The Implications of the Second-Person Perspective for Personhood. An Application to the case of Human Infants and Non-human Primates

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RESUMEN

Proponemos un enfoque intermedio del concepto de persona basado en la capacidad de participar en interacciones intersubjetivas. Articulamos esta propuesta como respuesta a las aproximaciones generosas y restrictivas defendidas, respectivamente, por Mark Rowlands y Stephen Darwall. Argumentamos que ambos enfoques carecen de las herramientas para discutir los casos fronterizos y defendemos un enfoque intermedio: el criterio para ser persona basado en la perspectiva de segunda persona de la atribución mental. Según esta propuesta, una persona debería ser capaz de participar en interacciones intersubjetivas. Aplicamos este enfoque a los casos fronterizos de los primates no humanos y los niños pequeños.

PALABRAS CLAVE: *persona; perspectiva de la segunda persona; intersubjetividad; primates no-humanos; infancia.*

ABSTRACT

This paper proposes an intermediate account of personhood, based on the capacity to participate in intersubjective interactions. We articulate our proposal as a reply to liberal and restrictive accounts, taking Mark Rowlands' and Stephen Darwall's proposals as contemporary representatives of each view, respectively. We argue that both accounts fall short of dealing with borderline cases and defend our intermediate view: The criteria of personhood based on the second-person perspective of mental state attribution. According to it, a person should be able to participate in intersubjective interactions. We apply our proposal to the borderline cases of non-human primates and human infants.

KEYWORDS: *personhood; second-person perspective; intersubjectivity; non-human primates; infancy.*

Whilst we were working on this draft, the Spanish Congress of Deputies approved a draft law calling for a legal status for domestic animals other than material goods. Until that day, non-human animals had been considered "goods" by the Civil Code, yet the draft law taken to Congress

aims to recognize them as "sentient beings". This discussion on the legal status of non-human animals relates to a pioneer court ruling: in 2016, in Mendoza (Argentina), the chimpanzee Cecilia was recognized as a non-human subject of law, becoming the first non-human person legally recognized. Cases such as Cecilia's are related to the classical, philosophical question about the criteria for personhood.

This question is especially difficult for borderline cases, such as non-human primates and human infants. Highly demanding, restrictive proposals are prone to false negatives: they might not consider as moral subjects some creatures that we intuitively would consider as such. For instance, accepting highly restrictive criteria might entail that preverbal infants or even some human adults should not be recognized as moral subjects. Conversely, minimal, liberal proposals are prone to false positives: they might consider as moral subjects some creatures that we intuitively would not consider as such. For instance, accepting softer criteria might entail that all non-human animals should be granted personhood. The problem with both kinds of proposals is that they are not sensitive to borderline cases.

In this paper, we propose an intermediate account of personhood, based on the capacity to participate in intersubjective interactions. We articulate our proposal as a reply to both liberal and restrictive accounts. We take Mark Rowlands' and Stephen Darwall's proposals as contemporary representatives of the liberal and the restrictive views, respectively. We argue that both views fall short of dealing with borderline cases and defend our intermediate view: the criteria of personhood based on the second-person perspective of mental state attribution. According to this view, a person should be able to participate in intersubjective interactions.[1] We apply our proposal to the borderline cases of non-human primates and human infants.

I. SEARCHING FOR THE CRITERIA OF PERSONHOOD

I.1. *Mark Rowlands' Liberal Account*

In his last proposal, Rowlands [(2016a), (2016b)] claims that being a person requires having a unified mental life. To fulfill this requirement, Rowlands follows Locke and views the person as a self-reflective entity with the ability to "consider itself as the same thinking thing, in different

times and places" [Locke (1690/1961), p. 280]. However, Rowlands' account (2016a) departs from Locke's view in rejecting that self-awareness must be reflective and that mental unity must endure in time [Barone & Gomila (2016)].

Entities capable of having experiences, that is, experiencing something "as something", fulfill Rowlands' criterion of a unified mental life. According to him, having experiences implies holding implicit expectations and anticipations related to the type of things that will happen to the self and can be equated to pre-reflective awareness of oneself. Whatever entity capable of having experiences would show the sort of mental unification required for personhood [Rowlands (2016b)]. Consequently, if non-human animals have experiences, they count as persons. Rowlands' account is liberal as it reduces the criteria of personhood to a minimum set and amplifies the scope of personhood including all non-human animals. Nevertheless, his proposal faces at least two shortcomings (see Barone & Gomila (2016), (2019), for a more detailed account).

