Self-Representation and Perspectives in Dreams

Melanie Rosen and John Sutton*
Macquarie University

Abstract

Integrative and naturalistic philosophy of mind can both learn from and contribute to the contemporary cognitive sciences of dreaming. Two related phenomena concerning self-representation in dreams demonstrate the need to bring disparate fields together. In most dreams, the protagonist or dream self who experiences and actively participates in dream events is or represents the dreamer: but in an intriguing minority of cases, self-representation in dreams is displaced, disrupted, or even absent. Working from dream reports in established databanks, we examine two key forms of polymorphism of self-representation: dreams (or dream episodes) in which I take an external visuospatial perspective on myself, and those in which I take someone else's perspective on events. In remembering my past experiences or imagining future or possible experiences when awake, I sometimes see myself from an external or 'observer' perspective. By relating the issue of perspective in dreams to established research traditions in the study of memory and imagery, and noting the flexibility of perspective in dreams, we identify new lines of enquiry. In other dreams, the dreamer does not appear to figure at all, and the first person perspective on dream events is occupied by someone else, some other person or character. We call these puzzling cases 'vicarious dreams' and assess some potential ways to make sense of them. Questions about self-representation and perspectives in dreams are intriguing in their own right and pose empirical and conceptual problems about the nature of self-representation with implications beyond the case of dreaming.

1. Introduction

What can we learn about the self by considering dreams? Our experiences during sleep, or our more occasional recollections and reports of those experiences, offer us significant insight into the operations of the mind in general. Philosophers continue to worry subtly at the metaphysical and epistemological problems addressed by Descartes' dream argument (Valberg 2007), and even whether dreams really are experiences during sleep at all (Malcolm 1959; Dennett 1976; Child 2007). But the new sciences of dreaming, in the wake of the discovery of REM (rapid eye movement) sleep and of the cognitive revolution, have opened up both entirely new concerns and distinctive twists on older philosophical topics (Churchland 1988; Revonsuo 1995; Flanagan 2000; Clark 2005; Windt & Metzinger 2007; Sutton 2009; Windt & Noreika 2011). Theories of consciousness, metacognition, psychophysical reduction, and embodied cognition, to mention just a few examples, can be both informed and constrained by the expanding array of psychological and neurocognitive approaches within dream science (Solms 1997; Foulkes 1999; Hobson, Pace-Schott & Stickgold 2000; Domhoff 2003; Schwartz et al. 2005; Nir & Tononi 2010; Valli 2011).

In this paper, we pick out two related, highly specific, and (we think) deeply puzzling dream phenomena which, in addition to their intrinsic interest, also exemplify the possibilities for philosophical engagement with the cognitive sciences. These phenomena involve the surprisingly complex ways in which we represent ourselves in dreams and experience dream events from a first-person perspective – although as we'll see these are not exactly

equivalent. While these topics clearly connect back to traditional philosophical issues, our methodological angle here is a strongly integrative form of naturalism, in which we seek to put distinct and somewhat disconnected parts of the cognitive sciences into contact. This philosophical strategy involves direct interactive engagement with the relevant sciences, seeking mutual coevolution of theory and evidence, as is standard in philosophy of biology or philosophy of neuroscience (Griffiths & Sterelny, 1999; Craver 2007). In the philosophy of psychology, such work can function as a catalyst, bringing together disparate fields of enquiry within the relevant sciences (compare Sutton 2009, or for the case of emotion, Griffiths 1998 and Colombetti 2013). This catalyst function is increasingly important, because of the daunting (sub–)disciplinary specialization of contemporary sciences. It can be required not only to put into contact research programs across distinctive levels which might be mutually informative, such as cognitive psychology and molecular neuroscience but also across different neurocognitive domains. This latter kind of integration is specifically relevant in the current case, because certain processes of self-representation in dreams may overlap with those involved in some forms of remembering and imagining.

