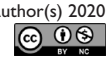
Theory & Psychology

Article

The "placebo" paradox and the emotion paradox: Challenges to psychological explanation

Theory & Psychology
1–21



DOI: 10.1177/0959354320928139
journals.sagepub.com/home/tap

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Abstract

Philosophical debates about how best to explain emotion or placebo are debates about how best to characterise and explain the distinctive form of human responsiveness to the world that is the object of interest for each of those domains of inquiry. In emotion research, the cognitive theory of emotion faces several intractable problems. I discuss two of these: the problem of epistemic deficit and the problem of recalcitrant emotions. Cognitive explanations in Placebo Studies, such as response-expectancy and belief-based explanations, also face the problem of epistemic deficit in addition to the problem of logically self-destructive true belief. While such considerations might motivate a retreat to affect, this brings its own problems. I argue that it is a particular version of cognitivism, representational cognitivism (Rep-Cog), that generates the paradoxes we encounter in emotion and placebo research. I propose that turning to nonrepresentational accounts of cognition will dissolve these paradoxes. As I move toward conclusion, I propose drawing on the ethnomethodological tradition to respecify human responsiveness to loci of significance in the lifeworld by undertaking ethnographies of members' own situated methods for making intelligible and accountable their attitudinal and nonattitudinal responsiveness to loci of significance in their environment.

Keywords

cognitivism, emotion, ethnomethodology, placebo response, response expectancy

Philosophical debates about how best to explain emotion or placebo are debates about how best to characterise and explain the distinctive form of human responsiveness to the world that is the object of interest for each of those domains of inquiry. In both cases, what is to be explained, the boundaries of the explananda, are identified in the first instance with the grammar of the vernacular terms: "emotion" and "placebo."

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Emotion researchers have tended to fall into one of two explanatory camps, usually referred to as Jamesians and Cognitivists. Jamesians explain emotions as essentially physiological responses to environmental causal triggers, which are captured by depicting those responses as affective states (e.g., Darwin & Ekman, 1872/1998; Ekman, 2003; Griffiths, 1997; James, 1884; Prinz, 2004). Cognitivists have usually explained emotions as primarily constituted by thoughts or propositional attitudes (e.g., Lazarus, 1991; Nussbaum, 2004; Solomon, 2006; Taylor, 1985).

In Placebo Studies, the debate has been dominated by those who seek to explain "placebo" in behavioural terms, as a conditioned behavioural response (e.g., Ader, 1988) or those who explain it cognitively as an expectancy response (e.g., Kirsch, 1985).

In emotion research, it has been argued that the cognitive theory of emotion faces a number of intractable problems (e.g., Deigh, 2004; Griffiths, 1997); I will discuss two of these in what follows: the problem of epistemic deficit and the problem of recalcitrant emotions (D'Arms & Jacobson, 2003). Similar problems face the currently favoured cognitive explanation in Placebo Studies, where, in addition to the problem of epistemic deficit, such theories face the problem of the logically self-destructive true belief (Cave, 2001). While such considerations might motivate a retreat to affect, these bring their own problems in both Emotion Research (for an overview, see Leys, 2018; see also my discussion of Barrett and Prinz in the next section of this article) and Placebo Studies (see, e.g., Moerman, 2002; Montgomery & Kirsch, 1997; Rescorla, 1988).

As Jesse Prinz put it in 2003, "cognitive theories give us too much, while non-cognitive theories give us too little" (p. 78). This is our dilemma of adequate explanation and what I propose as the central paradox of emotion and placebo research that serves as a challenge to psychological explanation.

In what follows, I shall propose that the paradox is generated not by the nature of the phenomena under study but by the underlying commitment to a particular way of thinking about cognition: what I refer to as Representational Cognitivism (Rep-Cog). Rep-Cog is a way of conceiving our responsiveness to loci of significance in the lifeworld as necessarily involving representations of the relevant locus of significance. To differentiate between representationalist cognitive explanations and nonrepresentationalist explanations, I will divide cognitive explanations into three classes: (a) Rep-Cog explanations are those that depict emotional responses as constituted and type-individuated by mental representations; (b) E-Cog approaches are those that invoke 4E—Embodied, Embedded, Extended, and Enacted—cognition and other embodied, enactivist, and ecological approaches, which don't invoke representations; and (c) EM-Cog, which draws on the ethnomethodological approach to describe cognition via members' situated accounting practices.

I will argue that it is Rep-Cog, as a version of cognitivism, that generates the paradoxes we encounter in emotion and placebo research. I propose that turning to nonrepresentational accounts of cognition will dissolve these paradoxes. As I conclude, I suggest routes out of the paradox by drawing on the work of Harold Garfinkel and the ethnomethodological tradition to propose respecifying this responsiveness to loci of significance in the lifeworld in terms of members' accounts of their attitudinal and nonattitudinal responsiveness to loci of significance. This amounts to a turn away from formal explanatory accounts of emotion and placebo and toward ethnographic descriptions of interactive practices.

I will begin by discussing two candidate explanations for the placebo response, so as to explore the problems they face, and identify the source of those problems. I then turn to Emotion Research where I will, with the help of two emotions researchers, the psychologist Lisa Feldman Barrett and the philosopher Jesse Prinz, identify the paradox faced by emotion researchers. In both cases, of Placebo Studies and Emotion Research, my suggestion is that it is representationalism that generates the paradoxes. In the final section of this article, I propose a nonrepresentationalist alternative as a way of dissolving the paradoxes.

