

SOME PRAGMATIST INSIGHTS

IN ACCOUNTS OF COLLECTIVE ACTIONS

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ABSTRACT: Developmental psychology studies offered by M. Tomasello and his colleagues concerning early abilities of children for joint action and shared intentionality are considered in relation with philosophical accounts of collective intentionality. It is argued that (i) empirical data show that young children display joint intentional actions before having a theory of mind, (ii) that most of the main conceptions of philosophical joint intentionality cannot account for these facts, and (iii) that a pragmatist view of mind and action offers crucial insights for an alternative picture of collective agency and intentionality. The most important implication for philosophy of collective agency and intentionality is to recognize that the causal theory of action and the mentalist conception of intentionality do not constitute an accurate background; classical pragmatism tradition meets recent critics of the main proponents in the field of collective intentionality, offering a practice-oriented account of human agency including early intentional interactions.

For the past few decades there is a growing interest in philosophy of action and in philosophy of mind for phenomena of collective intentionality i.e. capacities of individual agents to share some intentional attitudes. One of the reasons for this is to account for joint intentional actions. Indeed, when we act *together*, cooperatively or not, we have to coordinate our actions. Many philosophers¹ think that we cannot understand such joint actions merely in terms of individual intentions but that we have to recognize joint or shared intentions. While there are several positions in the field, from individualist and reductive accounts (like that of Bratman) to rather holist conceptions (as those of Gilbert or Searle), one can think yet that they globally rest on individualist assumptions and especially that individual actions are still conceived as simpler and more fundamental than collective ones. Therefore, if one can praise this growing interest for collective intentionality

¹ The most influential are Gilbert (1989, 1996, 2014), Searle (1990, 1995), Bratman (1992, 1993, 1999), Tuomela (1993, 1995), Tuomela and Miller (1988)

as a way to produce theories of action that become more social, one can though regret the persistence of “anti-social bias” of thought (Stoutland 1997, 45). In fact, from the point of view of these accounts, one of the main problems consists in articulating the collective dimension of joint intentions (in their content or in their subject) with the principle of the individuality of the intentional attitude bearer – what one calls the “individual ownership thesis” (Schmid and Schweikard 2013). In order to act jointly, every agent has to understand that the other(s) intend(s) the same joint action. Thus shared, or collective, intentionality’s theorists provide different and sophisticated accounts of the way this intentional coordination could be performed.

These works meet research in cognitive sciences regarding “social cognition” i.e. cognitive abilities such as joint attention, social referencing, perception of intention and so on. One of the main issues regarding the interpretation of such abilities is whether social cognition necessitates or not the capacity to view other persons as mental beings, having complex psychological and internal life, and especially having beliefs that can be wrong; this is roughly what one calls “theory of mind”.

We can say that most accounts of collective intention require from the agents the possession of a theory of mind². Yet recent studies in developmental psychology tend to show that infants and children of young age are able to act jointly very soon, before having developed a genuine theory of mind (not until four years of age). Thus these data seem to support the claim that social cognition does not necessitate the possession of this cognitive ability for meta-representation. It is as if human children apprehend other human beings firstly as partners for (intentional) interaction before seeing them as psychologically complex.

Although this idea might seem very common for a layperson, it leads to think that we need an alternative philosophical conception of collective intentionality that

² Searle was an exception until his book published in 2010. See Searle (2010, 49).

could account for early abilities of infants and children for joint actions. My hypothesis here is that classical pragmatist philosophers (especially Dewey and Mead) provide crucial elements for such an alternative conception³ through two main ideas: first, in conceiving intentionality from the practical perspective of goal-directed behavior, rather than from the property of aboutness of internal states of mind. Second, in conceiving that the first person perspective derives from social interactions rather than making them possible.

I want to argue for the need of an alternative conception of collective intentionality from the study of works in developmental and comparative psychology lead by Michael Tomasello and his colleagues (especially (Tomasello et al. 2005). In section 1, I present this work and its results as providing precious empirical and experimental data regarding the idea that collective action is fundamental for human agency and cognition. In section 2, I present some objections to this work, which concern the model of collective intentionality that it uses, namely Bratman's conception. More precisely, I will defend that the main problem concerns here the cognitive sophistication such a model requires for agents. In section 3, I present four main elements for an alternative conception of collective intentionality, coming from both internal critics toward prominent accounts of shared or collective intentions and pragmatist conception of mind and action.

1. Early abilities for understanding and sharing intentions: Tomasello et al. (2005)

1.1. Data for a conception of human cognition as intrinsically linked to collective agency

Several specialists of classical pragmatism⁴ have noticed that research led by Tomasello and his colleagues can be understood as broadly in line with Mead's conception of the essentiality of social interaction for human cognition. Indeed, their whole research in developmental and comparative psychology tends to show that the specificity of human cognition rests on cognitive abilities and specific motivation for joint action and shared experience; there is a specifically human disposition to see others as partners, to identify with others, to cooperate and to share some psychological states, what they call "shared intentionality" or sometime "collective intentionality". Thus both action and sociality are recognized as essential for human cognition, features generally associated with the pragmatist tradition.

Indeed, Tomasello's 2005 paper, entitled "Understanding and sharing intentions: The origins of cultural cognition" identifies the co-emergence in ontogeny of the ability to progressively understand the structure of intentional action of an actor observed and of the capacity to participate in increasingly complex joint activities.

In the first months of life, infants begin to differentiate animate self-produced action and inanimate caused motion and look in the same direction as others do. Tomasello and his colleagues consider that infants can see human action as "object directed", without seeing it as goal directed at this level (678). At the same age, infants perform "dyadic engagement" (681-2) in their face-to-face interactions with adults. They show a mutual responsiveness at the behavioral

³ Far from being a specialist of classical pragmatist thought, I do not pretend to give here a serious analysis of sense and scope of this convergence. I am just struck by the convergence of several internal critics of collective intentionality and Dewey's conception of mind, along with Mead's account of social interactions.

⁴ See for instance Nungesser (2016, 254): "Tomasello's studies, I claim, can contribute to an empirically saturated and refined account of both the evolutionary and ontogenetic logic of cognitive development described by Mead." For more critical perspectives see Booth (2016) and McVeigh (2016)

level, and furthermore, they engage in “proto-conversations” with mutual gazing, in which adult and infant touch, look, smile and vocalize toward each other in turn. Such interactions reveal shared behavior and emotions between infant and adult.

A few months later, 9-month-old infants begin to understand goal-directed action and can recognize successful action from failure or accident; they also understand that the actor perceives his environment and perceptually monitors the result of his movements. Simultaneously, at around 9 to 12 months of age, they engage in several triadic interactions that involve a partner and a third entity, such as taking and giving objects, building a block tower together, pointing and naming games or pretend games, such as pretending to drink tea together. They coordinate their looking with that of the other person toward the relevant objects, what the authors call “joint perception”. Some empirical works (Ross and Lollis, 1987; Ratner and Bruner, 1978) can be construed as showing that 9 month-old infants attempt to reengage a recalcitrant partner, by gesturing to him or handing him an object, suggesting the existence of a shared goal of the joint activity understood as such by infants. Thus according to Tomasello, these kinds of triadic engagement reveal the infants’ capacity for sharing goals and perception.