Dreaming's similarities to and differences from perception, imagination, and memory respectively have been the subject of discussion and controversy in both philosophy and science (Foulkes 1999; Sosa 2005; Horton, Moulin & Conway 2009; Ichikawa 2009; Windt 2010; Horton 2011). Dreaming involves a sharp bidirectional break in memory, such that our dream selves seem to be significantly disconnected: typically, we can neither reliably access our own autobiographical memories while dreaming nor clearly recollect our dreams on waking. This suggests that dreams and memory at least are firmly dissociated. But since our common sense categories for psychological processes need not map neatly on to the underlying mechanisms, there may also be overlaps and interactions across apparently distinct domains of cognition. In this paper, addressing some of the ways in which self and body are represented in dreams, we point to some specific and puzzling phenomena, which demand treatment using pooled theoretical resources from different cognitive domains as well as different disciplines.

Consider these two dream reports, gathered in controlled studies amongst large numbers of recollected dreams:

> I was in a sort of South American country, two hundred years ago, I was mounting a horse: with me there were two more persons riding a horse, and other people on foot. We were pursuing a man, who was myself, we were pursuing him because he had some money, and I was observing the whole scene. (Cicogna & Bosinelli 2001, p.32)

> I was walking (apparently it was me) in a suburban area, past a house whose yard was about one and a half meters above the street level. In the yard a girl I know from medical school was leading a big bearlike dog. I was leading a dog that actually was my female classmate from medical school. The girl suddenly attacked the bear–dog and they fought. The person in the dream that so far had been me, now was suddenly my classmate J. Somehow I became (physically) detached from myself and I noticed that I was not me but him. This was accompanied by a funny feeling. (Revonsuo, 2005, pp.213–4)

These reports fit a general picture of typical dreams as involving more or less bizarre narrative sequences. In the sciences of dreaming, the 'bizarreness' of dream reports is often analyzed into three distinct forms. The most common form of bizarreness is incongruity or mismatch of character, event, or setting, followed by vagueness or uncertainty, while full–scale discontinuity of narrative sequence is the least common (Stickgold & Hobson 1994;

Flanagan 2000, pp.147–8; Revonsuo & Tarkko 2002): There is, however, ongoing disagreement on precisely how to measure bizarreness and on its prevalence in all of our dreams as opposed to those which are most memorable (Domhoff 2003; Sutton 2009, pp.531–2; Colace 2010; Rosen 2012, ch.2).

But the bizarreness in these two reports has the notable extra feature that it stretches to touch the self, which is here variously shifting, doubled, observing, transformed, and detached. Such disruptions are not typical in most people's dreams, for sure. In by far the majority of dream experiences, as Revonsuo puts it, 'the self in the dream is the character who represents the dreamer' and 'is positioned in the center of the dream world' such that 'the dream setting and events are seen and experienced from his or her point of view' (2005, p.207). Even if, as David Foulkes' developmental studies suggest, it takes some time and some cognitive sophistication before the self regularly appears as an active character in extended dream narratives (Foulkes 1990, 1999), this does typically occur in the bulk of adult dreams. In another large-scale study, Strauch and Meier found that 'the Dream Self appears in nearly every dream', and for the most part (in 71% of dream reports) as a clear and active participant in each person's own dream: but in addition to the 11% of cases in which the dreamer is present but inactive, there were also some 18% of dream reports in which the dreamer was either entirely uninvolved or explicitly absent (1996, pp.114–5). Despite methodological challenges in characterizing and coding different ways in which self-representation in dreams might diverge from the standard case, various studies show that such divergence occurs in a sizeable minority of dreams. Our project here is to describe, probe, and assess the implications of two of its primary forms. Revonsuo notes the theoretical significance of the fact that the dream self 'is not present in every single dream', such that there is a simulated 'world of subjective experiences devoid of an explicit representation of the self' (2005, p.209). Here, we examine cases in which the self is displaced as well as missing. Even within the study of self-representation in dreams, one can ask a range of other live questions, relating for example to our understandings of our own and others' character and psychology in dreams, to the mechanisms of identification and misidentification in dreams and in delusions, and to the particular range of emotional experiences in dreaming (Foulkes et al. 1991; McNamara, McLaren & Durso 2007; Gerrans 2012). We focus on two of a number of possible forms of 'polymorphism of Self' in dreams (Occhionero & Cicogna 2011, p.1009): dreams (or dream episodes) in which I take an external visuospatial perspective on myself, and those in which I take someone else's perspective. These phenomena not only demand explanation in their own right but also pose empirical and conceptual problems about the nature of self-representation, which may have implications beyond dreaming.