Placebo

> Current thinking about Pavlovian conditioning differs substantially from that of 20 [now more than 50] years ago. Yet the changes that have taken place remain poorly appreciated by psychologists generally. Traditional descriptions of conditioning as the acquired ability of one stimulus to evoke the original response to another because of their pairing are shown to be inadequate. They fail to characterize adequately the circumstances producing learning, the content of that learning, or the manner in which that learning influences performance. Instead, conditioning is now described as the learning of relations among events so as to allow the organism to represent its environment. (Rescorla, 1988, p. 151)

> I believed I should get better solely because the pill would make me better, but I now know the pill will not. It is solely my belief that will make me better; but the belief about the pill is false—so I no longer hold that belief. Hence, I shall not get better. (Cave, 2001, p. 145)

Placebo Studies, with its own interdisciplinary international society (The Society for Interdisciplinary Placebo Studies, SIPS), which hosted its inaugural conference in spring 2017, is now a bonafide subject area, comprised of researchers from a range of disciplinary backgrounds, including anthropology, medicine, philosophy, psychology, and neuroscience. To the uninitiated, the term "placebo effect" can seem like an oxymoron.[1] There is an obvious tension between predicating of something that it is inert while at the same time talking of its effects. However, the subject matter of placebo studies is not the *placebo*—the pharmacologically inert dummy pill, or the sham surgical intervention—historically given to "please" the patient, but more recently employed as an important control in randomised controlled trials (RCTs); the subject matter might be said to be the puzzle, the problem in need of a solution, that presents itself to us when we observe participants responding in medically significant ways to the administering of inert pills or sham surgery.

The placebo problem, what has been described as a paradox,[2] has this form: the administering of dummy pills or sham surgery has been demonstrated to be reliably associated with measurable and medically significant recovery in significant percentages of participants for a diverse range of medical conditions, in well-constructed RCTs. The correlation is reproducible and reliable enough to warrant proposing a causal link, yet placebo pills, both by design and verifiably, contain no pharmacological properties with relevant causal powers, and placebo surgery is not surgery but sham surgery, designed purely to deceive the participant. Placebos are inert, they are designed to be so; therefore, something else is taking place. There is something in the

practice, context, or the meaning, of administering drugs and carrying out surgery that has reliable and medically significant effects. Placebo Studies seeks to explain this.

For example, what is the explanation for why the person endogenously produces dopamine when administered a dummy pill in trials for a treatment for Parkinson's Syndrome, thereby endogenously mimicking the dopamine that would have been introduced exogenously had the participant received the medically active intervention (see de la Fuente-Fernández et al., 2006)? What explains placebo pain relief, where patient reporting, endogenous dopamine release, and fMRI data all seem to support the conclusion that pain has been suppressed in response to taking an inactive, dummy pill (Wager & Atlas, 2015)? What explains those participants who have undergone sham stent surgery, where no stent has been inserted, having measurable recovery rates equivalent to those who had received the stent insertion (Al-Lamee et al., 2018; Wise, 2017)? What explains medically significant responses to dummy pills of a specific colour for certain groups of people but not others (Lucchelli et al., 1978)? What explains the enhanced pain-relieving effects of branded versions over nonbranded versions of otherwise identical aspirin (Branthwaite & Cooper, 1981)?[3]

While the "placebo response" has been reported and documented for centuries, it is only with the emergence of RCTs, and the extent to which these have enabled us to isolate through controls what has historically been referred to as the "placebo effect/response," that relatively clean and reliable data have emerged. Within Placebo Studies, response-expectancy is the explanation that presently enjoys widest allegiance, while conditioning is still widely employed as a model for experimental design. At present, there is no definitive answer to the questions as to which is the dominant folk understanding of placebo and which the most widely held conception of placebo among clinicians, though there has been some recent work on this (see, e.g., Hardman et al., 2019, 2020). It is worth noting also that there are placebo sceptics, researchers who have sought to explain away the "placebo response." Such attempts usually seek to depict those responses as mislabelled cases of existing phenomena, the most prominent examples of which are (a) natural history effects (people often get better over time), (b) regression to the mean (the statistical equivalent of the natural history effect: outliers tend to regress toward the mean), (c) Hawthorne effects (participants are behaviourally responding atypically because they are being observed), and (d) reporting and perception bias.

While some researchers have sought to explain away "placebo responses" in one or more of these ways, such attempts have so far failed to explain away many instances of placebo responses, or those attempts have been simply flawed in execution.[4] There is still something in need of explanation, and the two most prominent explanations are classical conditioning and response-expectancy.

Classical conditioning is comprised of patterned causal sensory stimuli (A) that are reliably associated over time with another distinct set of sensory stimuli (B), which results in the development of a "trigger mechanism" (C). Once developed, this "mechanism" becomes operative in the presence of sensory stimuli (A) but the absence of (B), leading to certain physiological responses hitherto associated with sensory stimuli (B) now being "triggered" solely by sensory stimulus/stimuli (A) (see Ader, 1988, 1997).

In response-expectancy, the participant expects to experience changes (ex-C) based on their belief that they have received active input (a-I). In response, the participant undergoes actual changes (C). Let us say these changes amount to recovery from an illness or a diminishment of illness symptoms. Unknown to the participant, what they believed was active input (a-I) was, in fact, inert input (i-I) and the changes they experienced and that took place (C) were responses to their expectation, which was based on the false belief that they had received an active input (a-I), when in fact they had received an inert input(i-I) (see Kirsch, 1985, 1997, 2018).

We might characterise these two explanations in the following way:

In a conditioned-response, placebo responses are explained as mechanistic responses to stimuli, where those stimuli have been rendered as akin to trigger mechanisms through conditioning: we are given pills over time and when we have taken them we have reliably experienced recovery from illness. Over time, a behavioural mechanism is thereby established, such that on being administered a pill we experience recovery even though it transpires that on this occasion the pill was inert. Comparing our example to Pavlov's dogs, the pill corresponds to the bell, the active pharmacological ingredient corresponds to the food, and the recovery corresponds to the salivating.

