

Is There Such a Thing as Joint Attention to the Past?

Abstract

Joint attention is recognised by many philosophers and psychologists as a fundamental cornerstone our engagement with one another and the world around us. The most familiar paradigm of joint attention is joint perceptual—specifically visual—attention to an object in the present environment. However, some recent discussions have focused on a potentially different form of joint attention: namely, ‘joint reminiscing’ conversations in which two or more people discuss something in the past which they both remember. These exchanges are in some ways comparable to joint perceptual attention to something present, and have been characterised by some as a form of joint attention to the past.

In this paper, I will assess the prospects for characterising joint reminiscing as a genuine form of joint attention to the past, as understood on the model of joint perceptual attention to something present. My conclusions will be tentative, and my primary aim will be to explore how different commitments regarding the nature of both joint attention and episodic memory give rise to different possibilities for characterising joint reminiscing as a distinctive form of collective engagement with the past. I will suggest that joint reminiscing is unlike ordinary joint attention at least insofar as joint reminiscing trades on the participants’ mutual recognition of one another as having been present at an earlier experience. This is connected with joint reminiscing’s social function, and its role in facilitating the special kind of relationship conveyed by the idea of *knowing a person*.

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In this paper, I will assess the prospects for characterising joint reminiscing as a genuine form of joint attention to the past, as understood on the model of joint perceptual attention to something present. My conclusions will be tentative, and my primary aim will be to explore how different commitments regarding the nature of both joint attention and episodic memory give rise to different possibilities for characterising joint reminiscing as a distinctive form of collective engagement with the past.

In section §1 I briefly discuss the issues that are at stake in considering joint reminiscing a form of genuine joint attention to the past. In section §2 I then review the main extant approaches to joint attention, and work towards a way of thinking about joint attention that leave an open and substantive question whether there could be such a thing as joint attention to the past. In §3 I explore the prospects for understanding joint reminiscing as a continuous outgrowth of occurrent joint attention. I suggest that we can make good on this idea by appeal to the way in which joint reminiscing involves recognising a person as having been present at an earlier experience.

Sections §4 and §5 contrast this approach with two recent accounts of joint reminiscing, by Felipe De Brigard and Axel Seeman. These start from quite different assumptions about the nature of episodic memory, yet both end up with a basically pessimistic verdict on the possibility of genuine joint attention to the past. I suggest that this pessimism is largely unwarranted, and that the model sketched in §3 shows how relevant structural difference between joint attention and joint reminiscing might be bridged. In §6 I briefly consider questions about the wider role and function of joint reminiscing. I make the suggestion that its significance lies partly in the forms of social relations it makes enables, and in particular the special kind

of relation suggested by the idea of *knowing a person*.

1 PRELIMINARIES

‘Joint attention’ is by and large a technical term, and to that extent there is a danger of triviality in asking whether there can be joint attention to the remembered past as well as the perceived present. There is arguably a good enough sense in which, whenever two participants to any normal conversation succeed in communicating about some particular some subject-matter, they are thereby jointly attending to that subject-matter. In this sense there clearly can be joint attention to the past—the remote past as well as the personal past, no less than joint attention to the future or the merely possible, abstract objects, and so on. On the other hand, if joint attention is defined as a specifically perceptual phenomenon, then it is clear that there can be no joint attention if the object is not perceived but remembered. More carefully put, then, the question is what the important commonalities might be between occurrent joint perceptual attention and the kind of co-ordination characteristic of joint reminiscing—and to what extent these warrant viewing joint perceptual attention and joint reminiscing as species of a wider, but still theoretically significant, phenomenon of joint attention broadly construed.

Why should this question matter? One of the guiding intuitions behind much interest in joint attention is the sense that, when two or more people are engaged in jointly attending to something, their minds become open to one another in a special way, and that this openness trades somehow on the immediate perceptual availability of the object of attention. As Naomi Eilan puts it: ‘Psychologists sometimes speak of such jointness as a case of attention being ‘shared’ by infant and adult, or of a ‘meeting of minds’ between infant and adult, all phrases intended to capture the idea that when joint attention occurs everything about the fact that both subjects are attending to the same object is out in the open, manifest to both participants.’ (Eilan 2005, p. 1) The question we should ask, then, is to what extent this distinctive kind of openness depends specifically on features which are peculiar to perception; and, conversely, to what extent memory—specifically, episodic

memory—might provide for a comparable meeting of minds.

There are a few initial intuitions about memory which would seem to militate against this possibility. Memory might be thought to be in some sense ‘subjective’, in a way that contrasts with perception. Untouched by philosophical reflection, we are ordinarily disposed to think of perception as providing us with a window onto a world that we all share. Joint perceptual attention opens our minds to one another precisely because we can meet in the middle in an objective, hence intersubjective, reality, rather than being confined to the private goings-on of our own individual mental theatres. Memory, by contrast, is unreliable, selective, and subject to interpretation and re-interpretation, in a way that perception is largely not.

A second, related, intuition about memory is that recall is an internal, covert matter. This again would seem to be a contrast with canonical cases of perception, which have an observable, bodily aspect to them. There is no obvious analogue in memory of the bodily action of looking, or to direction of gaze, that might serve to identify what someone is remembering by indicating its spatial location.¹ A corollary of this is that the co-ordination of focus in joint reminiscing would seem to be much more dependent on participants’ verbal reports of their memories than in canonical cases of joint attention. And this in turn might exert pressure to align joint reminiscing with ordinary verbal communication about remoter matters about which the participants lack present conscious awareness, in memory or otherwise.

These are only intuitions, and it remains to be seen to what extent they introduce differences of kind rather than degree between joint reminiscing and joint perceptual attention, and how significant these are. The next section will review some of the main ways of characterising ordinary joint attention, and work towards a conception of joint attention that leaves an open and interesting question whether there might be such a thing as joint attention to the past.

¹This is not to say that we have no way of knowing what other people are remembering, and indeed below I will suggest that the differences are not as radical as they seem. But there is an especially direct and systematic way in which direction of gaze can specify the object of visual attention, which has no direct analogue in recall.

2 CHARACTERISING JOINT ATTENTION

One basic assumption common to most people who have thought about joint attention is that it is not just a matter of two people both attending to the same object. Nor is it just a matter of both so attending as a result of one monitoring or manipulating the attention of the other. Rather, the fact that they are both attending to the same thing has to be in some sense, which proves notoriously difficult to elucidate, out in the open between them. As just mentioned, this is often put in terms of the idea that they are attending *together*, or ‘sharing’ their experience.