2. Perspective in Dreams

In the first dream report quoted above, involving a pursuit in South America, the dreamer is both the pursuer and the pursued, either sequentially or simultaneously. But he is also 'observing the whole scene', including himself. Likewise, in another report from the same databank of 800 laboratory dreams, 'I was seeing my body lying on the bed, and it was completely white, better "beige". I was able to see myself lying on that bed …' (Cicogna & Bosinelli 2001, p.31). These are cases in which there *is* a clear self-representation in the dream, and in which the dreamer is a character, but the visual or visuospatial perspective of the dream experience does not coincide with what would be the perspective of the self or the protagonist in the dream.

There are, we suggest, three key features of this kind of dream in which the dreamer reports observing himself or herself; though each of these features can probably vary

independently, they do often coincide. Firstly, the dreamer reports seeing his or her own body. Secondly, that body is immediately and unreflectively taken to be the dreamer, the dream self or the character representing the dreamer: there is no inference, uncertainty, or further question about the identity of that observed character. Thirdly, there is a definite visual or visuospatial perspective from which this observation occurs: this contrasts with cases in which dream events are experienced from no visual or visuospatial perspective at all. We suspect that our second initial report, in which the dreamer says that 'somehow I became (physically) detached from myself and I noticed that I was not me but him', is a case of the latter, distinct kind, accompanied as it was by 'a funny feeling'.

In identifying these features of what we suggest are an important, if relatively rare type of dream experience, we are explicitly guided by our understanding of related phenomena in memory and imagery, which have been extensively studied in cognitive psychology and (increasingly) cognitive neuroscience. Take memory first. In remembering specific events and experiences in my past, I may recall them from my original vantage-point, seeing the remembered scene as through my own eyes, with what appears to be my original field of view; or I may recall them from an external vantage-point, such that I see myself in the remembered scene, while adopting (now) an observer's point of view. After first being noted by Freud and others in the 1890s, this distinction between 'field' and 'observer' modes of remembering has become a popular topic in mainstream cognitive psychology, since Nigro and Neisser's influential paper (1983) and a systematic general renewal of interest in episodic and autobiographical memory. Among an array of robust findings, psychologists have shown that, in general, memories retrieved from an 'own-eyes' or field perspective are more common (especially for more recent events) and generally contain more information on emotional and other subjective states than memories recalled from an observer perspective (Berntsen & Rubin 2006; Rice & Rubin 2009). There are parallel phenomena in the case of imagery. In imagining a possible or future action or event, for example, I can visualize it either from my own point of view, or as if I am observing myself in action. There is solid evidence that the perspective from which I imagine or tend to imagine future actions can have definite and lasting effects on cognition, emotion, and action (Libby & Eibach 2011).

Philosophers have asked whether there can in fact be genuine memories in cases where past events are recalled from an external perspective that diverges from that of the agent's perceptual experience at the time (Vendler 1979; Debus 2007; Sutton 2010). But this distinction between field (internal) and observer (external) perspectives in remembering and imagining has also been studied intensively in applied domains of considerable independent interest. In the psychology of sport and movement, for example, practices of visualization among elite athletes and dancers are investigated to identify any differential effects of imagining one's expert performances from the inside or as an observer (Morris & Spittle 2012). Though it may seem natural to think that a field visuospatial perspective in imagery would tap and promote kinesthetic processes more effectively, in fact research suggests that external or observer perspectives may be more useful for certain kinds of movement task: the challenge of integrating kinesthetic sensation, 1st-person or field visual perspectives, and the experience of watching one's own moving body from the outside is faced regularly for elite sportspeople in using video analysis of their performance (Callow & Hardy 2004; Sutton 2012). In clinical psychology, in turn, there are ongoing discussions on the point of view from which traumatic experiences are recalled or relived. In general, remembering experiences from an observer perspective involves less detail on emotions and bodily sensations. This leads some clinicians and psychologists to argue that the adoption of an observer perspective in remembering trauma is a defense mechanism associated with ongoing or increasing negative psychological symptoms, whereas the adoption of a field

perspective can ward off or diminish such symptoms (McIsaac & Eich 2004; Kenny et al. 2009). Others see the abstraction, which external perspectives may bring as potentially beneficial, and argue that external perspectives can scaffold our capacity to consider different evaluative and emotional perspectives on our own past (Mackenzie 2008; Goldie 2012).