In response-expectancy, as Irving Kirsch (2018) puts it in a recent overview, "response expectancies are predictions of one's own nonvolitional responses (i.e., automatic reactions) to events" (p. 82). Participants are depicted as responding to the administration of placebo based on the (false) belief that they have received something that will initiate their recovery. The participant is responding to the expectation/expectancy/anticipation/prediction[5] that they will recover.

The explanatory factors in the response-expectancy explanation are *propositional attitudes*. Placebo responses are explained as attitudes (expectations or expectancies) toward propositions, where those propositions represent the expected or anticipated state of affairs: "the pill will make me better," let's say. Put another way, in being administered a pill, a participant expects—has this attitude toward—the following proposition: "this pill will cure me." This expectancy then serves as the trigger for their somatic response.[6]

Problems for conditioning and response-expectancy

A viable explanation of placebo must meet the challenge posed by three problems arising from the research and RCT data.

First, the absence of conditioning. There are cases of "placebo responses" where there is nothing that would qualify as classical conditioning. "Conditioning" is not merely a synonym for past "experience."

Second, the epistemic deficit. There are cases of "placebo responses" where the knowledge—the epistemic capital—required to form the relevant expectation is absent (see Hutchinson & Moerman, 2018). If an explanation invokes mental representations or mental models of the world, then for these representations or models to have content, the mind needs, at the minimum, access to the information that serves as the building blocks for that content.

Third, the role of culture. There are cases of "placebo responses" where participants with different cultural backgrounds, different enculturation, not only respond differently,

but do so in explanatorily relevant ways, and in ways that cannot be explained by either conditioning or expectations (see, e.g., Moerman, 2002, p. 82).

Starting at the top, based on the first problem, it seems we must reject classical conditioning as an explanation. Having rejected conditioning, it can then seem as though there are only two available options: "placebo" responses must be either innate reflex-like responses, or they must be "cognitive." If we argue that they are the former, we still leave ourselves without the resources to explain cultural variance and therefore we cannot overcome the third problem. So, it seems we are left with cognitivism. "Placebos" are cognitive; they are not the result of "classical conditioning" and not innate characteristics of the species (though it should go without saying that they will draw upon biological systems that might be species specific).

Having embraced cognitivism, we now seem to be confronted with another set of problems. For the cognitivism favoured by most placebo researchers is *representational cognition*. As we have seen, this version of cognition invokes the propositional attitudes, either in the form of semantically encoded representations comprising mental states, psychosemantically encoded representations comprising computational states, or, in the most recent work (e.g., Kirsch, 2018), representations now rebranded as "models," which are amended in accordance with Bayes' theorem. Whichever way one goes here, what is doing the work are certain representational (or modelled) contents, whether at the level of the person expecting x, or subpersonally as computational expectations, or as the models amended in accordance with Bayesian rules of probability. In each of these approaches, mental representations (models) are the central features and these require informational content if they are to represent (or model) in the explanatorily required way. However, the second problem, the problem of epistemic deficit, suggests that the required information isn't always present.

Both expectations and beliefs are attitudes, which, when invoked as explanations, as they are in cognitive accounts of placebo and emotion, are so as providing intentional and meaningful content. Crucially, it is that content that does the explanatory work and it therefore needs accounting for. If an explanation of placebo invokes attitudes such as expectancies (Kirsch) or beliefs (Cave, 2001; Evans, 2004), those attitudes need content so that they can do the explanatory work one is proposing they do. However, there are documented occasions when the required epistemic resources are not available to those whom our explanations attribute the attitudinal contents.

However, the problems don't stop with the problem of epistemic deficit; we are also confronted by a logical problem in the form of Peter Cave's (2001) version of the Placebo Paradox.

Miranda's proposal

The Placebo Paradox, as Cave (2001) states it, emerges from the logically self-destructive nature of the first-person belief that "this pill will make me feel better simply because I believe it will make me feel better." What makes this interesting to logicians, is that it stands in contrast to the unproblematic nature of the same belief when ascribed to the same participant by a third party: "that pill will make X-Y feel better simply because X-Y believes it will make them feel better." Cave introduces a fictional character, Miranda, to

illustrate his point. So, "This pill will make Miranda better solely because she believes that this pill will make her better" serves, at least logically, unproblematically as a third-person expression of belief in placebo effects. Paradoxically, "[t]his pill will make me better solely because I believe that this pill will make me better" held by the participant, Miranda, is logically self-destructive. This belief is self-destructive because Miranda's new-found true belief that it is her belief in the pill that will make her better destroys her otherwise medically operative belief that the pill will make her better. Miranda's hitherto-operative belief that the-pill-will-make-me-feel-better is now cancelled out by her new belief that my-belief-that-the-pill-will-make-me-feel-better-is-what-will-make-me-feel-better (Cave, 2001, pp. 143–144).

As Cave presents matters, we do seem to be faced with a paradox. However, the issue here is that we only face Cave's Placebo Paradox if we ignore the data on placebos and insist on explaining placebos, as Cave does, in terms of propositional attitudes.

Let us put this another way by introducing Cave's (2001) fictional Miranda to an actual placebo trial: Let us imagine that 9 years after featuring in Peter Cave's philosophy paper, Miranda receives a call from Ted Kaptchuk and colleagues (2010), asking her to participate in a trial for treatment of Irritable Bowel Syndrome (IBS). After 9 years in the placebo wilderness, Miranda readily accepts. When the trial takes place, participants are divided into two groups: a no treatment group and an open-label placebo group. Miranda finds herself in the open-label placebo group and is somewhat surprised, based on her memory of the minor celebrity status she enjoyed among philosophers 9 years earlier, to find that *believing that this pill will make me better solely because I believe that this pill will make me better* did not prevent her from responding to the administration of the "placebo." Indeed, it wasn't only Miranda. The conclusion—the actual conclusion—drawn from the trial (which, of course, did not include the fictional Miranda), based on 80 participants, was that knowing it is a placebo you are receiving does not necessarily nor reliably serve to negate the placebo response[7] (Kaptchuk et al., 2010).

