ORIGINAL ARTICLE

Social cognition, social neuroscience, and evolutionary social psychology: What's missing?*

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Abstract

In this paper I argue that something important, and something *social*, is missing from contemporary accounts of social cognition, social neuroscience and evolutionary social psychology. Contemporary accounts of social cognition focus on cognition directed towards social objects, that is, towards persons and social groups. In contrast, early twentieth century accounts of socially engaged cognition focused upon beliefs and attitudes oriented to the represented beliefs and attitudes of members of social 'reference groups' and directed towards both social and non-social objects. I argue that this earlier conception of socially engaged cognition should be integrated with contemporary research on social cognition, social neuroscience and evolutionary social psychology, since it poses a challenge but also an opportunity for these disciplines.

KEYWORDS
evolutionary social psychology, social cognition, social neuroscience, socially engaged cognition

Since the 1980s, the study of social cognition has been the mainstay of theoretical and experimental social psychology, with many claiming that the adoption of the cognitive paradigm in the wake of the 'cognitive revolution' in psychology resolved the 1970s 'crisis of confidence' (Elms, 1975) in social psychology (Taylor & Fiske, 1981; Ostrom, 1984; Markus & Zajonc, 1985). Taylor and Fiske (1981), for example, maintained that the scientific promise of social psychology could best be fulfilled by 'getting inside the head' to study social cognition. Social cognition came to be a dominant topic in conferences in social psychology in the 1980s and became so popular that Ostrom (1984) was moved to talk about the 'sovereignty' of social cognition. Fiske and Taylor's definitive text *Social Cognition* was first published in 1982, the same year the journal *Social Cognition* was founded (along with the 'Attitudes and Social Cognition' section of the *Journal for Personality and Social Psychology*). Within this cognitive paradigm, social cognition is defined in terms of its social objects, namely persons and social groups, as opposed to non-social objects, such as tables, trees and tarantulas. As Fiske and Taylor put it in their pioneering text *Social Cognition* (repeated in the 1991, 2008, 2013 editions):

> *The study of social cognition concerns how people make sense of other people and themselves.*
>
> (1982, p. 1)

Analogously, the original editorial of *Social Cognition* solicited articles that focused on 'the perception of, memory for, or processing of information involving people or social events' and 'the role of cognitive processes in interpersonal behavior' (Schneider, 1982, p. i).

A similar conception of social cognition is also to be found in contemporary philosophy of mind and cognitive science, which focuses upon 'theory-theory' vs. simulation accounts of our ability to attribute mental states to other persons (and some animals) and to explain and predict their behavior (see e.g. Carruthers & Smith, 1996; Stich & Nichols, 1992). And indeed, many social psychological (and neurophysiological) accounts of social cognition have now incorporated such theories of the attribution of mental states to other persons, or as Cacioppo, Visser and Picket (2012, p. xii) put it, theories of 'people thinking about thinking people.'

What is worth noting about these and virtually all consequent definitions is the absence of any attempt to distinguish social cognition as a form of cognition or cognitive processing distinct from individual cognition or cognitive processing. Social cognition is defined as cognition directed towards social objects, namely persons (including ourselves) and social groups, and this form of social psychology is virtually identified as a branch of individual cognitive psychology. Indeed, Markus and Zajonc (1985) claimed that social psychology and cognitive psychology are 'near synonymous.'[1]

This research program has gone from strength to strength since the 1980s, with the Fiske and Macrae *Sage Handbook of Social Cognition* published in (Fiske & Macrae, 2012), and the third edition of the Fiske and Taylor book published in (Fiske, 2013), along with Fiske's *Sage Major Works in Social Cognition*. These important advances have also stimulated the development of two distinctive sub-disciplines. The first is social neuroscience (Cacioppo & Berntson, 1992; Cacioppo & Decety, 2011), concerned with:

> *the neurobiological underpinnings of social information processing: more specifically, on the mechanisms underlying people thinking about thinking people.*
>
> (Cacioppo et al., 2012, p. xii)

The second is evolutionary social psychology (Simpson & Kenrick, 2009), which aims to provide explanations of forms of social cognition and behavior in terms of natural selection:

> *At the most basic level, the adoption of an evolutionary framework acknowledges that many thoughts, feelings, and behaviors are due, at least in part, to psychological adaptations built by natural selection acting over the course of human evolution.*
> (Zeigler-Hill, Welling, & Shackelford, 2015, p. 4).

From this meta-theoretical perspective, the evolutionary development of social cognition is to be explained in terms of its contribution to reproductive fitness in ancestral environments:

> *Evolutionary perspectives on psychological processes consider the implication that those processes—and the behaviors they produce—have for reproductive fitness.*
> (Neuberg, Douglas, Kenrick, & Schaller, 2010, p. 763)

While much important work has been developed in these traditions, in this paper it is suggested that something important, and something *social*, has been left out, which could both challenge and enhance contemporary research in social cognition, social neuroscience and evolutionary social psychology. This is the theoretically rich and fertile conception of *socially engaged* cognition embraced by early American social psychologists, in which social beliefs and attitudes are conceived as beliefs and attitudes oriented to the represented beliefs and attitudes of members of social reference groups (see, for example, Asch, 1952; Bogardus, 1924; Dunlap, 1925; Ellwood, 1925; Faris, 1925; Katz & Schanck, 1938; Kelley, 1952, 1955; La Pierre, 1938; Lewin, 1947; Newcomb, 1951).

