Group Identification, Joint Attention, and Preferences: A Cluster of Minimal Pre-Conditions for Joint Actions.

Alessandro Salice

Department of Philosophy, University College Cork

Center for Subjectivity Research, University of Copenhagen

ORCID-ID: 0000-0002-7255-2889

alessandro.salice@ucc.ie

An important thesis discussed in the literature on shared agency is that group identification motivates pre-school children to act together. This paper aims at further illuminating this thesis by clarifying what triggers the process of group identification in young children. It is argued that joint attention, among other functions in supporting joint actions, can reveal to the co-attenders that they share some preferences. Since sharing preferences has been established by the literature to be a reliable motivation of group identification and since joint attention has an early emergence in development, one can consider joint attention to be a putative trigger of group identification in pre-school children. If this is on the right track, group identification, joint attention, and preferences identify a cluster of minimal pre-conditions for joint actions.

Keywords: Group Identification; Joint Actions; Joint Attention; Preferences; Moral Self

1. Introduction

The claim that humans interact with each other in a distinct—and perhaps unique—manner is relatively uncontroversial within philosophical and empirical literature (Searle 2010, Tomasello 2019). Humans can and routinely do engage in joint actions of all forms and shapes: from short-lived, spontaneous, and dyadic actions to temporally extended and meticulously planned actions performed by multiple agents.

What remains a matter of controversy is how to explain human joint actions. It stands to reason that an adequate resolution of this controversy requires answers to a whole host of questions. Some of these questions concern the nature of the *explanandum*: e.g., are all joint actions of the same kind or does the indisputably vast variety of joint actions indicate that there is not one single overarching kind, but rather different fundamental kinds of joint actions? Other questions concern the *explanans*: are joint actions to be explained by psychological states? If so, what sort of states? Who are the subjects of these states: are these individuals or groups? What is the structure of these states? And yet another bundle of questions relates to the different kinds of pre-conditions that enable shared agency. An important line of investigation on this strand of the debate relates to the—specifically psychological and developmental—pre-conditions that are required of minded creatures like us to act together.[1] This paper is a contribution to this last line of research as it intends to shed light on the capacities that facilitate joint agency among young children (from 18-24 months of age) and, more specifically, on the relations between group identification, joint attention, and shared preferences.

The central hypothesis of the article is that these three capacities, when they operate in a concerted way, can initiate joint actions in young children. This is the plan ahead. Section 2 reviews philosophical literature on group identification and joint actions and introduces the idea that group identification plays a role in explaining joint actions among pre-schoolers. The interim conclusion of this discussion is that the explanatory role conferred to group identification stands on shaky grounds unless the question about

[1] Not all pre-conditions of joint actions have to be psychological in nature. For instance, it has been claimed that some of them relate to the environment, in which the agents happen to find themselves, and the affordances for agency the environment is imbued with, see Faria Costa 2021.

the proximate motivation of that process in young children can be given a satisfactory answer. Section 3 broaches the topic of joint attention and shows that this capacity, in addition to fulfilling other functions in support of shared agency, can also reveal to the perceivers that they have at least some shared preferences. Section 4 returns to group identification and argues for the idea that, when joint attention reveals shared preferences, it can trigger group identification in pre-school children and, by extension, start joint actions. That section also discusses an important limitation in the scope of this proposal, but also an additional reason in its support, which comes from debates on selfhood in moral psychology. The general upshot of the paper is that, given their early emergence in development, these three capacities identify a cluster of minimal pre-conditions for joint actions: they are jointly sufficient for joint actions.

Two comments before starting. First, as the previous considerations should have made clear, when I use the term "minimal," I refer to minimality in human psychological development.[2] Second, the paper aims at identifying only one—one single—cluster of minimal capacities and does not exclude the existence of other clusters, which it, however, does not discuss.[3]

2. Joint Actions and Group Identification

[2] In a recent article, Paternotte identifies different meanings of "minimalism" about joint actions and describes "cognitive minimalism" as the view according to which "characterisations of joint action should only invoke mental attitudes and abilities that are present in young children" (see Paternotte 2020: 44). This paper is non-committal on whether cognitive minimalism applies to *adults'* shared agency, but it aligns with this view in explaining shared agency among pre-school children.

[3] Other factors that have been claimed to play a role in this context include the sense of commitment (Michael 2021) and its proximate motivations (Fernández Castro & Pacherie 2021), the capacity to form expectations about collective goals (Butterfill 2012), mindshaping (Zawidzki 2013), second-personal address (Zahavi 2023), etc.

Joint actions have attracted significant and sustained interest in philosophy. According to an important family of theories, joint actions are to be explained by shared intentions. So, e.g., if you and I walk together, then you and I share the intention of walking together. For the past three decades, important accounts of shared intentions have been developed and continuously refined in analytic philosophy of mind and action. Particularly noteworthy examples of theorising about shared intentions that have spanned decades are provided by the works of Michael Bratman (1992, 2022), Margaret Gilbert (1990, 2022) and Raimo Tuomela (and Miller 1988, 2013), among others. These three theories have informed the debate about joint actions by epitomizing three distinct approaches to collective or shared intentions, which it has become customary to label as the content-, subject-, and mode- approach. Because this classification is by now relatively well-known (see Schweikard & Schmid 2021), a cursory characterization should do in the context of this paper: while Bratman argues that collective intentions are explained in terms of the (relational) content of the agents' individual intentions, Tuomela maintains that these are intentions had by agents in a particular psychological mode (a we-mode). Gilbert, by contrast, claims that a collective intention is the intention of a group, i.e., of a plural subject. Despite their significant differences, these theories converge in building on two core notions, which have attracted considerable attention—and criticism—within literature about the ontogenetic development of joint actions.