The dilemma of adequate explanation

The problems faced by explanations that appeal to conditioning might motivate a move in the direction of cognitive explanations. But the dominant cognitive explanation for placebo responses faces difficulties: the problem of epistemic deficit, Cave's Placebo Paradox, and recent trial data on open-label placebos. Each of these pose problems for an account that seeks to explain placebos in terms of representations with propositional contents. To overcome this dilemma, we must first differentiate between paradoxes and problems that emerge from the nature of the phenomena and those that are products of our mode of representation. Put another way, placebos might present a puzzle, but the puzzle—what it is that we are responding to when given a dummy pill or undergo sham surgery—should not be confused with the problems generated by our favoured form, or method, of explanation.

My proposal, which I will elaborate in the third section of this article, is that many of the problems faced by placebo research might be dissolved by forgoing the architecture of contemporary representational cognitive science and psychology and instead turning

to alternative nonrepresentational accounts of cognition. However, before we look at the alternatives, we will look at some similar issues in emotion research.

Emotion

> The fact that emotions are meaningful, reason sensitive, and intentional suggests that they must be cognitive. The fact that some emotions arise without intervention of the neocortex suggests that emotions cannot all be cognitive. The emotions that arise in this way seem to be meaningful. This seems to suggest that being meaningful does not require being cognitive. Noncognitive states are explanatorily anaemic and cognitive states are explanatorily superfluous. Noncognitive theories give us too little, and cognitive theories give us too much. Call this the Emotion Problem. (Prinz, 2003, p. 78)

> [A] fundamental emotion paradox: People are compelltements that we might together label "the dilemma of adequate explanation." by their own experiences to believe that emotions exist as natural-kind entities, yet a century of research has not produced a strong evidentiary basis for this belief. To date, there is no clear, unambiguous criterion for indicating the presence of anger or sadness or fear. (Barrett, 2006, p. 27)

In these two quotations, we find statements that we might together label "the dilemma of adequate explanation." Barrett and Prinz independently argue that this dilemma of adequate explanation serves as a central challenge to attempts to explain emotion.

For Jesse Prinz, emotions are meaningful and they are intentional, which means they are directed at or are about an object or state of affairs. However, while being meaningful and being directed at or about something, they often take place in the absence of the kind of neural activity required for them to qualify, on Prinz's terms, as cognitive. This generates the Emotion Problem.

Lisa Feldman Barrett observes that scientific attempts to explain emotions as "natural kind entities" have failed, yet folk practically and reliably identify their own emotions and the emotions of others. For Barrett, this is the Emotion Paradox.

Differences aside, Barrett and Prinz pick out a shared problem. Barrett notes the inability of science to establish the emotion natural kinds, while at the same time observing that people identify their own and others' emotions. Prinz lays the emphasis elsewhere. For him physiological, or pure Jamesian accounts, cannot explain the meaning and intentionality of emotion. At the same time, he observes that emotions can be meaningful and directed at something in the absence of neural activity involving the neocortex. In short, for both Barrett and Prinz, emotions are paradoxical because something meaningful and intentional happens without there having been discovered an explanatorily satisfactory underlying physiological process that would explain them and differentiate them from other things.

Affect and physiological changes versus intention and thought

The Emotion Paradox is pressing because explanations of emotion have, until very recently, tended to fall into one of two classes of explanation, membership of which is determined by the essential explanatory constituents. If an explanation depicts emotions

as essentially physiological responses to causal stimuli, and the subject's awareness of these responses, then the explanation is a member of the class of explanations usually referred to as Jamesian, named after the 19th-century philosopher, psychologist, and physician William James, who argued for such an explanatory framework at the end of the 19th century (James, 1884).[8] This is emotion explained as *affect*.[9]

In contrast, if an explanation depicts emotions as essentially thoughts about, or directed toward, something in the world, then the explanation is a member of the class of explanations usually referred to as "cognitivist," an approach to explaining emotion traceable, in the Western tradition, to the Stoic movement in Ancient Greece, but with advocates in contemporary cognitive psychology, and various philosophical schools. This is emotion explained as (embodied) thought.[10]

Subscribing to a Jamesian approach to explaining emotion, perhaps explaining emotions in terms of patterned changes in the autonomic nervous system or in terms of neural activity, and thereby conceiving of emotions as essentially physiological changes triggered by causal stimuli in the environment, will lead to our focus being on representing and explaining the causal mechanisms. On this view, the person experiencing the emotion is subject *to* that emotion, the emotions are characterisable as "passions," and a person who is in an emotional state is passive. The virtue of such a depiction of emotion is that it meets the demand of naturalism; unfortunately it also fails to capture the complexity of human psychology and the phenomenology of emotional experience. Moreover, it also faces the somewhat difficult problem of accounting for the meaning and intentionality of emotions.

Cognitivists in the philosophy of emotions have generally subscribed to representational cognition, what I termed Rep-Cog, and provide explanations of emotions that depict them as essentially constituted by thoughts. Here, emotions are no longer appropriately depicted as passions and the person has a potentially active role in their emotional responses to the world, for it is at least logically (or grammatically) possible to achieve some control over one's emotions, given certain conditions.

