

Considerations about cognitive empathy

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ABSTRACT : The deliberation in the following paper has the intentional meaning of sparking or raising a doubt about the sustainability of the phenomenon known as empathy (from a cognitive point of view), highlighting the primary question in relation to its nature.

The main focus will be centered (hopefully!) towards an approach that will take into account thoughts about the issue and the moral responsibility, because there is a belief that understanding the phenomenon cannot be excluded from the issue of freedom¹. This belief, though, will be object, in another context, of further analysis, because, at this moment, it is primarily important to reflect either of the nature of free will and the cognitive empathy.

KEYWORDS : *free will, responsibility, empathy, emotionalism, will.*

I. SOME PREMISES: THE PROBLEM OF CHOICE

When in 49 a. C. Caesar decided to cross the Rubicon, he was fully aware that this would have led Rome on the brink of a civil war which, for better or for worse, would change the Urbe, politics and society; certainly the same unanimity would not be on the metaphysical analysis of his choice. If it can be defined as “free” or as a prisoner it is difficult to establish it, since it is equally difficult to understand both what it means and what the concept of *free will* depends on and from which point of view Caesar can be held responsible for the choice made; responsibility understood as an incontrovertible consequence deriving directly from one’s own doing. If this has any correlation with the metaphysical or rational scope of freedom it is, unfortunately, equally controversial to define it.

As we already know, the last few years have been the stage for a re-orientation or reinterpretation of the classic ethical problems in the light of the advent of neuroscience which, with all the technological and interpretative limits to which they are subject, have the merit of having started the *urgency* of a more adequate understanding of human action or, as Nietzsche liked to define, of “the human, too human”. If Caesar’s brain, today, could be subjected to fMRI and to the multivariate modeling analysis (MVPA), neuroscientists would probably more or less agree on the activation of the medial prefrontal cortex (PCF), of the sensorimotor area (SMA), of the rostral cingulate area and, who knows, which other “subareas” still unknown or little studied²; but, certainly, the same “unanimity” would not be found among the philosophers, who, even if they found the data, would have disagreed on their interpretation. What would the discharge of one group of neurons mean instead of another? What consequences would there be for “human freedom”?

Peter van Inwagen, for example, argued - perhaps unaware of neuroscientific data - that where determinism³ was true, Caesar’s choice to cross the Rubicon was neither free nor dependent directly on his will, because he would have never had under his control all the factors that led him to that choice: the physical laws of the universe, the past events of human history or the progress of the world in its complexity⁴.

On the other hand, it is not said that by marrying indeterminism⁵ in its broadest sense, one is able to initiate a psychological analysis of Caesar’s choice, “marking” it as “free”: if the universe is without the rigid causal

¹ In this paper, I will use “freedom” and “free will” as synonyms.

² M. Brass, M. T. Lynn, J. Demanet, D. Rigoni, *Imaging volition: what the brain can tell us about the will in: “Exp. Brain Res”*, n. 299, 2013, pp. 301-312.

³ I’ll be used the generic term “determinism” meaning, in general, the range of all matters that match the causal causation.

⁴ Cfr. P. van Inwagen, *An essay on Free Will*, Oxford University Press, Oxford 1986.

⁵ It will be used the generic term “indeterminism” meaning, in general, the range of all matters that do not match the causal causation

chains that prevent an alternative course of action, where is the direct control of the action itself? In what way, in other words, can the authorship of action be established in a *certain* and *incontrovertible* manner?

One could then hypothesize that a fundamental role in Caesar's choice was dictated by fate which, according to Neil Levy, is “a function of three factors: chance, control and meaning”⁶: by helping us with Wittgenstein, one could say that “the world is all that happens”⁷ so an event could happen so much as not to happen even if nothing changes in the physical history of the universe; on the concept of control, as is known, the diatribes are concentrated between determinists and indeterminists to indicate an action as free or casual: Caesar “was acted” by the causal chain or “acted” as a consequence of his choice? It is certainly true that, from the point of view of the future dictator of Rome, the choice to cross the Rubicon was also significant because it probably was part of Caesar's own destiny, namely “personal traits or dispositions; [...] the way in which one is constituted as a person”⁸.