On the one hand, the problem of the borderline cases disappears in Rowlands' account. "Having experiences" is the key criterion that turns all the borderline cases, like non-human animals, into central ones. This disregards certain key aspects in understanding personhood, such as a sense of self or agential structure. On the other hand, the normative strength of personhood is absent in this liberal conception. Rowlands strictly sets apart metaphysical, moral, and legal notions of personhood although such dimensions seem closely interrelated: the metaphysical notion involves a psychological sense, and these psychological characteristics guarantee a moral status [Andrews (2016)].

Rowlands [2016b] believes that being a metaphysical person is necessary but not sufficient to be a moral person. However, he specifies no other criteria for being a moral or a legal person. Dismissing non-human animals' moral and juridical status while just focusing on the metaphysical definition is also questionable: across-the-board conceptions in distinct disciplines would ease the resolution of borderline cases.

I.2. *Stephen Darwall's Restrictive Account*

Stephen Darwall's (2006), (2009) proposal is a contemporary representative of the restrictive view of personhood, in line with the Kantian perspective. According to this view, persons are free and rational agents who should be able to self-determine their behavior according to their own maxims, and to assess those maxims according to the practical use of

the pure reason [Kant (1788/1996)]. Darwall (2009) adds a relational dimension to the Kantian view: personhood can only be captured under the second-person standpoint. Persons judge their behavior and their own maxims according to what the members of the moral community, including themselves, could legitimately hold them accountable for not doing without excuse [Darwall (2006)]. This deliberation requires second-person competence.

The second-person competence is composed of a set of psychological processes [Isern-Mas & Gomila (2020)]. The second-personally competent agent must be able to give and ask for reasons. For instance, when someone is held accountable for a transgression, they must be able to give reasons for their behavior, and to ask for reasons from those who reproached them, should that reproach be unjustified. This practice of holding each other accountable requires perspective-taking, emotional self-regulation, mental state attribution, and sensitivity to others' demands [Darwall (2006)]. Because we can implicitly hold each other accountable through the expression of moral emotions and reactive attitudes [Strawson (1974)], the practice of holding each other accountable does not need to be verbally addressed. In Darwall's most paradigmatic case, if someone steps onto someone else's foot, the person whose foot has been stepped onto might demand with an emotional expression that the other person moves their foot. If the person who has stepped onto the other's foot accepts the demand, they will move their food.

Contrary to Rowland's proposal, Darwall preserves the normative strength of the concept of personhood. Yet his highly demanding criteria for personhood are not sensitive to borderline cases. Darwall's proposal is especially restrictive because the second-person standpoint is not the specific standpoint of a member of the moral community, that is, it is not anticipation, nor an empirical expectation. Rather, it is an ideal one [Wallace (2007)]. According to Darwall, when agents assess the morality of their behaviors, they do not consider what flesh and blood members of the moral community would demand from them; instead, they consider what an abstract and rational member of an ideally moral community could legitimately demand from them.

The ideal nature of the moral community makes Darwall's proposal normative, rather than descriptive, and especially restrictive. For an interaction to be second-person, according to Darwall, agents must (i) assume their right to address demands and hold others accountable for noncompliance, (ii) recognize the behavior as a legitimate demand, and (iii) recognize others' right to equally address demands and hold others accountable

for noncompliance. All these assumptions entail the capacity to take an impartial perspective and to adapt one's behavior according to this perspective.

Even though second-person interactions might be implicit, through the expression of moral emotions and reactive attitudes, these could hardly take place in creatures devoid of language [Gomila (2012)]. Consequently, because Darwall's second-person interactions are not suitable for human infants or non-human animals, they should not count as persons. Hence the restrictive nature of his proposal.

I.3. *An Intermediate Account: Second-Person Perspective of Mental Attribution*

The criterion for personhood should take into account the capacity to engage in second-person interactions, described according to the second-person perspective. This criterion allows fined-grain discrimination, especially regarding borderline cases, and it preserves the normative strength of personhood. Additionally, it suggests a non-anthropocentric criterion and an intermediate account between Darwall's and Rowlands' views.

The second-person perspective of mental attribution accounts for a type of interaction based on direct, implicit, and pragmatic mental state understanding in face-to-face interactions [Pérez & Gomila (2021)]. From this account, mental attributions rely on behavioral expectations, and perceptive and expressive cues that are recognized as intentional but not on the attribution of propositional contents [Gallagher (2001); Pérez & Gomila (2021); Reddy (2008)]. Emotional expression, thus, becomes relevant.