Below, we focus in on a specific issue arising in these established research traditions on perspective in memory and imagery, to apply back to the case of dreams. But first, we underline the point that the availability of distinct perspectives appears to operate in many of the same ways across all these domains. As in memory, dream experiences in which an external or observer perspective is adopted may well be less common, but do occur in a significant minority of cases (Foulkes & Kerr 1994; Soper, Milford & Rosenthal 1994; Soper 1999). Even though while dreaming we can rarely access anything like our full autobiographical narrative, so that essential features of memory are not available in dreams, it is notable that these same mechanisms of visuospatial perspective-taking can operate in common across the domains. This can be harder to recognize because some scientific analyses of dream reports do not clearly acknowledge the existence of dreams experienced from an observer perspective. Strauch and Meier (1996) code 'participation of the dreamer' under the categories of 'dreamer active', 'dreamer inactive', 'dreamer uninvolved', or 'no dream self'. Dreaming from an external or observer perspective does not quite map on to any of these categories, which do not distinguish the agency of the dream character from the perspective from which the dream events are experienced. Likewise, in a more fine-grained scheme derived from the large Italian sample, Occhionero and colleagues code some reports as including a 'representation of self as a passive observer of the dream events'; but their use of the term 'observer' here is potentially misleading, since by this, they mean not what memory researchers call an observer perspective, but a dream from a standard field perspective in which the dream self is inactive ('I was at a service station and I was observing this scene …'). In contrast, they classify the case in which the dreamer reports seeing himself or herself lying on the bed under the category of a 'total or partial Self body image' (Occhionero & Cicogna 2011, p.5; compare Occhionero et al. 2005, pp.79–80): this characterization misses the key extra fact that this 'Self body image' is experienced and observed from outside, from an external vantage-point.

The fact that the literature on field and observer perspectives in memory and imagery is not explicitly discussed in contemporary research on self-representation in dreams is both puzzling and problematic. In the 1980s, there was a lively research focus on links between memory, dreams, imagery, and out-of-body experiences (OBEs), in which people see their own body from an external perspective. Susan Blackmore's initial hypothesis that people who report more regular OBEs would also remember their past more often from an external or observer perspective turned out to be unsupported. But those people *did* report adopting observer perspectives in their dreams more often than others, and were able to switch between internal and external perspectives in memory and imagery more easily (Blackmore 1987, 1988; compare Irwin 1986). But these earlier connections between dreaming and OBEs, on the one hand, and memory and imagery, on the other hand, have not been studied even in the recent dramatic revival of research on OBEs, as we now explain.

Out-of-body experiences are one of a range of autoscopic phenomena, in which one 'sees oneself' as if from the outside. The pathological waking conditions in this domain include not only OBEs but also cases in which people see a duplicate or double of their own body, while retaining their own standard first-person perspective on that doubled body (an 'autoscopic hallucination') (Brugger 2002; Blanke & Mohr 2005; Mishara 2010). OBEs, previously a focus of some scepticism among scientists, have recently

turned out to be linked to quite specific neurological disturbances, and to be open to experimental induction (Blanke & Metzinger 2009). But these researchers have not incorporated observer perspectives in memory and imagery into their classificatory schemes. We suggest that the adoption of external perspectives in remembering, imagining, and dreaming temporarily replicates certain features of OBEs, with which it is likely to share certain neurocognitive mechanisms. A link between dreaming in general and OBEs has been drawn by both Metzinger (2004, 2005) and Occhionero and Cicogna (2011), and there is ongoing investigation into possible neurocognitive commonalities with regard to vestibular function and the disintegration of standard waking mechanisms for binding multisensory information, leading to an usually partial or 'polymorphous representation of body image' (Occhionero & Cicogna 2011, p.1013). The link back to the ordinary temporary adoption of external perspectives in memory and imagery has not been made by these authors, but, we suggest, recollection from an observer perspective is another full-scale form of autoscopy. By explicitly noting and thematizing the existence of observer perspectives in both memory and dreams, researchers can now focus on psychological and neural links between both sets of ordinary psychological phenomena and the rarer cases of OBEs.

