



Phenomenology of Joint Attention

by Timothy Martell

Abstract

It is one thing for two or more persons to perceive the same object, and it is quite another for two or more persons to perceive the same object together. The latter phenomenon is called joint attention and has recently garnered considerable interest from psychologists. However, contemporary psychological research has not succeeded in clarifying how persons can share perception of an object. Joint attention thus stands in need of phenomenological clarification. Surprisingly, this has yet to be offered. Phenomenologists have provided thoroughgoing analyses of perceptual experience, but have overlooked the perceptual experiences of co-perceivers; and, while a number of well-known phenomenologists have offered accounts of how one encounters other persons, they have neglected the phenomenon of perceptually attending to an object with other persons. This paper addresses a shortcoming of both contemporary psychological research and the phenomenological tradition by providing a phenomenological analysis of joint attention.

Once, while on an otherwise uneventful hike in British Columbia, my companion and I chanced to cross paths with a brown bear. It approached the trail through brush, breaking small branches along the way. I heard my companion say “Bear! Bear! Bear!” in a hushed but increasingly urgent tone. “I know,” I said, “Let’s just keep walking away from it at the same pace.” Her utterance had not drawn my attention to the bear. It was a very large and not especially stealthy animal, so it already had my attention. But her words and my response established what psychologists call joint attention. We saw the bear together and, on the basis of our shared perception, we were able to take what turned out to be effective action.

Joint attention has recently garnered considerable interest among psychologists. Current research indicates that joint attention is uncommon among non-human animals, whereas humans typically begin to engage in some rudimentary form of joint attention at about the age of twelve months (Eilan, 2005). Joint attention appears to play a crucial role in the

acquisition of linguistic competence (Sabbagh & Baldwin, 2005), and it is clearly a basis for many co-operative activities. Some researchers have argued that joint attention episodes allow human beings to pool cognitive resources and thereby create species-specific features of human life such as natural languages and complex institutions (Tomasello & Rakoczy, 2003). The psychological literature has not, however, succeeded in clarifying how persons jointly attend to an object. Focused on identifying developmental antecedents and consequences of joint attention, psychologists have not provided a satisfactory account of how perception can be shared.

Joint attention thus stands in need of phenomenological clarification. Surprisingly, this has yet to be offered. Phenomenologists have provided detailed analyses of perceptual experience, and, as Dan Zahavi has rightly asserted, no other philosophical tradition has been more concerned with the nature of intersubjectivity (2008, p. 148). But phenomenological analyses of perception have

focused on perceptual experiences of a single perceiver rather than on those of co-perceivers, and phenomenology of intersubjectivity has focused on how one person encounters other persons rather than on how one person perceptually attends to an object with others.

This paper thus addresses a shortcoming of both contemporary psychological research and the tradition of phenomenology by offering a phenomenology of joint attention. The first section reviews elementary Husserlian phenomenology and introduces a system for symbolically representing the structure of intentional mental states. The second section summarizes Edith Stein's phenomenological description of empathy, the intentional mental state in which one is directly aware of other persons. The third section brings these resources to bear on the problem of joint attention. I begin by clarifying Alfred Schutz's analysis of the face-to-face situation, and then extend his analysis to cases involving a third element, a jointly perceived object. The final section considers and responds to a number of objections that might be brought against this analysis.

Husserlian Phenomenology

As Husserl explains in *Ideas Pertaining to Pure Phenomenology and to a Phenomenological Philosophy* (1913/1983), phenomenology is a theory of intentional mental states. A mental state is intentional insofar as it is about some object. The perceptual experience I have of my desktop fan is thus an intentional state, as is my appreciation of the beauty of a Klein bike frame or my judgment that the sum of two and three is five. In the *Logical Investigations* (1900-1901/2001) Husserl called these mental states "acts", but in *Ideas* he prefers to call them "noeses".

Every noesis has a number of distinct parts. The thetic character of a noesis is the part by virtue of which it falls into one or another psychological category such as perception, judgment, memory or imagination. Every noesis also has a noetic component, a part by virtue of which it is about an object. More precisely, this is the part by virtue of which a noesis is about an object under some description. On my otherwise uneventful hike in British Columbia, I did not see just an object. I saw an object as fitting the description "brown bear making its way toward the trail". I saw the object under this description by virtue of the noetic component of my perceptual act. Noeses of the same thetic character can have noetic components of different types, as is the case with perception of a desktop fan and perception of a Klein bike frame. Conversely, noeses with noetic components of the same type can differ in thetic character, as is the case with perception of an especially dry cappuccino and memory of an especially dry cappuccino.

Phenomenological theory uses noematic descriptions to identify the noetic components of intentional mental states. As explained above, the noetic component of a noesis is that part by virtue of which the noesis is about an object under some description. A noematic description identifies the noetic component by articulating the description under which the object falls. "Brown bear making its way toward the trail" would thus be a noematic description, as would "desktop fan", "Klein bike frame" and "especially dry cappuccino."