This understanding of mental attribution is supported by studies showing that babies can detect a genuine interaction with another person and recognize the other's emotional expressions and their contingency, that is, whether the other's expressions respond to their own [Trevarthen (1979)]. Caregivers and babies recognize, adjust, and coordinate each other. Therefore, babies respond when the interaction breaks by showing negative emotions and anxiety. For instance, if the mother's face remains still, stopping the interaction [Weinberg & Tronick (1996)] or if the mother's response is not contingent on the babies' expressions [Murray & Trevarthen (1985)].

Second-person mental attribution is genuine and irreducible to first and third-person attributions [Pérez & Gomila (2021)]. Baby-caregiver interactions cannot be mediated by a theoretical and inferentialist device such as theory of mind (ToM) but are realized in second-person attribu-

tions, which are more basic than ascribing propositional states. As the previous studies show, second-person attributions are evident in face-to-face interactions and are characterized by reciprocal contingencies: each agent responds to the other's expressions in real-time and in a feedback loop.

To be considered a person, an agent should be able to engage in second-person interactions. This criterion is sensitive to borderline cases. Personhood emerges from the second-person interactions among the members of the moral community, whether those are explicit, through verbal reproach, or implicit, through emotional expressions. Consequently, second-person interactions allow for developmental and evolutionary continuity, as these interactions might start before the acquisition of language. Therefore, a requirement for personhood is being able to participate in intersubjective interactions, that is, face-to-face interactions in which each partner adapts their behavior to the other one, with no need for verbal interaction.

On the other hand, second-person interactions allow us to account for the normativity of personhood [Isern-Mas & Gomila (2018)]. They enable us to distinguish between animated beings and inanimate objects, to make demands on those who can understand them, and to hold them accountable, either explicitly or implicitly, in case of noncompliance without excuse. For instance, when we express indignation at an unfair distribution, we communicate that we do not accept that distribution. This reaction would be different should that distribution be made by a machine [Engelmann et al. (2017)], or randomly [Engelmann & Tomasello (2019)]. Yet if the distributor is recognized as an intentional agent, we hold them accountable for an unfair distribution, that is, we demand recognition. These second-person interactions allow us to coordinate and develop norms and normative expectations [Pérez & Gomila (2021)]. This is how the concept of personhood acquires a normative dimension.

It is noteworthy that second-person interactions do not warrant mutual recognition or moral behavior. Yet they are a necessary condition for the emergence of both mutual recognition, and moral behavior. Intersubjective interactions might give rise to normative expectations, and demands for recognition, as well as conflict and immoral attitudes [Corbí (2005); Pérez & Gomila (2021)]. In other words, a fight for recognition is possible [Honneth (2021)] and this fight would also take place through second-person interactions. Consequently, second-person attributions become a necessary, although not sufficient, psychological basis for the emergence of morality and normativity.

II. Evidence of the Second-Person Perspective in the Borderline Cases

II.1. *Second-Person Perspective During the First Two Years of Life*

Research on the capacity to participate in intersubjective interactions with other agents has been framed around the issue of possessing ToM or not. ToM is the capacity to attribute mental states (desires, beliefs, intentions, etc.) to others [Krupenye & Call (2019)].

In its beginning, research on ToM used non-human primates as participants to see whether a chimpanzee understood their caregiver's mental states [Premack & Woodruff (1978)]. Later, the discussion moved to the field of developmental psychology, but it was focused on the attribution of a specific mental state: false beliefs [Wimmer & Perner (1983)]. Grasping that an agent holds a false belief (FB) involves detecting that she has information incongruent with reality and that such information guides her behavior. The full-blown, sophisticated capacity to attribute FBs is evident after children's fourth birthday when children succeed in the explicit FB task [Wellman et al. (2001)]. According to such a perspective, younger children who systematically fail the FB task cannot attribute FBs and, hence, do not possess ToM. Nevertheless, younger children do participate in intersubjective interactions before the age of four which involve mental attributions, although not ToM. Indeed, young children show their mental understanding through second-person attributions: for example, babies recognize another intentional agent through their expressive and emotional reactions [Hobson (1993); Trevarthen (1979), (1998)].

Not only do babies recognize if a genuine intersubjective interaction takes place [Trevarthen (1979)] but they can also anticipate the caregiver's behavior, detecting her intention and adjusting accordingly [Reddy et al. (2013)]. Specifically, when the mother moves her arms near the baby, the baby detects her intention to pick them up and adjust their body accordingly.

