

I LINGUAGGI DELLE  
SCIENZE COGNITIVE

a cura di  
DONATA CHIRICÒ

# Creatività

*I linguaggi nella percezione  
e nella narrazione dei corpi*



(CORISCO)

# I LINGUAGGI DELLE SCIENZE COGNITIVE

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INDICE	p.5
Donata Chiricò	
PREFAZIONE	
<i>Essere resistenza.</i>	
<i>La lingua tra regola e creatività</i>	p.7
Luigi Lobaccaro	
<i>Default mode network, Musement e Immaginazione:</i>	
<i>semiotica e neuroscienze della creatività</i>	p.15
Giovanni Pennisi	
<i>Racial schema and the objectified body image:</i>	
<i>assessing the role of embodiment and enfacement in reducing racial biases</i>	p.35
Caterina Scianna	
<i>Cognitive aspects of pragmatic disorders.</i>	
<i>How the role of epistemic vigilance explains irony recognition problems</i>	p.53
Vincenza Costantino	
<i>Corporeità e teatro nella relazione educativa</i>	p.65
Maria Tagarelli De Monte	
<i>Affordance naturali e intenzionali nella definizione di segni della lingua</i>	
<i>dei segni italiana (LIS). Osservazioni preliminari</i>	p.87
Maria Cristina Falco	
<i>La lingua come semiotica.</i>	
<i>Creatività e corpo nei processi di significazione</i>	p.105
Alessia Lirosi	
<i>Uno sguardo al passato:</i>	
<i>corpo, salute e malattia nelle lettere delle sorelle Colonna (XVII secolo)</i>	p.115
Valentina Certo, Laura Ieni	
<i>La percezione dell'arte. Una riflessione sui corpi</i>	p.153

- Laura Culicetto, Carmelo M. Vicario, Alessandra Falzone  
*Alessitimia e linguaggi alternativi:  
 il ruolo della creatività nella comunicazione emotiva* p.175
- Giulio Galimberti  
*Visibilizzare le emozioni.  
 Ritratti termici e processi di soggettivazione* p.187
- Federica Longo, Alessandra Falzone  
*On the Creative Aspect of Language Use:  
 Challenges to the Generativist Approach* p.203
- Ornella Navanzino  
*La costruzione del gesto tra mente, corpo e spazio. L'ambiente decodificato  
 condotto attraverso il gesto nell'improvvisazione musicale* p.225
- Matteo Giuca  
*Coltivare la creatività.  
 L'impatto della formazione musicale sull'apprendimento linguistico  
 e sullo sviluppo cognitivo* p.249
- Gaia Tedeschi  
*Corpi e linguaggi:  
 il Body positivity e le nuove narrazioni sociali sul corpo* p.267

Giovanni Pennisi<sup>1</sup>

*Racial schema and the objectified body image: assessing the role of embodiment and enfacement in reducing racial biases*

### **Abstract**

In this paper, I examine the concepts of body schema, body image, and embodiment, starting with a disambiguation of the terminology used by Fanon in his *Black Skin, White Masks*. This clarification will help to introduce the idea of racism as a phenomenon that can alter the embodied perception individuals have of their own bodies and, consequently, of the physical and social environment. By exploring the concept of embodiment and its various interpretations, I will demonstrate that this notion is crucial not only for understanding how racism impacts racialized people's perception of their own body and world but also for identifying effective empirical methods to neutralize implicit racial bias.

To this end, I will review experimental studies that have utilized Virtual Reality and the rubber hand illusion to create the sensation of embodying a body or limb with a different skin color. These studies have shown that the embodiment effect induced by the avatar or the fake limb can lead to a reduction in the experimental subjects' implicit racial bias.

However, different results have been observed with the experimental paradigm using the enfacement illusion, which has proven less effective in reducing implicit racial bias. The final section of the paper will discuss phenomenological hypotheses to explain the discrepancies between the results achieved by the embodiment and the enfacement paradigms.

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### **Keywords**

body schema; body image; embodiment; enfacement; implicit racial bias.