We believe that both the prevalence and the significance of flexibility or fluidity in visuospatial perspective-taking, which may be particularly striking in dreams, have been underestimated in a number of domains. Perhaps internal or field perspectives are the 'default' mode (Morris & Spittle 2012), and perhaps it will turn out that in the case of memory at least, they are more likely than observer perspectives to arise when we are remembering accurately. But recent evidence suggests that external or observer perspectives in memory may also turn out be relatively common, diverse, and functional (Rice & Rubin 2009, 2011). So in dreams too, the availability of external perspectives may signal the flexibility of our self-representational capacities, rather than their disruption, incompleteness, and weakness (Occhionero 2004). To note just two lines for inquiry, which could draw on established methods elsewhere in psychology, it would be useful to know if the emotions generally associated with distinctive perspectives in memory also typically accompany those perspectives in dreams and to get a better grip on the role of perspective in the way we represent our own movements through space both in waking and dreaming cognition (Schönhammer 2005; Cook 2011; Tversky 2011).

3. Vicarious Dreams

In documenting a variety of ways in which 'the self' can be represented in dreams, Occhionero and Cicogna note that the dream self can also be experienced 'either by way of embodiment-in or identification-with other characters or even objects' (2011, p.1013). Occasionally, on waking, the dreamer remembers having a dream in which the protagonist – the character or agent in the dream from whose viewpoint the dream events were experienced – was not the dreamer herself. Revonsuo's dream database includes the following report from a 25-year-old, blond female student:

> It's the Second World War and I am a dark-haired, strongly built, Finnish male soldier. The enemies are probably German … [Later in the same dream]: I could see myself in a mirror. Now I was a blond, strongly built woman. (Revonsuo 2005, p.213)

In a case from the Italian studies, the dreamer reports 'a lot of beautiful actresses … I'm transformed and become a famous actor' (Occhionero et al. 2005, p.80). In these cases, the dreamers report a shift within the dream, either to or from being the protagonist of their own dream. In other cases, the protagonist is not an embodied person at all. 'I was inside a giant photocopying machine. I knew I was inside this machine, not as a physical human being but as an abstract entity, as a mind, so I couldn't see myself' (Cicogna & Bosinelli 2001, p.32); another female student was 'a dog or some other animal' in the dream, and reported events experienced from the animal's point of view, 'running in a dark forest with another animal, hunting for prey' (Revonsuo 2005, p.214).

Each of these dream reports has its own unusual features. In some cases, perhaps including the photocopy machine, the dream protagonist is still the dreamer, albeit atypically located in some other kind of body. These are not cases of observer perspectives, but simply of muted or incongruous forms of self-representation within otherwise standard dream experience. But other cases, such as the woman dreaming as a dark-haired male soldier, are arguably distinct again: these, we suggest, are vicarious dreams, in which the holder of the first-person perspective in the dream is someone (or something) other than the dreamer. In vicarious dreams, the perspective of the dream is that of one of the dream characters, the one we call the *protagonist*, but this protagonist does not identify himself as the dreamer, and correlatively, the dreamer does not treat or identify herself as the protagonist.

Vicarious dreams are rare, certainly. As we noted above, in most remembered dreams the protagonist is, or is in some sense continuous with, the dreamer: this is true too in the cases of dreaming from an external observer's perspective discussed in Section 2 above. In those cases, there is no doubt that the observed protagonist is still *me*. Vicarious dreams are unlike observer perspective dreams and like standard dreams in that the events are experienced from an 'own-eyes' or field perspective, such that the first-person perspective is occupied by a character in the dream. But they are unlike standard dreams in that the protagonist from whose perspective the dream occurs is someone other than the dreamer. One of us (MR) has had dream experiences in which the protagonist was a male engineer on a spaceship, trying to prevent the ship from crashing into the earth, and in another case, an old man having a heart attack. In addition to the cases described in the scientific literature, what we are calling vicarious dreams have received some philosophical discussion. J.J. Valberg first describes a more complex case, a dream in which the two characters are X and JV, but where the first person perspective is occupied by X: 'in the dream I am not JV but X (X is me)', so that 'in the dream I am a human being other than the human being that I am' (2007, p.62). X can interact with JV in the dream, refer to JV as 'him' and observe JV from an external perspective. If the protagonist feels pain and thinks 'I am feeling pain', Valberg suggests, 'I' refers to X rather than JV, whereas JV's pain behavior is observed in the dream from an external perspective. Valberg then introduces what we see as the paradigmatic vicarious dream by noting that 'JV need not have been in the dream at all' (p.63): in this case, the protagonist X, from whose first person perspective the dream events are experienced, is still someone other than Valberg the dreamer. In this case, the dreamer or the waking self is not represented in the dream at all: the protagonist or subject of the dream, the one 'at the centre of the dream' (Valberg 2007, p.65) just is X (or the dark-haired Finnish soldier, or the famous actor, or the running animal).