1 | SOCIALLY ENGAGED COGNITION

According to the theoretical conception of socially engaged cognition advanced by early American social psychologists and advocated in this paper, a belief or attitude is a social belief or attitude if and only if it is *socially engaged* by an individual; if and only if the individual holds that belief or attitude (at least in part) because and on condition that they represent other members of a social group as holding that belief or attitude; if that representation provides her *motive* for holding that belief or attitude. In contrast, a belief or attitude is an individual belief or attitude (again, at least in part) if and only if it is *individually engaged* by an individual: if and only if the individual holds that belief or attitude for reasons or causes *independent* of how she represents the beliefs and attitudes of members of social groups.

On this conception, a Catholic's belief that abortion is wrong, for example, is socially engaged if it is held because and on condition that other Catholics are represented as holding that belief; if this representation provides her *motive* for holding that belief. Her belief is socially engaged if she holds that belief because she wants to believe what she represents other Catholics as believing, because she wants to be like the members of this social 'reference group'. In contrast, a Catholic's belief that abortion is wrong is individually engaged if it is held for reasons or causes *independent* of whether any other Catholic (or member of any other social group) is represented as holding that belief: if, for example, it held on the basis of reasoned argument or compelling evidence or has been beaten into her as a child.

Since the distinction between socially and individually engaged beliefs and attitudes is a distinction in terms of the *modality* in which beliefs and attitudes are held, that is, socially as opposed to individually, and not a distinction in terms of *the contents or objects* of beliefs and attitudes, any particular belief or attitude can be held either socially or individually, or in part socially and in part individually. Thus, for example, one individual can hold the belief that climate change poses a threat to future generations socially, and another can hold one and the same belief individually, and yet another can hold one and the same belief *both socially and individually*––in part because they represent other members of their social group as holding that belief, and in part for reasons or causes independent of what they represent other members of their social group (or any other social group) as believing.[2] Given our need to represent and present ourselves as rational beings, it is likely that most of our socially engaged beliefs and attitudes are also held in part individually, even if our reasons for holding these beliefs and attitudes are to a significant degree rationalizations, although this is of course a matter for empirical determination.

It might be objected that given this latter fact, the intermingling of socially and individually engaged cognition is so profound that there is little value in trying to separate them conceptually or empirically, and that what counts as 'reasoned argument and compelling evidence' is itself socially engaged, and subject to social negotiation and challenge. With respect to the first complaint, while it may be difficult to determine the precise degree to which beliefs and attitudes are held socially as opposed to individually, it can be determined that some beliefs and attitudes are socially engaged to at least some degree. Lewin (1947) and Kelley (1955) demonstrated long ago that socially engaged or what they called 'socially anchored' beliefs and attitudes are more resistant to persuasive communications that individually engaged beliefs and attitudes. While it is relatively easy to persuade a political group of a more effective method of promoting their core beliefs through advertising if this method really is more effective, it is much harder to persuade them that their core beliefs are false.[3]

In claiming that many, perhaps most beliefs, are held both socially and individually, it is not claimed that distinct individually and socially engaged beliefs intermingle or penetrate or fuse with each other: what is claimed is that *one and the same belief* may be held by an individual both socially and individually, that it may be held (to some degree) because other members of a social group are represented as holding this belief, and also held (to some degree) for reasons or causes independent of whether any member of any social group is represented as holding that belief. The degree to which any particular belief is socially or individually engaged may be a matter of disputation and exploration, but each *mode of engagement* is not more or less social or more or less individual in itself: the distinct modes of engagement are instantiated in their purely social or individual forms whenever they are engaged.

It is true that beliefs that are held purely socially or purely individually may be relatively rare, although again this is ultimately an empirical matter. That said, there seem to be at least some prima facie instances of beliefs and attitudes that are held purely socially. Those beliefs and attitudes that are recognized as fashionable are precisely those beliefs and attitudes that are held *just* because (and on condition) that other members of a social group are represented as holding these beliefs or attitudes, such as transient beliefs in the rationality of management strategies (David & Strang, 2006) and certain medical beliefs about asthma (Martinez-Gimeno, 2009), although again, it is ultimately an empirical question whether there are any merely fashionable beliefs and attitudes. More prevalent perhaps are beliefs or attitudes that are held purely individually, for reasons or causes independent of how the beliefs and attitudes of members of social groups are represented, such as the beliefs that there are twelve people in a room (based

upon a count), that the temperature outside is bitterly cold (based on the external thermostat reading), or a negative attitude to a pompous teacher (based upon their depreciating behavior towards you). Although one can imagine that in some cases such beliefs or attitudes could also be held in part socially, in many cases this would seem to be simply not the case.