John Campbell illustrates this idea with the following simple case:

Suppose that you are sitting on a park bench watching a swan and someone comes to sit beside you. Perhaps there is some rudimentary conversation. So you shift from solitary attention to the swan, through a condition in which both you and your neighbour are coincidentally watching the swan, to full joint attention. (Campbell 2002, p. 287)

We might draw the following moral from this case. When the stranger sits down next to you, it may be obvious enough that they can also see the swan. After all, it is right in front of them, and they are ‘visibly normal’.² It may also be that their attention to the swan is in some way influenced by yours—perhaps it is by following your gaze, consciously or unconsciously, that they notice it in the first place. So you are both attending to the same object, and there is some degree of causal co-ordination of your attention. Nevertheless, at this stage you might still not be sharing your attention to the swan, even though it may be obvious enough to you both that you are both attending to it. But as soon you acknowledge each other’s presence—perhaps even exchange a few words—a shift takes place in your attention: you are now looking at it together. This is full joint attention.

The challenge is to explicate what exactly this shift consists in. Theoretical accounts of joint attention differ with respect to how much extra-perceptual, cognitive complexity they appeal to in explaining the difference between solo and

²The notion of ‘visible normality’ features prominently in (Schiffer 1972)’s discussion of common knowledge. The basic idea is that people assume that normal perceivers under normal conditions can see things which are right in front of them, and that ‘normality’ in this sense is a property that can be observed to hold of a person and a situation.

joint perceptual attention. Approaches that make joint attention a cognitive phenomenon are typically also reductive, in the sense that the states of the respective subjects in question are supposed to be ones that each could be in separately, in the absence of full joint attention.³ In particular, a standard strategy is to appeal to some form of recursive mindreading in explicating the difference between merely co-ordinated attention and proper joint attention—that is, psychological states which represent the other’s psychological states, which may in turn represent one’s own states, and so on. For example, Michael Tomasello writes, in a joint attentional interaction between an infant and its caregiver, ‘The infant is attending not only to the adult’s attention to the object, but also to the adult’s attention to her attention to the object, and to the adult’s attention to her attention to the adult’s attention to the object, and so on.’ (Tomasello 2019, p. 56)

These approaches face difficulties in spelling out what exactly it is for the potentially infinitary hierarchy of psychological attributions actually to be realised in the minds of the participants. It seems clearly wrong—and to fly in the face of the well-established fact that infants engage in joint attention from around 9 months—to require the participants to explicitly and consciously entertain even a small number of steps of the hierarchy. This can encourage the thought that subjects’ cognition of the hierarchy is only implicit—in the sense, perhaps, that they would be warranted in inferring arbitrarily far up the hierarchy given the requisite concepts and computational resources.⁴ However, it also does not seem right for the openness of joint attention to consist merely in the potential for a series of inferences; as Christopher Peacocke observes, openness ‘is not merely something that exists: it also seems to be present to the consciousness of the participants.’ (Peacocke 2005, p. 301) The occurrent, immediate character of the mutual awareness seems to contrast signi-

³This way of dividing up the options to some extent mirrors the standard options in explaining collective intentions. ‘Content’ views of collective intentionality appeal just to the contents of the individuals’ intentions, and perhaps their beliefs about their cooperators’ intentions. To this extent content views parallels reductive approaches to joint attention. By contrast, nonreductive approaches, such as Campbell’s perceptual approach and the communicative approach I discuss below, resemble accounts of collective intentionality that appeal to some form of irreducible ‘we’-intention. See (Schweikard and Schmid 2012) for an overview.

⁴This is the standard move in classic analyses of common knowledge along the lines of (Schiffer 1972) and (Lewis 2002 (orig. 1969)).

ificantly with the various implicit assumptions—about one another’s background beliefs and intentions, and beliefs about one another’s beliefs and intentions, and so on—that make up the ‘common ground’ of any normal conversation, and are required by many classic accounts for successful communication.⁵ So the problem for the recursive mindreading approach is to capture the immediacy and directness of the mutual awareness that obtains in joint attention, yet without imposing unrealistic cognitive demands.⁶

At the other end of the scale are views that take joint attention to be a simple and purely perceptual phenomenon. The paradigm of this is John Campbell’s (Campbell 2005, 2011) influential proposal, on which joint attention is an primitive and unanalysable three- (or more-) place ‘experiential relation’ between two (or more) subject and an object: x is jointly attending with y to o . On Campbell’s view, the change that takes place when you start jointly attending to the swan with the stranger is that the other person is now present in your experience ‘as co-attender’. This is a change strictly in your perceptual experience of the swan, albeit one which essentially requires a parallel change to have taken place in the stranger’s experience of it. As he puts it, joint attention is ‘fundamentally a phenomenon of sensory experience.’ (Campbell 2011, p. 415)

Both of these positions look problematic from the perspective of the question of joint attention to the past. In the case of the recursive mindreading approach, the problem is that it assimilates joint attention to other cases of (perhaps implicit) mutual knowledge, and so threatens to lose what is special about joint attention as distinct from participants’ common knowledge of the subject-matter and background assumptions in any ordinary conversation. On the other hand, Campbell’s approach secures the specialness of joint attention, but at the cost of leaving it some-

⁵The classic account of how communication trades on implicit cognition is (Sperber and Wilson 1995 [1986]).

⁶Peacocke’s own sophisticated reductive analysis of joint attention, involving a complex reflexive state of ‘occurrent awareness’ that makes reference to itself as well as to both participant’s states of attention, attempts to steer a middle course between these two pitfalls. Yet a common reaction to his proposal is that it fails still involves too much cognitive complexity to fit the majority of cases of genuine joint attention (Campbell 2011; Eilan n.d.). I am sympathetic to this complaint, and I will set Peacocke’s approach aside without further argument. However, it would be an interesting project to see how a Peacocke-style approach might be adapted to give an account of joint reminiscing.

what obscure how the account might be extended beyond the perceptual case. It is not so much that anything in Campbell's perceptual approach strictly rules out that a parallel phenomenon might exist for memory as for perception. The problem is that the materials Campbell offers do not by themselves give us much of a clue how to make any progress on this question. As a number of commentators have pointed out, it is not particularly illuminating just to be told that, in joint attention, the other is 'present as co-attender,' unless something more can be said about what this relation involves (Battich and Geurts 2021; Eilan n.d.; Peacocke 2005). In a similar vein, it is simply unclear how to assess what it would be for joint reminiscing to involve a Campbell-style three-place relation in which the other person is present as 'co-rememberer'.