The first notion is (1) common knowledge: it is generally claimed that it must be common knowledge among the co-agents that they share an intention in order for them to engage in a joint activity, which is steered by that very intention. Common knowledge, as it is routinely construed in this debate, is a spiral of higher order beliefs ranging over others' beliefs (Vanderschraaf & Sillari 2022). Accordingly, for a proposition *p* to be common knowledge among a population of *n* individuals, these individuals must know (or believe) that *p*, they must know (or believe) that they know (or believe) that *p*, etc.

The second notion is (2) the plan-theoretic understanding of intentions, according to which these attitudes, in contradistinction to other conative states like wishes or desires, enhance stability in one's future conduct (see Bratman 1987): they do so because to form an intention to J is to commit oneself to

J. Intentions, hence, generate personal commitments and are sensitive to norms of instrumental rationality: not only does a commitment to J imply foreclosing options that are incompatible with J. Also, to commit oneself to J is to submit oneself to the rational pressure of developing a plan to achieve J. Against this backdrop, the plan-theoretic notion of intention is required by an explanation of joint actions because these are argued to be coordinated actions: they, hence, demand shared deliberation about plans to achieve their integration and, by extension, coordination.

Regardless of their explanatory power in accounting for various kinds of joint actions (see Salice & Satne 2020), theories of shared intentions that rely on these two notions appear to be problematic in the face of a, by now, large body of empirical literature that has described the development of joint actions among children from 18-24 months of age (Brownell 2011, Warneken et al. 2006, 2012, among others). Explaining these particular instances of shared agency by relying on (1) and (2) is problematic because these two notions are cognitively too demanding, as the following considerations show.[4]

Start with the idea that to establish common knowledge among *n* individuals, these individuals must possess an understanding of other's propositional attitudes (especially beliefs) and the capacity to form recursive beliefs. However, an understanding of beliefs requires a flexible theory of mind, whose acquisition is notoriously disputed before the age of about 4 (Rakoczy 2015). It is true that recent empirical studies have predated the emergence of theory of mind in children younger than 4 years (Baillargeon et al. 2010). However, the recursivity of the beliefs, which is equally required by common knowledge, is a cognitive achievement that outstrips what these more basic mentalising capacities are probably capable of (Carpenter & Liebal 2012). To be sure, simplified notions of common knowledge

[4] Note that this point is not necessarily a criticism of theories of joint actions appealing to (1) and (2), as long as these theories aim to illuminate joint actions among human adults *only*. Still, the point—if granted—retains significance for it delimits the conceptual space available to those theories whose main purpose, by contrast, is to explain joint actions performed by children. And this purpose is important because *any theory* of joint action, ideally, should be able to show how joint actions among human adults relate with joint actions among children.

have been developed which might bypass the charge of cognitive sophistication (Siposova & Carpenter 2019). Moreover, it has been claimed that theories of shared intentions do not necessarily require common knowledge (Blomberg 2016) and accounts of shared intentions that do without that notion have also been developed in the literature (Ludwig 2016).

Regardless of the merits of these proposals, it remains disputable whether attitudes like shared intentions can be attributed to children. For the rationality constraints imposed on intentions in the plan-theoretic understanding of these attitudes imply that, for these intentions to be shared, the agents must have agreed—or must have put themselves under the rational pressure of agreeing—on a plan. Accordingly, if children were capable of sharing intentions in this sense, they should be able to generate a shared plan which, by ensuring proper integration of sub-plans, enables coordination. However, empirical evidence indicates that the capacity of coordination in shared agency does not emerge before the mean age of about 5 years (Butterfill 2022, 192-196).

It transpires from these considerations that theories which invoke (1) and/or (2) in explaining joint actions cannot accommodate joint actions among young agents because of their cognitive sophistication. In failing to vindicate the developmentally simplest instances of shared agency, these theories hence fail to capture some of their minimal pre-conditions (Satne & Salice 2020). To overcome these difficulties, alternative accounts of joint actions have been developed, which exploit resources available in social psychology and, esp., in social identity theory (Hogg & Abrams 1988). One insight that lies at the centre of that approach to social psychology and that has proven to be particularly valuable for theories of joint actions is the notion of social or group identification (Tajfel & Turner 1979; Turner 1982). I quickly sketch this notion as this has been construed in socio-psychological literature before showing how it can be exploited to illuminate joint actions among pre-school children.