In certain other cases, such as the example of beliefs about abortion discussed above, it may be that the acceptance of standards of what counts as 'compelling arguments and evidence' may be socially engaged. Thus, for example, some (or many or all) Catholics might accept the apparent ability of the early developing fetus to experience pain as evidence in support of their belief that abortion is wrong because and on condition that they represent other Catholics as accepting such evidence *as evidence* in support of their belief that abortion is wrong. Nor need such social acceptance of what counts as argument and evidence be restricted to normative beliefs and attitudes, such as beliefs and attitudes about abortion or the corporate funding of candidates for political office. Correlations between exposure to putrid matter and puerperal fever, and between mosquito bites and yellow fever and malaria, were dismissed as irrelevant to the determination of the causes of such diseases during the historical period in which they were presumed to be caused by miasmic influences. Ignaz Semmelwiss' (1818–1865) methodological isolation of putrid matter carried on the hands of medical students coming from their dissection class as the cause of the higher incidence of puerperal fever in the First Division as compared to the Second Division of the Vienna General Hospital in the 1860s (in the First Division women were examined by the students, in the Second Division by midwives) is nowadays treated as a textbook example of the 'logic of scientific discovery' (see, for example, Hempel, 1966, Chapter 1), but was dismissed and ridiculed at the time as irrelevant by the medical establishment, who presumed that such fevers were miasmic in origin (Neuland, 2004).

The possible social engagement of 'standards of evidence and argument' is an intriguing phenomenon worthy of further investigation, but it does not undermine the distinction between socially and individually engaged beliefs and attitudes. The fact that the acceptance of standards of argument and evidence may be socially engaged does not entail that beliefs and attitudes based upon such (socially engaged) arguments and evidence are themselves socially engaged: while a Catholic's belief that abortion is wrong may be based on (socially engaged) arguments and evidence, it may not be held to any degree because and on condition that other Catholics are represented as holding that belief. A comparison with the so-called social dimensions of emotions may be illuminative here. While the acceptance of certain actions or failures to act as personal achievements or degradations may be socially engaged, and may vary for different social groups, individuals' feelings of pride and shame at their action or failure to act are caused by or based upon their representation of their action or failure to act as a personal achievement or degradation, and not by their representation that other members of a social group would feel pride or shame in such an action or failure to act (even though they would in fact generally represent them in this way): it is their representation of their action or failure to act and not the represented feelings of other social group members that provides the ground for their emotion. Analogously, individually engaged beliefs and attitudes may be based on arguments and evidence that are grounded in socially engaged standards of argument and evidence.

In the early decades of twentieth century social psychology, the social orientation of beliefs and attitudes to the represented beliefs and attitudes of members of what later came to be characterized as their social 'reference groups' (Hyman, 1942; Kelley, 1952) was held to explain a variety of social psychological phenomena, such as social prejudice and 'occupational attitudes.' Thus Horowitz (1936) argued that the racial prejudice of whites against blacks in the American South was generated not by inductive inference from interactions with black persons with

negative qualities, but by the adoption of the prejudices of their white social reference groups. Similarly, Bogardus (1924) argued that many distinctive 'occupational attitudes,' such as those associated with certain trades and professions, are socially engaged, and Watson and Hartmann (1939) and Edwards (1941) extended this analysis to religious and political attitudes.

For historical reasons that go beyond the scope of the present paper (but see Greenwood, 2004 for a detailed analysis), this theoretically rich and fertile conception of socially engaged cognition was progressively neglected as the century wore on and was effectively abandoned after a brief renaissance in the immediate post World War II period. Since there were never any good theoretical or empirical reasons for rejecting this conception, it deserves to be integrated within contemporary research on social cognition, given the implications of the social engagement and anchoring of many beliefs and attitudes. To the degree that our natural and social scientific and moral beliefs are socially engaged, that is, held independently of argument and evidence, they are to that degree irrational (see Greenwood, 2004, pp. 138–142), contrary to our image of ourselves as autonomous rational agents who adjust our beliefs and attitudes in line with the best available arguments and evidence. Yet while the social anchoring of beliefs and attitudes makes it difficult for outsiders to persuade members of a social group to change their socially anchored beliefs and attitudes, appeals by respected members of that social group may have a better chance of changing members' beliefs and attitudes (Lewin, 1947). And group members may cultivate strategies to strengthen the social engagement of core beliefs and attitudes, in order to resist persuasive communications from the media and outside groups. The practical implications of these features of socially engaged beliefs and attitudes certainly deserve to explored and developed.

Given the wealth of empirical evidence for the social engagement of beliefs and attitudes, the only questions that remain open are the degree to which our beliefs and attitudes are socially engaged, and the identification of the cognitive/affective and neurophysiological mechanisms that underlie our socially engaged beliefs and attitudes, and the developmental origins (phylogenetic and ontogenetic) of our capacity to have such socially engaged beliefs and attitudes.

Before proceeding to consider what this would entail, it is worth engaging some objections that would likely be raised against my claim that the study of socially engaged cognition has been progressively neglected and effectively abandoned since the post-World War II period. Surely, it may be said, social-identity theory (Turner, 1987; Turner & Reynolds, 2010), social representation theory (Moscovici, 1984), system justification theory (Jost & van der Toorn, 2012), and the sub-disciplines of discursive psychology (Edwards & Potter, 1992), cultural psychology (Cole, 1998), political psychology (Houghton, 2015), and societal psychology (Himmelweit & Gaskell, 1990) have at least tried to articulate and develop more social theories of social cognition, even if some of this work remains overly individualistic in nature.