Nothing excludes, however, that in a science fiction scenario some neuroscientists manipulated the will of Caesar so that if they had noticed, through particular electrodes implanted in his brain, that he had been in doubt whether or not to cross the Rubicon would induce his choice towards what he *de facto* did⁹. The cases of manipulation, that is, with which today some *hard incompatibilism* defend the indeterministic conception of free will, does not totally dispel doubts about the same nature of choice, since we can not ignore the data that some recent neuroscientific experiments show¹⁰: regardless of the shortcomings in which current technologies incur, there is a cerebral activation well 8-10 seconds before the agent's awareness of actually wanting to perform that given action. In other words, there would be a *consecutio temporum* that is quite different from what was commonly held to be: not conscious will as the cause of action, but action as the cause of conscious will¹¹.

If indeed our neurophysiology worked in this way, the explanations of the “consciousness phenomenon” should certainly be reviewed: currently, among the different interpretations proposed, those of Michael Gazzaniga¹² and Daniel Wegner - for some complementary aspects - combine neuroscientific data with the hermeneutics of themselves, arguing that consciousness, in order to appear, would need time: it would be nothing other than a higher-level cognitive function generated by the holistic activity of the brain and, at the same time, causes *apparent mental causation*¹³; so that one is not “always late” with respect to the action performed, the consciousness, appearing a few milliseconds after the motor start of the action itself, would postpone, illusively, the beginning of the action to the motor activity. In this way, the agent would remain in the conviction that he was consciously doing the action, saving the concept of conscious will and free will. In this regard, it is not unusual authors and scholars who claim that free will is a mere illusion: “The phenomenological feeling of free will be very [...] but this strong feeling is an illusion”¹⁴; the neuroscientist John-Dylan Haynes, following the research with the fMRI, argues that the interpretation of the data that can be derived from it is that “[t]here's not very much space for operation of free will. The outcome of a decision is shaped very strongly by brain activity much earlier than the point in time when you feel to be making a decision”¹⁵; and his colleagues, Joshua Green and Jonathan Cohen, conclude: “The net effect of this influx of scientific information will be a rejection of free will as it is ordinarily conceived with important ramifications for the law”¹⁶.

It is obvious that the undoubted metaphysical relevance of the notion of free will inevitably falls on moral concepts that are strongly relevant to social life¹⁷: how could we, in fact, hold Caesar responsible if we discovered that he was not *free* to act and to choose? according to his wishes? It is not by chance that when we

⁶N. Levy, *Quanto conta la sorte per la responsabilità?* In: M. De Caro, A. Lavazza e G. Sartori (Ed.) *Quanto siamo responsabili? Filosofia, neuroscienze e società*, Codice Edizioni, Torino 2013, pp. 157-171.

⁷ L. Wittgenstein, *Tractatus logico-philosophicus*, Einaudi, Torino 2009, proposition 1.

⁸ N. Levy, *Quanto conta la sorte per la responsabilità?*, cit., p. 163.

⁹ D. Pereboom, *Free will, agency and meaning in life*, Oxford University Press, Oxford 2016.

¹⁰ R. Custers, H. Aarts, *The unconscious will: how the pursuit of goals operates outside of conscious awareness* in “Science”, n. 329, pp. 47-50.

¹¹ C. S. Soon, A. H. He, S. Bode, J. D. Haynes, *Predicting free choices for abstract intentions* in: “Proc. Natl. Acad. Sci. U.S.A.”, n. 110 (15), pp. 5733-5734.

¹² Cfr. Michael Gazzaniga, *Who's charge?* In: S. Inglese (Ed.), *Chi comanda? Scienza, mente e libero arbitrio*, Codice Edizioni, Torino 2017.

¹³ Cfr. Daniel Wegner, *L'illusione della volontà cosciente* in: M. De Caro (Ed.), *La logica della libertà*, Meltemi Roma, 2002.

¹⁴ J. Bargh, *Free will is un-natural* in: J. Baer, J. Kaufmann and R. Baumeister (Ed.), *Are we Free?: Psychology and Free Will*, Oxford University Press, Oxford 2008, pp. 148-149.

¹⁵ E. Youngsteadt, *Case closed for free will?* In: “Science NOW Daily News”, april 2008.

¹⁶ J. Green e J. Cohen, *For the law, neuroscience changes nothing and everything* in: “Psychosocial Transactions of the Royal Society of London”, B, 359, 2007, pp. 1775-1778.