We need an approach to joint attention that steers between these two extremes. A number of recent treatments of joint attention have sought to develop a nonreductionist approach in a way that contrasts with Campbell's narrowly perceptual focus, and instead stresses the extent to which joint attention involves communicative relations between the participants (Carpenter and Liebal 2011; Eilan n.d.; Harder forthcoming; León 2021; Siposova and Carpenter 2019). The central idea of this approach is that, in explaining the jointness of joint attention, we need to appeal not only to the participants' perceptual awareness of one another and of the object of attention, but the patterns of mutual engagement whereby they co-ordinate and share their responses to the object.

Of course, almost everyone writing about joint attention agrees that it is to some extent importantly connected to communication: perhaps some kind of communicative action, such as pointing, is required to initiate it; and it can undoubtedly facilitate further communication about the attended object. But, as Naomi Eilan writes, the standard approaches typically view the phenomenon itself as 'sandwiched in between such communicative interactions, and not itself a communicative phenomenon.' (Eilan n.d., p. 10) By contrast, Eilan proposes that joint attention be conceived as communicative through and through, so that part of what it is to be sharing an experience with someone is stand in a communicative relation with them. Part of what it is for two people to stand in such a communicative relation

is for them to adopt attitudes of mutual address to one another—thinking of each other not as ‘that person’, but as ‘you’.⁷ Malinda Carpenter and Barbara Siposova summarise:

In a second-person relation, one no longer has a detached, observer’s attitude toward the other and his or her attention; the other is not perceived as ‘he’ or ‘she’. Instead, both individuals are in direct engagement with each other and treating each other as ‘you’, and both are senders and receivers of information at the same time. (Siposova and Carpenter 2019, p. 262)

It should be clear from this is that the relevant notion of communication is not to be understood in standard terms of the delivery and uptake of a message with a certain informational content—where this might in turn be analysed along individualistic, Gricean lines, in terms of the audience’s recognition of the speaker’s intention to produce in them a certain response. Rather, the relevant kind of communication must be taken as a more primitive and basic phenomenon than the formation and recognition of Gricean intentions.⁸

On the other hand, the kind of communication at stake here cannot be entirely devoid of content. It contains a ‘message’ of sorts: an acknowledgment of the presence of the stimulus, and the fact that you and I both see or hear it and what it is like. One way of bringing this out is with reference to the all-too-familiar phenomenon of the ‘elephant in the room’. Suppose you are trying to have an intimate conversation with a friend in a public place, and an altercation breaks breaks out across the street. You press ahead with the conversation, trying your best to ignore the rumpus even as it becomes increasingly distracting. To this extent, even though it is obvious to you both that you are both aware of what is happening nearby, it is not yet an object of joint attention. On the other hand, it does not take much—a glance over to where the outburst is happening and back at your friend, a slight movement of the head—for you to acknowledge to one another that your attention has become

⁷Eilan suggests that this way of thinking of a person is individuated in terms of the condition that, for a ‘you’-thought to be successful, the target must similarly think of the thinker as ‘you’. See also (Martin 2014; Salje 2016).

⁸Eilan coins the label ‘communication-as-connection’ and proposes that, in accounting for joint attention and its significance, ‘we should treat communication-as-connection as a basic psychological concept, which cannot be reductively analyzed—one of the concepts, along with those of perception, belief and the like, that we should take as basic when explaining our engagement with the world, in this case the world of other persons.’ (Eilan n.d., p. 13).

occupied by the scene across the street; once you make this acknowledgment, your observation of it becomes something shared between you.

What this example illustrates is in order to share our experience, we have to communicate with one another and to acknowledge that we perceive the same thing. Yet, this communication need not involve any explicit assertions about the object or our perceptions of it, or even involve any novel information at all being transmitted from one person to the other. It is rather a matter of bringing out in the open what was already obvious, but perhaps only implicitly so; and this acknowledgment may be nonverbal, unconceptualised, and grounded in quite primitive patterns of interpersonal engagement.⁹ In particular, eye contact is a canonical and singularly efficient way of acknowledging, and so bringing out in the open, the fact that we are both aware of and responding to the same thing.¹⁰

On this approach, it is a causal precondition of joint attention proper that the attended stimulus be somehow salient to both parties. This can occur spontaneously and unplanned, as with a sudden loud bang; or it can be through deliberate manipulation of the environment or of the other person's attention, like waving something in front of someone's face. The perceptual salience of an object may, in many cases, put each participant in a position to make a sound inference to the effect that the other person is aware that they are attending to it, and aware that they are so aware, and so on; yet this is not what jointness consists in. Salience, however, is not only the ground for a series of such individualistic inferences; it also sets the stage for the mutual acknowledgment of the stimulus through reciprocal communication, including non-verbal forms of communication such as eye contact.¹¹

⁹See, for example, work on the 'sharing looks' of infants, which (Carpenter and Liebal 2011) argue serves just this communicative function of acknowledgment and sharing.

¹⁰Arguably certain forms of mutual touch, such as hand squeezing, can also sustain joint attention. Cf. (Botero 2016).

¹¹One might worry here, as a reviewer did, that this kind of communication can succeed only if the object is already not merely salient, but jointly attended to. To this I can only reply that this worry, if cogent, applies no less to other accounts of joint attention, such as Campbell-style accounts, which after all allow that some kind of communication is a necessary precursor to joint attention. Joint attention has to get off the ground somehow, so it cannot be that all communication presupposes joint attention. Perhaps there is a deep puzzle about how this is possible, but it does not seem to me any more pressing for a communicative model than for other approaches.

The communicative approach resembles Campbell's in that it does not attempt to reduce joint attentional openness to the individual states of the participants; but, unlike Campbell's, it does not make joint attention a specifically perceptual phenomenon. To that extent, it is a promising way of conceptualising joint attention that leaves open an interesting possibility of subjects sharing their memories to attend jointly to the past. The next section will develop this possibility, before contrasting it with some recent accounts that take a more sceptical view about the genuine sharing of memories.