While there is much of value to be gleaned from these avowedly more social theories of cognition, *none* of them capture the conception of socially engaged cognition developed by early American social psychologists, as I have argued in detail elsewhere (Greenwood, 2004, 2014). Rather than reprise these arguments in this paper, I will try to explain why the theory that appears to most closely approximate the conception of socially engaged cognition, namely 'social identity' theory, at least in its extended 'self-categorization form' (Haslam, 2001; Haslam, McGarty, & Turner, 1996; Postmes & Branscombe, 2010; Turner, 1987; Turner & Reynolds, 2010), does not in fact employ the same theoretical conception, and explain why, in the end, it does not really matter to my main argument if any or all of these theories or sub-disciplines do in fact employ a conception of social cognition that more of less approximates the notion of socially engaged cognition.

With respect to social identity theory, socially engaged beliefs and attitudes are different from individually engaged beliefs and attitudes that individuals are persuaded to (or inclined to or caused to) adopt via their perceived 'psychological equivalence' with members of category groups, such as the populations of women, motorcyclists, Australians, the deaf and the unemployed:

> *The theory proposes that these others are persuasive because their psychological equivalence to self is seen to qualify them to validate self-relevant aspects of reality. In other words, we come to believe what others tell us when we categorize them as similar to us in relevant ways, and we cease to believe them when we categorize them as different.*

> (Haslam, McCarty & Turner, 1995, p. 30)

In contrast, socially engaged beliefs and attitudes are engaged not because individuals perceive themselves *to be like* members of category groups, but because individuals *want to be like* members of their social reference groups (for a more detailed defense of these claims see Greenwood, 2004, 2014). As early American social psychologists stressed, although all social reference groups are eo ipso category groups, not all category groups are social reference groups to which individuals orient their beliefs and attitudes. Thus Newcomb (1951, p. 38), for example, distinguished a genuine social group (to which individuals orient their beliefs and attitudes) from "a mere category, such as all males in the state of Oklahoma between the ages of 11 and 25," and Asch (1952, p. 260) distinguished social groups from "persons who are five years old or the class of divorced persons." The population of Catholics is both a social reference group (whose members hold beliefs and attitudes because and on condition that they represent other Catholics as holding these beliefs and attitudes) and a category group, who share certain properties (including shared socially engaged beliefs and attitudes), but the population of persons who are left-handed form a category group but not a social reference group, because (it may be reasonably presumed) they do not hold beliefs and attitudes because and on condition that they represent other left-handed people as holding these beliefs and attitudes.[4]

This is not to deny the reality of the cognitive dynamic that inclines individuals to be more accepting of the beliefs and attitudes of members of category groups whose categorical properties they share, or the explanatory and predictive value of 'social identity' theory. It is just to maintain that this cognitive dynamic is *different* from the cognitive dynamic of the social engagement of beliefs and attitudes.[5]

Second, let it be granted, for the sake of argument, that some or all of the alternative theories and sub-disciplines considered above do approximate the conception of socially engaged cognition that I have been advocating. The point remains that all these alternative and more 'social' conceptions of cognition are *completely lacking* from contemporary theory and research on social cognition, social neuroscience and evolutionary social psychology, where social cognition remains rigidly defined in terms of cognition directed to social objects, and not in terms of a distinctive type of socially engaged cognition distinct from individually engaged cognition (whether that be interpreted in terms of social identity theory, social representation theory, cultural psychology etc.).[6]

It might be objected that the study of the socially engaged cognition has been continued though the study of social projection (Krueger, Acevedo, & Robbins, 2005) and that the Fiske and Taylor texts and the journal *Social Cognition* acknowledge the influence of 'social' variables––such as class, gender, race and other demographic influences––on cognitive processes.

However, socially engaged beliefs and attitudes are different from beliefs and attitudes that *individuals already have* and project upon others, including members of social groups. And acknowledging the influence of 'social' variables––such as class, gender, race and other demographic influences––on cognitive processes is not the same as acknowledging the social engagement of cognition. For beliefs and attitudes may be influenced by class, gender, race and other demographics without being socially engaged: thus women may be more or less inclined to depressive thoughts than men because of differences in neurochemistry, and the unemployed may be more likely to contemplate criminal activity because of individual financial need and temporal opportunity.

In the early editions of *Social Cognition*, Fiske and Taylor championed the extension of the cognitive psychological approach to the study of social cognition by highlighting the analogy between the perceptions of things and the perception of people:

> *As one pursues research on social cognition, the analogy between the perception of things and the perception of people becomes increasingly clear. The argument is made repeatedly; the principles that describe how people think in general also describe how people think about people.*
>
> (Fiske & Taylor, 1991, p. 18).

In their defense, it might be pointed out that in later editions they did come to recognize that:

> *Social cognition departs from the general principles of cognition in some ways: Compared to [non-social] objects people are more likely to be causal agents, to perceive as well as being perceived, and to involve intimately the observer's self. People are difficult targets of cognition; because they adjust themselves upon being perceived, many of their important attributes (e.g. traits) must be inferred, and the accuracy of observation is difficult to determine. People frequently change and are unavoidably complex as targets of cognition. Hence those who study social cognition must adapt the ideas of cognitive psychology to suit the specific features of cognitions about people.*
>
> (Fiske & Taylor, 2013, p. 27).[7]

No doubt this is true of the social objects of cognition (people and social groups) as opposed to the non-social objects of cognition (tables, tree and tarantulas etc.). Yet once again, this distinction is made on terms of the *objects* of social cognition and not in terms of any distinctively social form of cognition or cognitive processing. No mention is made of the possibility of adapting cognitive psychology to accommodate the distinction between socially and individually engaged forms of cognition.