¹⁷ Cfr. M. De Caro, *Libertà metafisica e responsabilità morale* in: “Paradigmi. Rivista di Critica Filosofica”, n. 17, 2000.

talk about *free will*, in the background there is the conviction that two indispensable conditions must be given: one or more courses of alternative actions; the agent's choice to undertake one of the possible ones¹⁸. In fact, if on the one hand, there are philosophers who are inclined to share the fact that to give the agent moral responsibility the two conditions that make free will exist are necessary, on the other, there are as many philosophers who, denying the existence of free will, therefore, deny the concept of moral responsibility¹⁹.

If Caesar, for example, was "acted" in the choice to cross the Rubicon from the endless causal chains that have regulated the world up to the cardinal point on the date of 49 a. C., but, at the same time, had *his intention* to cross the river, then for the determinists Caesar would have acted freely and would be fully responsible. The deterministic thesis, in fact, binds, as is known, not to the existence (real or counterfactual) of the alternative between courses of action, but to the will of the agent from which, consequently, derives the moral responsibility of the behaviors descended from that choice: cause and effect of further infinite chains of causes and effects. The consequentialist position that derives from it, therefore, makes the agent not the result, but the behaviors that derive from him the object of blame or praise, since, as mentioned, it is only the social impact of the Rubicon gap that determines the moral responsibility of Caesar for what he has produced. Merit properly said is completely excluded from the "moral calculation" so that, according to neuroscientific data, the determinists could argue that their thesis is also supported on a scientific level: the areas of the medial prefrontal brain and the posterior medial parietal would, in fact, predictive of the type of choice / decision the agent is about to take²⁰. Of course, the determinists are perfectly aware that these are studies *in nuce* with all the above limitations, but, in fact, that the science-fiction scenario of a neuroscientist who, through electrodes or special technologies implanted in the brain of an agent, can predict the actions before they are aware of the agent himself would do no more than validate the starting thesis: infinite causal chains that, generating from the "free" will of the agent, would produce as many predictable consequences. A "free" will because, responding to the accusation of the indeterminists of the lack of alternative possibilities, if the agent had *wanted* otherwise, then he would have acted differently. In neuroscientific terms: if the brain mechanisms that determine the choice had "worked" differently, then the choice would have been different²¹. In fact, as many indeterminists maintain, the theoretical possibility does not solve, in itself, the problem of the freedom / responsibility of the action, since it is always the starting thesis to be problematic: how could it be, in fact, Caesar? considered free in the choice to cross the Rubicon ("free" will) and responsible for the passage performed (resulting behavior object of blame or praise) if already determined by the principle of the Big Bang?

It would seem "decisive" to hold Caesar responsible because the choice (and, therefore, his merit or his demerit) comes directly from himself, without being any effect and no cause of what would happen: lacking the rigid causal chains, lacking the determined "constriction" that follows. This, however, raises a problem of no small importance: lacking the causality, how can we consider Caesar *properly* responsible for his actions? How to be sure that the Rubicon gate was an action under the direct moral and physical control of the person Caesar? Once again, it falls again into the "hot" problems of the indeterministic thesis in direct association with the concept of responsibility. As previously stated, it is not unusual for philosophers who, because of the substantial doubts surrounding the two positions, declare themselves skeptical both about the existence of free will and the concept of responsibility, trying to disengage the latter from the first; but what we must pay attention to is that, regardless of the metaphysical or ontological level, moral responsibility means to stand in relation to the other.

II. RESPONSIBILITY AND INTERSUBJECTIVITY

It is not by chance that when one speaks of responsibility one speaks also of justice or, in general terms, of the benevolent relation or not of the consequentialist aspect of the behavior adopted in intersubjectivity. Think, for example, of the *trolley problems*²²: how many moral agents would feel capable of throwing the unfortunate obese down from the overpass to help slow down the mad rush of the train and thus save the family trapped on the rails? It is certain that any decision is taken, unless it is a "cold rationalist", will be the object of censure or praise and, at the same time, will generate a feeling for the fate of others: either for the obese or for the family. In this close union between responsibility and "feeling" one can speak of a particular interaction with others that the most call empathy. Here, then, that the question on responsibility is enriched by a relevant detail: Caesar could be defined as an empathic and therefore responsible person? It depends on the type of empathic phenomenon that one wants to take into consideration or that has intervened in Caesar's choice: neuroscientific studies, in fact, tell us, at the moment, that empathy - definable in many ways, but just like "the affective

¹⁸ Cfr. M. De Caro, *Il libero arbitrio. Una introduzione*, Editori Laterza, Roma-Bari 2011.