Linguistic expressions serving as noematic descriptions are intentional contexts. In such contexts neither existential generalization nor substitution of extensionally equivalent expressions necessarily preserves truth value. If I were to identify the noetic component of my act of imagination by saying "I imagine an especially dry cappuccino", it would not follow that there is an especially dry cappuccino. If I were to identify the noetic component of my perception by saying "I perceive the Klein bike frame" and, as a matter of fact, that bike frame is also the only piece of aluminium in the room, it would not follow that the noesis is about the only piece of aluminium in the room.

In Appendix XII to *On the Phenomenology of the Consciousness of Internal Time* (1928/1991, pp. 130-131), Husserl uses symbolic expressions to represent the thetic character and noetic component of a noesis. He apparently found these expressions well-suited for clarifying the structure of extremely complex acts. Since perceiving an object with some other person proves to be an experience of considerable complexity, I will introduce Husserl's system for constructing these expressions here and employ this system in my analysis of joint attention in the third section.¹ Upper case letters identify the act's thetic character. Formulae enclosed within parentheses are noematic descriptions.² These expressions appear

¹ Whether this system would be fruitful for other experiential analyses depends on both the nature of the experience to be analyzed and the interests of the researcher. My interest in joint attention may aptly be characterized as philosophical, since I mean to clarify what it is to perceive an object with others. Due to the intricacy of the phenomenon of joint attention, some means of formalizing my analysis is indispensable. Husserl's system for symbolically representing the structure of intentional states appears to be an adequate instrument of formalization.

² They are not full noematic descriptions. In *Ideas*, Husserl takes a full noematic description to include a description of the thetic character of the noesis as well as other features of the object as it is experienced, such as the clarity with which it is perceived. Full noematic description thus includes description of what Husserl calls the "object in the How of its modes of givenness" (1913/

immediately to the right of any thetic character letter. Lower-case letters abbreviate terms for objects other than noeses and only appear in parentheses (that is, they only appear as parts of noematic descriptions). For instance,

$$(1) \quad P(o)$$

represents perception of a physical object. "P" shows that the noesis is a perception, "(o)" serves as a noematic description, and "o" abbreviates "physical object". It is possible to represent the structure of noeses of greater complexity by using additional parentheses and letters. The following expression, for example, represents remembering having perceived a physical object:

$$(2) \quad M(P(o)).$$

"M" indicates that the noesis is an act of remembering, and "(P(o))" is the noematic description. Since the act of remembering is about a perceptual experience, the noematic description includes a thetic character letter, "P". The noematic description also includes "(o)", indicating that the remembered perception is of a physical object. There is no limit to the number of noematic descriptions that might, in this manner, be nested within some other noematic description. Thus, imagining remembering having perceived a physical object could be expressed by

$$(3) \quad I(M(P(o))).$$

In this case, the noematic description "(o)" is part of the noematic description "(P(o))", which is itself part of the noematic description of the act of imagining: "(M(P(o)))".

Two additional concepts of Husserlian phenomenology must be introduced before turning to a discussion of empathy: functional problems and horizons. A functional problem is a problem concerning how parts of a noesis or a plurality of noeses constitute consciousness of an object under some description. Phenomenological analyses which address functional problems are therefore called constitution analyses. Husserl addresses functional problems in *Philosophy of Arithmetic*, *On the Phenomenology of the Consciousness of Internal Time* and *Thing and Space*. These works respectively deal with the constitution of the consciousness of numbers, temporally extended phases of one's own

1983, p. 316). For my purposes, noematic description is confined to a description of the properties of the object apart from the How of its modes of givenness. Noematic description is confined, in Husserl's terms, to the "object in the How of its determinations" (1913/1983, p. 314).

experience, and three-dimensional visual objects. Phenomenological analysis of joint attention likewise addresses a functional problem: How is a phase of experience constituted so that I perceive an object as perceived with someone else?

Husserl's usual procedure is to begin with a noematic description of some phase of experience and work back to an account of constitutive noeses. It seems that, as Husserl became more practised in addressing functional problems, he became increasingly aware that the noematic description of some phase of experience often attributes more to the object of that phase than is, strictly speaking, presented in that phase. If the object of a perceptual experience falls under the description "coffee cup", this implies that the perceptual experience is of an object with an underside; but as I look at this object from above, this phase of my perceptual experience does not properly present that side (Husserl, 1907/1997, p. 42). However, the underside of the object could be properly presented in another perceptual experience, one that I would have by lifting the object up and looking underneath. That possible noesis belongs to the horizon of the current phase of perceptual experience. Generally, the horizon of a noesis consists of all possible noeses such that one would remain conscious of the same object under the same description.³

Empathy

The object of joint attention differs from other objects of perception insofar as it is perceived as a part of a broader situation that includes at least one other person who also perceives it. The intentional state in which one is aware of a jointly attended object must, therefore, include a noesis in which one is aware of another person as such (that is, a noesis in which one is aware of an object as falling under the description "person"). A detailed account of such awareness can be found in the early work of Husserl's assistant at Freiburg, Edith Stein.

