mechanisms to regulate those emotions (Clark & McManus, 2002; Clark & Wells, 1995). Retrieving memories from the 3rd person perspective may be one such mechanism aimed at reducing anxiety (D'Argembeau et al., 2006). This strategy may backfire, however, because such self-focused attention tends to increase, rather than decrease, anxiety (Hirsch, Clark, Mathews, & Williams, 2003). Accumulating evidence suggests that those high on social anxiety tend to retrieve social memories from the 3rd person perspective (D'Argembeau et al., 2006; Wells et al., 1998); the current research expands this association to individual differences in general anxiety. Indeed, individuals high on generalized trait anxiety may have heightened awareness of themselves in general, not just during social situations. As such, this self-awareness may be apparent across domains, rather than just within the social domain.

Both dissociation and anxiety are associated with heightened vigilance in general (Weierich, Treat, & Hollingworth, 2008) and this may extend to a vigilance of the self as well as the external world; 3rd person memories may assist in such vigilance by allowing the self to watch the self. In addition, both of these constructs are associated with negative feelings about the self, and individuals high in dissociation or anxiety may retrieve memories from the 3rd person as a way of distancing from themselves. Consistent with the idea that the 3rd person perspective can be used to distance the self from the memory, the Distancing dimension of the MEQ was associated with retrieval of the memory from the 3rd person.

Contrary to expectations, the Big Five personality traits were not consistently associated with visual perspective across the two studies. Surprisingly, Openness to Experience, which has been linked in previous research to the vivid reliving of a remembered event (Rubin & Siegler, 2004), was unrelated to visual perspective, both as a general retrieval style and when specific recent memories were retrieved. It is also surprising that Neuroticism was unrelated to visual perspective, given that anxiety is one of its facets. Neuroticism, however, is a heterogeneous dimension, encompassing depressive affect, susceptibility to distress, and difficulties in adaptation stemming from irrational ideas, poor impulse control, and ineffective coping mechanisms (Costa & McCrae, 1992). The facets of Neuroticism related to susceptibility to psychological distress, such as anxiety and depression, may be more highly associated with a 3rd person visual perspective, whereas other facets of Neuroticism, such as impulsivity, may be either associated with a 1st person visual perspective or unrelated to visual perspective, eliminating the association at the broader domain level. Thus, the more circumscribed facets of personality may be more strongly related to visual perspective than the broad dimensions. In addition, the association between personality and visual perspective may be moderated by the domain of the memory, as is the case for social anxiety. Using a broad measure of personality traits and prompts for non-domain specific memories, we were unable to test for associations at a greater level of specificity.

Visual Perspective and Memory Phenomenology—The literature on visual perspective and memory phenomenology has been somewhat mixed; some results suggest that the 1st person perspective is associated with stronger reliving of the experience (e.g., Berntsen & Rubin, 2006), whereas other results suggest the opposite (Terry & Barwick, 1998-1999). The present research is more consistent with the former: Recent memories that were vivid and coherent, with a clear time perspective and saturated with sensory details were more likely to be retrieved from the 1st person perspective.

Consistent with previous research (Berntsen & Rubin, 2006; Robinson & Swanson, 1993), natural 1st person memories were rated higher on all of the phenomenological dimensions related to the reliving of the memory; forcing participants to retrieve a memory from a specified perspective completely eliminated the phenomenological differences between the perspectives. The present findings add to the growing literature demonstrating that forcing a visual perspective can dampen the reliving of the memory, but it cannot encourage a greater reliving of the experience. In fact, phenomenology may determine the memory's visual perspective rather than vice versa. That is, because there was no effect of manipulating visual perspective on the memory's phenomenology, the correlation between visual perspective and phenomenology is either derived from the effect of phenomenology on visual perspective or is the result of a third-variable confound. Manipulation of the memory's phenomenological characteristics, such as its vividness or coherence, is necessary to determine whether phenomenology is an antecedent of visual perspective.

These findings have clear therapeutic consequences. Adoption of a third-person perspective may be one avoidance strategy that reduces the emotional intensity of trauma, but ultimately maintains distress (Kenny & Bryant, 2007). Even for negative, but non-traumatic events, a

third-person perspective prolongs the negative emotional experience of the event (Lau, Moulds, & Richardson, 2009). Perhaps individuals need to viscerally re-experience the event to be able to integrate it into their autobiographical memory base and put it behind them. Yet, guided therapy that helps patients gently shift perspective from 1st to 3rd person, after fully reliving the experience, may help to control painful memories. For example, Lawrence (1990; as cited in Wilson & Ross, 2003) found that her patients, by speaking in the 3rd person, were able to adopt "a more dispassionate, detached, retrospective view" (p. 97) of themselves. Lawrence argued that this type of therapy yielded less guilt and defensiveness because it decreased the psychological threat of the experience, not because it encouraged individuals to forget or deny painful situations. The effectiveness of retrieving emotional experiences from a distanced perspective, however, is a matter of some debate (e.g., Ayduk & Kross, 2009; Kross, Ayduk, & Mischel, 2005; Moulds, 2009; Wimalaweera & Moulds, 2008).

These findings have other implications for therapy as well. Depressed patients tend to retrieve positive memories from the 3rd person perspective (Bergouignan et al., 2008). Vivid, coherent memories of positive experiences may give hope to depressed individuals and remind them that good times do exist and that bad times do get better. Helping these patients shift their perspective to the 1st person should facilitate this process. Indeed, experimental evidence suggests that a 1st person perspective increases positive affect when imaging possible scenarios (Holmes et al., 2008). The current findings, however, indicate that when individuals are forced to retrieve their memories from a 1st person perspective, the phenomenology associated with natural 1st person memories does not accompany manipulated 1st person memories. This discrepancy may be due in part to differences in imagining the future versus the past: Directing visual perspective for future scenarios may be easier and more beneficial than trying to redirect the perspective of important events that happened in the past. Unfortunately, when retrieving self-defining memories, a simple switching of perspectives may not bring with it the full reliving of the experience.