One can be, broadly speaking, a Jamesian while laying emphasis on different physiological systems in one's explanation: perhaps you privilege patterned changes in the autonomic nervous system; maybe your primary focus is on the functional role of neural systems; or you might follow Charles Darwin and, later, Paul Ekman (Darwin & Ekman, 1872/1998), and begin by focusing on facial expression. Similarly, cognitivists in the philosophy of emotions have differed in the cognitive constituents they have proposed, which have included "judgements" (Nussbaum, 2004; Solomon, 2006), "evaluative beliefs" (Taylor, 1985), "appraisals" (Arnold, 1960; Lazarus, 1991), or "construals" (Roberts, 2003). However, while differing in this way, until recently, most have operated with a Rep-Cog account of cognition.

In concluding this section, I will focus on Jamesian and conventional Rep-Cog explanations, because (a) this presents a useful and illustrative parallel to the current state of placebo studies and (b) Jamesian and Rep-Cog approaches have been dominant in emotion research.

So, we have two candidate explanatory frameworks for emotion:

- Jamesian – physiological-causal: (a) Emotions are constituted and type-individuated by underlying physiological states and (b) emotions are passions, the bearer

of emotion is passive, and an emotion is a class of physiological response to environmental causal stimuli.

- Rep-Cog – representational cognition: (a) Emotions are constituted and type-individuated by thoughts, which have propositional form and (b) emotions are dynamic, the bearer of emotion has the possibility of agency, and an emotion is primarily a class of mental state (or computational state).

The problem is that neither of these two approaches have the resources to dissolve Barrett's Emotion Paradox. Jamesian explanations explain too little, in not explaining the meaning and intentionality of emotion, and Rep-Cog explanations demand too much, in virtue of their reliance on the propositional attitudes. There are too many cases in which we observe emotional episodes but see something akin to the problem of epistemic deficit, which I introduced in the first section of this article: sometimes subjects are in an emotional state yet do not possess the knowledge—the epistemic capital—to form the explanatory and (allegedly) constitutive propositional attitudes. People can feel shame, for example, without knowing why.

Miranda's fear of flying and recalcitrant emotions

In addition to the problem of epistemic deficit, Rep-Cog explanations also produce a logical problem that is akin to Peter Cave's Placebo Paradox (2001). This problem is called the Problem of Emotional Recalcitrance (D'Arms & Jacobson, 2003; Griffiths, 1997). The problem is as follows: if emotions are constituted by propositional attitudes—beliefs, for example–then we have a difficulty when confronted by emotions that seem to emerge while the person who is in the emotional state holds beliefs that would serve to undermine any beliefs that are claimed to be playing a constitutive and type-individuating role.

To illustrate, we will reacquaint ourselves with Miranda, to whom we were introduced in the first section. When we met Miranda last she had reentered the world of academic placebo studies, having accepted an invitation to participate in an open-label placebo trial for treatment of IBS at Harvard. Having accepted the invitation, (Cave's fictional) Miranda is left contemplating an imminent transatlantic flight. Miranda experiences a fear of flying, which, on a Rep-Cog account of emotion, demands that she has an attitude (belief, judgement, etc.) toward the proposition, which gives content to that attitude. Let us say that Miranda is in possession of the evaluative belief that constitutes her particular emotion of fear: *flying is dangerous*. This is the intentional content of Miranda's emotion. However, concurrently, Miranda has an attitude (belief, judgement) toward the proposition that seems to undermine the intentional content of her emotion (her fear of flying). This concurrently entertained second propositional attitude, is an attitude (belief, judgement, etc.) toward the proposition that "flying is the safest mode of transport." A Rep-Cog account of emotion seems to entail that, in the case of recalcitrant emotions, Miranda concurrently has two mental states, which have the content (a) flying is dangerous (which explains the intentional content of her emotion) and (b) flying is safe (which Miranda believes because true).

So, as does Placebo Studies, Emotion Research seems to complicate Miranda's life, because as in Placebo Studies, in Emotion Research we arrive at a point at which we face

significant difficulties with the explanations on offer. The difficulties result from the explanatory appeals to propositionalism.

Beyond representations, beyond propositional attitudes

We have seen that in both Placebo Studies and Emotion Research, having rejected physiological and instinctual explanations—conditioned response and Jamesian physiological, respectively—we saw that the alternative was to seek to explain a person's response to the world in terms of cognitive (or mental) representations with propositional content; what I termed Rep-Cog. The move to Rep-Cog faces the problem of epistemic deficit and the problems highlighted by Barrett and Prinz in emotion research. Moreover, as we saw at the end of the previous section, Rep-Cog explanations also face serious problems when we consider recalcitrant emotions. This has strong parallels with (cf. the first section of this article) the emerging data on open-label placebos and Cave's (2001) version of the Placebo Paradox. Both recalcitrant emotions and the emerging data on the administering of open-label placebos cannot be simply bracketed out when we seek to explain emotion and placebo.

The problem of recalcitrant emotion and its discussion in the emotion literature serves to demonstrate a potential framing problem with Cave's (2001) discussion of (his version of) the Placebo Paradox. The Problem of Emotional Recalcitrance is a problem faced by a particular form of explanation, and has been presented as such in the literature (e.g., D'Arms & Jacobson, 2003); this problem emerges when we acknowledge the phenomenology of a significant proportion of emotional experience. If we apply this way of thinking about emotional recalcitrance to Cave's Placebo Paradox, then rather than stating the paradox as The Placebo Paradox, depicting it as inherent to the phenomena, we instead see the paradox as resulting from a particular form of explanation. Having made this distinction, we are now in a position to highlight the extent to which such data as that emerging from trials on open-label placebo bring into question our assumptions about the explanatory framework we have been employing. For, just as the problem of emotional recalcitrance draws into question a particular way of explaining emotion, one that employs a Rep-Cog framework, Cave's Placebo Paradox should draw into question a Rep-Cog framework for explaining placebo: response-expectancy.