### **Riassunto**

In questo articolo, esamino i concetti di schema corporeo, immagine corporea ed embodiment partendo da una disambiguazione della terminologia utilizzata da Fanon nel suo *Pelle Nera, Maschere Bianche*. Questa chiarificazione servirà a introdurre il tema del razzismo come fenomeno in grado di alterare la percezione incarnata che il soggetto ha del proprio corpo e, di conseguenza, dell'ambiente fisico e sociale. Attraverso un'analisi del concetto di embodiment e dei suoi vari significati, dimostrerò come tale nozione sia fondamentale non soltanto per comprendere come il razzismo influisca su chi ne è vittima in termini di percezione del proprio corpo e del mondo, ma anche per individuare modalità di intervento empirico volte a neutralizzare i bias razziali impliciti. A tal fine, presenterò una rassegna della letteratura sperimentale che ha utilizzato la Realtà Virtuale e l'illusione della mano di gomma per generare l'illusione di embodiment in un corpo o in un arto con un colore di pelle diverso dal proprio. Questa letteratura ha mostrato che l'effetto di embodiment dell'avatar o dell'arto artificiale riesce a ridurre i bias razziali impliciti nei soggetti sperimentali. Risultati differenti sono stati invece riscontrati nel paradigma sperimentale che ha impiegato l'illusione di enfacement, che si è dimostrata meno efficace nel ridurre i bias razziali impliciti. La parte finale dell'articolo sarà dedicata alla discussione di alcune ipotesi fenomenologiche per spiegare le differenze tra i risultati ottenuti dai paradigmi dell'embodiment e dell'enfacement.

### **Parole chiave**

schema corporeo; immagine corporea; embodiment; enfacement; bias razzali impliciti.

### **1. Introduction**

From the second half of the twentieth century onwards, the issue of racism began to be explored through a phenomenological lens (Fanon 1952/2008; 1961/2004; Alcott 2006; Ngo 2017; Yancy 2017). This approach seeks to understand the impacts of discrimination based



on skin color and other phenotypic traits traditionally associated with different races from an experiential perspective. In essence, phenomenological analysis aims to capture the qualitative aspects of the lived experiences of those affected by racism, portraying discriminatory acts as forces that shape how individuals experience the world, perceive others, and represent themselves in relation to them. Although scholars in this field are aware of the importance of framing racism as an attitude rooted in socially and culturally «sedimented contextual knowledges» (Alcoff 2006, 184), they are more focused on unraveling its intersubjective rather than historical dynamics (Staudigl 2012), highlighting how these dynamics affect the relationships between the discriminated individuals and both other races and their own bodies.

One of the early figures to apply a phenomenological perspective to racism was Frantz Fanon, a French psychiatrist and philosopher of Martinican descent. In his most influential works, particularly *Black Skin, White Masks* (Fanon 1952/2008) and *The Wretched of the Earth* (Fanon 1961/2004), Fanon delves deeply into the lived experiences of colonized people and people of color under colonial and systemic racism. Through a phenomenological framework, Fanon explores how racial discrimination and oppression influence self-perception and identity, shedding light on the psychological and somatic responses triggered by conditions of subalternity and marginalization, as well as by overt manifestations of racism. In this paper, I will draw on some passages from *Black Skin, White Masks*, as well as from other works openly inspired by this book, to discuss three key phenomenological concepts: body image, body schema, and embodiment. As evident from several interpretations of Fanon's writings, these concepts are deeply connected to the issue of racism, as the discriminatory attitudes to which non-white individuals are systematically subjected impact the ways in which they mentally represent their own body (body image), move it within the surrounding space (body schema), and experience it firsthand (embodiment).

After detailing the concepts of body image and body schema and their relation to the notion of embodiment, I will demonstrate how the latter has been used in experimental psychology to create settings aimed at testing the possibility of reducing racist attitudes through techniques that create the illusion of inhabiting a body with a skin color different from one's own. Specifically, I will discuss studies that

have employed Virtual Reality (Peck *et al.* 2013; Banakou *et al.* 2016; Hasler *et al.* 2017) and the rubber-hand illusion (Maister *et al.* 2013; Farmer *et al.* 2014) to mitigate implicit racial biases. I will also compare these results with those from research that utilized the enfacement illusion – the experimentally induced sensation of seeing another face as one’s own (Sforza *et al.* 2010; Porciello *et al.* 2018) – to assess its impact on reducing racial biases (Bufalari *et al.* 2014; Estudillo e Bindemann 2016).