Triadic interactions by the end of the first year of life are richer, as the child and the caregiver are reciprocally engaged with an object or event that is of mutual interest for both [Trevarthen & Hubley (1978)]. In such interactions, the child and the caregiver hold an intentional relation with the object which is roughly aligned so that each participant experiences his own intentional relation with the object, the intentional relation of the other, and the degree of alignment between them [Moore & Baressi (2017)]. A clear example of a triadic interaction is joint visual attention, in which the infant follows or directs the gaze of their caregiver to jointly

attend to an object or an event [Gómez (2005); Trevarthen & Hubley (1978)], trying to reach an alignment of the epistemic intentional relationships towards such an object or event [Moore & Baressi (2017)].

In triadic interactions, children grasp an agent's basic intentions [Meltzoff (1995); Woodward (2009)] and react accordingly. 12-month-old children distinguish if the experimenter is unwilling or unable to give them a toy and they respond according to the detected intention [Behne et al. (2005)]. Moreover, children at this age track what an agent has and has not seen during a triadic interaction and inform her appropriately. For instance, children spontaneously point to the object's new location if the agent was absent when the object was moved [Liszkowski et al. (2006)] or whether she was looking to another side when the object fell on the ground [Liszkowski et al. (2008)]. In doing so, children try to update the agent's intentional relation with the object.

More recent evidence suggests that young children might attribute FBs. In some indirect FB tasks, 18-months-old children expect another agent behaves according to her beliefs [see Scott & Baillargeon (2017) for a review]. These indirect FB tasks are simpler than the standard, traditional FB tests that children overcome at 4 as they do not require a verbal answer and have less demands on executive control and memory. Indirect FB tasks use young children's automatic or spontaneous behaviors as measures of their FB understanding, such as longer looks at events that violate their expectations [Onishi & Baillargeon (2005)], first look to a specific location [Southgate et al. (2007)] or interactive behavior like helping or pointing [Buttelmann et al., (2009)].

Although more than 50 studies using indirect FB measures have been published, the available evidence is inconclusive about whether young children really attribute FBs in such tasks [Barone et al. (2019)]. The main problem lies in the high heterogeneity of the results, suggesting that other factors could explain the effect, like the type of paradigm employed. Young children perform better in the violation-of-expectation paradigm than in others.

From the second-person perspective, tasks considering children's interactive behavior are the most compelling since the experience available to the participants of an interaction is richer and qualitatively distinct than in non-interactive settings [Moore & Barresi (2017)]. The pioneering study within this paradigm aimed at showing that belief attribution emerges within the context of intention attribution [Buttelmann et al. (2009)]. In the task, an adult and the child play with a toy and, before the adult leaves the room, she puts the toy in box 1. In the true belief (TB) condition, the experimenter

transfers the toy from box 1 to box 2 before the agent leaves the room and, once she is outside, the experimenter locks both boxes. In the FB condition, the agent leaves the room immediately after putting the toy in box 1. While she is outside, the experimenter transfers the toy to box 2 and locks both boxes. In both conditions, the agent comes back to the room and tries to open, unsuccessfully, box 1 (where she originally left the toy).

Even though children spontaneously helped (they knew how to unlock the boxes), the type of help provided varied. In the FB condition, most children opened box 2 (the object's actual location) presumably detecting that the agent failed to see the change of location, and assuming that she might be looking for her object when trying to open box 1 (*she mistakenly believes that the object is in box 1*). However, in the TB condition, most children opened box 1 probably assuming that, as the agent saw the object's change of location (*she has a TB about the object's final position*), she might hold a different goal in attempting to open and explore the empty box.

Although Buttelmann and colleagues' study could not be replicated [see Barone et al. (2019) for a review], children do not need to attribute beliefs to overcome this task. Given an intentional comprehension of the agent as trying to do something with the box she tried to open, children helped her. In the FB condition, since the agent did not see the object's new location, children spontaneously attributed her the *intention* to retrieve the toy and thus opened the box that actually contained it. In the TB condition, instead, the agent and the child jointly attended when the object was moved to the other box. Hence, children detected the agent's intention to open that specific box and helped her to open the empty box.

Therefore, according to the second-person account, young children should show an ability to track the object's position and trajectory, the agent's look, and keep this information integrated into working memory to succeed in this and other indirect FB tasks [Barone & Gomila (2020)]. Indirect FB tasks require participants to understand the agent's intentional behavior, that is, her goal-directed behavior, but not to attribute propositional states. Indeed, if young children possessed the ability to attribute FBs, they would respond adequately and flexibly to the wide variety of situations presented in the different tests, but not only in a specific type of task or within a specific paradigm.