Hybrid theories, E-Cog, EM-Cog, and the meaning response

In emotion research, Barrett (2006) and Prinz (2003) independently proposed solutions that one might depict as neo-Jamesian hybrid theories. For both, emotions were still to be conceived primarily as physiological responses, but for Barrett (2006, p. 30) they have a conceptual overlay established through acts of categorisation and for Prinz (2003, p. 84) they have cognitive qualities bestowed by a theoretical postulation of psychosemantic content triggered by core relational themes.

Prinz's (2003) solution invites representationalism back in, only now psychosemantically encoded. One might respond to such a move by saying that if representationalism doesn't fare well, following what we've argued so far, there is little reason to assume that theoretically postulated computational representations with psychosemantic contents

will fare any better. Put another way, you can run all the arguments against representationalist propositional attitude accounts that I have discussed so far while doing so with reference to Prinz's psychosemantically encoded computational representations and the result is the same: we would still face Cave's (2001) paradox, we would still be puzzled by the open-label placebo findings, we would still confront the problem of recalcitrant emotions, and we would still face, on occasion, the problem of epistemic deficit.

Barrett's (2006) proposed solution is based on two commitments, which motivate the retention of a (neo-)Jamesian framework:

First, Barrett (2006, p. 27) is committed to the idea, and generates a paradox from this commitment, that the practical reliability of both first-person and third-person emotion ascriptions "compel" people to assume emotions are natural kinds. In response, I would argue that there is little reason to believe that people are compelled to assume something is a natural kind because it is reliably identified by them, much less for us to believe it *is* a natural kind on this basis. This is a quite basic running together of epistemological and ontological categories. I reliably recognise my aesthetic appreciation for my bicycle. I also reliably identify this kind of appreciation in my 11-year-old son, when he is riding or cleaning his bike. Am I compelled to conclude that such appreciation is a natural kind, as opposed to something that is the product of learning and enculturation and accomplished through interaction?

Second, Barrett is committed to an account of first-person emotion utterances as being reports of inner states. Again, there is little warrant for such a commitment. If you are committed to first-person, present-tense emotion utterances being reports of inner states, you will very likely proceed to assume that explanations of emotions must, primarily, be concerned with "discovering," theoretically postulating, or providing conceptual overlay so as to render intelligible these putatively inner states. This returns us to the first assumption.

Both Prinz and Barrett are constrained by their prior ontological commitments. They are both committed to the belief that emotion terms must, in essence, name something behind the skin, so to speak. This is compounded in Prinz's approach because he assumes that "cognition" is the name for brain processes involving the neocortex, and this generates a problem for him when he observes that some emotions occur and remain meaningful in the absence of neocortical intervention. Having thus generated the problem, he sees his task as theoretically postulating something to which "cognition" might refer in such cases, rather than, perhaps, reconsidering his conception of cognition in light of his observations about the phenomenology of emotion.

Barrett resists the temptation to theoretically postulate a solution, and instead appeals to contextually fixed conceptual overlays to underlying physiological processes, which thereby afford those processes hitherto elusive explanatory power. However, commitments regarding the grammar of first-person, present-tense psychological utterances lead Barrett to assume that physiological systems must play a primary and essential explanatory role.

Barrett and Prinz and hybrid theories 1.1. In recent work, it appears that Jesse Prinz has moved beyond the computational hybrid solution he proposed in 2003 and 2004, and, along with co-author Daniel Shargel, now advocates an enactive and ecological account of cognition, marrying enactive insights to an account of affordances. Unfortunately, this

doesn't represent the progress that it might initially suggest because talk of representations is still central (see Shargel & Prinz, 2018). If representations still figure, the explanation still fails for the reasons we have rehearsed above.

Lisa Feldman Barrett has developed a different account of emotion in recent years. In her most recent writings, Barrett draws on Bayesian Predictive Processing to provide an explanation of emotion, thereby advancing a theory similar to that which Irving Kirsch has recently begun to embrace in Placebo Studies. Barrett's work isn't successful in overcoming the problems I have discussed here, because, as we noted in the first section, Bayesian brains and theories of predictive processing still depend on mental representations, though often rebranded as "models" (see Barrett, 2017).

In Placebo Studies, a number of authors have recently turned to "predictive processing" and Bayesian brains (e.g., Kirsch, 2018; Ongaro & Kaptchuk, 2019) and (nonradical) enactivism (Ongaro & Ward, 2017). Unfortunately, this does not protect them from the problems we have reviewed in this article because they still invoke representations, only now rebranded as (Bayesian) "models."

E-Cog—4E cognition and ecological psychology. Nonrepresentationalist approaches to our responsiveness to loci of significance and our object-involving abilities come in a variety of forms, such as Ecological Psychology (Chemero, 2009; Costall, 1995, 2017; J. J. Gibson, 1979a; Heft, 2013), Radical Enactivism (Hutto & Myin, 2013, 2017), and Ethnomethodology (Coulter, 1991; Garfinkel, 1967; Sharrock & Coulter, 1998). I here abbreviate Ecological and Radical Enactive accounts to E-Cog. The ethnomethodological approach to finding the intelligibility in our responsiveness to loci of significance in the lifeworld and our object-involving abilities, I here label *EM-Cog*.

Both E-Cog and EM-Cog emerge out of and are developments of the insights of existential phenomenology, and in some cases Pragmatist and Wittgensteinian insights. I won't say more here about E-Cog approaches; the interested reader might refer to Hutto and Myin (2013, 2017) or to Chemero (2009), and for a recent critical discussion, Hutchinson (2019b).

EM-Cog—Cognition in an ethnomethodological mode. What is required is a way of explaining our responsiveness to loci of significance in the lifeworld that doesn't serve to generate the paradoxes we have observed so far. While this means we must reject representationalist accounts of cognition, it doesn't amount to an eliminativist project about attitudes. Expectancies might well figure in many of the accounts one gives of a placebo response, for example. However, the point is that it's not the expectancy-as-a-cognitive-item or as a mental representation that is doing the work here. If expectancies are to figure in the account of the responsiveness in which we are interested, then we respecify attitudes as witnessable states of persons, made available for anlaysis by people in and through their interactive practices.