Finally, I will link the differences in results from the two paradigms (embodiment vs. enfacement) to the fundamental distinction between the sense of ownership and the sense of agency, and to the experimental setups designed to elicit one, the other, or both. Additionally, I will discuss the significance of the face as a primary identity marker to explain why embodiment and enfacement differ in their effectiveness at reducing racial biases.

## **2. From the racial epidermal schema to the objectified body image**

The phenomenological analysis of racism carried out by Fanon is particularly evocative. The reason for this lies in the fact that Fanon often refers to events from his own life, thus managing to convey, through a language that draws on the philosophical tradition of Merleau-Ponty and Sartre, the profound and genuine impact of racialized experiences.

In one of the most well-known passages of his *Black Skin, White Masks* (1952/2008), Fanon recounts an incident where a white child, upon seeing him on a train, pointed at him in terror and began shouting the N-word, attracting the attention of the child’s mother and the other passengers. Fanon depicts this episode as an authentic act of violence perpetrated against him, an assault that altered the perception of his own physical presence in the world:

Assailed at various points, the corporeal schema crumbled, its place taken by a racial epidermal schema. In the train it was no longer a question of being aware of my body in the third person but in a triple person. In the train I was given not one but two, three places [...]. I was responsible at the same time for my body, for my race, for my ancestors. I subjected myself to an objective examination, I discovered my blackness, my ethnic characteristics» (84).

As I will soon argue, Fanon, while using different terms, addresses the concepts of body schema, body image, and embodiment in this excerpt. However, in doing so, Fanon also reflects – and, in some ways, anticipates – certain ambiguities characteristic of the phenomenological tradition. To grasp these ambiguities, it is essential to first introduce the notions of *body schema* and *body image*.

According to a now well-established phenomenological interpretation, the body schema is «an active, operative performance of the body, [...] the body as it actively integrates its positions and responses in the environment» (Gallagher 1986, 548). On the other hand, the body image «consists of a complex set of intentional states and dispositions – perceptions, beliefs, and attitudes – in which the intentional object is one's own body» (Gallagher 2005, 25). In short, whereas the body schema is the capacity of the body to adjust its posture and movements to adapt to environmental contingencies in a «*close-to-automatic way*» (26), the body image is the knowledge we have about our own body based on the interlocking of proprioceptive or sensory information (e.g., feeling our body parts or seeing/touching them), conceptual understanding of our own body (e.g., knowing that certain actions or objects can cause pleasure or pain), and the emotions or sentiments we have developed toward it (e.g., body dissatisfaction).

Importantly, the body schema is a *pre-noetic* phenomenon, which is to say, «it does not depend on a consciousness that targets or monitors bodily movement» (32). This means that, even though one can reflect or thematically focus on his/her own bodily actions (for instance, paying attention to the micro-movements one has to learn in order to attain the skill of driving), the body schema always pertains to those movements that one has internalized – either through assisted training or mere ontogenetical development – to the point where they became «motor habits» (see 45). Conversely, the body image is a *noetic* process. In Husserl's (1931/2014) lexicon, this means that the body image has a *noema*, that is, an intentional content toward which it is directed. In more prosaic terms, this is to say that having a body image is tantamount to having a consciousness of something, namely, the body. Whether it manifests itself as a form of perceptual consciousness (I see my body), semantic consciousness (I have beliefs about my body), or affective consciousness (I have feelings toward my body), the body image always has an intentional object – more precisely, it

is the process through which our perceptions, beliefs, and attitudes related to this intentional object are generated over time.

Going back to Fanon's passage, it is worth noting that he does not explicitly refer to the body image, and that he speaks of 'corporeal schema' rather than 'body schema'. His use of the term 'corporeal schema' echoes Merleau-Ponty's (1945/1962) choice of words: in the French edition of his *Phenomenology of Perception*, in fact, Merleau-Ponty defines the «system of dynamic motor equivalents that belong to the realm of habit» (Gallagher 2005, 20) as *schéma corporel*, using this nomenclature seemingly interchangeably with what we know today as 'body schema'. However, as Gallagher points out, Merleau-Ponty's notion of *schéma corporel* is somewhat ambiguous, as it refers to both the bodily adaptive responses to environmental contingencies and to «a 'global awareness' or 'marginal consciousness' of the body» (22) which is not further expounded in the text. Finally, «to make matters worse, [...] the term 'schéma corporel' was rendered 'body image' in the English translation of his work *Phenomenology of Perception*» (20), resulting in a terminological and conceptual confusion that influenced the phenomenological debate for several years onward (see 20-22).