³ This statement must be qualified. In the case of perceiving a coffee cup, I not only take the object to have an underside which is not presently properly perceived, but also to have a mark on the underside identifying its maker. I might not presently, though, take the object to have any particular mark on that side. If I were to pick up the cup and look at the underside, then I would properly perceive a particular mark. The description under which I perceive the object changes as that description becomes more determinate in the course of my experience. Yet, I continue to perceive the object as a coffee cup with a mark on the underside. The noematic descriptions of the two acts have this description in common. This common description is the description that remains unchanged in the course of the perceptions belonging to the horizon.

Unlike many contemporary cognitive psychologists, Stein maintains that it is possible to perceive other persons as such. It is not the case that one only perceives non-thinking, physical things and then infers that some of these things think in this way or that (perhaps on the basis of perceived similarities between one's own body and the bodies of others). When I observe someone walk into a room, my experience no more involves an inferential process than when I perceive a cup. Rather, I am non-inferentially aware of someone who exists here and now and is engaged in an action, an intentional behaviour. This awareness of the other person thus merits being described as perceiving the other person.⁴

When I see someone walk into a room, I perceive the body of the other person not merely as a *Körper* but as a *Leib*, as a lived body (Stein, 1917/1989, pp. 40-56). Whereas the *Körper* or physical body shares features common to other physical objects (for instance, position in space and time, extension in three-dimensions, causal relation to other physical objects), the lived body, whether my own or that of another, is a sensory field, a zero-point of orientation, an expressive field, and self-moving. If I perceive someone's hand resting on a table, then I perceive his or her hand as touching the table. Moreover, I see the table as beneath his or her hand, and I see both the table and other objects in my perceptual field as above, below, in front, behind, left or right relative to the person's body. In the other's facial expression, gait and posture I can see emotions such as joy, and I see the other's body as initiating movement rather than being moved. Perceiving the body of another person as sensing, as a zero-point of orientation, as expressive, and as self-moving, I must see that body as intentional. I see that body as perceiving other objects at various locations relative to itself, as joyous over some event, as intending some course of action. Perceiving the body of the other as a lived body, I perceive someone who is in intentional mental states.

Although there is good reason to speak of perceiving someone act or perceiving their joy, a distinction should nonetheless be made between perception of other persons and perception of mere physical things. The horizon of a perception of a physical thing is quite different from the horizon of a perception of another person. Some of the features of a physical object are improperly perceived in any finite course of perceptual experience. But it is possible in principle for the presently improperly perceived aspects of the physical object to be properly

⁴ I use the term "person" more loosely than Stein, who wishes to reserve the term for thinking beings of a particular sort: thinking beings that are accountable for their actions and responsive to objects of value.

perceived. If I do not presently properly perceive the underside of the coffee cup, I can do so by picking it up and looking underneath. To use another of Husserl's terms, improperly perceived features would then be given originally, given in the most evident manner possible for that type of object. As embodied beings, other persons have spatial locations and are extended in three dimensions, and so some aspects of other persons must likewise be improperly perceived in any finite phase of perception. However, unlike mere physical objects, other persons possess features that cannot be originally presented in any of my experiences: mental processes.

Both Husserl and Stein maintain that each of us has first-person access to his or her own mental processes. Both phenomenologists, furthermore, privilege first-person access to the mental. Mental processes are originally presented in this way. But I cannot have first-person access to the mental processes of another person. This is not just impossible due to limited cognitive resources or limited time. It is conceptually impossible. The mental processes of another person would not be other than my own if I had first-person access to them. The noeses of the other are not, then, originally given to me, but are, as Stein says, co-originarily given to me (1917/1989, p. 57).⁵ I experience the other person as having features to which there is first-person access, but I am not the subject for whom there is such access. Owing to this peculiarity of the noeses in which one is aware of another person as such, this sort of intentional mental state requires a term distinguishing it from perception of mere physical things. In keeping with the psychology of her day, Stein chose the term "*Einfühlung*", a term usually translated as "empathy".⁶

As Stein notes, empathy belongs to the class of noeses which permit iteration (1917/1989, p. 18). Remembering, reflecting and imagining also belong to this class. It is possible, for instance, to remember having remembered. It is likewise possible to

⁵ I would modify the English translation, reading "*Konoriginarität*" as "co-originarity" instead of "co-primordiality".

