The Tracking Dogma in the Philosophy of Emotion

Talia Morag

Deakin University

Abstract

Modern philosophy of emotion has been largely dominated by what I call the Tracking Dogma, according to which emotions aim at tracking "core relational themes," features of the environment that bear on our well-being (e.g. fear tracks dangers, anger tracks wrongs). The paper inquires into the empirical credentials of Strong and Weak versions of this dogma. I argue that there is currently insufficient scientific evidence in favor of the Tracking Dogma; and I show that there is a considerable weight of common knowledge against it. I conclude that most emotions are insensitive to the circumstances that might be thought to elicit them and often unfitting to the circumstances in which they arise. Taking Darwin's lessons seriously, even predictable emotional responses to biologically basic objects (e.g. bears, heights), should not be understood as tracking abstract categories (e.g. danger). This renders most contemporary accounts of emotion implausible. We are left with two options: one may still continue to claim that emotions aim at tracking, even if they often fail; or one may abandon the Tracking Dogma in favor of a non-representational view.

Keywords: emotions, Darwin, core relational themes, non-representational, empiricism

Modern philosophy of emotion has been conditioned in large part by a dogma, what I shall call the *Tracking Dogma*, according to which emotional reactions track features of the natural and social environment that relate to or bear on certain typical aspects of our well-being. As Annette Baier put it:

> *We all accept* the idea that emotions are reactions to matters of apparent importance to us: fear to danger, surprise to the unexpected, outrage to the insult, disgust to what will make us sick, envy to the more favored, gratitude for the benefactors […]. Emotion then plays the role of alerting us to something important to us—a danger, or an insult (Baier 2004: 200. *Emphasis* added).

In other words, every emotion-type such as fear or anger functions to track what a leading psychologist has called "core relational themes" (Lazarus 1991: 22) that match emotion types with roughly described types of circumstances, such

as fear with danger or threat, anger with a wrong we suffered, guilt with wrongs that we inflict, joy with benefit, pride with achievement, sadness with loss, jealousy with loss of affection. I use the term 'core relational theme' but these general descriptions of types of circumstances that matter to us are also known in the philosophical literature as the 'formal objects' of emotions.

Philosophers differ in how they conceive of core relational themes. Some think of them as conceptually structured aspects of the situation (e.g. *seeing* the situation *as* dangerous, thereby noticing its dangerous aspect).[1] Others (e.g. Brady 2007, Tappolet 2012) regard these themes as designating values (e.g. 'dangerous'), and yet others (e.g. Griffiths 1997) as features of the natural and social environment (e.g. danger, threat) that call for certain typical coping strategies, known as the emotion's action-tendencies, such as running away in fear or lashing out in anger. But they all presuppose that tracking is *objective* in the scientific sense, namely that an observer would identify certain circumstances as objectively dangerous to a person or animal with objectively appreciable needs and wants. Whether or not such objective dangers and wrongs etc. may be further reduced to some other kind of entities is a metaphysical question for those philosophers but whose answer is not relevant for the purposes of this paper.

I will use the term 'core relational themes' as well as 'tracking' without taking these differences of interpretation into account. Nor do I take into account the difference between speaking about general themes such as 'danger' or 'wrong' and speaking about how those themes can be broken down to components such as "goal relevance" or "coping potential" (Lazarus 1991: 39).[2] Such components or aspects also thematically characterize the way the environment bears on the subject's well-being. "The point is—as Jesse Prinz says—that core relational themes are directly relevant to our needs and interests" (Prinz 2004: 66). This is the crux of the dogma, shared by everyone who holds it, namely that the themes in question are *purposive*, that they directly bear on our well-being. I shall use the terms 'core relational themes' and 'purposive themes' interchangeably in the rest of this paper.

Core relational themes are matched to emotion-types creating "couples" such as [fear/danger] and [anger/wrong] or generally [E/T], where E stands for Emotion, T for Theme (and traditionally it has been said that T is the "formal object" of E). And these roughly described "couples" are the ones in reference to which we may judge whether or not the emotion is justified, that is, whether or not a given emotional reaction *fits* the situation in which it arose. Fear is a fitting response to dangerous situations; anger fits situations where we have been wronged, etc. These "couples" thus also articulate what D'Arms and Jacobson (2003: 132) call "norms of fittingness". According to the Tracking Dogma then, emotions *aim* at fittingness.