¹⁹ Cfr. A. Lavazza, *I tanti volti della responsabilità* in: M. De Caro, A. Lavazza, G. Sartori (Ed.), *Quanto siamo responsabili? Filosofia, Neuroscienze e società*, Codice Edizioni, Torino 2013, pp. VII-XXX.

²⁰ Cfr. C. S. Soon, A. H. He, S. Bode, J. D. Haynes, *Predicting free choices for abstract intentions*, cit.

²¹ Cfr. M. Reichlin, *Responsabilità morale e persona* in: M. De Caro, A. Lavazza, G. Sartori (Ed.), *Quanto siamo responsabili? Filosofia, Neuroscienze e società*, Codice Edizioni, Torino 2013, pp. 175-197.

²² Cfr. F. M. Kamm, *Trolley Problem Mysteries*, Oxford University Press, Oxford 2013.

response more appropriate to the situation of another person than to his own”²³ - certainly has a neural base that is not limited to mirror neurons alone²⁴, but involves different areas of the brain²⁵; so, according to the determinists, Caesar would have been as empathic as responsible. The problematic aspect that emerges, however, is that attention to intersubjectivity, this openness to the other, has not only a prelinguistic, pre-conscious and preverbal root, but it is also the object of a logical reasoning of the agent on himself in deciding whether to be attentive to the other or not. In the case of *Trolley Problems*, for example, the problem could be split into two: on the one hand, moral reasoning whether it is right or not any action taken by the agent; on the other, what kind of “attention to the other” has emerged in the agent itself: an unconscious, involuntary, preverbal emotion? What mechanisms, that is, appeared in the physical proximity of the agent with the unfortunate obese standing next to him and which towards the family trapped on the rails?

If the phenomena of *mimesis*, *classical conditioning* and *direct association*²⁶ can be explained by the activation of those neuroscientific mechanisms that contribute to the holistic formation of taking care of the other from the Self, quite another nature has cognitive empathy properly called²⁷: the emotional fusion with other beings or other objects as an epistemological instrument that “opens” to the other, making possible not only the understanding of the feelings of others, but the perception, in the first person, of the same on oneself. The metacognitive aspect of mentalizing responds to “laws” that are much more complex and articulated than those present in basic empathy: the time of decoding the message, the cognitive effort made or the semantic processing of the hypothesized concept in the mind of the other or, simply, the act of “putting yourself in someone else shoes”, they make the mindreading object of the emotional coexistence of the observer and of the observed, shared by common cultural, normative and semantic codes, which on the one hand have the moral value to share with the other the lived feeling, on the other hand they are subject to serious structural limitations. The cognitive empathic overcrowding, due, for example, to the constant vision of the suffering of others, leads - which conscious choice of the agent - to place a psychological distance between oneself and the other or to a *selfish drift* such that the suffering of others becomes the pretext to reason about their suffering or their emotional situation²⁸. The problem that arises, then, is whether the choice of the agent to distort psychologically from the other can be held responsible and in what way. At this point the question becomes: assuming that Caesar knew - as he certainly knew - that the consequences of the Rubicon gap would be the death of thousands of soldiers, men, women and children and that despite knowing he decided that his own reason was worth more than the resulting losses, putting “a cynical veil” of separation between the self and the civil war generated, how could it be held responsible for its actions? For the *choice*, one would be inclined to answer, since, substituting the above-mentioned question to the minimum, it would become: assuming that Caesar's choice to cross the Rubicon Caesar was able to know the consequences of his choice (thousands of deaths and civil war in the capital); that he pondered, then chose, that among his own reasons and the consequent losses he preferred the former and that, in the awareness of provoking the dead, has consciously decided that this would have been the price to pay for his own reasons (the “cynical veil” of separation), the cognitive choice to place himself at the center of the empathetic feeling instead of the other made Caesar responsible for his action? The point, that is, is that the choice to base the action, free will, and the cognitive choice of emotional distance, the empathy, have the same nature: the logical reasoning that the agent operates on himself in the conscious decision of to carry out an action and to place oneself outside the suffering of others is the problem of *free will* dropped in a different cognitive context, subject to all limits and to all the problems it incurs.