3 JOINT REMINISCING AS TEMPORALLY DISPLACED ACKNOWLEDGMENT

The basic idea to be explored is that episodic memory can put subjects in a position jointly to attend to things they have previously done or experienced together by acknowledging, or re-acknowledging, some object of awareness after a temporal delay. This idea is not an entirely new one in the developmental literature: a study by (Liszkowski, Carpenter and Tomasello 2007) shows that 12-month-olds will often point at empty locations recently occupied by objects of interest; more broadly, Vasudevi Reddy (Reddy 2008, 2011) has suggested that joint attention to non-present objects might be seen as an outgrowth of more immediate forms of joint attentional engagement. The present discussion will aim to situate this suggestion with respect to the above-discussed issues about how to characterise the jointness of joint attention.

An immediate observation, which already takes us some way towards joint attention to the past, is that many cases of ordinary joint perceptual attention also already encompass what is in fact attention to something in the past. For example: a loudmouth in the pub makes an off-colour remark; you catch your friend's eye and subtly raise an eyebrow. It is plausible to say that in doing so you are sharing your reaction, and so establishing joint attention, to that very remark, although by the time you acknowledge it is now wholly in the past.

Reflection on some further cases can also serve to suggest a broad continuity

between joint perceptual attention and joint attention to the past. Consider the contrast between the following two vignettes:

1. Alice and Priya have an argument in which Priya loses her temper and storms out of the room. Five minutes later she comes back in and busily occupies herself tidying the room. Alice determinedly goes on reading the news on her smartphone. There is no eye contact.
2. Priya comes back in sheepishly after her outburst and glances contritely at Alice, who returns an admonishing but basically affectionate look.

In both scenarios, the recent altercation is highly salient to both, so that both are in a position to infer that the other is likely thinking about it—and so on for at least a few levels of recursive attribution. But in 1) this just characterises, separately, the individual states of awareness of both parties; there is no communication, no acknowledgment of the outburst. In scenario 2), by contrast, the exchange of glances opens up a line of communication about what just occurred—one which might, perhaps, come to facilitate something like apology or reconciliation.¹²

The suggestion I want to have on the table is that standard cases of joint reminiscing are broadly continuous with the above kind of case in which little or no verbal prompting is required to mutually acknowledge something which now lies in the past. Of course, it goes without saying that people forget (or ‘forget about’) things they have done and seen together; memories fade in salience, so that bringing them

¹²A reviewer expressed scepticism at this point that the glance really establishes anything like shared attention to the recent argument, on the grounds that there is no way either can ‘non-descriptively highlight’ features of the situation in communicating about it. I think this point needs to be taken with care. On the one hand, it is true that the possibilities for non-verbal demonstrations of specific aspects of the situation are much more limited than when the object of attention is perceptually present. On the other hand, it is not obviously correct to say that any verbal highlighting is thereby wholly descriptive. Suppose Priya later says, ‘It was your dismissive tone of voice that really touched a nerve’, and Alice thereby comes to sympathise better with her point of view. Has this come about just through Priya producing an accurate description of the relevant feature of the situation—one which could in principle convey the same information to someone who was not actually present? It seems to me clearly not, and that the communicative force of such verbal descriptions depends essentially on the audience being able to latch onto the relevant features of the particular concrete situation they concern. Such partial descriptions also play a role in highlighting aspectual features of jointly perceived situations that cannot be non-verbally demonstrated: “Look at that amazing deep blue!”, “What a funny accent”, and so on.

to mind again, in oneself or another person, can take a good deal of prompting and searching, and may well fail. And the tools we have to guide one other's attention to the contents of memories are undoubtedly more limited and indirect than the means we have for directing one another's perceptual attention. We cannot physically point to things that are not there any more, or causally manipulate a past environment to make something more salient the way we can manipulate things in the present. So in a sense there is no 'showing' in memory the way there is in perception.

Nevertheless, to stop at this observation would, I think, be severely to underestimate the extent to which we do often succeed, and knowingly succeed, in directing one another's attention to some particular past occasion. Typically the means will be verbal and at least partially descriptive ('remember that time we did X?')—but this is by no means to say that the only way we can identify an event to someone else who remembers it is by producing a full descriptive specification of it. Indeed, especially among people who know each other well, reminding someone of a given past experience may, in the appropriate context, take little more than a nod or a few words. ('Remember *that* night', you say to your friend as you walk past a bar where you once had a particularly chaotic evening together.)¹³ People's facility at successfully reminding one another of personally significant episodes they have enjoyed is, in fact, one of the defining features of human relationships. I will revisit this observation in the concluding section.

This kind of prompting of one another's memories, of course, exploits aspects of our knowledge of one another that go beyond what is observable in the here and now. In particular, reminding someone or being reminded of something you have experienced together engages not only your own memories of that thing, but also the assumption that the other person can remember it too. And someone might think this does introduce a significant discontinuity with joint perceptual attention—at least as construed along noncognitivist lines—insofar as the mutual recognition that you are both remembering the same thing involves involves a fur-

¹³Semantically, such locutions appear to have the character of 'complex demonstratives' rather than descriptions: expressions like 'that book', used to indicate a particular salient book. For discussion, see (Borg 2000).

ther inference, drawing on your non-perceptual knowledge of the other person and of how, in general, memory works, to an unobservable mental state.

Yet the fact that other people's memories are not perceptually observable need not lead us to conclude that the only way we can become aware of them is by inference. An alternative model is suggested by the idea of *recognising* a person. In general, the idea of a recognitional capacity for a thing can be invoked to explain how, on encountering a thing one has encountered before, one can thereby be in a position to exploit information previously gathered about that thing, without necessarily representing the inferential step that this thing now is the same as the thing one encountered earlier.¹⁴ In recognising something as my childhood toy, for example, I may thereby think, 'I used to fall asleep holding this', without having necessarily made any inference involving the identity of *this* thing (that I now see) with *that* thing (that I remember falling asleep with). Similarly, when I recognise someone who was present at an earlier experience, I may simply recognise them as having been there, without having to make any inference about their identity over time.