Generally, group identification is understood as the psychological process that leads one to feel oneself as a group member (where this sense of being a group member is often labelled as a "social self," Brewer 1991). Note that the sense of group membership inherent in the social self does not correspond to objective group membership: the first is a psychological fact, the second an institutional one. These two notions are orthogonal to each other as one can feel oneself to be member of a group without being an institutional group member and, vice versa, one can be an institutional group member without feeling oneself to be a member of that group. Hence, the notion of group at stake in these studies is often labelled as “subjective” or “psychological” precisely because the actual (or “objective”) existence of groups is not necessary for group identification.

The original studies on group identification theorised this notion in research about ingroup favouritism (Tajfel et al 1970), which is the psychological tendency to favour individuals belonging to the one’s ingroup (over those who belong to out-groups). According to these studies, awareness of salient similarities among individuals disposes them to group identify and thus to elicit a sense of being group members. This sense of being a group member (a social self) generates pro-social motivation towards perceived in-group members by selectively favouring them in their actions and conduct. Interestingly, it has been revealed that even trifling similarities can have the power to generate subjective groups. For instance, similarities in aesthetic preferences (like preferring Paul Klee over Paul Kandinsky) have been shown to have the power to trigger group identification and ingroup favouritism (Tajfel et al 1970).

Social psychology has applied the notion of group identification to shed light on a large number of social phenomena, incl. shared emotions, groupthink, we-language, etc. But this very idea has also been marshalled within the philosophical debate on joint actions (Gold & Sugden 2007, Pacherie 2013, Petersson 2017, Salice & Miyazono 2020, Tuomela 2013, among others). While group identification has been invoked to address various problems related to the classical approaches to shared intentions, some authors have specifically suggested that this notion can liberate the explanation of minimal joint actions from its problematic appeal to the two notions mentioned above.

First, it has been contended that group identification makes common knowledge otiose in that explanation (Pacherie 2013). The suggestion is that if one has group-identified, then one expects that the other, too, has group-identified. That is, one expects that the other, having group-identified, has the motivation to contribute to the joint activity. This expectation is a belief, but it neither ranges over the other's belief nor needs be accompanied by other recursive higher-order beliefs. If this suggestion is on the right track, then common knowledge is not needed for an explanation of joint actions among pre-school children.

Second, recall that the assumption that minimal joint actions are to be explained by shared intentions (in the plan-theoretic understanding) leads to the prediction that young children coordinate their plans when they act together. However, evidence suggests that the ability to coordinate plans does not fully manifest before the mean age of 5. This implies that joint actions cannot be explained by invoking shared intentions. But then, what kind of states motivate children to act jointly? According to Salice & Miyazono 2020, the plan-theoretic notion of intention can be replaced by that of social self when explaining this class of actions:[5] according to their proposal, the social self is a representation that—along the lines of Ruth Millikan's Pushmi-Pullyu representations (1995)—at once describes the self as group member and directs the individual to act as such. In so doing, the social self has the power to motivate rudimentary forms of joint actions without incurring in the cognitive costs related to plans' deliberation and coordination.[6]

One last point about philosophical literature on group identification merits attention before the next step. Many authors concur that group identification evades the agent's direct rational control (Bacharach 2006, Peterson 2017, Salice & Miyazono 2020; for an alternative take on this point, see Tuomela 2013: 195): the agent acquires the disposition to group identify if the environment confronts them with certain

[5] Other answers have been provided to this question, though. One alternative view is to preserve the explanatory role assigned to the notion of shared intention, but to discard its plan-theoretic element (Pacherie 2013, Tollefsen 2005). Another proposal is to activate the idea of a collective goal as an outcome that several actions are directed to (Butterfill 2012, 2022).

[6] Note that this does not amount to the claim that group identifiers do not plan their participatory actions. They do plan them, but they do so as group members.

relevant factors (more on these factors in the next section). It is true that the agent can influence the environment to reduce or increase the likelihood of the process, but they cannot directly control the process itself. This, however, does not necessarily imply that group identification cannot be made subject to rational assessment. In fact, group identification may be the warranted or fit response in certain circumstances (e.g., in certain game-theoretic scenarios; on these scenarios, and especially the Hi-Lo, see Bacharach 2006).[7]

The upshot of this section is that theories, which invoke group identification as a minimal requirement for joint actions, can dispense with the two problematic notions of (1) common knowledge and (2) intention as plan-state; these theories, therefore, promise to illuminate shared agency among pre-school children. However, the credibility of this promise hinges on at least one crucial issue, which I broach in the next section.

3. Joint Attention and Preferences

Group-identification-based theories of joint actions among pre-schoolers—and, in fact, any theory of group identification—face an important question. This question concerns the factors that set this process in motion: what triggers group identification in young agents? The following considerations might help appreciate the significance of the question to these theories.

Socio-psychological research has already identified a number of factors capable of initiating group identification in adults. In his review of the literature, Michael Bacharach mentions the following factors: "being members of the same pre-existing social group; belonging to an ad hoc category […];

[7] An analogy can be drawn between group identifying and emoting. Generally, episodic emotions are conceived of as attitudes that do not stand under the emoter's rational control. However, this is not to say that emotions entirely elude rational assessment. For there is wide agreement among philosophers of emotion that if an emotion tracks an evaluative property (e.g. if fear tracks danger), the emotion qualifies as fit or warranted.

exposure to the pronouns ‘we’, ‘our’, and so on […]; having ‘common interests’; being subject to a ‘common fate’ […]; shared experience […]; face-to-face contact […]; and ‘interdependence’ […], that is, having common interests that can only be achieved together” (Bacharach 2006: 76). Bacharach acknowledges that this list is open-ended as, admittedly, research on group identification can identify other factors as it progresses. However, he also remarks that “although there is wide agreement that there is such a psychological condition as having a group identity, and that it is characterized by some of these causes […], there are *unresolved disagreements about which are the basic ones*” (Bacharach 2006: 76, my emphasis).