The third step of this ontogenetic pathway for joint action and intentionality consists in understanding genuine intentional action i.e. action structured both by an aimed goal and an action plan chosen by the actor in order to achieve his or her end. This happens between 12 and 18 months of life; the main study showing this understanding is Gergely et al., 2002. It consisted in showing to 14-month-old children an adult touching his head to the top of a box to turn on a light. Children were divided in two groups; for the first one, the adult’s hands were occupied (holding a blanket around his shoulders) whereas they were free for the demonstration to the second group. When it was their turn to act, children of the second group, who saw the adult using his head to turn on the light while his hands were free, touched the

box with their head more often than children of the first group. This seems to mean that children understood that if the adult’s hands were free and he still chose to use his head, then there must be some reason to do so. Thus 14-month-old children seem to be able to understand that the actor does things for a reason and chooses specific ways of acting that they can rationally imitate. Furthermore at the same age, children begin to understand that people attend to specific features of their environment, and see attention as an intentional perception. In parallel, children engage in collaborative interactions, which involve, according to the authors, joint intentions and attention. They consist mainly of triadic engagement where the child is increasingly active, especially by helping her partner if he failed to play his part. This implies role-reversal understanding and imitation. All these developments appear at the same time as language, which authors qualify with Clark (1996) as an inherently collaborative activity; conversation is seen as an essentially joint activity implying at least two partners in order to be performed. The crucial idea is to consider of language as a form of joint activity that *derives* from the ability for shared intentionality rather than *producing* it.

Tomasello and his colleagues understand these capacities of human infants and children for understanding and sharing intentional activities as preconditions for their ability to engage in “cultural learning⁵”, i.e., the specifically human way of learning and teaching that convey conventional ways of doing things in a specific culture, implying an essential normative dimension.

⁵ cf. Tomasello et al. 1993; 2016.

1.2. Models of intentional action and of shared intentionality

There is a specific philosophical interest of this 2005 paper because it makes explicit models of individual and shared intentional actions used in the interpretation of the previous data. Firstly, it offers a conception of individual intentional action as bodily movements of an actor caused by an internal mental state that consists in the representation of the goal aimed at and of the action plan chosen in order to fulfill it (676-677). Thus this model of intentional action conceives the relation between intention and action as a causal link. In other words, it is a causal, internal and mentalist conception of individual intentional action. Then, this model is adjusted to joint intentional action; joint intentions have to trigger bodily movements in the same way that individual intention does, that is as an internal and mental representation, embodied in each individual. Thus one can understand the choice of Bratman's model of shared cooperative intention since he explicitly aims at offering an individualistic and reductive account of such intentions (Bratman 1992, 341). If Tomasello refers to other accounts of shared intentions (especially Gilbert 1989, Searle 1990 and Tuomela 1995), it seems that Bratman's model is more likely to provide a model that appears as an extension of the causal and internal model offered for individual intentional action. Indeed, joint intention is conceived as an internal mental state embodied in each partner and its main features are conceived from the analysis offered by Bratman, 1992. This is the way Tomasello et al. resume this account:

According to Bratman (1992), joint cooperative activities, as he calls them, have three essential characteristics that distinguish them from social interaction in general (here modified slightly): (1) the interactants are mutually responsive to one another, (2) there is a shared goal in the sense that each participant has the goal that we (in *mutual knowledge*⁶) do X together, and (3) the participants coordinate their plans of action and intentions some way down the hierarchy – which

requires that both participants understand both roles of the interaction (*role reversal*) and so can at least help the other with his role if needed. (680)

These features are picked up in order to figure the content of each participant's representation of the joint intention. It includes the representation of the goal as a shared one i.e. that is aimed by both of them, and the representation of its own intention linked to the other's intention. These two points conform to clause (2) and (3), while mutual responsiveness (1) is provided by joint attention toward each other, and toward the same features in their perceptual field. The specific mental representations sustaining joint intentions are called "dialogic cognitive representation" (684) and are characterized by the fact that they include a representation of the whole situation and of both self and other. Thus this model of shared cooperative activities requires the capacity for the agents to represent the other's intention as an internal representation. Then, joint intention must trigger and constrain bodily coordinated movements in order to fulfill the shared goal aimed at by both participants.

Obviously, this kind of model requires a great cognitive sophistication from agents and by the way Bratman explicitly focuses on adult interactions (Bratman 1992, 327). Tomasello and al. do not address this particular fact in their paper. The idea seems to be that this account provides a general model of joint cooperative activities performed by mature human beings; infants and children are supposed to begin by interacting with others and then gradually internalize these interactions in a Vygotskian fashion (684 and 689).

Actually, it is rather convincing that we can only possess dialogic cognitive representations once we conceive of the other as someone who has (internal) representations of reality and of his or her goals. It is not problematic to consider that Bratman's model of joint cooperative action fits well for some specific interactions, namely planned and adult cooperation, but could it serve as an overall conception? The principal

⁶ My emphasis, cf. supra

issue seems to be whether we can agree both with the presentation of this account as a *general* model for joint actions on the one hand and, on the other hand, with the idea that early interactions performed by infants and pre-school children *are* genuine intentional actions: if full-blooded joint actions presuppose sophisticated representations as their mental causes, do we have to say that early interactions are *not* genuinely intentional since this complex intentional structure is not yet internalized by young children? In fact, researchers interested in the study of some specific triadic engagement, namely games of pretend, raise this issue.

2. Critical points regarding main conceptions of joint intentions and shared or collective intentionality

Firstly, it is rather puzzling that Tomasello et al. refer to Bratman's model of joint intentionality, since their empirical researches are often claimed as objections against his individualistic and intellectualistic account (see for instance Risjord, 2014, 298). Admittedly, Bratman does not claim to offer a general account of necessary conditions for joint actions, but only a set of sufficient conditions. But the fact that infants and young children actually perform joint activities without fulfilling these conditions suggests that Bratman does not accurately represent the kind of cooperation fundamental to human joint actions. I think that one of the main reasons Tomasello and his colleagues have to choose Bratman's account lies in the fact that it fits well with the general model of (individual) intentional action they give which, let us recall, conceives of intentions as internal states that cause the bodily movements which produce effects in the world. Hence, if this is relevant, then critics of Bratman's account of joint actions and intentions can provide solid grounds against the whole conception of intentional action, arguing that this view has to be modified in order to avoid the aforementioned problems (section 3).