2 | SOCIALLY ENGAGED COGNITION AND SOCIAL COGNITION

Whatever is the case with regard to the relation between the early American theoretical conception of social cognition as socially engaged cognition and contemporary conceptions of social cognition derived from social identity theory, social representations theory, system justification theory and the like, this theoretical conception of socially engaged cognition cannot simply be grafted onto the dominant theoretical conception of social cognition as cognition

directed towards persons and social groups, for the two conceptions of social cognition are orthogonal.

There will of course be a significant degree of overlap between socially engaged cognition and cognition directed towards persons and social groups, since we have many socially engaged beliefs and attitudes about persons and social groups, such as our spouse, colleagues, and Muslims. However, socially engaged beliefs and attitudes are not restricted to beliefs and attitudes directed towards persons and social groups: we can have socially engaged beliefs and attitudes about non-social objects, such as the origin of species, the environment, climate change, and the existence of N-rays and gravitons, which *would not count* as social cognition according to the dominant contemporary conception of social cognition.[8] Conversely, one can have individually engaged beliefs and attitudes directed towards persons and social groups––about our spouse (that he/she has been unfaithful), colleagues (that they are to be trusted), and Muslims (that they hate all things Western)––on the basis of inductive experience or cognitive heuristics such as stereotyping.

This means that the cognitive/affective mechanisms that underlie cognition directed towards social objects cannot be assumed to be identical with whatever cognitive/affective mechanisms underlie socially engaged cognition, although there will be some degree of overlap, given that some beliefs and attitudes about social objects will be socially engaged, and suggests the need and opportunity for a novel research program to explore the cognitive/affective mechanisms underlying socially engaged cognition, *whatever its objects*. Analogously, it cannot be assumed that the neurophysiological mechanisms that subserve cognition directed towards social objects can be identified with those that subserve socially engaged cognition, although again there will be some degree of overlap, given that some beliefs and attitudes about social objects will be socially engaged. Once again this suggests the need and opportunity for a novel research program, devoted to the identification of the neurophysiological mechanisms that subserve socially engaged cognition, *whatever its objects*.

As noted earlier, Lewin (1947) and Kelley (1955) demonstrated long ago that socially engaged or 'socially anchored' beliefs and attitudes are more resistant to change by persuasive communications than individually engaged beliefs and attitudes, and it would be interesting to discover if this difference is reflected in the neurophysiological data. Along similar lines, it would be interesting to discover whether our social engagement of moral principles limits the scope of their application––whether, for example, we are more inclined to help represented members of our own social reference groups as opposed to complete strangers, or whether the socially engaged attitudes of some but not other social reference groups promote extending the 'moral circle' to strangers (Greenwood, 2011), and whether such differences (if any there are) are reflected in the neurophysiological data.

This is not to disparage the excellent and extensive work in social neuroscience that has been devoted to the exploration of the neurophysiology of cognition directed to social objects. It is just to lament the fact that it *has been restricted to the study of cognition directed to social objects*, excluding the study of socially engaged cognition. For there remain a wealth of questions to be explored given the recognition of socially engaged cognition as a distinctive form of cognition.

Consider for a moment the following account of the neurophysiological processes that are distinctive of social cognition, defined as cognition directed to social objects (persons and social groups):

> *The brain region most frequently implicated in social cognition is the medial prefrontal cortex (PFC), although research also suggests that a number of other*

> *regions contribute critically to social-cognitive processing, including the temporoparietal junction, orbitofrontal cortex, amygdala, superior temporal sulcus, and temporal poles.*
>
> (Mitchell, Mason, Macrae, & Banaji, p. 65)

However, for the reasons noted above, it cannot be presumed that these regions will be identical to or isomorphic with those regions activated in the social engagement of cognition directed to social and nonsocial objects, although again there is bound to be some overlap, given that much socially engaged cognition is directed towards social objects. So exploratory work needs to be done in identifying both similarities and differences between the neural regions activated when cognition is directed to social objects simpliciter, and those neural regions activated when socially engaged cognition is directed towards social objects, with the aim of identifying these neural regions distinctive of socially engaged cognition. More developed and discriminative investigations would compare and contrast the neural regions activated when individually engaged beliefs and attitudes are directed towards social objects and (separately) non-social objects, and the neural regions activated when socially engaged beliefs and attitudes are directed towards social objects and (separately) non-social objects. No easy task to be sure, but one that is surely worth pursuing, as, for example, an alternative means of determining the social engagement of beliefs and attitudes (and perhaps the degree of their social engagement) towards both social and non-social objects, and perhaps as a means of identifying the neural deficits responsible for the apparent failure of autistics and psychopaths to socially engage beliefs and attitudes (see for example, McGreer, 2008).