Cognitive empathy, that is to say, is an additional concept that is generated by the idea that the emotional-affective field is, necessarily, a different field from the epistemic,gnoseological, or, better, metaphysical field in which it is placed. the problem of freedom. This does not mean that rationality and emotionality are, in reality, a single human “cognitive” field (Hegelian romanticism, for now, is not part of the explanation of the phenomenon), but, certainly, a well-developed analysis careful, a correspondence between choice (free will) and empathic *mindreading* exists.

²³ M. Hoffman, *Empatia e sviluppo morale*, Il Mulino, Bologna 2008, p.7

²⁴ Cfr. Giacomo Rizzolatti e Corrado Sinigaglia, *So quel che fai. Il cervello che agisce e i neuroni specchio*, Cortina Raffaello Editore, Segrate (MI) 2005.

²⁵ Cfr. Simon Baron Cohen, *La scienza del male. L'empatia e le origini della crudeltà*, Raffaello Cortina Editore, Milano 2012.

²⁶ Cfr. M. Hoffman, *Empatia e sviluppo morale*, cit.

²⁷ F. Madonna, *Mentalizing: the cognitive aspect of empathy*, in “Journal of Advance Research in Social Science and Humanities” (ISSN: 2208-2387), 5 (2), 69-78. Retrieved from: <http://jaats.com/osj31/index.php/shs/article/view/963>

²⁸ *Ibidem*.

In a study conducted in 1985, the American psychologist Bernard Weiner²⁹ argues that people tend, spontaneously, to attribute a cause to every phenomenon: be it physical or emotional. In fact, Weiner reiterates that causal attribution plays an important role in cognitively empathizing with the victim, since knowing the causes of the aforesaid suffering leads the viewer to increase, to diminish or even to cancel the emotional sharing with the other. by himself; and that leads to the construction of that “cynical veil” of psychological distance that does not motivate to rescue the victim. According to some scholars, a possible explanation of the phenomenon would occur when the viewer feels helpless to provide help and, therefore, to solve the causes that caused the victim to suffer emotional (as already advanced by Staub), but this phenomenon inevitably leads to two orders of problems:

- a. What kind of causality breaks into the phenomenon?
- b. What role does empathy play in “access to the minds of others”?

III. THE PROBLEM OF EMPATHIC CAUSALITY: DOUBTS AND PERPLEXITIES

Questioning the error of causal attribution means questioning the role of causality. If Weiner *et alii* argue, just to stay in the names already met, that “naturally” man tends to attribute a cause to an effect, such an explanation can not go well for a gnoseological or metaphysical question that one wants. The explanation of “empathic causality” can not be separated from the analysis of the concept of causality, which inevitably remains the *punctum dolens* of the discourse on free will. In fact, if it were a deterministic causality, we should explain the suffering situation of the victim and the observer in this way: the victim, being the result of an infinite chain of causes that led him to live a given situation, would be responsible for his situation, because *his intention* would be in that same; the observer, also the result of the same causal history and the role of his will, would be equally responsible for his actions; therefore, both would be the result of infinite causal chains which, making them find in that given situation, would make them responsible for the choice to be made: the observer in helping or not the victim; the victim in being in a state of emotional need. In fact, his condition would never be avoidable and if the observer empathizes with the victim, one should also understand what kind of empathy he is. If, in fact, the emotional tune between victim and observer was automatic, unconscious and involuntary, certainly it would be in the phenomenon of *mimicry* as a direct response (effect) to a manifest cause (suffering); in the event that, on the contrary, the observer finds himself in the condition of choice to “abandon himself” to an emotional state more suited to the victim than to his own, then it would not be cognitive empathy, but a far more complex and complex phenomenon that combines, in itself, the nature of *free will* and *empathy*: the *freempathy*. In fact, remaining in the analysis of the situation, the problems that would emerge would be the same in which the deterministic position for the explanation of free will enters: how it could be argued that victim and observer are free to perform or not a given action if a different course of action? In which way, that is, could they ever choose?

On the contrary, by imagining that the nature of causality is indeterministic, how would the empathy explain it? The problems would not be solved in the same way, since the causal paternity of their choices would not be guaranteed to the agents, the principle of causality being completely absent. It is true that one could introduce the hypothesis of the indeterministic fault that, probabilistically, the causal principle of a different nature to the deterministic one would provoke the chosen action, but, also in this case, one would incur the classic problems of libertarian incompatibility: how to explain the distinct nature of causality? How to attribute the source of the action to oneself and not to others?