2.1. The requisite of the theory of mind

As we said, some important criticisms of the bratmanian conception of shared (or joint) intentionality are made in the context of the study of games of pretense. At first, we can broadly define these games as interactions where children act (with other children but first and foremost with adults) *as if* something (e.g. this piece of wood) was another thing (e.g. a cup of tea), or *as if* some proposition (e.g. "you are a horse") was true while it is not (e.g. I am not a horse). Although there are debates concerning the interpretation one must give of empirical data, it can be said that pretend play means acting intentionally, knowingly and non-seriously (Rakoczy 2006, 114). According to Rakoczy's view⁷, games of pretense are genuine joint intentional actions performed by children from 12 months of age. Yet these features of intentionality and jointness are not understandable as such, as long as one conceives joint intentional actions as Bratman does.

In connection with these critics, Tollefsen (2005) notes two main problems in Bratman's account of joint intentional action when it is applied to intentional games of pretense performed by young children. She calls the first one the "mutual responsiveness problem" (Tollefsen 2005, 81) It corresponds to the condition (1) in regard with the characterization Tomasello et al. give of Bratman's account. This clause consists in the fact that each participant must be aware of the other's intentions and be responsive to his or her intentions. According to Tollefsen, this condition requires that participants have a "robust theory of mind" (*ibid.*) She defines it as including the following features: (i) an understanding of other persons in terms of their thoughts, intentions and beliefs; (ii) an understanding that other persons' thoughts, intentions and beliefs may differ from one's own; (iii) an understanding that others have thoughts

⁷ This view is in fact Rakoczy and Tomasello's one, that they call Cultural Learning Approach (Rakoczy 2006, 116, 119; Rakoczy, Tomasello & Striano, 2004; Tomasello & Rakoczy, 2003)

and beliefs that may not match with the current state of affairs (false beliefs). Yet, there is a general consensus according to which children do not possess a theory of mind until four years of age. Therefore, one cannot understand how 18 month-old children could jointly and intentionally perform pretend games.

The second problem follows the same pattern, i.e., the cognitive sophistication required by Bratman's account. Moreover, it raises a deeper difficulty since it concerns a feature that most of philosophical accounts of collective or joint intentionality share, which is the clause of *common knowledge*. Indeed, in the quotation we made from Tomasello et al., this notion does not appear; authors mention "*mutual knowledge*" (I emphasized it in the quotation). According to them, the fact that each partner aims at the shared goal ("that we do X together") is in mutual knowledge. I do not know if this modification has been intentionally made but one can think that it could *prima facie* make the requisite less demanding than if it was genuine common knowledge. Actually, mutual knowledge requires only that each partner knows that the goal is one's own and the other one's too. It is less stringent than common knowledge that requires not only knowledge of the other's knowledge but also knowledge of the inferential capacities of others. Despite the several important debates concerning the notion of common knowledge (CK), one can say with Tollefsen that Schiffer (1972) offers a relevant definition: *p* is CK among X and Y iff X knows that *p*; Y knows that *p*. X knows that Y knows that *p*. Y knows that X knows that *p*. X knows that Y knows that X knows that *p*. Y knows that X knows that Y knows that *p*... and so on (Tollefsen 2005, 82). If this structure does not have to be actually and consciously present to the agents, it must be something that each of them could infer from his beliefs. Thus, Tollefsen argues that this clause of CK requires a robust theory of mind that children do not have yet. Could we say, then, that the less demanding mutual knowledge is enough in order to account for a joint goal? Unfortunately it is not, at least according to Bratman's view: if I want us to open this

box together and I know that you want it too, but I do not know if you know that this is what I want, we do not actually have any shared goal. It is crucial in Bratman's account that the fact that the goal is shared is CK among partners in order to provide a joint intention to act according to it. This is also true to some degree for Gilbert's account (1989; 2014) and for Tuomela's one (1995).

Thus, since models of collective or joint intentionality require CK, they cannot account for pre-school children abilities to act jointly and intentionally. Rakoczy states in this way the logical problem space one is confronted by concerning this issue (Rakoczy 2006, 123). There are three mutually incompatible propositions:

- i) Competence C requires psychological background ability P;
- ii) young children seem not have ability P; yet
- iii) it seems justified on pre-theoretical grounds to ascribe competence C to young children.

When C is the ability to engage in cooperative activities, including cooperative pretense, the problem arises with P as the possession of a genuine theory of mind i.e. the ability for mind reading. Rakoczy argues that most of the major accounts of cooperative joint activities available in the field of philosophical debates concerning collective intentionality lead to the same problem. Rakoczy examines Tuomela and Miller's (Tuomela & Miller 1988) and Bratman's accounts (Bratman 1992), but it concerns also Gilbert's view (1989; 2006; 2014).

Then, two first possibilities are available, which are rejecting either proposition (ii) and recognizing that pre-school children actually *have* a theory of mind⁸, or proposition (iii) and denying that children are able to engage in cooperative pretense as an intentional joint activity⁹. However, Rakoczy offers relevant empirical

⁸ Rakoczy mentions Fodor (1992); Leslie (2000); Sperber & Wilson (2002) as embracing this solution.

⁹ This is the position adopted by the "behaving-as-if

arguments opposed to these options. Rather, he suggests revising proposition (i) in order to provide simpler psychological background ability needed for cooperative activity. He refers to Searle's conception (1990; 1995) according to which collective intentionality is a biologically primitive and pre-intentional capacity, possessed by all social animals. Yet, despite the attractiveness of this view, Rakoczy offers two main objections against it. First, the primitiveness makes collective intentionality inexplicable and rather mysterious; second Searle's conception does not permit distinguishing specific human forms of cooperation from those of animals. If Bratman's account is too demanding concerning cognitive abilities needed for cooperative joint activities, Searle's account is too liberal. Yet research made by Tomasello and his team, including Rakoczy, offers relevant data concerning the difference between non-human coordinated activities and human cooperative ones¹⁰.

Therefore, Rakoczy asks for "more fine-grained conceptual distinctions and taxonomies" (Rakoczy 2006, 124) regarding in philosophical accounts concerning cooperative activities and psychological abilities required (it is worth noting here that conceptual analyses and empirical research have to work together). According to this line, Rakoczy refers positively to Tollefsen's modification of Bratman's account of shared cooperative activity (Tollefsen 2005). The point of Tollefsen's contribution is to resort to Peacocke's work concerning joint attention (Peacocke 2002) in order to substitute joint attention for the condition of common knowledge. Thus children have to perceive that the others perceive, and what they perceive and attend to, in order to be able to cooperate together. They do not have to know others' mental states or to be able to draw inferences about those states (Tollefsen 2005, 92). The main idea is

theory" of pretense developed by Lillard (1993; 1998); Nichols & Stich (2000). Rakoczy discusses this theory in his paper and argues quite convincingly against it.