The fact that Fanon (1952/2008) operated within a framework with still undefined boundaries, and that his idea of the schema was influenced by the ambivalence of Merleau-Ponty's definition, is confirmed by the following passage: «A slow composition of my self as a body in the middle of a spatial and temporal world – such seems to be the schema» (83). Nevertheless, in his account of the racial incident, it is still possible to observe a clear distinction between body schema and body image. More precisely, as Ataria e Tanaka (2020) put it, it is possible to identify when and how Fanon's body image takes over his body schema. In their interpretation, the racist insult triggered a dynamic whereby the body schema, as the mechanism that ensures a pre-reflective attunement to the surroundings and enables us to coordinate the body parts into a unified action within the environment (see 655), ceases to perform its function, being replaced by an over-focused attention to those bodily aspects now deemed integral to the body image.

In essence, when Fanon (1952/2008) states that «the corporeal schema crumbled, its place taken by a racial epidermal schema» (84),

he is describing a cognitive process where the reliance on bodily automatisms that govern our usual interactions with the world – such as spontaneously adopting certain postures or making close-to-automatic micro-movements – gives way to an «objective examination» (*ibidem*) of the body as a carrier of perceptions, concepts, and emotions associated with it. Moreover, and most importantly, this unwanted «thematization» (85) of the body and the constitutive components of the body image occurs according to the modalities enforced by the racist context in which Fanon finds himself – the train full of white people and, more broadly, the Western society of that time. The ‘racial epidermal schema’ Fanon refers to, in fact, is the product not of a generic self-reflective effort but of a specific force – the «racializing white gaze» (see Yancy 2017; Sithole 2016) – which imposes its own categorizations of the other from the outside, simultaneously leading to the problematization of one’s own black presence in a white world. As mentioned, this problematization involves all three levels of the body image: perceptual («I discovered my blackness, my ethnic characteristics» Fanon 1952/2008, 84), semantic («My body was given back to me sprawled out, distorted, recolored [...]. The Negro is an animal, the Negro is bad, the Negro is mean, the Negro is ugly», 86), and affective («I begin to suffer from not being a white man to the degree that the white man imposes discrimination on me [...], tells me that I am a parasite on the world [...], ‘that I am a brute beast, that my people and I are like a walking dung-heap that disgustingly fertilizes sweet sugar cane and silky cotton, that I have no use in the world’<sup>2</sup>», 73).

The cognitive shift from the body schema to the racial epidermal schema – or to what we may now call the ‘racially objectified body image’ – has been more recently addressed by Yancy (2017), who discussed the phenomenological underpinnings of this process by drawing on examples of everyday racial discrimination. The most famous of these examples is the «elevator effect» (see 17-49), which describes the experience of a black man entering an elevator with a white person who then reacts with visible discomfort, fear, or suspicion. This reaction impacts the body schema and body image of the black man by disrupting his automatic, pre-reflective engagement with what is supposed to be a neutral environment and forcing him

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<sup>2</sup> In the excerpt between the single quotation marks, Fanon refers to a poem by Césaire from his *Cahier d’un retour au pays natal* (1947).

to pay «almost neurotic attention to [...] body movements, making sure that this ‘Black object’ [...] is not too close, not too tall, not too threatening» (32). This heightened self-consciousness transforms the subject’s experience of his own body from an unproblematic medium for interaction into a target of constant auto-surveillance and regulation. As a result, the body schema collapses and the body image of the black individual is reshaped under the oppressive white person’s gaze, which «becomes part of the black person’s sensorimotor loop» (Ataria e Tanaka 2020, 61). This means not only that black people must consciously control motor acts that would otherwise be performed spontaneously – consider, for instance, the phenomena of «driving while black» (Lundman e Kaufman 2003; Warren *et al.* 2006) and «walking while black» (Cadogan 2016; Sellers-García 2021) – but also that they often undergo an unwitting internalization of negative representations of themselves (see Yancy 2017, 82), being compelled to trade their body schema for a body image shaped by white normative standards and the existence of both explicit and implicit racial biases.