When it comes to other people, however, recognition has a special significance beyond the assumption of identity, one connected with an aspect of our everyday understanding of memory. Something we ordinarily assume about one another is that, just as perceptual exposure to a thing (being within suitable perceptual range and oriented in the right direction, without obstacles and occluders and with one's senses in working order, and so on) normally puts one in a position to direct one's attention towards it and respond appropriately to its features at the time, so does such exposure, absent lapses of memory, normally put one in a position to attend to that thing in memory and respond to its features at a later time. We assume, in other words, that experience is not just a fleeting thing: experience leaves its mark on us in a particular way, so that that very experience and its objects remain available for attention at a later time. And this background assumption, about

¹⁴For a classic discussion of recognition and its significance, see ch. 8 of (Evans 1982). Note that the notion of recognition here is somewhat technical in that it implies the successful identification of the object rather than just a feeling of familiarity. This contrasts with ordinary usages such as: "I recognise that face, but I can't think where from".

what experience makes available beyond the here and now, greatly enriches the consequences of recognising a person: recognising someone to have been present at an earlier experience something creates a default presumption that the object of that experience will remain available for them subsequently as a possible object of attention.

Of course, these presumptions are defeasible: sometimes we think we recognise a person but are mistaken; other times the other person fails to recognise us back, or pretends to, or recognises us while conflating the details of our previous encounter with an entirely different occasion. When these presumptions are not defeated, though, and two people mutually recognise each other, they thereby make available to one another the contents of their earlier experiences as a potential topic of communication, waiting to be acknowledged.

That is the basic idea. The remainder of this contribution will elaborate it by contrasting two recent accounts of joint reminiscing in which the need for verbal identification does introduce a significant discontinuity with the perceptual case, in a way that creates obstacles to genuine sharing.

4 DE BRIGARD: JOINT REMINISCING AS ‘CONCERTED DEFERRED MENTAL OSTENTION’

In a recent discussion, Felipe De Brigard puts forward an account of joint reminiscing as involving ‘concerted deferred mental ostention’. There are two components to this.

First, De Brigard holds that reference to past remembered objects and events quite generally takes place by means of ‘deferred mental ostention’—referring to or thinking about some non-present object by way of demonstrating or attending to some present item that stands in a relevant relation to it. A classic example is the remark, “He’ll be sorry” made while pointing to the car with the parking ticket on it (Evans 1982, p. 199). In the case of memory, De Brigard maintains that we generally refer to past items by way of inwardly demonstrating something in the present stream of consciousness—in his terminology, a ‘region of intentional content’—

that stands in a relevant (i.e. a causal-cum-representational) relation to that item.

He explains:

I suggest that what allows us to refer to past objects when we are consciously attending to a particular mental content that presents itself as being about a previous experience, is the covert equivalent of our overt capacity to demonstrate deferredly...we can talk about the intentional objects of our memories because we can refer deferredly to them by mentally ostending toward the intentional contents we experience when retrieved by the right cue. Remembering a past object is a case of deferred mental ostension.¹⁵ (De Brigard 2018, pp. 209, 211)

The second component to De Brigard's view is that joint reminiscing occurs when two people both perform this mental act in a co-ordinated or 'concerted' manner. He suggests that this a similar process to what occurs when people use co-ordinate their perceptual attention on the same object using some combination of overt pointing gestures, mutual salience of the relevant item, and verbal prompting.

As he explains:

Just as [in the case of visual attention], I can guide my friend's attention to highlight a particular aspect of his intentional content...so it becomes the target of his mental ostension...The capacity to mutually coordinate each other's attention so as to consciously highlight (approximately) the same mental contents I call 'concerting'. Consequently, our capacity to talk about the very objects represented by the intentional contents we are conscious of during joint reminiscing would be concerted mental deferred ostension. (p. 213)

As De Brigard tells this story, the absence of direct physical cues like pointing gestures or direction gaze, and the relatively greater importance of verbal prompting, do not introduce any profound discontinuity between the perceptual and the memorial case. In both cases what happens is some object or event is relatively salient to both parties, and that this salience can be exploited by one or the other party in selecting cues to bring that object or event into common focus. To this extent, Brigard's account would seem to be in agreement with the suggestion in the last section of a broad continuity between joint perceptual attention and joint reminiscing.

¹⁵It is important that, as De Brigard is using the term 'intentional content', this is not the same as the remembered thing, which he calls the 'intentional object' of the remembering. As I emphasise, it is an essential aspect of De Brigard's account that what one attends to in recall is distinct from what one would normally be said to remember.

The above quotation, however, papers over a major disanalogy with the perceptual case on De Brigard's account. In the above story, both participants are guiding one another's respective attention to *different* things, namely their respective individual memory images, or intentional contents. It is only in deferentially ostending to the represented object of their images that they end up landing together on the same object: rather like the way in which two people looking at digital images of the Bayeux Tapestry on their respective computer screens might thereby be in a position to talk together about the events of the Battle of Hastings.

Why it should matter so much that there is some numerically identical single object of both parties' direct attention? De Brigard has, after all, articulated some substantial parallels between how outward perceptual attention is co-ordinated in joint attention, and how inward attention is co-ordinated in joint reminiscing. And there is an important sense in which in the latter case both participants are thinking about the same thing—namely, via deferred ostention—even if they are not both strictly and literally attending to that thing.

As I emphasised earlier, one of the driving intuitions behind the interest people have taken in joint attention is that joint attention enables us not only to communicate successfully, but to bring our experience out in the open, and thereby in some sense to share a world. So the question to ask of De Brigard's account is whether it really captures any sense in which joint reminiscing involves not just talking about the past, but sharing memories of it.

I think we should say that it does not. For, on De Brigard's account, the participants in joint reminiscing are each attending just to their own private memory images, which are just that: images, with no intrinsic connection to the past event that the participants converge on linguistically by means of deferred ostention. These respective images are products of different, idiosyncratic mental processes: each apprehended the original scene from different perceptual perspectives, giving rise to qualitatively different experiences; their memories may have selectively emphasised different aspects of the scene, or reconstructed it in quite different ways, by processes subject to different biasing factors. In short, both participants' private memory contents are likely to be very different, in ways they both can only guess

at.