A tracking system can be characterized in reference to two empirical notions:

Accuracy: If it were not the case that the situation presents core relational theme T then the subject would not experience emotion E, where T and E belong to the above described 'couple' [E/T].

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[1] These include 'quasi-judgmentalists' or the 'seeing-as' accounts such as Greenspan 1988. Some seeing-as account elaborate more on the conceptual structure of the perceived situation, e.g. Ronald de Sousa's (1987) "paradigm scenarios".
[2] For a summary of Lazarus's appraisal theory and the dimensions it involves, see Prinz (2004: 14-17).

> *Sensitivity*: if the situation presents the purposive theme T then the subject experiences emotion E under normal conditions, where T and E belong to [E/T].

In other words, a sensitive tracking system would alert the subject whenever she faces dangers, wrongs, and other core relational themes in the nearby environment, and an accurate system will by and large "get it right." Whoever holds the Tracking Dogma is thus committed to one of its following versions: 1) The Strong Tracking Dogma: A *reliable* tracking system that is both sensitive and accurate. Such a system will allow for predictions as to when a subject will emotionally react and how. 2) The Weak Tracking Dogma: An emotional system that need not be sensitive to the instantiation of core relational themes but when it tracks it does so accurately. 3) The Normative Tracking Dogma: A system that *aims* at tracking core relational themes, but need not be either sensitive or accurate.[3]

In order to distinguish clearly between the Strong and the Weak Tracking Dogma, we need to know what 'normal conditions' amount to for the case of an emotional detection system. Indeed, all tracking accounts owe us a specification of what emotional normal conditions are in order to clarify how the tracking system is supposed to 'track'. If emotions do track core relational themes, then we have to assume there are such specifiable conditions and that the distinction between Strong, Weak and Normative versions of the tracking view holds.

That anyone who thinks that emotions *aim* at tracking core relational themes holds one of these views is a conceptual argument, which introduces a straightforward way to classify the many philosophical accounts of emotion and which further forces philosophers of emotion to clarify their commitments about the tracking systems they propose. But since each of these versions is an empirical hypothesis about the actual sensitivity and accuracy of the supposed tracking system, these views can be defended or criticized by turning to empirical support. This paper aims to cast serious doubt on the empirical plausibility of both sensitivity and accuracy. This doubt is therefore addressed at any view which takes either sensitivity or accuracy or both for granted, i.e. at the Strong and the Weak versions of the Tracking Dogma, which together comprise the majority of philosophers of emotion, whose prominent figures are identified in the first section. This leaves intact the possibility of the Normative version of the Tracking Dogma, which I do not criticize here. But I take myself as making more plausible an alternative to *any* version of the Tracking Dogma.

One main aim of this paper is methodological, namely to examine what kind of experience counts as evidence for or against the Tracking Dogma or any other general vision of what emotions are. In order to conduct such a methodological inquiry, we need a working definition for emotions that is as uncontroversial as possible, i.e. that is not theoretically biased. I propose this minimalist definition: *an episodic affective experience that is characterized by prototypical physiological and behavioral expressions, and that we often feel or experience as passively coming over us*.[4] And whatever the causal etiology of these affective episodes is, it differs

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[3] I leave out the option of a sensitive and inaccurate tracking system, since it cannot be ascribed to any philosopher.

[4] Even when we attempt to induce a mood in ourselves by listening to music or watching the ocean, we do not actively order our emotion to appear but rather put ourselves in

from that of mere sensation (e.g. tummy ache caused by food poisoning). I do not assume that in having an emotion one needs to be aware that one does. That is, I allow that one may go through an emotional experience without awareness, e.g. be angry with someone while forcefully denying it and genuinely believing one is not angry. These affective episodes often involve attending to one's nearby environment, making people and things in the environment emotionally salient, namely more vivid and often targets of behaviors such as running away from them or attacking them. Anything further than this—such as claims about those emotionally salient objects being intentional objects or targets of tracking systems, or claims about emotions as providing us with information about the world that is beneficial in some way to our well-being—cannot be presupposed, but is rather a question about our experiences and practices.