I will address the topic of explicit and implicit racial biases in the next section. For now, I want to emphasize that both Fanon and Yancy depict enduring racial discrimination as a coerced transition to what Sartre (1943/1956) designated as «the third ontological dimension of the body», that is, a third-person awareness of the body that arises when the other’s look makes me «experience the revelation of my being-as-object» (351). The paralysis of the body schema and the objectification of one’s body image are the psychophysical manifestations of a specific mode of existence: living the body through the gaze of the other, or developing «a consciousness of one’s body as a body-for-others» (Simonsen e Koefoed 2020, 37). When Fanon and Yancy discuss the power of the white gaze, they are referring precisely to this: a process in which the individual’s sense of self is profoundly disrupted and reconstituted through the external perspective dictated by racialized social dynamics. This externalization forces the individual to see him/herself not as a unified subject but as an object among objects, constantly conscious of and reacting to how he/she is perceived by the dominant group.

Framed in this way, racism seems to be an issue related to embodiment, in the sense of the assimilation or internalization of something – in this case, a distorted viewpoint shaped by centuries of colo-

nialism and the self-attributed superiority of the white race. However, this meaning (which I will refer to as E1 hereafter) is not the only one we can assign to the term embodiment. This word also indicates the «egocentric frame of reference» (Riva 2012) from which we observe and navigate the world (E2 hereafter). In short, the latter interpretation highlights how being embodied equates to having a firsthand, subjective, and pre-reflective experience of one's own body, which is based on an «integrated, real-time percept of the current state of the body» (254) that allows our attention to be directed outward – to the physical and social environment – rather than inward. In Fanon's and Yancy's phenomenological analysis of black individuals living in a predominantly white society, the interplay between E1 and E2 becomes problematic, as black people are unable to fully experience their own bodies from a first-person perspective due to the internalization of the white gaze, which leads to self-objectification. As Yancy (2017) insightfully puts it, «white embodiment is paradoxically a form of *disembodiment*» (197), suggesting that the hegemonic group's imposition of its racializing norms and stereotypes creates a disconnect within black individuals, preventing them from inhabiting the world through their bodies and resulting in the development of a detached, third-person perspective on their own corporeal existence.

### **3. How embodiment and enfacement affect implicit racial bias**

Within the phenomenological framework established by Fanon and more recently embraced by Yancy, racism is depicted as a series of attitudes that can cause a person experiencing discrimination to shift from an embodied perception of his/her body (first-person perspective) to a disembodied one (third-person perspective). These attitudes are influenced by the presence of racial biases, which can be explicit – such as the belief in the superiority of the white race – or implicit, operating subconsciously and affecting how we interact with people of other ethnicities or races. Since the late 2000s, several researchers in experimental psychology have begun to investigate whether the concept of embodiment, understood as an egocentric frame of reference, could be used not only to grasp how racism impacts the lives of those discriminated against but also to develop experiments aimed at mitigating people's racial biases, especially implicit ones. To achieve this, the authors of these experiments have utilized various tools capable

of creating the illusion of embodying a body – or body parts – with a different skin color from one’s own. I will focus on three different techniques employed to produce this illusion: full-body illusions engendered by Virtual Reality (VR), enfacement, and the rubber-hand illusion (RHI).