¹⁰ I do not treat here this central concern of Tomasello's works, not because of a lack of interest but rather of lack of space.

to consider that children can recognize that someone is doing something rather than having something done to them, without having to understand that people have internal states of mind. In this way, one can say that children can *perceive* others' intentional actions as such, since they do not infer their intentions from the sensation of a set of mere sense data. Rather, they see somehow directly what the actor aims at and is doing, from the context and the situation in which the action occurs. Thus, the others' intentions would not be inferred but perceived. Now what is at stake is the way one conceives these intentions.

2.2. The causal conception of intention

Tollefsen uses the searlian notion of *intention-in-action* deployed in his analysis of intention action (Searle 1983, 83-98) as distinguished of the notion of *prior intention*, saying that children in pretense games can actually perceive the others' intentions-in-action. According to Searle, a prior intention is an intention that concerns an intended action in the future, whereas intention-in-action is the intention deployed in a non-premeditated or deliberated action, which is still intentional. All intentional action involves intention-in-action but not all intentional action involves prior intentions, because all our intentional actions are not premeditated. Thus one can say that intentions-in-action are primary regarding prior intentions.

But it is worth noting that Searle has a strongly causal conception of intention. According to him, an action has two components, a mental one that is intention, and a bodily movement. The intention has to represent its conditions of satisfaction (or to "present" them, in the case of intention-in-action) in a manner that is self-referential to the intention itself: this is because of this very intention that the action has to be made, otherwise one cannot distinguish between a genuine intention and a mere desire or wish. In other words, if I intend to write this article, my intention would not be satisfied if this article was written but not by me, or not

because of this intention; therefore, my action to write it has to be causally engendered by my intention in a manner that refers to this intention itself: this is because I intend to do it that I do it intentionally. According to Searle, this is a crucial feature of both intentions-in-action and prior intentions.

I do not have space here to develop the specific issues linked to this causal conception of intention¹¹ but I want to emphasize that these deep problems are even more obvious as soon as one thinks collective intentions as needing to be mental causes of action. Yet this is what Searle should do, given his whole conception of the relation between intention and action. Indeed, he claims that the difference between a mere aggregate of individual actions and a genuine collective action is the presence in the latter case of a “we-intention” in the heads of each participant, that causes these movements as a collective action (cf. the case of people running for shelter compared to the case of people performing a dance together, each group displaying exactly the same behavior in Searle 1990, 402-403). But doing so, this collective intention should cause these movements just like an individual intention is supposed to do, saying being self-referential. Yet, how to understand this self-referentiality when the intention is of the sort “we intend to do X”? Either it concerns only the movements of each individual, but then one fails to account for the collective character of the action, or it regards the whole of the group’s movements but one has to recognize something as a super-brain, which is obviously strange.

Actually, Searle drops out the condition of self-referentiality in case of collective intentions and proposes a pattern according to which the individual

intentions of each partner are the means in order to achieve the collective intention that is the end. However, in doing so, his account becomes very similar to Bratman’s, where each individual has an intention of the form “I intend that we do X”. But here again there is a problem: as some critics¹² have noticed, there is a conceptual issue with intentions of this form, mainly that one cannot intend something that is not up to her or him: “that we J” does not depend on the action, deliberation or discretion of the individual, but refers to the collective action of the “we” at stake. Now, Tollefsen broadly agrees with this last objection and even remarks “more interesting would be the possibility that [children] have something like the capacity Searle identifies and all of their early intentions are of the form “We intend to J” (Tollefsen 2005, 19, n. 24). But if Searle fails to analyze this proper “we-intention” as fitting with his causal conception of intention, then we have to think that what Tollefsen calls intention-in-action must not be conceived as a mental *cause* of the action.

Therefore, Tollefsen’s attempt to modify Bratman’s account of shared cooperative intentions in order to understand early games of pretense performed by young children leads to deep issues concerning the main conception of intentional action as such i.e. the causal theory of action. Saying that children can actually *perceive* intentions-in-action in order to form we-intention with their partners is consistent only if one conceives both intentions-in-action and collective intentions as being *not* internal states of mind in the heads of the actors causally linked to their bodily movements. I think that the reference she made to Searle’s account can only be superficial, because if she had to endorse this whole conception, the solution offered would not be conclusive¹³.

¹¹ These issues have been first raised by the proponents of a wittgensteinian conception of intentional action, especially by Anscombe (1976), Von Wright (1971), Melden (1961), Stoutland (1980), among others. It is worth noting that the term “cause” in these debates does not have the broad sense according to which it is just a synonym for “because”. It is a narrower sense in which it presupposes law-like relations and rest on empirical generalizations, when antecedents necessitate the effects.

¹² Especially Baier (1997, 25-27), Velleman (1997, 34-35), Stoutland (1997, 56-58)

¹³ In fact Tollefsen does not endorse the causal theory of action in her latest works. In her book devoted to group agency she offers a denettian interpretationist account of both individual and collective intentional actions. (Tollefsen 2015)

So, if we follow Tollefsen and Rakoczy when they affirm that children can display intentional collective activities by perceiving the others' actions as intentional, then we have to admit that we need a general conception of collective intentionality that deeply differs from main accounts available in the field. In particular, I think that we must agree with the claim made by Stoutland, who thinks that the main drawback encountered by the accounts of collective agency is the causal theory of action (Stoutland 1997, 59). More precisely, what is at issue is the conception of intentions as internal causes of action, understood as mental states that confer to bodily movements their intentional character. Although one can defend a causal theory of action without endorsing an internal conception of intention (see for instance Velleman 1992; 1997, 37), I deem here that one of the main distinctive features of causal theory of action consists in seeing causes of action as mental and neural events that occur inside the agents and trigger his or her bodily movements (Gnassounou & Kirstler 2007, 780). Because this view encounters deep difficulties especially when it is applied to collective actions, we better have to drop it out, in order to understand these actions as fundamental and intelligible.

Now, how shall we conceive intentionality and collective agency in order to avoid the previous difficulties? I think that we can find some crucially relevant insights in classical pragmatic philosophy.

3. Pragmatist insights for an alternative conception of collective intentional actions

Without claiming to offer here a genuine commentary of Dewey or Mead's texts, I will rather notice the congruence between some critics of mainstream trends in collective intentionality's studies and some of the well-known thesis of these authors. In this way, I hope to bring some important conceptual issues concerning collective actions to pragmatism specialists' attention. In the following part, four main features will be addressed: the perception of intentions, the "adverbial" conception

of the mind, the priority of interaction upon individual action, and the derivative nature of the self.

3.1. The perception of intentions

We can say with Stoutland (1997) that main accounts of collective intentionality admit more or less explicitly the causal theory of action; hence these authors seem to be committed to a broadly mentalist conception of intentional action. This view is characterized by the idea that the difference between a mere behavior and a genuine action rests on the presence of a mental and internal state of mind (of brain for the most "naturalist" accounts such as Searle's) that causes bodily movements; this is supposed to be an intention¹⁴. Stoutland argues that mentalists agree with tight behaviorism that they elsewhere criticize in conceiving that "all observational terms are physical, so that observations of behavior must be expressed in physical terms." (Stoutland 1988, 42) Mentalists conceive the intentional terms excluded from descriptions of behaviors as *inner* and *individual* states that are not themselves observable *prima facie*. Therefore they still agree with the idea that bodily movements are by themselves accurately describable in purely physical terms. Against this idea, Stoutland defends another position that he calls "intentionalism¹⁵" according to which "we *observe* directly not only physical motions and events but behavior as intentional. We observe that persons are greeting each other, taking notes, trying to open windows, not merely that their body are moving" (Stoutland 1988, 44).