The magic of joint attention, by contrast, is that it allows us to share our experiences, and to have a sense of inhabiting a common world, despite the unknown diversity of what is going on in our individual streams of consciousness at any one time. Essential to its being able to do so is the fact that perceptual experience makes available the very same objects of attention, despite perspectival differences in how these objects are apprehended. As Campbell puts it, ‘the basic ability to identify *what* the other person is attending to, so that one can attend to it oneself, is foundational for subsequent perspective-taking capacities...There is no such thing as coming to grasp the other person’s perspective on the world without having first identified which things it is that the person is attending to.’ (Campbell 2011, p. 426)

De Brigard’s account, by contrast, reverses this order of explanation. Insofar as your converging on the same target of deferred ostension is a deliberate achievement—rather than, say, something secured by a linguistic convention, one which might be acknowledged only implicitly—this can only be as a result of your successfully guiding your partner’s inward attention to a private image which stands in the relevant causal-cum-representational relation to the past occurrence. Yet, as just emphasised, people typically have quite limited insight into what each other’s memory images, construed as items in the stream of consciousness with no intrinsic connection to the past, are like.

I think we should conclude that, if De Brigard were right about the nature of episodic memory, we would not be able to experience the past as shared in the way we can share our present perceptual environment. This is, of course, not an argument directly against the view; it is just to say that it should be seen as basically pessimistic about the possibility of joint attention to the past.

As I just presented it, this pessimism about joint attention to the past is a consequence of De Brigard’s commitment to the claim that, in episodic recall, what one attends to is a present mental image and not any part of the remembered scene itself. This commitment is, of course, one (quite extreme) way of giving substance to the intuition that memory is somehow subjective, in a way that contrasts with perception. By contrast, the simple conception of joint attention to the past just

outlined in the previous section presupposes a different view, on which episodic memory puts subjects in a position to attend to the very same events of the past that they previously experienced.

A natural question, then, is whether there might be ways of pressing the intuition that memory is somehow subjective in ways that do not depend on De Brigard's particular view about episodic memory and attention. The next section addresses this question by looking at Axel Seemann's recent discussion of joint reminiscing, which, despite starting from quite different assumptions about the character of episodic recall, nevertheless comes to a sceptical conclusion about the possibility of genuine joint attention to the past.

5 SEEMANN: JOINTLY RETAINED ACQUAINTANCE

Seemann does not, on the face of things, assume that episodic memory is private and subjective in the way that De Brigard does. On the contrary, he takes as a starting point M. G. F. Martin's characterisation of episodic memory as a form of 'retained acquaintance' with the past (Martin 2001). Seemann glosses: 'Episodic memories are retained memories of particular events that the subject originally experienced and is able to explicitly recall, so as to be able to "travel back into the past"...in her own mind.' (Seemann 2019a, p. 4822) So this is, at the very least, a view on which episodic memory puts one in a position to attend to the very events one once experienced, rather than merely one's present memory images.

Nevertheless, Seemann sees a fundamental contrast between joint perceptual attention and joint reminiscing. He holds that joint perceptual experiences have a special epistemic significance, which is lost as soon as the joint experience ends. As he explains:

In [joint attention], the epistemic constellation allows the subjects to settle contested claims simply by pointing out the relevant facts to each other...Subjects in joint constellations can point out the relevant facts to each other because these facts are publicly accessible...*It is just this feature that is lost when the event is remembered.* I cannot produce evidence [of the relevant kind] if we are debating a past jointly experienced event. Whether you were there with me or not is irrelevant as far as our perceptual evidence is concerned: all I can offer you is my memory of what happened, which may or may not be consistent with yours. (p. 4822, emphasis ad-

ded.)

Seemann's idea is that, when people are engaged in joint perceptual attention, the perceptible facts are out in the open and in a certain sense indisputable between them. It is not just that each person individually has a solid epistemic warrant for forming beliefs based on their perceptions; when their perceptions are shared, they can appeal overtly to the perceptible facts in order to explain or justify claims to one another, and these appeals to what is publicly perceptible require no further justification. By contrast, Seemann holds that episodic memory endows individuals separately with a distinctive epistemic authority regarding what happened, yet cannot be a source of public justification in the same way that shared perceptual experience can be. The jointness, and consequent dispute-settling power, of the earlier shared perceptual experience is irretrievably lost. Seemann concludes that joint reminiscing 'has as its goal something that is, strictly speaking, impossible: it aims at a retained acquaintance with [i.e. joint attention to] a shared past.' (p. 4824)

It is hard not to be at least somewhat swayed by the intuition that facts about the past cannot lie open to view between us in the way that perceptible facts about the environment can. Yet, on closer inspection, it is not clear exactly where the source of the disanalogy with joint perceptual attention is meant to lie. Seemann rightly highlights that parties to joint reminiscing invariably have their own partial, idiosyncratic perspectives on the remembered occurrence: 'all I can offer you is my memory of what happened, which may or may not be consistent with yours.' But it is no less true of perception that different people have their own idiosyncratic, possibly divergent perspectives: things look different to differently situated observers; people have variable perceptual sensitivities, which may be shaped by prior expectations, cultural assumptions, stereotypes, and so on. It may be that divergences in memory are more frequent and radical, and less easily compensated for, than divergences in perception. But this would seem to be a difference in degree rather than kind. Indeed the lesson from the above discussion of De Brigard was that what matters for joint attention is not that the participants' experiences completely match—which is, of course, probably both unachievable and unknowable—but

that they converge on a common referent so as to make it salient as a topic for communication. And people do successfully remind one another of past events all the time, so that there is no significant doubt that they are both remembering the same event.¹⁶

A further point Seeman's discussion draws attention to, however, which may introduce more of a genuine structural difference with the perceptual case, is the derivative character of memory. The distinctive epistemic authority of memory resides in its connection to an earlier experience. As he puts it, drawing again on Martin's notion of 'retained acquaintance', 'what explains the justificatory power of eyewitness accounts is the recognition that subjects of past perceptual experiences retain a direct [i.e. experiential, conscious] connection with the past event that is preserved through their representation of it.' (p. 4823) And Seeman's idea is that what is preserved in memory is only ever the individual's own experiential perspective on the remembered scene, rather than a joint experience: 'If you take it, plausibly to my mind, that it is the 'retained acquaintance with the past' that confers justificatory relevance on appeals to past experience, this acquaintance cannot be of a joint kind.' (p. 4823)

Now, something that appears to be an assumption here is that a joint experience of the past could only be so in virtue of preserving an earlier joint perceptual experience—that is, that joint attention to the past presupposes prior joint perceptual attention. Yet it is not obvious why this should be so. It does not, at any rate, follow at all straightforwardly from a conception of (individual) episodic memory as retained (individual) experiential acquaintance. There is nothing in this concep-