While Bacharach does not explicitly expand on this issue, one way of interpreting his point is that the basicity of those causes remains a matter of disagreement because it is uncertain whether they are operative in young children. I submit that there are good reasons for understanding the nature of the disagreements in this way. In fact, all the aforementioned causes appear to have one element in common: they seem to presuppose a sophisticated understanding of one’s social environment by consisting of properties, encoding which is a complex cognitive affair. For instance, they arguably presuppose an understanding of the first person plural pronoun and sensitivity to the context that assigns salience to its usage (exposure to the first personal plural pronoun), an explicit notion of group (membership in pre-existing groups), an understanding of social norms (belonging to an ad hoc category, being subject to a common fate), or again: a flexible theory of mind (interdependence).[8]

This observation raises a critical issue for group-identification-based theories of joint actions. For remember that this line of investigation resorts to group identification to solve the problem of cognitive

[8] Perhaps this is too quick. Perhaps some of these causes can indeed trigger group identification in young children. The empirical sciences of the mind will tell us. Suppose some of these causes are confirmed to kick-start that process in early development. In that case, I contend that little in my argument will be affected. For remember that my claim is not to develop an all-encompassing theory of joint actions among young children but to provide reasons for thinking that one (one single) cluster of abilities is operative in that form of shared agency.

complexity that has been held to plague some classical theories of joint actions (when these are applied to explain shared agency among children). However, the risk now is that the issue of cognitive complexity that was kicked out of the door might come back through the window. In fact, unless these alternative accounts of joint actions are able to specify what triggers group identification in young children, they seem vulnerable to the very same charge. This consideration thus directly leads to the question concerning what Bacharach calls the "basic causes" of group identification, where "basic" here means "developmentally minimal."

The hypothesis I explore in the remainder of this paper is that looking at joint attention can inform us on the proximate motivation of group identification in young children (the idea has been proposed, although in a tentative fashion, in Salice & Miyazono 2020[9]). More precisely, I suggest that joint attention, among its many services in support of joint action, can also fulfil the following function: it can reveal to the agents that they share some of their preferences. Once this result is achieved, the dots can be connected: since shared preferences have already been established by the literature to motivate group identification, their exposure in joint attention indicates that they can motivate group identification in young children, too.

To underpin the hypothesis, let's start with some relatively uncontroversial insights about joint attention: triadic joint attention is the capacity to perceptually attend to an object/event together with another subject[10] and empirical evidence converges in dating the emergence of this capacity around 9-12 months

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[9] A similar suggestion can be found in Schmitz 2014, where it is claimed that joint attention intrinsically includes pro-social motivation and a disposition to act together. While the current proposal embraces the spirit of Schmitz's suggestion, it diverges in important respects. As I elaborate below, the hypothesis is that joint attention is accompanied by pro-social motivation when the converging preferences of the co-attenders, revealed in the joint episode of attention, lead them to group identify. Thus, joint attention can—but does not intrinsically—include pro-social motivation.

[10] On the development of dyadic joint attention, see Reddy 2008: 90ff.

of age, at the very last (Siposova & Carpenter 2019: 269). But just as the nature of joint action, so is the nature of joint attention at the centre of a heated debate. This debate is broadly divided into a reductivist and a non-reductivist camp (León 2021). The reductivists claim that joint attention can be analysed in terms of simpler notions (Peacock 2005, Stueber 2011, Tomasello 2019, among others). By contrast, non-reductivism holds the opposite view, according to which joint attention is a primitive notion and thus cannot be analysed in terms of simpler notions (Campbell 2005, Eilan MS).

As the considerations I develop in this section do not hinge on the outcome of this debate, I will not take a stance on the nature of joint attention. My interest rather goes to the various roles joint attention plays in facilitating joint actions, many of which have already been identified within the literature. In fact, it has often been remarked that joint attention inhabits a practical dimension (Hobson & Hobson 2011, Schmitz 2014) to the extent that some authors have even claimed that at least some episodes of joint attention are episodes of joint action (Fiebich & Gallagher 2012). The close link between joint attention and joint action is also indicated by the idea that, in joint actions among pre-school children, joint attention provides "an understanding that the other participant has a focus of attention to the same entity as the self. There is a recognition of an alternative perspective. This implies an understanding of the other participant, not as an object but as a locus from which action can originate" (Tollefsen 2005: 90). Moreover, joint attention has been ascertained to be at the service of coordination (see Wilby 2023). Most work on the relation between joint attention and joint action has focused on the role that joint attention plays for or within already started instances of joint agency. But some authors have also claimed that joint attention can prompt "the initiation of coordinated action (as when one individual follows another's gaze to an object to be manipulated)" (Sebanz et al. 2006: 70). This last observation is particularly relevant to the current discussion and I will expand on it in the next section.