To consider that we can actually *observe* intentional actions as such is a way to reject the mentalist conception of action. Indeed, some important trends in cognitive sciences assert that intentions are actually *perceived* as such, especially in the study of social

¹⁴ Tomasello et al. share this conception in the paper we discussed (Tomasello et al. 2005, 677)

¹⁵ Thus Stoutland refers to Von Wright's distinction in analytic philosophy of action that oppose intentionalism to causalism (Von Wright 1971, chap. 1).

cognition. More precisely, the notion of social perception, developed by Jacob and Jeannerod (2003) or the idea of interpersonal affordances (Richardson, Marsh & Baron 2007) are instances of a broadly non-intellectualistic and mainly perceptual conception of the basic ability to understand others' intentions¹⁶. In this line of thought, some authors defend what they call the "hypothesis of direct perception", which proposes that perceptual experience primarily is a process of directly revealing the meaning of the perceived (Froese and Leavens 2014, 3). This meaning includes others' intentions since these people are perceived as agents with mental lives like oneself¹⁷. I think that this can be read as views in line with some aspects of intentionalism as Stoutland defines it.

The point is that one can admit that behaviors are not accurately described only in purely physical terms without having to endorse a mysterious and dualistic ontology, which could be thought as opposed to the general picture of reality given by modern natural sciences. Rather, one can admit that living beings biologically structure their environment according to what they have to *do* in it. A living environment is never purely "physical" since some aspects are valued whereas others are pointless according to the issues met by living beings; this is *a fortiori* true of human beings. In this latter case, we have to admit that meanings instituted by the *culture* are pervasive. It does not mean that these features do not have any physical description – every thing may have a physical description – but, rather, that this physical description does not grasp the relevant characteristic of these things. In saying that, we meet Dewey's conception of human environment:

The environment in which human beings live, act and inquire, is not simply physical. It is cultural as well. Problems which induce inquiry grow out of the relations of fellow beings to one another, and the organs for dealing with these relations are not only the eye and ear, but the meanings which have developed in the course of living, together with the ways of forming and transmitting culture with all its constituents of tools, arts, institutions, traditions and customary beliefs. (Dewey 1938 / 1960, 42)

Dewey enables us to account for the intrinsically cultural dimension of human environment inside a naturalistic picture of the reality. Thus, one can recognize that naturalism is not necessarily committed to physicalism specifically understood as an *ontological* thesis according to which the sole things that *really* exist are the entities described by physics¹⁸. This pragmatist conception of naturalism is a relevant general background for what we have called with Stoutland "intentionalism". From this point of view, we can assert that intentions can be perceived by beings that live in a world where there *are* some behaviors accurately described and understood as intentional.

Furthermore, Dewey's conception of experience provides an insightful way to understand what perception of intention means. He rejects the idea that perception is a passive reception of sense data thought as the material for knowledge and conceptualization, which does not itself have a content informed by practical needs or concepts. On the contrary, what we experience is shaped by our vital interactions and our habits of expectation. Thus, sensations are not some idle and isolated pieces of information without any conceptual content or practical meaning. However, Dewey denies that experience is essentially cognitive, a view that he calls "intellectualism", "the theory that all experiencing is a mode of knowing" (Dewey 1925/1981, 28) and that both rationalism and classical empiricism share. Rather, experience is basically practical and pre-cognitive, "an affair primarily of doing" (Dewey 1920/1982, 129). A sensation is first and foremost

¹⁶ cf. Dokic 2012.

¹⁷ This view has important consequences for the issue of imitation and human ability to mimic the precise way an action is performed rather than just reproduce the action regarding the goal it aims at (what one calls "emulation"). See Froese and Leavens (2014).

¹⁸ What is the starting point of Searle's account of social reality (1995)

“an invitation and inducement to act in a needed way. It is a clue in behavior, a directive factor in adaptation of life in its surroundings. It is urgent not cognitive in quality” (*ibid.*) This is when this kind of immediate experience encounters some issues in the adjustment to the situation that a cognitive, mediate and inferential relation to the objects of perception emerges. So Dewey shows how experience can be immediate and non cognitive while including in its content some meaningful features. I think this is a penetrant manner to see how other agents’ intentions can be perceived. From the very beginning, children live with people and learn to perceive them as intentional agents. This learning is not theoretical but firstly vital and practical. They perceive their gestures and behaviors as goal-oriented and teleological since these movements have a practical meaning in the situation in which they are embedded together. In this line of thought, one can say that intentions are objects of perception because they are experienced as meaningful. Thus, I think that Dewey’s conception of experience provides grounds for intentionalism.

But in order to avoid some ambiguity, one has to recognize that “intentionalism” refers to a specific sense of “intentionality”. Here, it must be the *practical* meaning of the term that refers to goal-directedness of behavior and which aims at an end, whether consciously represented or not. This meaning differs from the mentalist property of mental states’ *aboutness*, conceived as internal representations concerning something in the world¹⁹. Therefore, a crucial point in the discussion of collective intentionality with mentalism concerns the meaning we have to recognize for the word “intentionality”. Since pragmatism develops a conception of the mind focused on “conduct”, one can recognize in this tradition a way to defend the primacy of practical intentionality. This is the second relevant feature of pragmatism for our purposes here.

¹⁹ Concerning the relevance of such a distinction for the social cognition’s studies, see for instance Kaufmann & Clement, 2003, 20.

3.2. An adverbial conception of the mind and a practical conception of intentionality

Debates between intentionalism and mentalism rest on different conceptions of what the mind is, and how one must conceive the relations between mind and body concerning actions. Intentionalism denies that action is an *effect* of a mental cause and argues that action *expresses* the mental. Several commentators of classical pragmatism show that this view is already yielded by Peirce, Dewey and Mead. For instance, Cometti writes that for pragmatism “intention is the action”²⁰ and refers to Anscombe (1953) for further developments of this very idea. Without doing justice to the complexity of Anscombe’s conception of intentional action, let me present her view by this well-known quotation of *Intention*: “Roughly speaking, a man intends to do what he does”²¹ (Anscombe 1953, 45). This position is mainly opposed to a conception of intention as a mental state of mind, conceptually distinct from the action itself. Rather, the intention conceived as the mental feature of the behavior *is* the action itself, described in its teleological structure. In this line of thought, intention and action are not even ontologically separable. Thus, if an intention is what confers to a behavior its mental character, then an action is an intrinsically mental behavior. In this regard, one can link intentionalism with the pragmatist conception of action. According to the latter, one can say that the mindedness is a quality expressed in the conduct of a being, in its relation with its environment. It even claims that the most basic sense

²⁰ Cometti (2010, 319) « *l’intention c’est l’acte* ».