Future Directions—Our research had several strengths, including large samples, comprehensive, well-validated measures of personality and memory phenomenology, and several complementary approaches to assessing visual perspective (i.e., general retrieval style and memory-specific visual perspective; naturally occurring vs. manipulated). Future research could build on the present research in several ways. To the best of our knowledge, we are the first to examine whether individual differences in normal personality functioning are associated with visual perspective. Our null findings could mean either that there is no association between the Big Five personality traits and visual perspective, or that we need to go to a greater level of specificity in personality. Given that general anxiety was associated with visual perspective in the current study, and that previous research suggests that facets of personality tend to be more strongly related to other phenomenological aspects of memories than are the broad traits (Rubin & Siegler, 2004), the association between personality facets and visual perspective should be examined before concluding that there is no relation between the two. There is also much to be learned yet on the nature of visual perspective. For example, it is unclear to what extent this phenomenological characteristic of the memory is stable both over time and across memory domain. Among trauma victims, for example, 9% of participants changed the visual perspective of the memory of their trauma over the course of 12 months (Kenny et al., 2009). Future research would benefit from establishing both kinds of stability for this phenomenological characteristic of memory in nonclinical samples. Finally, it is unknown whether visual perspective develops at encoding or at retrieval. If visual perspective takes shape at encoding or during elaboration and consolidation of the memory, it may be much harder to manipulate perspective than if it is a component of the retrieval process.

Our most personally meaningful memories can be vivid or dim, coherent or confused, emotionally intense or muted, shared with others or kept to the self. Since the pioneering work

of Bartlett (1932/1967), researchers have documented the many factors that contribute to the reconstruction of autobiographical memories. To this body of research, we add individual-difference constructs that are associated with visual perspective and how this visual perspective, in turn, shapes the phenomenological experience of the memory.

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 $\label{thm:constraint} \textbf{Table 1} \\ \textbf{Personality Correlates of 3^{rd}-Person Visual Perspective (Studies 1 and 2)} \\$

Individual-difference measures	General style	Specific memory
Clinically-relevant constructs		
Dissociation	.12**	.14**
General anxiety	.06*	.18**
Personality		
Neuroticism	.00	.08
Extraversion	.01	10
Openness to Experience	.04	02
Agreeableness	04	07
Conscientiousness	08**	05

Note. N = 1,684 (expect for Dissociation, n = 1,292) for general visual perspective and ns range from 327 to 357 for memory-specific visual perspective. Visual perspective is keyed toward a 3^{rd} person retrieval style

^{*} n < .05

^{**} *p* < .01.

Table 2 Linear Regression predicting Visual Perspective from the Phenomenological Characteristics of the Memory (Study 2)

Phenomenology	Visual Perspective		
	В	SE B	β
Spatiotemporal components			
Vividness/Coherence	.13	.05	.18*
Time Perspective	.15	.06	.14*
Perceptual components			
Sensory Detail	.20	.09	.14*
Emotional Intensity	.02	.07	.02
Other components			
Accessibility	.03	.060	.03
Sharing	.02	.04	.02
Distancing	11	.05	10*
Valence	05	.03	08

Note. N = 450. $R^2 = .20$.

p < .05.

Table 3
Phenomenological Differences Between Naturally-occurring Visual Perspectives (Study 2)

	Visual Perspective		Cohen's d
MEQ Dimension	1 st	3 rd	
Spatiotemporal			
Coherence	4.13 (.65)	3.78 (.69)	.52**
Vividness	4.22 (.69)	3.72 (.76)	.69**
Time Perspective	3.88 (.90)	3.31 (.85)	.65**
Perceptual			
Sensory Detail	3.63 (.64)	3.17 (.64)	.72**
Emotional Intensity	4.04 (.82)	3.63 (.85)	.49**
Other			
Accessibility	4.00 (.88)	3.64 (.88)	.41**
Sharing	2.88 (1.13)	2.74 (.90)	.14
Distancing	2.23 (.91)	2.63 (.91)	44**
Valence	3.24 (1.49)	3.21 (1.34)	.02

Note. ns = 335 and 115, respectively for natural 1St and 3rd person perspectives. MEQ = Memory Experiences Questionnaire.

p < .01.

Table 4
Phenomenological Differences Between Manipulated Visual Perspectives (Study 2)

	Visual Pe	Cohen's d	
MEQ Dimension	1 st	3 rd	
Spatiotemporal			
Coherence	4.07 (.63)	4.03 (.66)	.06
Vividness	4.02 (.68)	3.96 (.78)	.08
Time Perspective	3.62 (.96)	3.54 (1.02)	.08
Perceptual			
Sensory Detail	3.52 (.68)	3.40 (.64)	.18
Emotional Intensity	3.76 (.84)	3.66 (.84)	.12
Other			
Accessibility	3.96 (.81)	4.00 (.84)	05
Sharing	2.80 (1.07)	2.95 (1.02)	14
Distancing	2.52 (.90)	2.43 (.80)	.10
Valence	3.10 (1.52)	3.46 (1.35)	25*

 $Note. \ ns = 128 \ for \ both \ manipulated \ 1^{st} \ and \ 3^{rd} \ person \ perspectives. \ MEQ = Memory \ Experiences \ Questionnaire.$

^{*} p < .05.