For now, I want to introduce an additional role joint attention might play for shared agency. One can start to appreciate this role if one pays attention to the distinction between two forms of joint attention, which I label "short-lived" and "enduring" joint attention.[11] To introduce this distinction, suppose that you and I—strangers to each other—manage to fix reference in joint attention through some bottom-up process and establish what is sometimes called "attention contact" (Gómez 1996): for instance, while waiting for the bus, you and I make eye contact in noticing that somebody is pickpocketing another person waiting in the queue. Once reference has been fixed in this manner, the episode of joint attention can unfold in two different ways.

According to the first way, joint attention—as it has abruptly occurred—so it abruptly comes to an end. For instance, if my attention (or yours) is attracted by something else (say checking the time for the arrival of the bus), this immediately seals the end of the joint experience. Redirection of one party's attention brings joint attention to an end notwithstanding what the other does. Call "short-lived" instances of joint attention that have a punctual or non-lasting extension in time. (This is obviously not to say that short-lived joint attention does not have consequences, which are themselves long-lasting.)

Joint attention, however, is not always merely short-lived as it can unfold in a second, different, way. Suppose that you and I continue to pay attention, jointly, to the thief or the victim. In this case, joint attention transitions from short-lived to "enduring." Now, the suggestion is that looking at this form of joint attention might reveal an important feature of this capacity, but appreciating this feature demands elaboration of the conditions under which short-lived joint attention can turn into enduring joint attention.

[11] I do not want to add too much emphasis to this distinction. In particular, I am not claiming that these are two genuinely distinct kinds of joint attention. The distinction is merely instrumental to secure the point that, sometimes, joint attention reveal the preferences of the co-attenders. For the importance of temporal extension in joint attention, see Siposova and Carpenter 2019: 264.

Plausibly, one such factor[12] is for the referent to elicit or to continue to attract the interest of both attenders. For again if either of the attenders loses interest or has no interest in the referent, then the psychological event comes to an end. Assuming that this point is on the right track, then one can draw the following inference: if enduring joint attention is sustained by the interest of each subject, then the two co-attenders have putative and defeasible evidence that the referent is appreciated, evaluated or assessed as interesting (in some broad sense) by both.[13] For instance, if you and I continue to direct our joint attention to the pickpocket or to the victim, this gives us putative and defeasible evidence that you and I remain interested in the respective referent. In according their interest to the referent, each of the attenders prefers the referent over other potential referents in their perceptual environment.

This last idea should be amplified upon. I posit that for a subject to be perceptually interested in an object *o* is for them to evaluate object *o* as more valuable (in some relevant sense) compared to other environmental objects *r*, *s*, *t*... *n*. Thus, for a subject to be perceptually interested in an object *o* is for this subject to have a preference,[14] where *o* is preferred over *r*, *s*, *t*... *n* with respect to the value at stake. Furthermore, to have a preference about *o* (i.e., to evaluate *o*) is to acquire the disposition to emote in a

[12] But perhaps not the only one. For instance, one of the co-attenders might exert normative pressure on the other to keep their attention aligned with (or to re-align it with) their own attention to the referent—especially when the two attenders operate against a background of shared familiarity. I come back to familiarity between co-attenders in the next section.

[13] To reinforce the point, this evidence is *putative* and *defeasible* for there might well be cases where joint attention is sustained by the co-attenders diverging evaluations of the referent (or by altogether different factors). Hence, not all instances of enduring joint attention are grounded in shared preferences.

[14] As for many other notions I have touched upon in this article, so is the nature of preferences highly controversial in the literature (see Guala 2019). There is no need to enter this debate here. A broad and unspecific understanding of preferences as subjective evaluative attitudes should be sufficient to support my considerations.

particular way. So, for instance, to evaluate *o* as being dangerous is to acquire the disposition of feeling fear of *o*.[15]

Similar considerations can be made about joint perception: if S1 and S2 jointly perceive *o* because each of them is interested in *o*, they do so because each of them prefers *o* over *r*, *s*, *t*… *n* with respect to the relevant value at stake. In this sense, they "share" the same preference ("sharing" is used here in a "distributive" sense, according to which a preference is shared among two or more individuals if each of them holds a type-identical attitude). If joint attention is enduring, then each of them also has putative and defeasible evidence that the other entertains the same preference. Importantly, this evidence solidifies if co-attenders emote in accordance with their preference—their emotional expressions provide each of the co-attenders salient cues on how they are evaluating the target.

It is worthwhile elaborating on this last point against the backdrop of a taxonomy of forms of social attention developed by Siposova and Carpenter in a recent paper (2019). The authors introduce two categories that are particularly relevant for this discussion: mutual and shared attention. While there are various factors that are brought into play to draw this distinction, the most relevant for my purposes are the following: in mutual attention, "the thing in the environment is salient and/or relevant for both individuals" and "eye contact enables them to gain reciprocal and reactive information about their attention to it" (2019: 263). By contrast, intentional communication about the referent must be added to mutual attention to yield shared attention: "two individuals are in shared attention when on top of an interaction that meets the criteria for mutual attention, in addition they intentionally communicate with each other about the object of their attention, and/or the fact that they are sharing attention to it" (Siposova and Carpenter 2019: 263).