¹⁶In other work, Seemann develops a framework on which the possibility of joint reference in general is dependent on subjects' abilities to locate their reference in a shared spatial framework (Seemann 2019b, 2021). There are difficulties for this proposal which are not fully addressed by Seemann—for example, it is not clear how it generalises to joint attention in modalities other than vision, in which spatial information is relatively impoverished. Setting these doubts aside, though, there is a way in which Seemann's proposal about the role of joint spatial awareness in underpinning reference might be combined with the present proposal: namely, in terms of the idea that co-reference to a past object needs to take account of the participants' understanding that they were both *previously* at the location in question (or within perceptual range of it), and have each traversed a continuous path in a common spatial framework of experience and action since that earlier encounter. For a discussion of the role of spatial understanding in recall, albeit limited to the individual case, see (Hoerl 2001).

tion of episodic memory that rules out the possibility that subjects might come to attend jointly to the past by sharing their memories of something they both experienced, even if this experience was not shared, in the sense of acknowledged, at the time. Indeed one important social function served by joint reminiscing is as an occasion to communicate and share experiences in a way that was not feasible at the time—for instance due to practical obstacles or social imperatives. (“What a terrible bore that guy we were sitting next to was!”)

Of course it may well be that the sharing of memories is greatly facilitated if the target object or event was acknowledged at the time, or soon after. ‘Marking a moment’ with someone else is likely to make it much more salient, and so easier to highlight, in one’s later interactions with that person; conversely, occurrences or features that go unmarked are more likely to fade into the general flow of things, and so be harder or impossible to point out at a later time. But this would seem to be just one of the many factors that can modulate the degree of salience and accessibility of a past object, rather than a completely general necessary condition on successful joint attention to the past.¹⁷

The point of raising this is less to insist on this particular possibility, of joint reminiscing about something that was not shared at the time, so much as to highlight Seemann’s assumption that joint attention to the past could be joint only in virtue of preserving the jointness of an earlier experience. By contrast, on a conception of joint attention to the past as delayed acknowledgment, it is easy enough to see how people might come to share their memories of the past only after the fact, trading just on the residual salience of the event and their mutual recognition of one another as having been there.

What might account for Seeman’s resistance to this possibility? One factor, I think, is his rather narrow emphasis on the epistemic function of both joint attention and remembering.

If we construe the significance of memory just as a special source of evidence about what happened at an earlier time, and the significance of joint attention just as particular way of settling factual disputes, then Seemann is perhaps right to say

¹⁷Thanks to a reviewer for inviting me to consider these questions.

that, in sharing our memories of a past situation, we can never get anything *more* than what we each respectively bring to the table. In a joint perceptual situation, people can point things out to each other that they had not previously seen, by manipulating the environment and one another's perceptual attention. By contrast, in joint reminiscing, the objects of attention are always over and done with, so that one is ultimately dependent on the other person already being in a position accurately to remember the events in question and its relevant features.

However, it is questionable whether we should view the significance of joint reminiscing solely in epistemic terms. After all, people frequently engage in joint reminiscing when there is little doubt as to the bare facts about what happened, but rather to bond socially and emotionally over the experiences that they have in common. This social function is at the core of a communicative approach to joint attention: the kind of communication in question, as I stressed earlier, is not so much about pointing out the facts to the other person, but sharing what is already apparent in order to connect with the other person on an emotional level. Similarly, the significance of joint reminiscing may reside less in the possibility of settling disputes about what happened, but in the way that the sense of a shared past transforms the character of the social relations we enjoy with one another. The final section will briefly expand on this possibility.

6 SHARING A PAST AND KNOWING A PERSON

The question I have been concerned with is in what sense, and to what extent, we might be said to share a past in jointly reminiscing about it, in the same way that we can share a perceptual environment through joint attention. Yet one might wonder what is really at stake here. Are there not just both similarities and differences between joint perceptual attention and joint reminiscing? What, ultimately, is the point in calling joint reminiscing a form of joint attention to the past? This question might seem especially pressing given that philosophical discussions of joint attention are often framed in terms of its role in facilitating and rationalising cooperative action; and it is unclear how joint reminiscing could play any such action-guiding

role, given that the object of attention is in the past and so inaccessible to action.¹⁸

But this is not the only way way of framing the phenomenon. In particular, in developmental research, a large part of the interest of joint attention is the way in which it enables a particular kind of emotional engagement with the other person, one in which both share their reactions to the attended object. This form of engagement might be seen as in some ways continuous with simpler dyadic interactions, typically between mothers and infants; but the introduction of the ‘third item’ in joint attention transforms the possibilities of emotional engagement insofar as the participants now understand one another’s reactions as responses specifically to that item.

In a similar vein, the move from joint perceptual attention to joint reminiscing once again transforms the possibilities for emotional engagement with the other person. Here the change is not so much the introduction of a new type of object (after all, things of the past are not a distinct kind of thing), but the manner in which the other person figures as a co-communicator. In particular, earlier I suggested that joint reminiscing trades distinctively on the recognition of the other person as having been present at an earlier experience. So the kind of engagement here is connected with a conception of the other person as a being extended in time, who is shaped by their experiences insofar as they can access them later in recall.

This point has an echo in adult life. We often speak, not only of recognising a person, but of *knowing* someone. The idea of knowing a person does not seem to be just a matter of being able to identify them perceptually, nor knowing a suitable number of facts about them, but rather has something to do with having a certain kind of relationship and pattern of engagement with that person over time. I suggest that joint reminiscing, and the mutual recognition of one another as having been present at an earlier time, is a gateway to the particular kind of cognitive intimacy suggested by this locution. Our knowledge of one another, on this suggestion, essentially involves social relations, and in particular those social relations by means of which we mutually acknowledge the progress of one another’s experiences over time and thereby come to share a past.

¹⁸For example, this is Campbell’s principal argument against reductive accounts of joint attention; see also (Seemann 2007; Wilby 2023).