²¹ The whole passage is: “And against the background of the qualifications we have introduced, we can epitomize the point by saying ‘Roughly speaking, a man intends to do what he does’ But of course that is *very* roughly speaking. It is right to formulate it, however, as an antidote against the absurd thesis which is sometimes maintained: that a man’s intended action is only described by describing his *objective*.” The main idea I retain here is that the intentional character of an action lies in the whole structure of the behavior, the way it is performed and not only in the goal it aims at. Nonetheless, the crucial point of Anscombe’s analysis, namely that an action is intentional only *under a description*, is left aside here.

of the word “mind” refers to ways of qualifying certain activities much more than denoting some specific entity. Dewey clearly defines the mind by referring to qualities of conduct:

Mind is primarily a verb. It denotes all the ways in which we deal consciously and expressly with the situations in which we find ourselves. Unfortunately, an influential manner of thinking has changed modes of action into an underlying substance that performs the activities in question. It has treated mind as an independent entity *which* attends, purposes, cares, notices, and remembers. This change of ways of responding to the environment into an entity from which actions proceed is unfortunate, because it removes mind from necessary connection with the objects and events, past, present and future, of the environment with which responsive activities are inherently connected. (Dewey 1934/1980, 268)

Underlining the verbal use of “mind”, Dewey defines the thought as an activity in itself. He denounces the view that reifies the mind as an entity distinguishable of the conduct, which becomes the substrate to which one attributes the activities that are indeed performed by the agent himself. This dualistic conception of the relation between mind and body in the action leads to misconceive the way an agent acts, because it disconnects the action and the whole context in which the former has a meaning. Furthermore, one can say that this prevents to think accurately how one actually understands the others’ intentional actions. In fact, their meanings are inherently linked with the environment in which these actions occur; someone who observes someone else acting has to understand this activity as intrinsically linked with its context. From this third-person perspective, the intention of someone’s gesture *is* his or her action itself.

More precisely, according to Dewey, the mind is not a specific activity (a verb) but denotes rather some specific manners of performing activities that can also be accomplished in a non-mental way. Thus, Dewey’s conception of the mental is better qualified as an *adverbial* view, mind qualifying the ways activity are

accomplished²². “Thought, reason, intelligence, whatever word we choose to use, is existentially an adjective (or better an adverb), not a noun. It is a disposition of activity, a quality of that conduct which foresees consequences of existing events, and which uses what is foreseen as a plan and method of administering affairs.” Dewey (1925, 126). If the most sophisticated features of the mind are concerned with forecasting and planning, the fact remains that more basic conducts can still express mindedness. From this point of view, cognitive abilities are fundamentally linked to the *ways* we act, rather than to the *aboutness* of our mental states. Then, if we maintain that intentionality is the specific feature of mental, according to a common conception in contemporary philosophy of mind, we must clarify here that we refer to a *practical conception of intentionality* that Dewey allows to think. According to this view, one has to understand mental phenomena as primarily some qualities of conduct, some ways of acting and dealing with problematic situations.

In this perspective, I think we can find in pragmatism some relevant insights leading to consider that intentionalism thus conceived is an accurate way to answer to issues raised by early intentional activities of children. Indeed, it seems to support the claim that intentions have to be understood from the basic case of intentional action rather than intending to act in the future. Such a view corresponds to Anscombe’s (1953), who asserts that the process of actualizing of an intention has to be understood before the intention to do something later. She postpones the analysis of the former until the last pages of her book (1953, 90-94). Yet this is explicitly what Bratman refuses, saying that “to understand what intentions are we should begin by concentrating on the future-directed case. This is the *methodological priority of future-directed intention*” (Bratman 1982, 379). But this priority is not just a mere

²² This is the reason of the enlightening comparison made by certain specialists of early pragmatism (see for instance Steiner (2008) and Garreta (2012)) between Dewey’s view and Ryle’s adverbial conception of mental terms (Ryle 1949 /1955).

methodological point because it leads to view intentional actions as particular cases of prior intentions to act in a certain manner, where intentions are formed consciously throughout the action²³. But this is not the way we usually act and in most cases; and this is not anymore how children learn to act and to understand how people act.

As a matter of fact, in order to account for children's abilities to perceive others' intentional actions as such, we would better have to focus on pervasive adult practices whereby adults teach, explicitly or not, what a given action is, that is *why* it is performed in *this way*. To answer the question "why" is not fundamentally to mention the end the actor consciously aims at, but rather to state an internal structure of the conduct itself. I think that an adverbial conception of the mind which makes intentionality a basically practical concept permits to conceive that one of the main features of cognitive education humans provide to their young consists in teaching how to perceive a structured action. In this perspective, studying the several cultural patterns of early relationships between infants and caregivers could provide insightful data concerning human cognition specificity²⁴. These social practices consisting in settled ways of acting are doubtless crucially important for the later developments of the ability to understand intentional actions. Furthermore, this leads to the third point I want to make here concerning relevance of pragmatism for issues regarding collective intentionality and action, that is a social conception of the mind.

²³ Although Tomasello has argued that his research supports the view that young children have an understanding of prior intentions, data support a less controversial claim, that young children perhaps even infants can perceive intentions-in-action, yet conceived in a non-searlian way.

²⁴ Therefore the comparative study of social learning on the one hand, and cultural learning on the other hand, led by Tomasello and his colleagues, is of outstanding importance: Tomasello et al. (1993; 2016.)

3.3. The importance of reasoning on essentially collective actions

Among classical pragmatists, Mead is the one who most emphasized the intrinsically social nature of the mind. Furthermore, one can understand his work as defending the idea of an intrinsic sociality of action. Thus, Nungesser argues that Meads claims that "human agency is in itself an intersubjective process, which must be explained on the basis of the individual's embeddedness in human sociality" and that this is "a systematic claim about human agency and action" (Nungesser 2016, 252). One of the most important Meadian concepts concerning issues of collective agency and intentionality is "the social act", that is an action that can only be performed by several agents doing their own parts. There is not only a differentiation between complementary roles, but also a form of interdependence in the *performance* of the action. This is what happens in the paradigmatic case of conversation of gestures developed by Mead in *Mind, Self and Society*. The later development of conversation of significant gestures involving language follows broadly the same pattern.