Respecifying attitudinal content: "To represent" is something people do. As an alternative to the formal specification of attitudinal content as a proposition abstracted from its use, we now respecify attitudinal content as an accomplishment of members of a society, embedded in and acting on the world.

So, this is the first proposal: we respecify attitudinal content. *If* we identify an emotional response as being constituted by an attitude, perhaps, following Robert Solomon (e.g., 2006), as a judgement, *then* we do so because in observing members responding emotionally we observe their methods of accomplishing judgement and making that judgement available to analysis in their interactive practices. Judgements are part of the social currency of human inter- and transactional behaviour, and as such are witnessable in the contexts in which they are accomplished and exercised. Our methods should be tailored to fit these witnessable social phenomena, so that we replace psychological theory with ethnographic practice.

The primary ethnomethodological insight is that interaction relies upon parties to the interaction finding each other intelligible and seeing the meaning of each other's actions. Garfinkel (1967), and the ethnomethodological tradition that has developed from his work, has shown us that this intelligibility is the product of the situated, endogenously produced methodic practices of those same interactants. Members of society employ ethno-methods to produce, maintain, and repair the conditions for interaction. In terms of our resources for explanation, members' situated practices and the meaning they have for the participants in the setting now replace formal accounts, which invoke propositions, abstracted from those practices. Until now we have had a choice between explanations that essentialise the physiological-instinctive or conditioned-instinctive responses or those that essentialise the cognitive and invoke mental representations. We are now in a position to introduce an alternative approach of members' situated practices of accomplishing and making accountable and witnessable their attitudes to loci of significance in the lifeworld. Ethnographic descriptions of the ethno-methods and the interactive practices replaces the theoretical specification of the formal account.

As the data emerges from ethnographies, we might find, as some of the existing studies have suggested, that attitudes—judgements, expectations/expectancies, beliefs—don't always figure in the responses to the relevant loci of significance. This suggests to us something that existential phenomenologists, among others, have sought to remind us: there are modes of engagement with and modes of responsiveness to the world that are not reducible to instinct while also not involving representations of the world, whether those representations be mental or witnessable practical social phenomena.

Nonattitudinal meaning responsiveness. Reorienting our thinking away from formal accounts of our responsiveness to loci of significance in the lifeworld to members' practices of accounting for their responsiveness serves to help overcome some of the problems we have encountered with Rep-Cog accounts. However, it doesn't yet serve as a way out of the problem of epistemic deficit that we encountered in both Emotion Research and Placebo Studies. For this we need to recover a mode of responsiveness to loci of significance that does not invoke attitudes but doesn't thereby collapse into a kind of instinctual responsiveness to causal impacts. One reason why we need to resist the collapse into a stimulus–response model is that our emotional responses and placebo responses are responses to the meaning the lifeworld has for those who are responsive in the relevant way, and this meaning can be sensorial and unavailable to representation in addition to being context-bound, occasioned, and indexical: the meaning it has is the meaning it has for this person, in this context, on this occasion. We require an account of

responsiveness that can accommodate a person's responsiveness to loci of significance without requiring that we explain it in terms of attitudes, if our ethnographies show, on occasion, those attitudes to simply not be present or operative.

The Existential Phenomenology of Maurice Merleau-Ponty, Samuel Todes, and Hubert Dreyfus has furnished us with one way of depicting this mode of engagement with and responsiveness to the world as "fully absorbed coping" (Dreyfus, 2002; Merleau-Ponty, 2002; Todes, 2001).[11] Merleau-Ponty describes this mode of engagement and responsiveness via metaphors of "attractive" and "repulsive" forces that are solicited by loci of significance in the lifeworld. One finds a similar attempt at specifying a responsiveness irreducible to either stimulus–response or attitudinal content in the ecological psychology of James J. Gibson (J. J. Gibson, 1979b) and the affordance theorists who have followed him (e.g., Chemero, 2009; Heft, 2001). Here the metaphors of existential phenomenology are replaced with a theoretical account of the organism's perception of loci of significance as affording it possibilities for action.

Where, for existential phenomenology, the lifeworld solicits our responses, which we experience as "forces" of "repulsion" or "attraction," for ecological psychologists, the lifeworld affords possibilities for action, which we perceive as affordances and to which we respond by acting in the afforded way. Both these accounts seek to capture engagement with and responsiveness to the world that doesn't involve attitudinal content while also resisting reducing that engagement and responsiveness to stimulus–response. There are two things of note in the accounts of responsiveness advanced by the existential phenomenologists and the ecological psychologists. First, both deny any role for concepts in their respective accounts of responsiveness; and second, both accounts are formal analytic accounts: in phenomenology via the analysist's introduction of metaphors to represent a person's responsiveness and in ecological psychology via the representation of a person's engagement and responsiveness in the theory of affordances. Both existential phenomenology and ecological psychology introduce analyst's concepts to formally represent members' first-person experiences of responsiveness to loci of significance in the lifeworld.

As an alternate to the formal analysis of our engagement with and responsiveness to the world, EM-Cog proceeds by seeking to recover and document members' own accounts of the meaning the world has for them and their ways of making that available for analysis by both lay and professional analysists. Again, one method for doing this would be ethnographic, or more specifically, ethnomethodologically informed sensory ethnographies, perhaps also including follow-up (sensory) ethnographic interviews. Here, we would focus on the ways in which the meanings the settings have for members are the product of members' interactive practices and in being so are rendered accountable and available to analysists, both lay and professional (see, e.g., W. Gibson & Lehn, 2020; Hindmarsh & Pilnick, 2007; Pink, 2015).