3 | EVOLUTIONARY SOCIAL PSYCHOLOGY

Like social cognition theorists and social neuroscientists, evolutionary social psychologists define social cognition in terms of cognition directed towards social objects, as "cognitive processes that enable individuals to understand and interact with others in their social environment" (Zeigler-Hill et al., 2015, pp. 5–6), without recognizing any distinction between socially and individually engaged cognition. However, in this case the neglect may actually be warranted, since it seems doubtful if there can be such a thing as an evolutionary social psychology of socially engaged cognition, as opposed to an evolutionary social psychology of cognition directed towards persons and social groups, which is a thriving contemporary enterprise, as evidenced by the wealth of contemporary evolutionary psychological explanations of cooperation, competition, altruism, competition, pretense, deception, aggression, and the like in terms of forms of cognition that promoted evolutionary stable strategies that provided a reproductive advantage in ancestral environments.

The main reason that it is doubtful if there can be an evolutionary social psychology of socially engaged cognition is because it is doubtful that socially engaged forms of cognition provided humans with enhanced reproductive fitness in ancestral environments. One reason for doubting this is that there do not appear to be homologues of socially engaged cognition in the animal kingdom, even among the higher primates, since many argue that even the higher primates do not appear to have sufficient 'theory of mind' to represent the beliefs and attitudes of other primates (Call & Tomasello, 2008; Penn & Povinelli, 2007),[9] a precondition of socially engaged forms of cognition oriented to the represented beliefs and attitudes of others. However, this claim has been disputed (de Waal, 2016), and indeed some recent evidence suggests that

primates are able to attribute false beliefs to other primates to anticipate their behavior, the gold standard of tests of 'theory of mind' in children and non-human animals (Krupenye, Kano, Hirata, Call, & Tomasello, 2016). At the end of the day this is an empirical matter, and it may be granted that if it could be shown to be the case that some primates (or other non-human species) are in fact able to represent the mental states of other primates (or other non-human species), then they *may* also be able to socially engage certain beliefs and attitudes.

However, a number of points are worth making about this possibility. The first is that even if it could be shown that primates can represent the mental states of others (and themselves), this would not be sufficient to demonstrate socially engaged cognition. Primates might be able to infer (or simulate) the beliefs and attitudes of other primates, and employ them in complex calculative ways to anticipate their behavior, deceive them, cooperate with them and the like (in much the same way as humans often do), *without ever adopting beliefs or attitudes because and on condition that other primates are represented as holding such beliefs and attitudes*: *this may never be their motive or ground for holding any belief or attitude*. Second, even if primates were able to socially engage beliefs and attitudes, this ability, like those of humans, might not be a product of natural selection, but rather a byproduct (a 'spandrel') of their highly developed intelligence and ability to represent the mental states of others.[10] And this might be the case even if the ability to represent the mental states of others is itself a naturally selected adaption, since the ability to represent the mental states of conspecifics might very well have provided a reproductive advantage for humans and other animals in ancestral environments. If this were the case, then we would have a (partial) explanation of the evolution of socially engaged cognition in terms of its ancestral precursors, without socially engaged cognition itself being explained in terms of its enhancement of reproductive fitness in ancestral environments,[11] and *it is only in this latter sense that I suggest that it is doubtful if an evolutionary social psychology of socially engaged cognition is possible.*

It might be objected that socially engaged cognition is an adaptation that is specific to the human species, given that group selection seems to have played a far more important role in human phylogeny than in the phylogeny of other species (Henrich, 2004; Richerson & Boyd, 2005; Wilson, 2012), especially with respect to the development of what is termed 'ultra sociality' in humans: the ability of humans to cooperate in large groups of genetically unrelated individuals (Richerson & Boyd, 1998). Now it may well be the case that socially engaged cognition is a distinctively human achievement, but it is doubtfully a product of group selection. The ability to represent others' beliefs would certainly have made it easier to mimic, imitate or conform to others' beliefs. Yet these forms of assimilation of belief are only socially engaged when the representation of others' beliefs function as individuals' motives for adopting these beliefs. If conformity of belief is induced automatically, or by reward or punishment, or the promise or threat thereof, it is individually and not socially engaged.

Mimicry or imitation or conformity of beliefs within groups may have facilitated the selection of certain groups over others by making differences within groups less significant than differences between groups (Henrich & Boyd, 1998). However, it is not clear that this popular account of 'in-group/out-group' differences between competing groups that promoted cooperation among members during the course of the cultural evolution of societies captures the dynamics of contemporary forms of social engaged cognition, which operate *within* established societies or cultures.

Individuals do not mimic or imitate or conform to each and every behavior of those around them, or even the majority of those around them, but *selectively* orient their beliefs and attitudes and behavior to the beliefs and attitudes and behavior of members of specific social reference

groups within society or culture. We may imitate the thought and behavior of our family members via the social engagement of their attitudes and behavior, but not those of our poor neighbors or ethnic minorities. As we grow older, we may socially engage the attitudes and behavior of our playmates or fellow gang members or professional colleagues to a greater degree than those of our family members, but not those of strangers or members of different gangs or professional groups (lawyers as opposed to psychologists for example).