In waking life, Williams argues, I can imagine being Napoleon and looking over the battlefield without this entailing either that Napoleon exists now, or that I might have been Napoleon (1973, pp.42–45). So it seems from the examples we have given above that I can

dream as Napoleon. This means not that in the dream my waking self has somehow been transplanted into Napoleon's body, or vice versa; rather, it means that the centered and embodied (or dream-embodied) subject position of the dream protagonist, from whose first-person perspective the dream events unfold, is occupied by Napoleon and not by me. But the phenomenon of vicarious dreaming raises puzzles about ownership of experience, self-representation, and self-reference. Who do the experiences belong to in such dreams, the dreamer or the protagonist? Who exactly *is* the protagonist? And to whom does 'I' refer when, in the dream, Napoleon thinks or says 'I see the battle', or the dark-haired Finnish soldier thinks 'I see the Germans'? We work with the Napoleon case because it underlines the implausibility of answering these questions by simply identifying the dream self, the one occupying the first-person perspective in the dream, with the apparent thinker and speaker. Napoleon does not now exist: even if he did it would be odd for *him*, that actual person, to be thinking and speaking in dreams which *my* brain generates and hosts. But what alternative approaches are available here? Shortly we examine some philosophical resources developed to deal with the parallel cases in waking imagination, but first we examine three other options. We do not offer a single preferred solution here, but intend to raise the problems sharply for further attention.

Perhaps, firstly, the occupant of the first-person perspective in vicarious dreams really is, despite all appearances, the dreamer. On this view, the label 'vicarious' is a little misleading, for a dream protagonist is always an altered version of the waking self. In my dream, perhaps, I am a shorter, more megalomaniacal version of myself. Perhaps the soldier dream is of this kind, with the 25-year-old female student inhabiting a different dream body, but still identifying herself as the protagonist. But though such cases do occur, as we have noted, they do not exhaust the possibilities or entirely capture the phenomena we have described. In general, the psychological discontinuity between waking self and dreaming self can be extreme. And in particular, in our other examples of vicarious dreaming the waking self just does not enter the picture within the dream at all. As Valberg says of such cases, 'in the dream JV is not me (I am not JV)': rather, someone else – X or Napoleon or the soldier – 'is at the center of the dream' (2007, p.67).

Secondly, if the protagonist is neither Napoleon nor the dreamer, perhaps it is just a 'dream Napoleon'. This would be a challenging result, because unlike other characters in the dream, dream Napoleon appears to be consciously experiencing the dream environment from a first-person perspective. This would mean that some experiencing protagonists only exist for a short period during a dream, in what could be considered an extreme implementation of Lockean psychological continuity theory. Locke considers the possibility of 'two distinct incommunicable consciousnesses acting in the same body, the one constantly by day, the other by night' (1690/1975, II.27.23, p.344), arguing that they would be distinct selves. In dreams, however, the protagonist is not always the same person: the protagonist of last night's dream is not usually psychologically linked with other dream protagonists in the way Locke seems to think of his 'nightman'. Given the fluidity and discontinuity of dreams as shown by our examples above, a dream protagonist may exist only for a short part of a dream, as with the famous actor dream. Each protagonist, both within and across dreams, may have varying levels and kinds of connectedness with other dream protagonists and with the dreamer, and many such protagonists may have no such connectedness at all. So the nightman would not be a singular dream protagonist who persists 'constantly' through all of my dreams.