⁶ "*Einfühlung*" is a somewhat unfortunate term for the phenomenon in question. Transliterally, "*Einfühlung*" is "feeling-in", which suggests a process of imaginatively putting oneself into the place of the other. Stein does recognize that some such process can play a role in making one's experience of the other person more determinate. Imaginatively placing oneself in the position of the other person can help to more precisely identify the mental process that the other is taken to undergo. But Stein is clear that this does not always take place when one empathizes. Ordinarily, I simply see what others are doing, what emotional state they are in, and so forth, without engaging in any simulation.

empathize with another's empathy. I might, for example, empathize with another person as empathizing with me insofar as I perceive a physical object. This would be second-order empathy. I might also empathize with another's empathy for me insofar as I empathize with her insofar as she perceives some object. This would be third-order empathy. Fourth- and fifth-order empathy are also possible. In fact, as with other iterable noeses, higher order empathic noeses are possible *ad infinitum*.

The Face-to-Face Situation

In *Philosophy of Psychology and the Humanities* (1922/2000), Stein recognizes that empathy plays a role in the constitution of *Gemeinschaftserlebnisse*, or communal experiences (p. 133). These are intentional mental states that one has with others. Together with others, I might mourn the loss of a leader, judge that a defendant is guilty, or intend to move a piano. I might also observe, with others, features of the directly perceivable environment. Joint attention, then, is a kind of communal experience. Unfortunately, Stein does not provide a constitution analysis of communal experience, preferring instead to use the concept of a communal experience to distinguish between various types of social collectivity. To make additional progress in the analysis of joint attention, we must turn to Alfred Schutz's account of the face-to-face situation.

In *Phenomenology of the Social World* (1932/1967), Schutz's principal concern is to clarify fundamental concepts of Weberian sociology, including the concept of a social relationship. Schutz finds it necessary to distinguish between several different kinds of social relationship, one of which is the living social relationship. This relationship involves two or more persons, each of whom is in the perceptual field of each of the others. Each participant in the living social relationship not only perceives each of the others, but also perceives the body of each of the others as a lived body. In Stein's terms, then, each participant in the living social relationship empathizes with each of the others. Finding the term "*Einfühlung*" objectionable, Schutz prefers to say that each takes up a *Thou*-orientation toward the others. In any case, the face-to-face situation is a situation comprising such participants.

An analytically isolable moment of the face-to-face situation is the pure *We*-relationship. Schutz offers a series of increasingly precise accounts of the latter. He initially states that "The pure *We*-relationship is merely the reciprocal form of the pure *Thou*-orientation, that is, the pure awareness of the presence of another person" (1932/1967, p. 168). But shortly thereafter he writes that "The pure *We*-relationship involves an awareness of each other's presence and

also the knowledge of each that the other is aware of him" (1932/1967, p. 168). The second statement is quite different from the first. It is possible that two persons are such that each empathizes with the other without being aware that his or her empathy is reciprocated. Imagine a situation in which each person sees the other but neither is aware of being seen by the other. In this case, there would be two first-order acts of empathy, but no second-order empathy. According to Schutz's first statement, this would nonetheless count as a pure *We*-relationship. But, in the second statement, Schutz indicates that more is required: second-order empathy. If I am in a pure *We*-relationship with some others, then I must empathize with each of the others as empathizing with me, and each of the others must empathize with me insofar as I empathize with each of them.

But this is still not an adequate characterization of the pure *We*-relationship. Discussing the example of a conversation, Schutz goes on to claim that:

[A]s I watch you, I shall see that you are oriented to me, that you are seeking the subjective meaning of my words, my actions, and what I have in mind insofar as you are concerned. And I will in turn take account of the fact that you are thus oriented to me, and this will influence both my intentions with respect to you and how I act toward you. This again you will see, I will see that you have seen it, and so on. This interlocking of glances, this thousand-faceted mirroring of each other, is one of the unique features of the face-to-face situation. We may say that it is a constitutive characteristic of this particular social relationship. (1932/1967, p. 170)

In addition to first- and second-order empathy, Schutz claims that third-order and fourth-order empathy are also constitutive features of the face-to-face situation. As I am talking with another person in a face-to-face situation, I empathize with the other as empathizing with me. The other mirrors my second-order empathy in her third-order empathy, an act that includes a noetic component by virtue of which her empathy is about my second-order empathy. Her third-order empathy is mirrored by my fourth-order empathy. Schutz adds "and so on", indicating that still higher orders of empathy are constitutive of this relationship. Presumably, he means that the other, aware of my fourth-order empathy, mirrors this fourth-order act in her own fifth-order empathy; this is something of which I am aware, mirroring it in my own sixth-order empathy. Higher orders of empathy are constitutive of the face-to-face situation *ad infinitum*.