Conclusion

The meaning response, ethno-methods, and sensory ethnography

Explaining emotion responses and placebo responses in terms of propositional attitudes and mental representations (or mental models), throws up the paradoxes we encountered

in the first two sections of this article. Moving to an EM-Cog account of attitudinal content is to move to an examination of attitudinal contents as occasioned, indexical, endogenously produced practical phenomena, which are available for analysis to both lay and professional analysts.

We have also seen the need to go beyond attitudinal accounts and overcome the instinct–cognitive dichotomy. We now acknowledge that between instinctive, physiological responses to causal stimuli on the one hand, and attitudinal responses on the other, there is a mode of responsiveness to loci of significance in the lifeworld that is not stimulus–response, because it is intentional, meaningful, and indexical, yet nor is it attitudinal (and representational). While existential phenomenology and Ecological Psychology propose formal–analytic accounts of this mode of responsiveness, I recommend that here too we might instead pursue the policies proposed by ethnomethodology and undertake ethnomethodologically informed (sensory) ethnographies so that we might recover the ways in which members make available-to-observation and acknowledgement, to lay and professional analysts, their nonattitudinal responsiveness to meaningful loci of significance in the lifeworld.

Emotion and placebo responses are responses to meaningful phenomena. While occasionally those responses will involve attitudes, such as beliefs, expectations/expectancies, and judgements, on other occasions, they will not. Sometimes, emotion and placebo responses will be nonattitudinal responses to loci of significance. Here the person might be responsive to the meaning something has for them but that responsiveness does not involve having taken an attitudinal stance: the meaning is exhibited in their behaviour or their (nonattitudinal) response. For example, consider emotional response to a hand coming to rest on the back of your hand when you are distressed, emotional response to scent or sound, to a swelling orchestral movement, or to choral singing that moves you to tears, while being in a language you don't understand. Then consider a placebo response to a particular colour of pill, or a more pronounced placebo response to pills with a bitter taste, or consider how "placebo" surgery seems more powerful than the administration of "placebo" pills (see, e.g., Harris, 2016). These, I submit, are examples of nonattitudinal emotional and "placebo" responses.

Having made this switch away from Rep-Cog accounts, we can approach questions about emotion and "placebo" responses as questions about a specific kind of meaning response, and set about the task of gaining a better understanding of these meaning responses, via EM-Cog ethnographies of people responding in emotional or medically significant ways to loci of significance in the lifeworld.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

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Notes

1. Some authors (see Blease et al., 2017; Kirsch, 2019; Kirsch & Sapirstein, 1999) have sought to stipulate a distinction between the terms "placebo response" and "placebo effect." Kirsch

and Sapirstein (1999) were the first to propose such a distinction and they did so by extending a distinction made in the 1960s by Fisher et al. (1965), who argued for a distinction between "drug response" and "drug treatment." I don't believe the distinction Kirsch and Sapirstein propose is either obviously analogous to what Fisher et al. proposed or helpful. Moreover, their stipulation has not been widely taken up in the literature.

2. See, for example, Koshi and Short (2007, p. 11). What Koshi and Short, and I, refer to as the placebo paradox is different to Peter Cave's Placebo Paradox.
3. There have been a number of systematic reviews and meta-analyses of branded versus nonbranded drugs and very few show clinically significant differences in effects (see Kesselheim et al., 2009; Manzoli et al., 2016). One possible explanation is that the placebo-enhanced effect that branding might have is nullified when drugs are prescribed and administered by a clinician, because in such cases the patient isn't choosing, often doesn't get to see the packaging, and they trust the clinical judgement of their physician in prescribing. By contrast, in the case of over-the-counter (OTC) meds and self-medication, things might be different. In the case of OTC medications, the patient selects (for example) the branded aspirin, ibuprofen, or cetirizine from a shelf on which there are likely to be generic, unbranded, plain-packaged and very cheap aspirin, ibuprofen, cetirizine racked alongside branded and expensive versions of the same meds. The branded meds are presented in packages that have been carefully designed to emphasise certain healing properties, and those brands and that packaging will probably have been marketed via various media too. The difficulty we face here is one of obtaining quality data comparing branded and non branded OTC, *self-selected, and self-medicated* drugs because the data would be based on patient reporting of their symptoms, and could therefore be compromised by perception or reporting bias.
4. For a discussion and critique of a prominent flawed attempt by Hróbjartsson and Gøtzsche (2001, 2010) to explain away placebo, see Hutchinson and Moerman (2018), which draws on Howick et al. (2013).
5. Each of these terms appears in Kirsch's schema over the years.
6. I have argued elsewhere that propositions cannot refer when cut off from their use by people in a context and on an occasion. I won't replay these arguments in the present paper. See Hutchinson (2019b).
7. The Open-Label Placebo studies are small-scale. We should exercise caution in drawing any firm conclusions from these early small-scale trials.
8. The Jamesian theory is sometimes referred to as the James–Lange theory, because the Danish physiologist Carl Lange arrived at the same theory at around the same time.
9. "Affect" is now often used as a synonym for "emotion." Its use in the contemporary literature is not without problems. See Leys (2018) for an overview and Hutchinson (2019a) for further critique.
10. See Hutchinson (2009) for a more detailed overview of Jamesianism and Cognitivism in the philosophy of emotions.
11. Some phenomenologists have depicted such a mode of responsiveness in terms of judgements (e.g., Dreyfus, 2002; Solomon, 2003), though they go on to specify these attitudes as not only without content but as being nonconceptual. This is a conception of judgement that departs significantly from our ordinary concept, and that amounts to a glossing of the responsiveness it is being recruited to represent. For this reason, I think it unhelpful to introduce the attitudinal language here, unless we find that members do so.

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