While we are selective in the social orientation of our beliefs and attitudes, we are also *pluralistic* in the social orientation of our beliefs and attitudes. We orient our beliefs and attitudes to the beliefs and attitudes of members of a variety of different social reference groups within society or culture, such as family, friends, co-religionists and co-politicals. As William James noted in his discussion of the variety of 'social selves' that may be attributed to an individual:

> *We may practically say that he has as many different social selves as there are distinct groups of persons about whose opinion he cares ... From this there results what practically is a division of the man into several selves; and this may be a discordant splitting, as where one is afraid to let one set of his acquaintances know him as he is elsewhere; or it may be a perfectly harmonious division of labor, as where one tender to his children is stern to the soldiers or prisoners under his command.*
>
> (1890, p. 294)

Other early social psychologists noted that the social orientation of different beliefs and attitudes to different social reference groups could lead to conflict, as for example the case of an individual whose beliefs and attitudes are oriented to the represented beliefs and attitudes of fellow-Catholics and to those of brothers and sisters in the gay and lesbian community, or to accommodative compartmentalization:

> *An individual as a member of different groups may be divided within himself, and in a true sense have conflicting selves, or be a relatively disinterested individual. A man may be one thing as a church member and another thing as a member of the business community. The division may be carried in watertight compartments, or it may become such a division as to entail internal conflict.*
>
> (Dewey, 1927, p. 129; Cf Cooley, 1902; Faris, 1925; La Piere, 1938)

Moreover, those intra-personal conflicts that are the product of socially engaged beliefs and attitudes would seem to be orthogonal to whatever conflicts or competition might occur between particular groups themselves. This is because individuals who jointly orient their beliefs and attitudes to one social reference group might experience conflict with their beliefs and attitudes oriented to quite different social reference groups (some Catholics might feel conflicted by their orientation to gay or lesbian groups, others might feel conflicted by their social acceptance of the interrogation strategies of their army combat group), *independently of whether there is any significant conflict or competition between the members of the social reference groups themselves*.

Finally, as far as I can tell, there is little evidence to suggest that any other animal displays such selective and pluralistic social engagement of beliefs and attitudes, and it is hard to see how the selective and pluralistic social engagement of beliefs and attitudes could have contributed to reproductive fitness in ancestral environments, or to the general advantage of individuals or groups. To the degree that beliefs and attitudes are socially engaged, they are held independently of evidence and argument, and are just as likely to be detrimental as

advantageous to individuals and groups who maintain them (such as socially engaged beliefs about the immorality of wealth accumulation or the efficacy of magical treatments of cholera).[12] And in cases where they would work to the advantage of individuals or groups, this would be in virtue of the *content* of these beliefs and attitudes, not their social engagement per se.

4 | CONCLUSION

In this paper I have advocated a revival of the theoretically fertile conception of socially engaged cognition developed by early American social psychologists and documented the implications for contemporary research in social cognition, social neuroscience and evolutionary social psychology.

Such advocacy is not intended to deny the significance of contemporary social psychological and neurophysiological research on cognition directed towards social objects or the contribution of evolutionary psychology to our theoretical understanding of cognition directed towards social objects, including the adaptations that enabled the development of socially engaged forms of cognition in contemporary human forms of life. Such advocacy is neither intended to deny the utility of the development of theories that explore the interaction between socially engaged forms of cognition and the different objects of socially engaged cognition (social vs. non-social, social vs. individual, human vs. animal etc.) or of the interaction between socially engaged modes of cognition and individually engaged modes of cognition. However, in order for the development of such theories to be fruitful, contemporary social psychology must re-orientate its research traditions to encompass the too long neglected tradition of research on socially engaged cognition.

ENDNOTES

[1] Although they doubtfully meant this literally. Rather they appear to have claimed that social psychology and cognitive psychology are co-extensional: they refer to the same subject-matter. So there is no distinction between cognitive psychology and social cognition: social cognition is just the psychology of cognition directed towards social objects. Cf. Floyd Allport's famous claim that there is no distinction between social psychology and individual psychology: social psychology is just individual psychology directed at other persons:

> Social psychology must not be placed in contradistinction to the psychology of the individual: it is part of the psychology of the individual, whose behavior it studies in relation to that sector of his environment comprised by his fellows.

> (Allport, 1924, p. 4.)

[2] It is also theoretically possible for an individual to hold one belief socially, for example that the philosophy program ought to introduce an affirmative action policy, and hold a contrary belief (that it should not) individually, either for explicit reasons or through implicit bias.

[3] This point is important to stress. While it may be extremely (and perhaps hopelessly) difficult to determine the degree to which any individual belief or attitude is socially or individually engaged, this does not mean that the social engagement of beliefs and attitudes cannot be empirically or experimentally demonstrated, or knowledge of the social engagement of beliefs and attitudes exploited to practical ends, as demonstrated by Lewin's (1947) work on group decision and social change. An analogy may help to illustrate this point. The influence of situational factors on the generation of behavior such as bystander apathy (Latané & Darley, 1970) and destructive obedience (Milgram, 1974) may be demonstrated experimentally, and this knowledge exploited to practical ends (for good or ill), even though it is extremely (and perhaps hopelessly) difficult to determine the precise degree that situational and dispositional factors play in the generation of any individual instance of apathetic or destructively obedient behavior.