In order to present the constitution analysis of the

pure We-relationship, I will make three additions to the system introduced in the first section of this paper for symbolically representing the structure of noeses. First, I will use subscripts to distinguish one's own noeses from the noeses of a person with whom one empathizes. Suppose that I empathize with another person whom I take to empathize with me insofar as I perceive a physical object. Using subscripts, the structure of this act is represented by

$$(4) \quad E_1(E_2(P_1(o))).$$

“ E_1 ” indicates both that this is an act of empathy and that it is my act rather than the act of the other person. “ E_2 ” serves as the first part of the noematic description of my empathy and indicates that the object of my empathy is the other's empathy. The first part of the noematic description of the other's empathy, “ P_1 ”, indicates that the other empathizes with me insofar as I have some perceptual experience. The “(o)” that follows “ P_1 ” shows that the other person takes me to perceive a physical object. As a second addition to the system, I will say that one noematic description explicates another noematic description if and only if a noesis cannot have the latter description without also having the former description. Suppose, for instance, that I perceive a Klein bike frame. It is impossible for me or anyone else to perceive a Klein bike frame without perceiving a bike frame. This means that the noematic description “bike frame” explicates the noematic description “Klein bike frame”. Finally, I will use “ (N_1) ” to indicate that a noesis is self-referential. More precisely, “ (N_1) ” indicates that the act with this noematic description is about the noesis represented by the whole expression in which “ (N_1) ” appears. So understood, it may be expressed in English by “this noesis”.

With these additions in place, I take myself to be in a pure We-relationship with some one other person just in case:

$$(5) \quad E_1(E_2(N_1)), \text{ where} \\ (E_1(E_2(N_1))) \text{ explicates } (N_1).$$

(5) shows that my empathic act is about another person's empathy. Thus, (5) represents the structure of my second-order act of empathy. Since (N_1) is the noematic description of the other's empathy, the other's empathy is for my second-order empathy. Since $(E_1(E_2(N_1)))$ explicates (N_1) , the structure of my act of empathy may also be expressed by

$$(6) \quad E_1(E_2(E_1(E_2(N_1)))).$$

But, if $(E_1(E_2(N_1)))$ explicates (N_1) , then $(E_2(E_1(E_2(E_1(E_2(N_1))))))$ explicates $(E_2(E_1(E_2(N_1))))$. Thus, the structure of my act of empathy may also be

expressed by

$$(7) \quad E_1(E_2(E_1(E_2(E_1(E_2(N_1))))))).$$

Explication may continue in this manner *ad infinitum*.

Since the noematic description in (6) explicates that of (5), and the noematic description in (7) explicates that of (6), it is not possible for my empathy to have the noematic description given in (5) unless it has the noematic description given in (7). Indeed, it is not possible for my empathy to have the noematic description given in (5) unless it has all of the noematic descriptions that might be generated by continued explication. The analysis therefore accommodates Schutz's description of the face-to-face situation. It certainly involves thousand-faceted mirroring. Indeed, on the present analysis, that turns out to be an understatement. Notice, too, that the explication of the noematic description of my empathy is also the explication of the noematic description of the empathy that I attribute to the other. Thus, whenever I empathize with another person so that I attribute to the other an act of empathy for my own empathy, I take each of us to be in an intentional mental state that may be explicated to yield higher order acts of empathy without limit.⁷

Schutz prefers to discuss examples of face-to-face situations in which participants engage in other-affecting action (that is, action aimed at changing the intentional states of co-participants). A conversational partner engages in actions of this sort, as does a conductor leading members of an orchestra.⁸ Focused on other-affecting action in the face-to-face situation, Schutz tends to overlook the fact that these situations involve additional, co-perceived objects. This has led critics such as David Carr to reject Schutz's analysis. According to Carr, “we” typically has to do with situations in which participants do something together, such as attending to an object in the

⁷ Eugen Fink seems to have explicitly noted this feature of the face-to-face situation. In discussion with Schutz, Fink remarks that “the experience of the Other involves a reciprocal relationship: in experiencing the Other I experience concurrently his experiencing of me. But this reciprocal relationship is, taken strictly, not only a simple running back and forth from myself to the Other and from the Other to me. This reciprocal relationship allows, potentially, infinite reiteration. I can therefore say that I so experience the Other as he is experiencing me, and that he so experiences me as I am experiencing him, and this can go on infinitely. This potentiality need not be actualized; however, we have here an infinite reciprocal reflectibility somewhat like two mirrors placed one opposite the other reflecting into each other in infinite reiteration” (Fink, in Schutz, 1970, p. 85).

⁸ Schutz deals with the latter case at some length in “Making Music Together” (1951/1964a).

perceptual field of each participant. Carr regards this third element, the object co-intended by participants, as a necessary condition of the pure We-relationship.