[15] For views grounding emotional disposition in preferences broadly understood, see Scheler 1973 (esp. 86-100) and Helm 2001. I come back to this point towards the end of section 4.

This distinction helps clarify an important aspect of the current discussion: given that Siposova and Carpenter's construct of shared attention includes intentional communication in its definition, it arguably involves the exercise of shared agency in the form of an exchange of reciprocal communicative acts. If so, then this understanding of shared attention presupposes—in one form or the other—the co-attenders prosocial motivation of engaging in shared agency. However, the goal of this paper is to account for how joint attention facilitates minimal joint actions by generating the relevant pro-social motivation. To that effect, the notion of joint attention under consideration here must avoid circularity by presupposing what is to be explained. To ensure this basic desideratum, the relevant notion of joint attention can only be "mutual," not "shared" attention (according to the authors' taxonomy), where this notion ought to be understood as doxastic through and through and, therefore, as deprived of motivational force (by not presupposing the motivation to act together).[16]

I will not address the exact credentials of the doxastic states occurring in joint attention (whether they are perceptions, beliefs, or *sui generis* states of knowledge, see Seemann 2019), but I want to highlight that their doxastic nature does not amount to dislocating joint attention from the practical dimension. Quite the contrary. First, joint or "mutual" attention stands at the service of (already started instances of) shared agency precisely because it provides information to the agents about their partner or the

[16] Because it involves no communication, mutual attention is not shared attention. Neither is mutual attention "common attention," which is when two individuals "each take a third-person, observer's perspective on the other, […] attend to what the other is attending to, and infer not only that they are both attending to the same thing, but also that they are attending to each other's attention to the thing" (Siposova and Carpenter 2019: 262). According to the authors, what contradistinguishes mutual attention hence is that the two co-attenders adopt a second-personal stance towards each other, which makes the joint experience "co-created." It exceeds the purposes of this paper to spell out the notion of an I-Thou co-created experiential episode like mutual attention. However, a promising way of thinking about this phenomenon is that the "eye" or "attention contact," which lies at its origin, should be explained in terms of a "mutual transaction," where the idea is that the gaze of one co-attender acts on and is concomitantly acted upon by the gaze of the other co-attender (for this relational understanding of eye contact, see Laing 2021)

world. Second, knowledge of shared preferences in joint or "mutual" attention, even if it is not acquired through or via communication, can generate the pro-social motivation for acting together thereby initiating the joint action, as I argue below.

4. A cluster of minimal pre-conditions

Time to return to group identification. Remember that, to resort to group identification in explaining joint actions among pre-school children, group-identification-based theories of joint actions must avoid the problem of cognitive sophistication. It is now time to assemble the pieces of the mosaic to address this potential problem. There are at least four such pieces, which I briefly list here and will address one by one in the remainder of this section: (i) shared preferences can trigger group identification; (ii) joint attention can reveal shared preferences; (iii) joint attention has an early developmental emergence (9-12 months of age); (iv) children are sensitive to preferences as these are revealed in joint attention.

First, since early studies on group identification, evidence has accumulated to the effect that similarities between persons lead them to group identify with each other. For this reason, it has been argued that group identification always include social comparison, where social comparison is the ability to detect social similarities (Hogg 2000): "self-categorization and social comparison are mutually dependent and complementary processes in that neither can exist without the other" (Turner 1985: 96). These similarities range from ephemeral and irrelevant (wearing t-shirts of the same colours, Bigler et al. 1997) to significant and profound to one's personal identity (e.g., similarity in personalities, Klohnen & Luo 2003). Among the similarities that play a role in this context, (i) similarities in preferences have attracted the attention of the literature from the very start of research on group identification (Vélez et al. 2019): if two or more individuals share the same preferences, they are likely to group identify with each other.

Second, if preferences can be revealed in joint attention (ii), as I have argued in the previous section, then joint attention can ignite group identification. To go back to my example: if either the pickpocket or the victim continues to attract our joint interest, then you and I have putative evidence that we share the same preference. Awareness of this similarity can trigger group identification, which describes each of us as group members and directs us to act as such—despite the fact that we are strangers to each other. We now have acquired a pro-social motivation that disposes us to reciprocal pro-social behaviour, including the performance of joint actions. For instance, we might start talking about and commenting on the event. Or, depending on the nature of our shared interest (say, concern for the victim or indignation towards the pickpocket), you and I may jointly act in accordance to the action tendencies inherent in the interest (e.g., help or warn the victim; accuse or stop the pickpocket).[17] If this is correct, then the co-attenders' prosocial motivation to communicate about the object of their attention, to share that object (even only for the sake of sharing it), and to act on it, which some authors consider to be the hallmark of a robust notion of joint or "shared" attention (Carpenter & Liebal 2011, Schmitz 2014, Siposova and Carpenter 2019), is an element that is not intrinsic to joint attention (qua doxastic phenomenon), but derives from somewhere else; it derives from group identification.[18]

But now, assuming that (i) preferences can trigger group identification (and group identification itself can trigger joint actions) and (ii) a person's preferences can become manifest in joint attention, then

[17] As mentioned in the previous section, the interest underlaying (joint) attention is often affectively laden and manifests itself in the form of an emotion (surprise, excitement, concern, anger, blame, etc.). The emotive charge of joint attention naturally flows from the very nature of our fundamental interests or preferences—they not only motivate us to act, they also motivate us to emote in a certain way, as the concluding part of this section further expands upon. Hence, joint attention and shared emotions are closely linked and this link has often been highlighted in the literature (Hobson 2002, Salmela 2012).