In conclusion, the empirical evidence suggests that children during the first two years of life can participate in intersubjective interactions and are sensitive to the different mental states of the agent. Although the attribution of propositional states lies beyond the possibilities of two-year-old children,

they cannot be excluded from successfully participating in second-person interactions. Therefore, they might count as persons.

II.2 *Second-Person Perspective in Non-Human Primates*

The possibility that some non-human primates may possess a sort of normative cognition has only recently been considered. Therefore, empirical work on this topic is scarce (see Fitzpatrick (2020) for an extended review). The most relevant evidence comes from anecdotal observations in wild primates. In several groups of chimpanzees (*Pan troglodytes*) it has been reported that, after successful cooperative hunting, they distributed the meat according to the degree of participation in it, independently of individuals' social rank [Boesch (2002), (2012)]. Studies on captivity have shown that chimpanzees manifested disagreement with inequitable distribution of rewards when they did the same task as another individual but received a lower reward [Brosnan (2005)] and that a group of chimpanzees ostracized a young chimp that did not show "appropriate" behaviors (e.g., submission gestures) towards higher rank individuals [Nishida (1995)]. Furthermore, although extremely rare, there are reports of wild chimpanzees showing behavior suggestive of third-party punishment [Fitzpatrick (2020)].

As for reciprocal contingency, it has been detected in several interactive contexts. For instance, chimpanzees give differential treatment to sick, injured, or disabled individuals, recognizing and adjusting their behaviors to their needs [Fitzpatrick (2020); Pérez-Manrique & Gomila (2018)]. They also adapt their behaviors to infants, towards which they are highly tolerant [Fitzpatrick (2020)]. But the greater adaptation to the behavior of an interacting partner is observed in social play. In addition to using specific facial signals to indicate that they are playing and to avoid misunderstandings, individuals moderate their strength by adapting to each other, especially when adults play with juveniles [Fitzpatrick (2020)].

On the other hand, studies on mental state attribution and perspective taking in non-human primates are more numerous. In general, these studies could be divided into two groups [Krupenye & Call (2019)]: 1) studies about primates' understanding of motivational states, like goals and intentions, and 2) studies about primates' understanding of cognitive or epistemic states. The first group of studies suggests that apes like chimpanzees identify others' motivational states. For example, in several instrumental helping experiments chimpanzees seemed to perform a cognitive evaluation of the situation and needs of another individual to appropriately help their partner achieve its goal [Greenberg et al. (2010); Melis et al.

(2011); Yamamoto et al. (2009, 2012)]. They also helped humans with simple tasks such as approaching an out-of-reach object, which requires identifying the human's goal [Warneken & Tomasello (2006); Warneken et al. (2007)]. Measuring participants' eye movements, a study showed that several species of apes (chimpanzees, bonobos (*Pan paniscus*) and orangutans (*Pongo pygmaeus*)) predicted the actions of a human arm based on their previous actions [Kano & Call (2014)]. Thus, these apes could have attributed a goal or an intention to those actions. Furthermore, chimpanzees could be aware that other individuals have desires, even if those desires are opposed to one's own [Buttelmann et al. (2012)]. These apes were able to rely on the experimenter's emotional expressions of happiness or disgust towards the contents of a box to infer what food the experimenter would have eaten, even if this choice was contrary to their preferences.

Additionally, chimpanzees and capuchin monkeys (*Sapajus apella*) seemed to distinguish when an experimenter was reticent or unable to perform an action [Call et al. (2004); Phillips et al. (2009)]. These primates were more frustrated and left the area faster when the experimenter was reluctant to give them food than when unable to do so. Moreover, capuchin monkeys only behaved in this way when the action was performed by an animated agent (human hands) and not when the food was delivered by an apparatus. In line with these results, chimpanzees and orangutans distinguished an intentional from an accidental action [Call & Tomasello (1998)]. Both ape species correctly chose the box that an experimenter had intentionally marked to indicate the location of the food, distinguishing this box from another on which the experimenter had accidentally dropped the marker.