Comprising two or more subjectivities, it requires a third thing, the common object, in order to come into being. ... Schutz's description suggests a staring match or perhaps lovers gazing deep into each other's eyes. But in a staring match the other disappears as other, and lovers who do not get on to other things besides gazing will not have much of an affair. (Carr, 1983, p. 267)

According to Carr, Schutz mischaracterizes the pure We-relationship precisely insofar as he leaves out the third element.

Carr's criticism is somewhat unfair, since the pure We-relationship is supposed to be an analytically isolable part of a more complex phenomenon. That is the point of calling it "pure". Schutz stresses, for instance, that persons are never aware of each other simply as persons, but always under culturally and historically specific descriptions such as "professor", "mail carrier" or "New Yorker". He would also have accepted that face-to-face situations involve shared intentional states about a third element. Carr is correct, however, that Schutz's account of triadic intentional systems (that is, face-to-face situations including a third element) is underdeveloped.

Lack of attention to these systems is odd considering that Schutz's first example of a face-to-face situation explicitly involves a jointly perceived object:

Suppose that you and I are watching a bird in flight. The thought "bird-in-flight" is in each of our minds and is the means by which each of us interprets his own observations. Neither of us, however, could say whether our lived experiences on that occasion were identical. In fact, neither of us would even try to answer that question, since one's own subjective meaning can never be laid side by side with another's and compared. Nevertheless, during the flight of the bird you and I have "grown older together", our experiences have been simultaneous. Perhaps while following the bird's flight I noticed out of the corner of my eye that your head was moving in the same direction as mine. I could then say that the two of us, that *we*, had watched the bird's flight. What I have done in this case is to co-ordinate temporally a series of my own experiences with a series of yours. But in doing so I do not go beyond the assertion

of a mere general correspondence between my perceived "bird-in-flight" and your experiences. I make no pretence to any knowledge of the content of your subjective experiences or of the particular way in which they were structured. It is enough for me to know that you are a fellow human being who was watching the same thing that I was. And if you have in a similar way co-ordinated my experiences with yours, then we can both say that *we* have seen a bird in flight. (Schutz, 1932/1967, p. 165)

In this example, I see the bird in flight and notice that another person also perceives the bird in flight. This means that I empathize with the other. Empathizing with the other, I take her to likewise notice that I perceive the bird in flight. Thus,

(8) $P_1(b) \ \& \ E_1(P_2(b) \ \& \ E_2(P_1(b))).^9$

But, in light of what Schutz goes on to say about the constitutive features of the face-to-face situation, (8) cannot be an adequate analysis. If co-perception of the bird in flight occurs in a face-to-face situation, then it must involve a pure We-relationship. The analysis of joint perceptual attention to the bird in flight must somehow incorporate the analysis of the pure We-relationship offered in (5). This may be accomplished as follows:

(9) $P_1(b) \ \& \ E_1(P_2(b) \ \& \ E_2(N_1)), \text{ where } (P_1(b) \ \& \ E_1(P_2(b) \ \& \ E_2(N_1))) \text{ explicates } (N_1).^{10}$

In that case, the structure of the total phase of my experience may be represented by

(10) $P_1(b) \ \& \ E_1(P_2(b) \ \& \ E_2(P_1(b) \ \& \ E_1(P_2(b) \ \& \ E_2(N_1)))).$

This, in turn, may be represented by

(11) $P_1(b) \ \& \ E_1(P_2(b) \ \& \ E_2(P_1(b) \ \& \ E_1(P_2(b) \ \& \ E_2(N_1))))).$

And so on. This suggests the following analysis of joint attention with one other person. Letting "(a)"

⁹ The recurrence of (b) in the conjuncts of (8) does not infer that the noematic descriptions of the two perceptions are completely identical. A noematic description of either perception would include description of features of the object which are only perceivable from the perspective of one perceiver at a time. Since two perceivers take up different perspectives at the same time, the complete noematic descriptions of their perceptions must differ. There may, nonetheless, be a core that they have in common, and (b) stands for this core description.

¹⁰ For explanation of symbols, see my discussion of (4) - (7) above (p. 6).

serve as a variable taking noematic descriptions of the perceptual acts as values, consciousness of an object of joint attention is constituted by:

(12) $P_1(\alpha) \& E_1(P_2(\alpha) \& E_2(N_1))$, where $(P_1(\alpha) \& E_1(P_2(\alpha) \& E_2(N_1)))$ explicates (N_1) .

Objections

A critic might raise a number of objections to the proposed constitution analysis of joint attention. Of these possible objections, two strike me as most serious: (a) the analysis is incompatible with finite human cognitive powers; and (b) the analysis is unnecessarily complex.