[18] However, the point requires some qualification as the nature of the preferences does play a role in the social context as it can generate a competitive (rather than a collaborative) scenario. For instance, if the preferences of the two co-attenders go to scarce and non-replicable resources, then it is likely that they will induce competition rather than collaboration. Hence, the qualification that shared preferences induce group identification is to be understood as barring special circumstances related to the nature of the preferences themselves.

how do these results square with developmental considerations? A *third*, important, piece of the puzzle is that, as mentioned in the previous section, (iii) joint attention emerges at 9-12 months of age.

Fourth, we know that (iv) children are sensitive to preferences as these are revealed in joint attention. The close relation between interest, or preference, and joint attention can be illustrated by cases of so called "declarative-as-expressive pointing" (Tomasello 2008, see also Liszkowski et al. 2004), where young children—starting from the first year of life—point to a referent they find interesting precisely in order to share their interest with the other. This is in contradistinction to the "declarative-as-informative pointing" where the motivation for the pointing is to convey information not available to the other. Tomasello writes:

> [In declarative-as-expressive pointing] when the adult expressed *disinterest*, young children did not prolong or repeat their pointing within trials, presumably because they understood that the adult did not share their enthusiasm, and they also decreased pointing for this adult across repeated trials compared to when the adult expressed interest. These results specifically isolate the young children' motive to share their attitude with an adult in the expressive subtype of declarative pointing, their motive that the adult *not just attend to a referent but also align with their attitude about it* (Tomasello 2008: 120f, my emph.).

Hence, the picture that emerges is that adults and children are aware that they can secure information about the other's enthusiasm and, by extension, about the other's preference,[19] by partaking in an episode of joint attention (and that pointing to the referent—in the declarative-as-expressive mode—is

[19] The connection between enthusiasm and preference relies on the idea that enthusiasm is an emotional response, which presupposes a comparative evaluation. An object elicits enthusiasm insofar as it is evaluated as more interesting with respect to other environmental objects (under some relevant value). Hence, securing information about the other's enthusiasm is to secure—however vague and underdetermined—information about the other's preferences.

a way to establish shared preferences). This precisely goes to show that, in joint attention, co-attenders can acquire *prima facie* evidence that they share the same underlying preferences.

If one connects this last point (iv) with the previous (i)-(iii), then it becomes plausible to hold the view that joint actions, as they emerge at the end of the second year of age, can be explained by the concerted working of preferences, joint attention and group identification. Importantly, this proposal shields group identification based theories of minimal joint actions from the charge of cognitive complexity. So, e.g., if an object (say, a toy) is attended to in enduring joint attention, this can reveal to the co-attenders that they share the same preference for the referent (e.g., the referent is evaluated as interesting, exciting, playable, etc. by each of them). If awareness of this similarity leads to group identification, the co-attenders gain the motivation to communicate about the object and/or to perform the joint action afforded by the referent: e.g., to play together. All this provides support to the idea that preferences, joint attention, and group identification belong to a cluster of minimal pre-conditions of joint actions.[20]

At this junction, I want to offer a clarification of my claim and, at the same time, adduce an extra reason on its support coming from a different, and yet not unrelated, debate.

The clarification consists in an important limitation of the scope of my claim. As I have already mentioned at the beginning of this paper, the cluster of three capacities (group identification, joint attention, preferences) I am considering in this paper is not meant to offer a one-size-fits-all explanation

[20] If this is on the right track, then why is it that children do not display joint actions already at the end of the first year, given that these minimal pre-conditions are already fulfilled at that stage? I will leave this question open, but note that its answer hinges on the notion of joint action at stake in the question. On a relaxed understanding of shared agency, reciprocal acts of communication (even if they are not linguistic) could count as instances of shared agency, as I have already hinted at. I should also mention that joint attention only is one pathway to get at the other's preference. If there are other pathways (see Mahajan and Wynn 2012), the prediction would be that they, too, facilitate group identification and, ultimately, joint actions.

of all instances of minimal joint actions. For the selective consideration this paper accorded to preferences and joint attention in sparking group identification is primarily meant to shed light on joint actions that children perform with persons with whom they have no previous familiarity. There is one important reason for constraining the scope of my claim to these actions. Children are immersed in a social environment from birth and, in normal development, their first interactants are their caregivers, i.e., persons they have grown in complex and multifaceted intersubjective relations together, often since birth. Importantly, forms of in-group favouritism have been observed in children at the end of their first year of age, e.g., towards those who share their own language (Kinzler et al. 2011, Buttelmann et al. 2013) or have the same racial appearance, when they have grown up in a racial homogeneous environment (Bar-Haim et al. 2006). Now, if these forms of favouritism demand children to group identify with them (a hypothesis that I raise here in a non-committal and conditional way; see Liberman et al. 2017 for reservations about this hypothesis; León 2023 raises similar reservations concerning adult relationships), then it is likely that other proximal motivations could be operative in igniting that process. However, the paper will remain silent on these instances of minimal joint actions.