Without going into the details of the relations between these two kinds of communication, I would rather focus on the simple fact that, according to Mead, it is obviously necessary to study collective and cooperative activities from the perspective of intrinsically collective actions that are actions that can not be performed alone. Indeed, conversation and communication are logically and ontogenetically made with a partner. The possibility to internalize the presence of the interlocutor and to be able to have an internal conversation, that is a private thought, develops later. Firstly, it is an intrinsically *social* act. This point is important regarding the way Bratman, by contrast, conceives the analysis of cooperative or even joint activities. According to him, in order to avoid problems of circularity in the analysis, we have to study some specific actions, i.e. actions that do not already bring in the very idea of cooperation, otherwise we do not show

how the goal to perform something *together cooperatively* can be engendered from mere individual intentions. Thus he recommends to reason from actions whose joint performance may be cooperative, but need not be. This is how he draws a distinction between “cooperatively loaded joint-act-types”, e.g. solving a problem together, and “cooperatively neutral joint-act-types”, e.g. going to New York together or painting the house together (Bratman 1982, 330). In the latter case, there is a clear sense in which two persons can go to New York together without their activity being cooperative. This is the reason why he writes, “our analysis of shared cooperative activities should appeal to intentions in favor of joint activities *characterized in cooperatively neutral ways*” (*ibid.*).

Yet, it seems that other accounts of collective intentionality approve more or less implicitly this priority of actions that could be performed alone or together but being not intrinsically cooperative. Gilbert’s main example is two people going for a walk together and Searle’s is two people making a hollandaise sauce, both examples are actions that could be performed alone or even together but not cooperatively. The choice of such actions is therefore all but insignificant and I agree with Baier who asserts: “I find an individualist bias to be discernible in all these accounts [...] But why should we take the first person singular to be more self-explanatory than the first person plural?” (Baier 1997, 17-18) Baier accurately notes that accounts of collective intentionality and actions begin with analysis of individual intentions and actions and subsequently look at shared or collective intentions. Yet, and in line with Mead’s view, we can rather think that interactions have to be considered first in order to understand individual actions thereafter.

Baier notes:

Some features that [Bratman] has to take pain to specify, in order to make the activity “cooperative”, depend upon the fact that this activity of house painting is only accidentally shared. [...] Now if what we were doing was essentially a two-persons activity, such as singing

a particular already composed duet [...], then a certain degree of meshing will be built in [...] The nature of the activity, not just the limits of human power, rule out doing this sort of thing on one’s own. (Baier 1997, 22)

Thus Baier thinks that collective and cooperative activities have to be studied from cases of cooperatively loaded activity. It is worth noting that when Rakoczy examines the social background necessitated by cooperative early games of pretense in the paper stated above, he supports the view that these activities have to be understood as originally cooperatively loaded:

One interesting possibility, inspired by the Vygotskian tradition and its notion of internalization and by Mead (1934), is that for a given act type it does not remain constant over developmental time whether it counts as cooperatively neutral or cooperatively loaded; specifically, that it is primarily cooperatively loaded, i.e. essentially tied to joint execution, and only in a derived way becomes cooperatively neutral. [...] [I]nitially pretense is cooperatively loaded for young children, is essentially pretending together, and only later – through internalization – becomes possible as a solitary and cooperatively neutral act type. (Rakoczy 2006, 121-122)

Therefore, we would better have to study early intentional interactions between young children and caregivers and adults as essentially collective actions, whose complex intentional structure does not have to be built only from the cognitive resources of interactants but first and foremost from the action’s structure itself. The intentional structure of the action does not have to be mentally scaffolded before being displayed. In this perspective, it will be crucial to study how adults teach children the way to do such things with particular attention to the cases of failed attempts i.e. when young children stop the interaction and adults reengage them, e.g. “this is not the way we build something together” or “please, help me to dress you by giving me your hand”. This is how we can take seriously the fact that interaction between young children and adults is ontogenetically fundamental, considering that partners do not have the same cognitive abilities, nor the same

perspective at first. Doing so, we could understand how the child can progressively internalize more and more complex patterns of intentional actions from an initial and also progressive sharing of essentially cooperative actions. Thus, I think that Mead's conception of human agency as essentially social provides relevant insights against the implicit priority of individual agency prevailing in the main philosophical accounts of collective agency and intentionality. Furthermore, his conception of the emergence of the self from social interactions gives crucial elements concerning the problems raised by the theory of mind; this is the last point.

3.4. Sense of the self derives from sense of the others as selves

Mead is well known to have given an account of the social nature of selves, asserting that self is a product of our interactions and does not preexist to them. In a paper where he compares the different theories of mind²⁵ with Mead's conception of the self, McVeigh notes that since Mead conceives the selves as socially constituted, his view is "fundamentally at odds with both theories of mind" (McVeigh 2016, 221). According to Mead, there is no such thing as a "problem of others" that is the issue concerning how an individual can be ensured that other people with mental life exist as he himself does. In fact, this cartesian question only makes sense if one conceives that what is fundamentally given is a certain sense of "me" as a self, having an internal

²⁵ This concerns the debate about how the theory of mind is actually realized. Two main models are confronted: theory-theory and simulation theory. The former maintains that our understanding of others as psychological agents stems from an implicit knowledge of psychological laws and theories (several versions of this conception are developed and refined). In contrast, the simulation-theory explains our understanding of others from the ability to take their own perspective and imagine the situation from their point of view. One simulates the way someone else perceives, thinks and acts, from a first-person point of view, as putting herself in the other's shoes. For a clear presentation of these debates and their relation with Mead's position, see McVeigh (2016, 215-221).

mental life immediately perceived as such. But Mead argues on the contrary that the self is not a precondition for our interactions with others, but rather a product of them, since an individual begins to conceive him or her as a self after he or she has managed to internalize the others as selves:

For he enters his own experience as a self or individual, not directly or immediately, not by becoming a subject to himself, but only in so far as he first becomes an object to himself just as other individuals are objects to him or in his experience; and he becomes an object to himself only by taking the attitudes of other individuals toward himself within a social environment or context of experience and behavior in which both he and they are involved. (Mead 1967,138)

Here, again this conception leads the inquiry toward the actual and concrete interactions humans²⁶ perform in order to understand how the self emerges. As McVeigh notes, quoting Mead: "In that sense, the appropriate question to ask is not how we are logically sure others exist but how we personally come to exist as a self amongst others: "what is there in human social conduct that gives rise to a 'me,' a self which is an object?" (Mead 1925, 405) This inverts the problem of other minds and rightly focuses on the developmental issues faced by an individual self." (McVeigh 2016, 222).

This perspective leads to deny that children have to experiment their own mental states and abilities for intentional behavior before being able to recognize that others have their own and act similarly. This is Tomasello's general view, asserted in the paper we discussed above and elsewhere: "our general view is that infants begin to understand particular kinds of intentional and mental states in others only after they

²⁶ Again, by focusing here on main accounts of collective intentionality I did not say anything about the question concerning the comparison between human and other animal species, which is yet a central concern (*per se* and in Tomasello's works). Let me just say that this idea of seriously considering actual interactions applies also to comparative studies between animal species; the importance of observation in the wild, added to experiment in laboratory, has to be noted both for human and non-human species.

have experienced them first in their own activity and then used their own experience to simulate that of others" (Tomasello et al. 2005, 688). On the contrary, for Mead, this is social process and interactions that make progressively arise the self and self-consciousness when an individual adopt the perspectives of pre-existing others toward him or her. "Since I seem to be like *them*, any new understanding of *their* functioning leads immediately to a new understanding of *my own*. I subsequently simulate other people's psychological functioning to constitute my own" (McVeigh 2016, 224). Then, what is internalized is the psychological functioning of others understood on the basis of fundamental interactions with them.