Objection (a)

While it is plausible to suggest that human beings are capable of second-, third- and even fourth-order empathy, it may not seem plausible that we are capable of hundredth-order acts of empathy, let alone empathic acts of an infinite order. But, on the present analysis, all parties to joint attention have such intentional states, and, since joint attention is a pervasive, everyday phenomenon, intentional states of an infinite order must likewise be pervasive, everyday intentional states.

Schutz appears to have anticipated an objection along these lines. Immediately following the passage in which he discusses thousand-faceted mirroring in the face-to-face situation, he notes that

we must remember that this pure *We*-relationship, which is the very form of every encounter with another person, is not itself grasped reflectively within the face-to-face situation. Instead of being observed, it is lived through. The many different mirror images of Self within Self are not therefore caught sight of one by one but are experienced as a continuum within a single experience. (1932/1967, p. 170)

It is one thing to undergo a phase of experience consisting of some intentional mental states, and another to reflect upon that phase of experience and thereby distinguish each of the states and their parts. The claim that (12) represents the structure of the experience of joint attention does not imply that persons jointly attending to an object are aware, in reflection, of each of the infinitely many components of their intentional states. That sort of reflective awareness is indeed impossible.

Furthermore, if Husserl is right, then one has an intentional state of an infinite order whenever one is aware of the duration of one's own experience.

According to Husserl's well-known account of the consciousness of internal time, one is always aware of that which is immediately present, that which is now. But this awareness of the immediately present is a dependent part of a more complex intentional state, a state that includes both awareness of that which has just occurred and awareness of that which is about to occur. In Husserl's terms, awareness of that which is now is a dependent part of an intentional state including both retention of that which has been and protention of that which will be. Retention, more precisely, is retention of the intentional state of the preceding moment. That state had included awareness of that which was immediately present relative to it, as well as its own moments of retention and protention. This means that the moment of retention of one's present intentional state is about the moment of retention of the immediately preceding intentional state. Any retention has this feature. Thus, the moment of retention belonging to awareness of the present is about a moment of retention which is itself about a moment of retention. The latter is also about another moment of retention, and so on. This explains why Husserl claimed that any temporally extended phase of experience is a continuum of continua (1928/1991, p. 341). Internal time is a continuum, since for any two non-contemporaneous temporal points there is some other point that falls before one and after the other. But each intentional state in which one is aware of that which is immediately present may be characterized as a continuum, since its noematic description consists of an infinite series of nested noematic descriptions of the moments of retention of preceding intentional states.

Husserl's constitution analysis of the consciousness of internal time is certainly not unobjectionable. My point here is simply that Husserl himself maintained that every intentional state wherein one is aware of internal time involves retention of an infinite order. If phenomenologists reject the analysis of joint attention offered above on the grounds that finite minds cannot have intentional states of infinite order, then Husserl's account of the consciousness of internal time should be rejected on the same grounds. Since consciousness of internal time founds every other intentional state, this would mean rejecting most, if not in fact all, of Husserl's theory of intentionality.

Objection (b)

Even if it is possible for persons to have intentional states of the structure of (12), the proposed analysis might seem unnecessarily complex. While second- or even third-order empathy might very well be constitutive of joint attention, it might appear that empathic acts of higher order are not.

But, as Christopher Peacocke (2005) points out, I

jointly attend to an object with some other person only if I take the other person to jointly attend to that object with me. It is safe to assume that I take myself to jointly attend to an object with some other person only if I am aware that each of us empathizes with the other. This means that I must have second-order empathy about the other's first-order empathy. If second-order empathy is required for me to jointly attend to an object with the other, then the other must likewise have second-order empathy in order to jointly attend to that object with me. If I jointly attend to an object with some other person only on the condition that I am aware that the other jointly attends to that object with me, then I must be aware of the other's second-order empathy. This means that I must have third-order empathy for the other's second-order empathy. By parity of reasoning, the other must likewise be aware of my second-order empathy. I must be aware of this, and so forth. In short, if I jointly attend to an object with some other person only if I take the other to jointly attend to the object with me, then there is no upper limit to the order of empathy constitutive of joint attention.

Conclusion

In this paper I have attempted to address a shortcoming common to both contemporary psychology and the phenomenological tradition: lack of an analysis of joint attention. Making use of resources provided by Husserl, Stein, and Schutz, I have argued that consciousness of a jointly perceived object has the following structure:

$P_1(\alpha) \& E_1(P_2(\alpha) \& E_2(N_1))$, where $(P_1(\alpha) \& E_1(P_2(\alpha) \& E_2(N_1)))$ explicates (N_1) .

The object of perception in a case of joint attention is

grasped as part of a broader situation. That situation includes another perceiver. It also includes the intentional state wherein one is aware of that situation. This intentional state, then, must be about itself. It follows that the intentional state in which one is aware of perceiving an object with another person must have a noematic description that makes reference to that very state.