This line of thought might force us to posit temporary and highly fleeting subjects of experience in vicarious dreams. We think this option is worth pursuing, but acknowledge that it may be so counterintuitive as to encourage adoption of a third possibility, that the

dream protagonist just is no kind of subject or self at all, and that the first-person perspective apparently occupied in these dream experiences is in fact empty after all. We return to these thoughts after discussing an attempt to defuse the puzzle by pushing harder on the parallel with imagining.

David Velleman (1996) argues that the use of the first person pronoun is unproblematic when imagining that I am someone else. In such cases, as the actual subject, I actively *frame* my thoughts and imaginings so that they diverge from my own and arise from the perspective of the 'notional subject', the imagined center of perspective: 'imagining that I am Napoleon is first-personal, but it is, so to speak, first-personal about Napoleon, in the sense that it is framed from Napoleon's point of view' (1996, p.40). This framing of perspective is unlike the genuine reflexivity of unselfconscious first-person thoughts, yet raises no special mystery once we understand that thoughts thus framed enact this explicitly specified gap between actual and notional subjects. He applies this account not only to imagining being someone else but also to certain possible relations between the present self and past or future selves, seeking a unified framework for understanding perspectival selfhood across a range of psychological states and processes.

Although Velleman does not discuss dreams, we might naturally try to extend his approach from imagining and remembering to dreaming. Perhaps when I dream of being Napoleon, my first-person thoughts are not genuinely reflexive. Rather, a self-conscious framing contextualizes 'I see the battle': the dreamer is the *actual subject* who frames the thought from the perspective of Napoleon, the *notional subject*.

Unfortunately, this tidy solution does not work. In vicarious dreams, there need be no explicit framing: the actual dreamer, whose brain is generating or hosting the dream, is nevertheless not accurately described as an actual subject of the dream. In lucid dreams, certainly, the dreamer realizes that she is dreaming and might thus be in a position to frame certain thoughts and experiences as being those of a distinct notional subject (LaBerge & DeGracia 2000). But ordinary, non-lucid dreams are quite unlike this. The dreamer is neither in the dream nor framing the dreamed perspective. This contrasts sharply with the case of imagining as described by Velleman, in which the actual subject unselfconsciously retains her own perspective whilst deliberately adopting the imagined perspective. In vicarious dreams, there is only one centered subjective perspective, and it is the first-person perspective of the dream protagonist, Napoleon (or X or the soldier). In contrast to the kind of imagining discussed by Williams and Velleman, the dream protagonist experiences the dream world as if he is the actual subject. (In some kinds of imagining, such as more hallucinatory forms of fantasy or mind wandering, the duality of perspective which Velleman describes also disappears, perhaps giving rise to related problems).

There are two possible responses here, further ways to develop a Velleman-style solution to the problem of vicarious dreaming. Perhaps the dreamer either forgets the framing that occurred during the dream, or frames the perspective of the dream protagonist tacitly or unconsciously. We do not think either option works for vicarious dreams. Regarding the first explanation, indeed, forgetting of the framing thoughts may *sometimes* occur, but it is unlikely as a plausible explanation of all vicarious dreams. There seems to be a clear distinction between dream reports in which the protagonist remains somehow aware of the waking self despite doing Napoleonic things such as riding a horse and looking over a battle, and dreams in which the dream protagonist believes they are Napoleon, in which there is no distinction between the actual subject and the notional subject just because the actual subject is out of the picture entirely and not even engaged in some tacit or background framing. Such cases are the ones we find most philosophically interesting.

Secondly, the possibility that the framing of certain thoughts could occur outside conscious awareness is not consistent with Velleman's framework. For Velleman, only standard, genuinely reflexive first-person thoughts are 'unselfconscious about their reference, in that they require no other thought about whom they refer to. I can think of NB as notionally "me" only by deliberately placing him where he will intercept this inward-directed pointer, thus rendering its reference to him self-conscious' (Velleman 1996, p.60). If we allow that non-genuine reflexive thoughts can also be established in an unselfconscious manner, it is not clear how the distinction between genuine and non-genuine cases can be maintained. Perhaps such automatic or non-conscious framing does operate in the case of imagining, where there is an ongoing duality of coexisting distinct perspectives: the actual subject, doing the framing, is still in the picture at the same time as the notional subject roams free in the imagined world. But even if this is possible in imagining, it will not explain vicarious dreaming: in vicarious dreams, there is no actual subject distinct from the notional subject during the dream. The dream protagonist is the holder of the center of perspective, and the waking self is not represented in the dream. When the protagonist uses a first-person pronoun, it points out the center of perspective: other perspectives, such that of the waking self, are not involved. This contrasts with the case of imagining as described by Velleman, in which the waking self has a real world perspective whilst adopting the imaginary world perspective. In such dream experience is there is only one perspective, that of the dream protagonist.