It is worth emphasizing the convergence between this Meadian line of thought and some critics already mentioned concerning main accounts of collective agency and intentionality such as Baier's. According to her, there is something like a "Cartesian brainwash" that leads us to think that we cannot conceive of not taking the first person singular to be the place to start (Baier 1997, 18). Yet we could as well

see solo action as in a way the least simple, having to be construed as managing without our usual helpers. (We routinely do construe a child's first attempt to walk alone, dress herself, or manage her bike alone in this way)[...]. We make unnecessary philosophical problems for ourselves if in our philosophy we forget that individual action was something we all have to learn and that we learned it as a departure from common action" (Baier 1997, 22- 29).

Far from being obviously simpler, individual action can also be seen as a complication of collective actions. This is true from an ontogenetically perspective, essential for our topic here, but it may be argued that this is also true from a logical point of view, many of our individual actions necessitating the presence and participation of others. Against the apparent patency of the primacy of individual actions, Baier brings to the fore some facts linked to our mammalian nature:

If our physical separatedness is what supports our biases in favor of methodological individualism, they could perhaps be countered by reminding ourselves of our origins, of the time when basic involuntary bodily activities such as nourishment and growth and removal of bodily waste were necessarily common, where one pair of kidneys functioned for two persons, where the two grew in size together. It is our separatedness, not our togetherness, that originally needed initiative and assistance from others. The question "how is individuality and individual action possible?" is just as good a question as the more usual one, "How is collective action possible?" (Baier 1997, 43)

I see a deep continuity between these recent lines of critics toward main accounts of collective actions and intentions as being too individualistic, and the classical pragmatist approach. Generally, it seems that we can find decisive arguments in early pragmatism leading to consider first that, intentionality is fundamentally a practical notion rather than a representative conception of the property of 'aboutness' of internal mental states. Second, that the mind or the thought is expressed by ways of acting rather than the cause of the actions, and consequently that intentional actions have to be studied from the fundamental case of non pre-planned actions. Third, that collective actions are best understood from cases of essentially collective actions rather than from cooperatively (or collectively) neutral act types. And fourth, that one can argued that there is something like an ontogenetic primacy of the sense of "we" upon the sense of "I". Last but not least, I think that one can find in pragmatism (classical and later "analytical") some strong arguments concerning the logical primacy of multi-persons actions upon individual ones, and this concerns both cooperative and non-cooperative actions, such as conflicts and hostile activities. Here are some main features of an alternative conception of collective agency and intentionality, which has to be built.

Conclusion

We wondered here how to account for Tomasello and his colleagues' empirical researches concerning early abilities of children for collective intentional actions, exposed in Tomasello et al. 2005. The point was that their data were hardly understandable from the philosophical background they have chosen as a model of collective or shared intentionality, namely Bratman's account of shared cooperative activities (Bratman 1982). The main issue concerns the cognitive sophistication required by this account, i.e. the ability of participants to have high order intentions, that is intentions concerning others' intentions. In other words, Bratman requires that the agents have a robust theory of mind expressed in the ability for mind reading. However, there is strong evidence according to which children begin to possess these abilities around four years of age, long after they display collective intentional interactions. Furthermore, this requisite is more or less present in most of the available philosophical accounts of collective agency and intentionality.

Studies focused on a specific kind of early cooperative interactions, games of pretense, offer some elements of modification of these accounts, in particular a perceptive requisite of joint attention instead of the cognitive criteria of common knowledge. Yet I argued that this modification is coherent only if one considers intentions perceived, and collective intentions thus formed, as being not some mental and internal causes of movements. Therefore, it is the whole picture of the intentional action depicted by the causal theory of intention that has to be modified. In order to provide insights for such a modification, I brought recent criticisms of collective intentionality's debates together with a classical pragmatist conception of mind, action and sociality. Thus, I defended a practical intentionalism, according to which agency is not only fundamental for the development of human cognitive abilities, but also that collective agency is itself originally fundamental. Hence, I can now defend a terminological choice to avoid

an ambiguity present in the whole paper: we should better speak of "collective intentionality" rather than of "shared intentionality", since the latter seems to refer to something that is first possessed by one and only after separated between several persons. On the contrary, we can assert that there is a sense according to which we collectively do things with others, before doing things alone and being able to share.

To conclude, I will refer to a commentary of Tomasello's book, *Origins of Human Communication* (2008) offered by H.B. Schmid. The author reveals a tension in Tomasello's conception of collective intentionality between "a mentalist or intentionalistic²⁷ account" and "a practice account". According to the former "whether a complex of behavior instantiates joint actions, or whether it is simply an aggregate of individual actions depends on whether it is intended *collectively*, or individually. From an empirical point of view [...] since the difference is in the mental infrastructure, there is ultimately no way to decide the question on the base of the observable behavior" (Schmid 2011, 8) This is exactly how we defined mentalism. Schmid continues: "The opposing view [the practice account] holds that the relation between practice and intention runs the other way around: it is the *practice* that determines what the intentional attitude of the participants is (ibid.)". I agree with the observation of an ambivalence of Tomasello's conception between these two accounts but against Schmid, I think that the practice account – which we called practical intentionalism – is the better way to understand at least early abilities displayed by young children for collective actions. This view is supported by a broadly pragmatist conception of what intentional actions are. This is not to say that mentalist accounts such as Bratman's do not have any relevance. They fit well with certain specific kind of joint actions, which require a great cognitive sophistication in order to plan

²⁷ Here is the ambiguity of the term « intentionalism » that I tried to avoid in 3.1 and 3.2, a noun used by very different philosophical perspectives, namely mentalism and anti-causalism.

and share each partner's participation. Neither does it say that we expect from empirical researchers such as Tomasello to arbitrate between philosophical views. Yet, it seems that empirical data they provide are better understood from the practice-oriented account, rather than from the mentalist one. In general, this defense of a practical conception of collective intentionality leads to view these kinds of practices in which it is expressed as fundamental in regard with the understanding we shall have of human life as a whole. This is consistent with an idea developed by a colleague of Tomasello according to whom collective intentionality has to be thought of as a feature of "the human form of life" rather than of "individual" (Kern & Moll 2017, 3), being pervasive in the whole of our existence. If the authors refer this "transformative conception of collective intentionality" to the Aristotelian-Wittgensteinian tradition, I hope having shown here that this can be bound with classical pragmatism as well.

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