This analysis raises a number of questions. First, is it adequate for human beings in early stages of cognitive development? If it is implausible as applied to the latter, does that mean that it is likewise implausible in the case of adults, or should infant joint attention be viewed as a similar but comparatively unsophisticated relative of full-blown, adult joint attention? Secondly, what are the principles governing inferential relations between noematic descriptions? I have maintained that one noematic description explicates another when the second description implies the first. But under what conditions does one noematic description imply another? Since noematic descriptions are intentional contexts, this is tantamount to asking for the rules of inference of an intentional logic. Finally, I have repeatedly made use of a system for symbolically representing the structure of intentional states. In order for this system to be really fruitful, the principles governing the construction of symbolic expressions should be precisely stated. These principles should include rules governing the formation of primitive expressions, as well as recursive rules for generating any other well-formed expression of greater complexity. It would be useful, in other words, to have an inductive definition of well-formed formulae of this system. That is, of course, far from what the present paper has been able to offer.

Referencing Format

Martell, T. (2010). Phenomenology of joint attention. *Indo-Pacific Journal of Phenomenology*, 10(2), 10 pp.. doi: 10.2989/IPJP.2010.10.2.5.1086

About the Author



Timothy Martell received his PhD in philosophy from Purdue University in West Lafayette, Indiana, and teaches philosophy at Murray State University in Kentucky, USA. His research focuses on Husserlian phenomenology and the philosophy of social science. Professor Martell's recent publications include articles on Edith Stein's political ontology and Thomas Hobbes's theory of collective action.

E-mail address: timothy.martell@murraystate.edu

References

Carr, D. (1983). Personalities of a higher order. In W. L. McBride & C. O. Schrag (Eds.), *Phenomenology in a pluralistic context* (pp. 263-272). Albany, NY: State University of New York Press.

Eilan, N. (2005). Joint attention, communication, and mind. In N. Eilan, C. Hoerl, T. McCormack, & J. Roessler (Eds.), *Joint attention* (pp. 1-33). New York: Oxford University Press.

Husserl, E. (1983). *Ideas pertaining to a pure phenomenology and to a phenomenological philosophy – First book: General introduction to a pure phenomenology* (F. Kersten, Trans.). Dordrecht, The Netherlands: Kluwer Academic Publishers. (Original work published 1913)

Husserl, E. (1991). *On the phenomenology of the consciousness of internal time (1893-1917)* (J. B. Brough, Trans.). Dordrecht, The Netherlands: Kluwer Academic Publishers. (Original work published 1928)

Husserl, E. (1997). *Thing and space: Lectures of 1907* (R. Rojcwicz, Trans.). Dordrecht, The Netherlands: Kluwer.

Husserl, E. (2001). *Logical investigations* (Vols. 1 & 2) (J. N. Findley, Trans.) (Rev. ed.). New York: Routledge. (Original two volumes published 1900 and 1901 respectively)

Peacocke, C. (2005). Joint attention: Its nature, reflexivity, and relation to common knowledge. In N. Eilan, C. Hoerl, T. McCormack, & J. Roessler (Eds.), *Joint attention* (pp. 298-324). New York: Oxford University Press.

Sabbagh, M. A., & Baldwin, D. (2005). Understanding the role of communicative intentions in word learning. In N. Eilan, C. Hoerl, T. McCormack, & J. Roessler (Eds.), *Joint attention* (pp. 165-184). New York: Oxford University Press.

Schutz, A. (1964). *Collected papers II: Studies in social theory* (A. Brodersen, Ed.). The Hague, The Netherlands: Martinus Nijhoff.

Schutz, A. (1964a). Making music together: A study in social relationship. In *Collected papers II: Studies in social theory* (A. Brodersen, Ed.) (pp. 159-178). The Hague, The Netherlands: Martinus Nijhoff. (Original work published 1951)

Schutz, A. (1967). *The phenomenology of the social world* (G. Walsh & F. Lehnert, Trans.). Evanston, IL: Northwestern University Press. (Original work published 1932)

Schutz, A. (1970). *Collected papers III: Studies in phenomenological philosophy* (I. Schutz, Ed.). The Hague, The Netherlands: Martinus Nijhoff.

Stein, E. (1989). *On the problem of empathy* (W. Stein, Trans.). Washington, DC: ICS Publications. (Original work published 1917)

Stein, E. (2000). *Philosophy of psychology and the humanities* (M. C. Baseheart & M. Sawicki, Trans.). Washington, D.C: ICS Publications. (Original work published 1922)

Tomasello, M., & Rakoczy, H. (2003). What makes human cognition unique? From individual to shared to collective intentionality. *Mind and Language*, 18(2), 121-147.

Zahavi, D. (2008). *Subjectivity and selfhood*. Cambridge, MA: The MIT Press.