One of the first experiments to employ VR-driven full-body illusions to test their effects on racial biases was conducted by Peck *et al.* (2013). In this study, the authors initially subjected a sample of light-skinned participants to an Implicit Association Test (IAT, Greenwald, McGhee e Schwartz 1998) to assess the presence of implicit racial biases by measuring the speed and accuracy with which participants associated positive words with pictures of white faces, negative words with pictures of black faces, and vice versa (pre-stimulus IAT). In the next phase, participants underwent several sessions where they embodied a full-body avatar with dark skin via VR to see if this could induce an illusion of body ownership of the digital body and, potentially, reduce implicit racial bias. To evaluate the latter outcome, the experimenters administered a new IAT to the participants after exposure to the digital avatar (post-stimulus IAT). Finally, to determine whether any changes in implicit racial bias were influenced by the type of avatar experienced from a first-person perspective, the experimenters administered the IAT after participants had embodied an avatar with an unnatural purple skin color. The results showed that participants made fewer and slower associations between negative words and other-race faces in the post-stimulus IAT compared to the pre-stimulus IAT, thereby suggesting that the embodiment of light-skinned individuals in a dark-skinned virtual body temporarily reduced their implicit bias against people categorized as out-group based on skin color. Moreover, this effect seemed to be specifically related to racial bias, as embodying a purple-skinned virtual body did not produce the same outcome.

A few years later, a similar setup employed by Banakou, Hanumanthu and Slater (2016) yielded comparable results, providing further insight into the duration of the racial bias mitigation effect. Like the previous study, the researchers measured the implicit racial bias of light-skinned participants by administering an IAT before and after exposure to a dark-skinned avatar experienced in first-person through VR. Unlike the previous study, where the embodiment in the avatar



was generated through the simple spatiotemporal matching between the movements of the subject's and the avatar's heads and bodies, this experiment required participants to perform more complex and immersive tasks, such as following the instructions of a virtual Tai Chi teacher. It was perhaps this higher level of engagement with the 'new' body that allowed the reduction in racial bias to persist for up to a week after the experiment concluded.

A third experiment demonstrated that embodying a virtual body with a different skin color can affect not only biases that manifest as implicit semantic associations but also pre-linguistic processes, such as facial mimicry. Facial mimicry is our tendency to automatically imitate others' facial expressions (Sato e Yoshikawa 2007; Stel e van Knippenberg 2008), which helps us understand and emotionally connect with them. Research has shown that this phenomenon is significantly influenced by racial factors, as we are more inclined to mimic the facial expressions of – and empathize more with – people from our own ethnic or racial group (Hess 2001; Gutsell e Inzlicht 2010). Hasler, Spanlang and Slater (2017) found that the full-body ownership illusion engendered by the embodiment of an avatar with a different skin color can lead to notable changes in this behavior, for instance, enhancing facial mimicry for individuals whose skin color matches that of the embodied VR avatar.

A different experimental paradigm explored the onset of embodiment not in a virtual body, but in someone else's face: this phenomenon is known as *enfacement* (Sforza *et al.* 2010; Porciello *et al.* 2018). In essence, enfacement is an experimentally-induced illusion that makes a person perceive another's face as if it is his/her own. This illusion is elicited through multisensory stimulation, which consists of the observation of another person's face (visual stimulus) being touched in sync and mirrored to the subject's own face (tactile stimulus). This process demonstrates that under certain conditions, such as perfect spatiotemporal congruency between visual and tactile inputs, the sense of self can expand to incorporate even features of the other's most distinctive identity trait – namely, the face (see Pennisi 2024, 87-88).

Some researchers have investigated whether it is possible to create the illusion of enfacement in the face of a person with a different skin color and whether this effect would reduce implicit racial bias.

Two studies in this area (Bufalari *et al.* 2014; Estudillo e Bindemann 2016) yielded similar findings: in both cases, the authors showed that while it is possible for a white person to experience the illusion that a black face is his/her own (and vice versa), this temporary enfacement effect does not significantly alter the responses in the post-stimulus IAT compared to those in the pre-stimulus IAT. How can we explain the differences in the impact on implicit racial bias observed between VR-based full-body illusions and enfacement research? I think there are at least three potential explanations. First, this might relate to the two interpretations of ‘embodiment’ discussed in the previous section. Unlike the paradigms that employ immersive technologies, the enfacement paradigm aligns more with the first meaning of embodiment (E1), involving the assimilation or incorporation of an external element into one’s body image, rather than experiencing another’s face directly and from a first-person viewpoint (E2). Estudillo e Bindemann (2016) seem to agree with this, noting that enfacement does not encourage perspective-taking and highlighting that such egocentric «perspective-taking might be an important factor for prejudice reduction» (337).

A second explanation might relate to the difference between the sense of ownership and the sense of agency.