So vicarious dreams are not analogous to imagining being someone else. Perhaps we are left with the possibility that the dream protagonist is a temporary separate entity, a fleeting self (Rosen 2012). We leave this open as a live option, but finish with one further note about the idea that there is no subject or self at all in such dreams. Even such a diehard realist about dream experience as Antti Revonsuo, discussing dreams in general rather than vicarious dreams in particular, offers a line of thought which might support this notion. Revonsuo argues that it is only with the subsequent waking reconstruction of a dream experience on the basis of memory traces that a sense of ownership of the dream arises: only at that point do I 'feel that *this* experience originally took place in the same system of conscious experience in which my current experiences take place'. This idea that the dream 'becomes *my* experience … only after the original experience is long gone' has, as Revonsuo notes, the striking consequence that there is no sense of ownership of unremembered dreams: they were 'experiences *in my brain*', but their potential to be *my* experiences is unactualized (2005, pp.209–210).

The two unusual dream phenomena we have discussed – external perspectives and vicarious dreams – are much less common than ordinary dreams in which the dreamer is straightforwardly represented in the dream protagonist. Yet they appear to occur in a significant minority of dreams, and plausibly more for some dreamers and in some circumstances than others. They need to be incorporated into our best understanding of the nature of self-representation in dreams. We have suggested some specific lines of enquiry in each case, along with some direct connections to parallel but strangely disconnected literatures on remembering and imagining. We see dreaming as a fruitful domain for integrative, naturalistic work at the interface between philosophy and the cognitive sciences.

Short Biographies

Melanie Rosen is interested in the intersection between philosophy and cognitive science. Her research takes a broad focus toward the philosophy of mind, consciousness, the self, and the relevance of our scientific knowledge of the brain and cognition. Rosen completed a BABFA (Fine Arts and Philosophy Conjoint) and MA (Philosophy) at Auckland University and recently in 2013, graduated from her PhD at Macquarie University, Sydney. Her thesis titled 'Dream Pluralism: A Philosophy of the Dreaming Mind' focused on dreaming and its relevance for philosophy and cognitive science. Rosen argued that a pluralistic approach to the wide variety of cognitive phenomena that occur during sleep can help further our understanding of a variety of cognitive states. Dreaming is a conscious state that involves interesting features such as body representation in absence of the real, waking body, and a variety of cognitive defects that provide insight into the self, consciousness and cognition. She is currently teaching at Macquarie University and the Australian Catholic University and does research at the Australian Commonwealth Scientific and Industrial Research Organization (CSIRO). Her teaching interests range from ethics to metaphysics, philosophy of mind and critical thinking. She won the 2009 International Association for the Study of Dreams (IASD) paper prize and is currently preparing further papers on dreaming.

John Sutton is Professor of Cognitive Science at Macquarie University, Sydney, where he was previously head of the Department of Philosophy. His degrees are in Classics from Oxford and in Philosophy from Sydney, and he has held visiting fellowships at UCLA, UCSD, Edinburgh, and Warwick. His research centers on memory, both in and at the intersections of philosophy, the cognitive sciences, and the social sciences. His book *Philosophy and Memory Traces: Descartes to Connectionism* (Cambridge) was reissued in paperback in 2007, and he is coeditor of *Descartes' Natural Philosophy* (Routledge, 2000) and of the interdisciplinary journal *Memory Studies*. His recent work addresses distributed cognition, collaborative and social memory, perspective in autobiographical memory, skilled movement and embodied cognition, and cognitive history.

Note

* Correspondence: Cognitive Science, Macquarie University. Email: john.sutton@mq.edu.au.

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