The second group of experiments encompasses studies on perspective taking of non-human primates, including the ability to distinguish what others can or cannot perceive and the capacity of attributing and recognizing in others' actions beliefs about the world. In general, it seems that both apes and monkeys can identify what others know or ignore. Instead, there is not enough evidence to affirm that they are sensitive to others' beliefs. For example, Rhesus macaques (*Macaca mulatta*) seem to establish a cognitive link between seeing or hearing and knowing [Drayton & Santos (2014); Flombaum & Santos (2005); Krupenye & Call (2019); Rochat et al. (2008); Santos et al. (2006)]. Nevertheless, these capacities seem more robust in apes than in monkeys [Hare et al. (2003)]. Several ape species, especially chimpanzees, inferred what others knew or did not know (e.g., food location) based on what those individuals could see or hear and actively followed their gaze direction [Krupenye & Call (2019)]. Furthermore, these apes frequently used this information to their advantage.

Even in the wild, chimpanzees seem to selectively inform group mates who are unaware of the location of a nearby snake, over groupmates who do have that information [Crockford et al. (2012); Crockford et al. (2017)]. Thus, the evidence suggests that non-human primates possess the ability to understand what others know or do not know about the world based on behavioral cues and that they flexibly use this ability in a variety of contexts.

Most recent studies in non-human primates have focused, as in children, on FB tasks. Many of these studies found no evidence of FB understanding in primates [Krupenye & Call (2019)]. These works tested apes in both cooperative and competitive interactive social contexts that included food. To get the food, these primates had to consider the other ape's FB about the food location, and act accordingly [Call & Tomasello (1999); Hare et al. (2001); Kaminski et al. (2008); Krachun et al. (2009, 2010)]. As in the case of young human children, the most recent studies resort to indirect FB tasks. In fact, some great ape species (chimpanzees, bonobos, and orangutans) might pass indirect FB tests. On the one hand, apes anticipatorily looked where an actor would search for another individual or various objects based on the actor's FB about their location, even though the apes knew they were no longer there [Krupenye et al. (2016)]. On the other hand, apes also responded adequately in the FB condition of an interactive helping paradigm like the one used with children [Buttelmann et al. (2017)]. These results are surprising given that, since Premack and Woodruff's seminal study [1978], no convincing evidence of FB attribution in non-human primates had been found [Call & Tomasello (1999); Hare et al. (2001); Kaminski et al. (2008); Krachun et al. (2009, 2010)]. However, as in the case of infant studies, this positive evidence of belief attribution in great apes has been questioned and further studies are needed to confirm that apes can attribute FBs to other agents [see Horschler et al. (2020)]. Nevertheless, such indirect FB tasks can be overcome with more basic, second-person abilities.

To sum up, the reviewed evidence suggests that some non-human primates have behavioral expectations, understand, and recognize perceptive and expressive cues in other individuals and even recognize some of those as intentional. These animals, especially apes, can also understand certain mental states and emotional expressions, and what is more, they may be capable of adjusting and coordinating their expressions and behaviors to those of others. In addition, some groups of chimpanzees display behavioral patterns that are similar to normative behaviors. In conclusion, according to the analyzed evidence, some non-human primates might participate in intersubjective interactions, since they respond,

like children, in a contingent and appropriate manner in various experimental situations that require sensitivity to the mental states of another individual. Therefore, they could count as persons.

III. Conclusion

The analyzed empirical evidence suggests that non-human primates and infants, two paradigmatic examples of borderline cases, display more complex capacities than merely experiencing something as something (in Rowlands' words). This evidence highlights that infants and non-human primates show mental state attribution in interactive situations and that they can adjust their behavior to the mental states of another individual in a contingent manner. Nevertheless, both nonhuman-primates and infants are unable to adequately adjust their behavior to participate in "plain" intersubjective interactions when they require the attribution of propositional contents. Although children acquire this capacity of understanding and attributing propositional contents during their development, this ability seems to be absent in non-human primates.

However, their inability to attribute mental states with propositional contents does not turn them into mere bystanders of their social environment, as traditional ToM research had assumed. On the contrary, both are able to participate in reciprocal and contingent interactions that require them to be sensitive to certain mental states. Adopting the second-person perspective of mental attribution implies searching for evidence in that direction. Based on the previous exposition, infants meet the requirements to be considered as persons. Accepting this fact also implies accepting the other borderline case, since some non-human primates show similar capacities that meet the criteria to be considered as persons.[2]

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NOTES

[1] Our proposal aims to shed light on borderline cases of personhood, especially those of non-human primates, and human infants. Yet this does not prevent our proposal from having its own borderline cases, such as the cases of those who might have lost their capacity to participate in intersubjective interaction due to adverse circumstances. Our take on these cases is that a person cannot lose their status once they have been recognized.

[2] The order in which the authors of this article appear is strictly *alphabetical*.

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