The sense of ownership is the pre-reflective experience or sense that I am the subject of the movement, that I am the one moving [...], or that I am experiencing a certain sensation (e.g., touch). The sense of agency is the pre-reflective experience or sense that I am the cause or author of the movement (e.g., an experience that I am in control of my action) (Tsakiris *et al.* 2007, 646).

In the VR-driven full-body illusion paradigm, both these aspects of the sense of self are activated. The subject, in fact, experiences the sense of ‘being’ the digital body while also feeling in control over the actions performed by this deceptively owned body. In contrast, in the enfacement paradigm only the sense of ownership is elicited, as the face in which the subject perceives his/herself is not involved in any movement that may trigger the sense of agency. This could account for why enfacement is less effective in reducing implicit racial bias: as research suggests, the sense of agency plays a key role in mediating

cognitive processes like the acceptability of another body experienced from a first-person perspective (Ventre-Dominey *et al.* 2019) and the emotions we develop toward it (Jung *et al.* 2022).

If we accept the two above explanations, we must understand how they can be reconciled with the data from research on the rubber hand illusion (RHI) applied to implicit racial bias. Some studies have shown that the well-known experimental paradigm introduced by Botvinick e Cohen (1998) can be employed not only to create the illusion of owning an artificial limb with a different skin color but also to trigger a reduction in implicit racial bias accordingly (Maister *et al.* 2013; Farmer *et al.* 2014). These results suggest that it is not enough to attribute the deficit in influencing implicit racial bias to a lack of perspective-taking and sense of agency, since these experiments were conducted in settings as static as those where the enfacement effect is observed.

Therefore, we need to embed a third, more intuitive explanation into the framework, which concerns the different perceptual significance of the face compared to the rest of the body. The face is the human feature most closely associated with individual subjectivity, serving as the primary reference point for personal identity and distinctly marking the difference between oneself and others more than any other body part. The enfacement effect induced in laboratory settings can undoubtedly blur and temporarily make this threshold more permeable. However, it is plausible that the transient embodiment of a specific face produces less impactful cognitive effects than embodying another body (especially if this is an abstract and generic representation of ‘another race’s’ body, rather than the body of a specific individual), because the face is more directly tied to one’s sense of self and may create stronger resistance to changes in perceptions and unconscious prejudices. While the body can be incorporated with more malleability and less rigidity, allowing for a greater degree of acceptance and integration of otherness, the face constitutes a more entrenched and inflexible boundary. This could explain why enfacement, although it can temporarily alter the perception of another’s face as one’s own, fails to produce significant and lasting changes in implicit biases. In other words, the enfacement paradigm may not be suitable to durably influence implicit biases because the face is a more central and deeply rooted representation of the self compared to other

body parts. Further research is needed to determine if the limitations of the enfacement paradigm outlined here are accurate and whether they can be addressed by developing experimental settings that, where applicable, implement and aim at enhancing perspective-taking and the sense of agency.

#### **4. Conclusion**

At present, we can only speculate about why the enfacement paradigm seems to be less effective in reducing implicit racial bias compared to research using immersive technologies and full-body illusions. However, the latter approach also has its own limitations. For example, a recent systematic review (Haggins *et al.* 2024) found that the diversity of races represented in VR avatars is often lacking. Only one study (Chen *et al.* 2021), in fact, «included different ingroup-outgroup embodiment conditions beyond Black and White ethnic groups» (Haggins *et al.* 2024, 15). Moreover, most of the studies employ samples of white people as the ‘majority group’, fostering a tendency that «perpetuates and reifies the notion that this particular population sets the standard against which others are to be measured» (16).

Phenomenological research has long cautioned us about the dangers of the white gaze. In this paper, I discussed how this philosophical approach can contribute to experimental psychology by illuminating how social phenomena like racism impact embodied experiences of the world and suggesting ways to examine these experiences through concepts that describe empirically replicable and investigable processes. Specifically, I focused on the concept of embodiment and its relationship with body schema and body image, demonstrating how this notion is crucial not only for understanding how racism affects racialized people’s perception of their own body and world, but also for identifying ways to intervene in the implicit cognitive mechanisms underlying racial discrimination.

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