[4] Of course, given a certain back story, they might, like the category group of divorced or unemployed persons. The point is that social reference groups are not equivalent to category groups, and it is always an open and empirical question whether any category group also functions as a social reference group, to which individuals orient their beliefs and attitudes.

It might be objected that I am being unfair to social identity theory here, on the grounds that the key variable is not a binary matter of whether an individual is a member of a group or not, but rather an individual's degree of identification with a group, which is an active, linear variable. But one might identity with members of a group and affiliate oneself with them without orienting one's beliefs and attitudes towards theirs: for example, left-handers and the unemployed might identify with and affiliate with other left handers and unemployed persons without adopting their multifarious beliefs and attitudes. In other cases individuals might identify with and affiliate with group members because they *already* share their beliefs and attitudes, and see themselves as like them, and this may be true of some members of religious and political groups. But this is different from holding these beliefs and attitudes *because* one represents members of that group as holding these beliefs and attitudes. This is not to deny that in some cases identification with members of a social group who already share some of your beliefs may motivate you to be *more like them* by adopting (what you represent to be) their other beliefs and attitudes, so identification with group members may sometimes lead to the social engagement of beliefs and attitudes. Conversely, the social engagement of beliefs and attitudes may lead individuals to identify with members of social groups.

[5] There is another significance difference between the theories. Social identity theorists maintain a fundamental and contrastive distinction between 'social identity' based up social category identification and 'personal identity' based upon views of oneself as a unique individual (Haslam et al., 1996, pp. 35–36). Yet according the present account, there is no such distinction to be made: we forge our personal identities by managing the moral demands and hazards created by the orientation of our psychology and behavior to the psychology and behavior of different social reference groups. Put another way, our personal identity is a social achievement (Greenwood, 2014).

[6] This is even true of works that purport to secure an integration of 'social identity' theory and social cognition, such as Abrams and Hogg's (Eds.) *Social Identity and Social Cognition* (1999), in which it is maintained that social-identity theory is a "true social cognitive theory, which specifies cognitive and social processes and structures and their relationships, and which therefore encourages dialogue between researchers operating at different levels of explanation" (Hogg & Abrams, 1999, p. 6).

Cognition simpliciter is treated as distinct from the social processes and structures to which it is related (at *different* levels of explanation), in contrast to the treatment of some forms of cognition or cognitive processing as socially as opposed to individually engaged (at the *same* level of explanation). Even when cognition is related to group processes (Nye and Brower, 1996), it is identified as cognition simply shared by members of social groups rather than cognition socially engaged by members of social groups. Yet the belief that paper is flammable (based upon empirical experience) may be shared by all Catholics (and Democrats) but not socially engaged by any of them.

[7] This is not exactly a new idea. In 1948 Krech and Crutchfield characterized social and non-social psychological 'fields' in terms of their social and non-social objects, but maintained that "no theoretical distinction... can be drawn between a 'social field' and a 'non-social' field," since the difference between the contents and objects of both fields is a continuum representing different degrees of "capriciousness, mobility, loci of causation, power qualities, reciprocal reactivity" (1948, p. 9).

[8] Although contemporary philosophical accounts of social beliefs and attitudes in terms of 'we intentions' (Searle, 1995, 2010) 'joint commitments' (Gilbert, 1987, 1994) and beliefs and attitudes in the 'we-mode' (Tuomela, 1992; Tuomela, 2007) differ from my own theoretical conception derived from early American social psychology, they have similar implications. For according to such accounts, our social beliefs and attitudes are not restricted to beliefs and attitudes about persons and social groups, but can be extended to beliefs and attitudes about the origin of species, the environment, climate change, and the existence of N-rays and gravitons, and so cannot be equated with the dominant conception of social cognition in contemporary social psychology. Thus Tuomela (2007, p 138), for example, notes that members of a social group might hold the social belief (or belief in the 'we-mode') that the earth is flat, and Gilbert and Searle would clearly agree. Once again, contemporary social cognition theorists *would not count* this belief as a form of social cognition, since it is not directed to persons or social groups.

[9] Cf Mitchell, Mason, Macrae, and Banaji (2006, p. 63):

> Many of these abilities, such as recognizing oneself as a mental agent and inferring the psychological states of other such agents (even when their beliefs conflict with one's own), do not appear to have ready homologues among other animals.

Mitchell, Mason, Macrae & Banaji suggest that humans may have their own adaptation for social cognition, which may of course be true.

[10] Darwin himself acknowledged that it might be the case that "certain powers, such as self-consciousness, abstraction, &c, are peculiar to man" (1871, p. 105). But if this were the case, he suggested, such distinctive human achievements are most likely byproducts of the superior intelligence of humans:

> *If it be maintained that certain powers, such as self-consciousness, abstraction, &c., are peculiar to man, it may well be that these are the incidental results of other highly-advanced intellectual faculties.*
>
> (1871, p. 106)

[11] And there are no doubt other ancestral precursors that played a role in the development of socially engaged cognition in humans, such as a pretense, cooperation and language.

[12] Cf Baldus (2014, p. 233) on the process of 'internal selection' within cultural evolution made possible by the creative development of human agency:

> *Internal selection creates much that we find useful, but also much individual error and collective harm, from medieval witch hunts to the use of lead-based make-up by Edo-period Samurai women which made their infants sick.*

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