I now come to the additional reason in support of my claim. If the results of this paper stand, then preferences are at the core of our social self and, by extension, at the core of our pro-social motivation, incl. the motivation to engage in joint actions with others.[21] But then, why is it that shared preferences have the power to trigger group identification? There is an established line of reasoning that sustains this conclusion coming from considerations about selfhood in moral psychology.

[21] Note that shared preferences themselves, not the way in which individuals become aware of them, are claimed to be core to our social self, as illustrated by cases where one group-identifies based on shared preferences, awareness of which is not gained by partaking in an episode of joint attention. However, if the considerations of this paper are sound, they provide further support to the claim that shared preferences are constitutive of the social self: given the emergence of joint attention in development, if shared preferences can be revealed in joint attention, then they are operative in the creation of a social self at quite early stages in ontogenesis.

An important way to disambiguate the notion of self is by distinguishing a thin and a thick understanding of the self (Cassam 2014). On an important view, the thin notion is one that is intrinsic to living through conscious experiences: each creature living through conscious experiences has a thin or minimal self (Zahavi 2014). But when Socrates recommended his audience on the streets of Athens to know who they were, he was not addressing this notion of the self: for having a minimal self has little to do with who one is—in a distinctive and profound way. The notion at stake in the quest for Socratic self-knowledge (Renz 2017) rather is that of a thick self.

Among the many accounts of the thick self, one important view proposes that this dimension of the self is moral through and through. More specifically, it has been claimed that our deep-seated preferences or concerns determine who we are in a substantial sense. The phenomenologist Max Scheler, e.g., writes:

> *Whoever has the ordo amoris of a man* [i.e., his deep-seated preferences], *has the man himself*. He has him as a moral subject […]. He sees into this man as far as one can see into a man. Behind the empirical multifold and complexity, he sees the ever simply proceeding basic contours of the man in front of himself, and this, rather than knowledge or will, deserves to be called the core of man as a spiritual being (Scheler 1986: 348, my transl.)

More recently, similar ideas have been developed by Bennett Helm (2001, 2010). Such preferences determine our emotional dispositions (Mulligan 2015) and, hence, our character (on the assumption that our character coincides with our emotional dispositions, see Deonna & Teroni 2012). For instance, and to simplify, if you have a preference or concern for, say, individual freedom (over social justice), then you have the disposition to feel indignation for the introduction of a new tax (whereas that disposition would lack in those who have the inverted preference). In addition, there is preliminary evidence that, folk psychologically, we tend to identify others' personal identities in their character traits (Strohminger & Nichols 2014).

Why and how does all this bear on the issue? Here is a line of reasoning that combines moral psychological considerations on selfhood with the topic of this paper. It has been argued that, according to social identity theory, subjective group membership relies on a dimension of the self: to group identify is feeling to be a group member. Further, the theory about the moral self contends that one's thick self hinges on or is identified by one's preferences. Based on these two ideas, it appears natural to infer that the social self, too, ultimately relies on one's (shared) preferences: an important, if not perhaps fundamental, dimension of our social identity depends on the preferences we share with others. We are, in a fundamental sense, those who have the same preferences.[22]

5. Conclusion

Time to recap. This paper focuses on a narrowly delimited kind of minimal joint actions: joint actions performed by pre-school children together with another agent in the absence of any previous familiarity with each other. It advances the research hypothesis that one possible motivation for this form of shared agency is group identification and it does so by illuminating the minimal triggers of this process. The motivation behind this line of research is that, unless light is shed on such minimal triggers, group identification based theories of joint action are vulnerable to a charge of cognitive sophistication. The

[22] An interesting fact about preferences is that they are, at least to a certain extent, adaptive. Hence, it is plausible that if a subject desires to be a member of a certain group, they may adapt their preferences and align them with the group's preferences to facilitate affiliation. While this possibility supports the general idea that preferences are a crucial factor in group identification, it also raises questions about whether preferences or the desire for belonging is the most important factor to that process. It exceeds the purposes of this paper to address these questions, but it is plausible to conjecture that for a subject to desire to belong to a particular group, they must have already experienced some form of group identity. In other words, not all groups are created equal: some are primary in the sense that we naturally grow into them during early development based on whether our deep-seated preferences converge with those of others (among other factors). Other groups are secondary in the sense that our membership in them is motivated by our desire to belong, but this desire emerges in later years and presupposes primary group belongingness.

paper argues that one basic trigger is sharing at least some preferences with the other, and that this can be revealed in joint attention. Further support for this analysis is provided by the theory of the moral self: if one's thick self is identified by one's preferences, then our social self is identified by our shared preferences. Of course, it merits attention that the hypotheses that the paper has put forth require empirical corroboration before any definitive conclusions can be drawn on these complex matters.

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