Returning to the empathic situation: how could one ever be sure that the state of one's need and the hypothetical and real capacity to help the other are not compromised by a general, more holistic state of the *status quo* of the world? In other words, one could never be certain of the true cause of empathic suffering or of the phenomenon that would enter the field in the explanation of empathic activation.

An argument in support of the influence of free will in cognitive empathy, a phenomenon that, substantially, reduce to the first (here is the nature of *freempathy*) is the same: Staub³⁰, in his work of 1996, argues that pointing to the victim the cause of one's own suffering *reduces* suffering in the observer: choice, that is to say free will, at the metacognitive and conscious level determines, in part *orin toto*, the emotional activation of the agent, *influencing* his emotionality. The dilemma that should be overcome would be the subsequent explanation of what is meant by free will: a neural response? A cognition? Would you really be sure that, in both cases, you always talk about free will? Even if the latter did not exist, from a gnoseological point of view it would not change much: the existence of the phenomenon (empathic and cognitive) exists; in this case it would only be to give it a different name.

Another question mark is the role to be attributed to the observer: would he be responsible for choosing to help or not the victim? Here too the discourse would focus on the questions that link or distance free will from moral

²⁹ B. Weiner, *The emotional consequences of causal attribution* in: M. S. Clark e S. T. Fiske (Ed.), *Affect and cognition*, Hillsdale, NJ, Erlbaum, pp. 185-210.

³⁰ Cfr. E. Staub, *Responsability, helping, aggression and evil* in: “Psychological Inquiry”, n. 7, 1996.

responsibility, placing great emphasis on the observation that the observer, where it is in the conditions to intervene, could choose to remain helpless for purely selfish reasons <<for example the fear or the desire not to meddle³¹>>, turning inaction into a sense of guilt facing oneself. Self-aggrandism sometimes causes the agent to have that push in providing relief that leads to pro-social action, but the explanation of altruistic behavior is not found in the emotionality of the observer or the victim, but in the choice: the will, that is, to engage in a situation in which it is *rationaly* decided whether to intervene or not, making a calculation of the costs / benefits in utilitarian terms of any rescue. It is not a question, I think, of selfishness as an end in itself, but of the survival law of the most suitable of Darwinian memory. Precisely for this reason to explain cognitive empathy as a pre-moral phenomenon I think it is inappropriate: rather than cognitive empathy one should speak of a rational evaluation, which, by marrying the emotional sphere, transforms its result into a feeling. If we wanted to add the adjective “moral” it would be only because we enter the field of intersubjectivity. Returning to the starting point, ie the situation for which the observer, knowing the causes of emotional suffering of the victim, decides to lend or not to provide relief - according to what has been said - remains to clarify the role of mentalizing. Several authors, including Kurner Stuber³², argue that thanks to empathy (not specifying what kind of empathy it is) one has privileged access to the other, considering it as “the epistemically central way through which we know the other minds”³³, citing, among the many arguments, that of analogy³⁴: observing the behavior of others similar to ours in a same emotional situation, it is inferred that the other possesses a mind as an unmanifest cause of what makes manifest. The argument is subject to multiple refutations, but what should be underlined is precisely the problem of the induction of humane memory: the inference towards the best explanation is, by the very nature of the reasoning, unjustifiable for which the conclusion reached (the other has a mind) could only be a cognitive strategy. What would happen if we were not convinced that the You also has a mind? Would you still choose to start an empathic action towards a stranger or a “cluster” of electric circuits? There are many question marks and perplexities that arise from a different analysis of the phenomenon, but this does not mean that there is no alternative way, still under construction, to look at cognitive empathy: there is still so much to do, but, on the other hand, not even Rome was built in a single day.

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³¹ M. Hoffman, *Empatia e sviluppo morale*, cit., pp. 130-131.

³² K. Stueber, *L'empatia*, Il Mulino, Bologna 2010.

³³ *Ibidem*, pp. 28-29.

³⁴ S. Gallagher e D. Zahavi, *La mente fenomenologica. Filosofia della mente e scienze cognitive*, Raffaello Cortina Editore, Segrate (MI) 2009, pp. 275-276.

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