REFERENCES

- Battich, Lucas and Bart Geurts (2021). 'Joint Attention and Perceptual Experience'. In: *Synthese* 198.9, pp. 8809–8822. DOI: 10.1007/s11229-020-02602-6.
- Borg, Emma (2000). 'Complex Demonstratives'. In: *Philosophical Studies* 97.2, pp. 229–249.
- Botero, Maria (2016). 'Tactless Scientists: Ignoring Touch in the Study of Joint Attention'. In: *Philosophical Psychology* 29.8, pp. 1200–1214. DOI: 10.1080/09515089.2016.1225293.
- Campbell, John (2005). 'Joint Attention and Common Knowledge'. In: *Joint Attention: Communication and Other Minds: Issues in Philosophy and Psychology*. Ed. by Naomi Eilan et al. Oxford: Clarendon Press.
- (2011). 'An Object-Dependent Perspective on Joint Attention'. In: *Joint Attention: New Developments in Psychology, Philosophy of Mind, and Social Neuroscience*. Ed. by Axel Seeman. MIT Press.
- Carpenter, Malinda and Kristin Liebal (2011). 'Joint Attention, Communication, and Knowing Together in Infancy'. In: *Joint Attention: New Developments in Psychology, Philosophy of Mind, and Social Neuroscience*. Ed. by Axel Seemann. MIT Press.
- De Brigard, Felipe (2018). 'Memory, Attention, and Joint Reminiscing'. In: *New Directions in the Philosophy of Memory*. Ed. by Kourken Michaelian, Dorothea Debus and Denis Perrin. Routledge.
- Eilan, Naomi (2005). 'Joint Attention, Communication, and Mind'. In: *Joint Attention: Communication and Other Minds: Issues in Philosophy and Psychology*. Ed. by Naomi Eilan et al. Oxford: Clarendon Press.
- (n.d.). 'Joint Attention and the Second Person'. URL: <https://warwick.ac.uk/fac/soc/philosophy/people/eilan/jaspup.pdf>.
- Eilan, Naomi et al. (2005). *Joint Attention: Communication and Other Minds: Issues in Philosophy and Psychology*. Oxford: Clarendon Press.
- Evans, Gareth (1982). *The Varieties of Reference*. Ed. by John McDowell. Oxford: Oxford University Press.

- Harder, Rory (forthcoming). 'Joint Attention and Communication'. In: *Inquiry: An Interdisciplinary Journal of Philosophy*.
- Hoerl, Christoph (2001). 'The Phenomenology of Episodic Recall'. In: *Time and Memory*. Ed. by Christoph Hoerl and Teresa McCormack. Oxford University Press, pp. 315–38.
- Hoerl, Christoph and Teresa McCormack (2005). 'Joint Reminiscing as Joint Attention to the Past'. In: *Joint Attention: Communication and Other Minds: Issues in Philosophy and Psychology*. Ed. by Naomi Eilan et al. Oxford: Clarendon Press, pp. 260–286.
- León, Felipe (2021). 'Joint Attention Without Recursive Mindreading: On the Role of Second-Person Engagement'. In: *Philosophical Psychology* 34.4, pp. 550–580. DOI: 10.1080/09515089.2021.1917533.
- Lewis, David (2002 (orig. 1969)). *Convention*. Oxford: Blackwell.
- Liszkowski, Ulf, Malinda Carpenter and Michael Tomasello (2007). 'Pointing out new news, old news, and absent referents at 12 months of age'. In: *Developmental Science* 10.2, F1–F7.
- Martin, M. G. F. (2001). 'Out of the Past: Episodic Recall as Retained Acquaintance'. In: *Time and Memory: Issues in Philosophy and Psychology*. Ed. by Christoph Hoerl and Teresa McCormack. Oxford University Press, pp. 257–284.
- (2014). 'In the Eye of Another: Comments on Christopher Peacocke's 'Interpersonal Self-Consciousness?'. In: *Philosophical Studies* 170.1, pp. 25–38. DOI: 10.1007/s11098-013-0173-z.
- Peacocke, Christopher (2005). 'Joint Attention: Its Nature, Reflexivity, and Relation to Common Knowledge'. In: *Joint Attention: Communication and Other Minds: Issues in Philosophy and Psychology*. Ed. by Naomi Eilan et al. Oxford: Clarendon Press.
- Reddy, Vasudevi (2008). *How Infants Know Minds*. Harvard University Press.
- (2011). 'A Gaze at Grips with Me'. In: *Joint Attention: New Developments in Psychology, Philosophy of Mind, and Social Neuroscience*. Ed. by Axel Seeman. MIT Press.

- Salje, Léa (2016). ‘Thinking About You.’ In: *Mind* 126.503, pp. 817–840. DOI: 10.1093/mind/fzw018.
- Schiffer, Stephen R. (1972). *Meaning*. New York, NY, USA: Oxford, Clarendon Press.
- Schweikard, David P. and Hans Bernhard Schmid (2012). ‘Collective Intentionality.’ In: *Stanford Encyclopedia of Philosophy*. Ed. by Edward N. Zalta.
- Seemann, Axel (2007). ‘Joint Attention, Collective Knowledge, and the “We” Perspective.’ In: *Social Epistemology* 21.3, pp. 217–230. DOI: 10.1080/02691720701673959.
- (2011). *Joint Attention: New Developments in Psychology, Philosophy of Mind, and Social Neuroscience*. MIT Press.
- (2019a). ‘Reminiscing Together: Joint Experiences, Epistemic Groups, and Sense of Self.’ In: *Synthese* 196.12, pp. 4813–4828. DOI: 10.1007/s11229-016-1156-3.
- (2019b). *The Shared World: Perceptual Common Knowledge, Demonstrative Communication, and Social Space*. Cambridge, MA, USA: MIT Press.
- (2021). ‘An Externalist Theory of Social Understanding: Interaction, Psychological Models, and the Frame Problem.’ In: *Review of Philosophy and Psychology*, pp. 1–25. DOI: 10.1007/s13164-021-00584-z.
- Siposova, Barbora and Malinda Carpenter (2019). ‘A New Look at Joint Attention and Common Knowledge.’ In: *Cognition* 189.C, pp. 260–274.
- Sperber, Dan and Deirdre Wilson (1995 [1986]). *Relevance: Communication and Cognition*. Oxford: Blackwell.
- Tomasello, Michael (2019). *Becoming Human: A Theory of Ontogeny*. Harvard University Press.
- Wilby, Michael (2023). ‘The Form and Function of Joint Attention Within Joint Action.’ In: *Philosophical Psychology* 36.1, pp. 134–161. DOI: 10.1080/09515089.2022.2039384.