So what kind of empirical knowledge about or epistemic access to our emotional experiences and practices can we avail ourselves to? This question becomes pertinent once we acknowledge that the scientific data often cited by philosophers of emotion cannot currently decide on the correct vision for emotions, as argued in the second section of this paper. The second section further argues that if we take Darwin seriously, then many co-variances between emotional responses and various objects that are not inherited from the evolution of our species (e.g. fear of exams, sadness caused by losing a job) should not be understood as tracking dangers or losses. Even scientifically verifiable co-variances between emotional responses and objects inherited from the evolution of our species (e.g. fear and bears), need not be understood as verification of tracking (e.g. danger). The third section argues that we may appeal to common knowledge that is based on our ordinary everyday experience of emotions, and the fourth section accordingly presents non-scientific empirical considerations against sensitivity and accuracy of the supposed tracking system.

I conclude with a brief introduction of a new vision for emotions, a rival to the only plausible option left from the Tracking Dogma, namely the Normative version of it. According to the new view, emotions do not aim at tracking dangers, wrongs, or any other purposive theme. Indeed, emotions do not have an intrinsic purpose that relates to our well-being. When emotions are triggered by objects such as bears or exams, they are not triggered by objects-qua-instantiating-a-purposive-theme such as danger. The triggering of emotions need not be law-like and the resulting emotions need not be fitting. I leave the criticism of the Normative Tracking Dogma and the full defense of the new alternative for another occasion.[5]

1. The Strong and the Weak Tracking Dogma: Definition and Supporters

According to the Strong Tracking Dogma, the emotional tracking system is presupposed to be reliable, namely both sensitive and accurate. The reliability claim is explicitly held by Jesse Prinz, one of the leading philosophers who regard

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front of various familiar *triggers*, with the hope that they will work in the desired way again, a hope that is, by the way, not always fulfilled.

[5] For a critical discussion of appraisal theories of emotion, including those that qualify as the Normative Tracking Dogma, and a new view on emotions see Morag 2016.

emotions as produced by sub-personal law-like mechanisms.[6] Prinz articulates the Strong Tracking Dogma:

> Emotions are certainly set off by core relational themes. That is, they are reliably caused by relational properties that pertain to well-being (Prinz 2004: 66).

It is hard to find such an explicit declaration among the other sub-personalists. Yet their formulations indicate that they hold the Strong Dogma. Jenefer Robinson, for example, says that we are 'programmed' to emote in certain ways in the face of instantiated core relational themes. Unless the program is faulty, a 'program' assumes that a certain input will normally produce a certain output, that is, it assumes both sensitivity and accuracy.[7] Paul Griffiths talks about (basic) emotions as natural kinds that allow for "very reliable predictions" (Griffiths 2004a: 235).[8] In order to predict how one will emote in the face of what circumstances, the supposed tracking has to be both sensitive and accurate, at least most of the time. Everyone acknowledges that our emotions do not *always* fit the objects they make salient, but the Strong Tracking dogmatist considers such occasions to be divergences from normal functioning, "errors" (D'Arms 2000: 1468). Fallibility is in any case built-in to the empirical notion of reliability.

There is another camp in the philosophy of emotion that presupposes the reliability claim. Those are philosophers who regard emotions as a mode of perception.[9] Perceptual and perception-like capacities—which are representational and have correctness conditions—are presupposed to fulfill, by and large, their function. According to this model then, emotions "typically" (Brady 2007: 273) fit their targets, that is, they are by and large accurate. Indeed, accuracy is built into our language insofar as perceptual verbs like 'see', 'hear' and 'touch' have a success grammar. It makes no sense to say 'I see the tree in the garden' if there is no tree there to see. Furthermore, perceptual and perception-like states presuppose more than the possibility of being caused by the features they in turn represent. Under normal conditions (whatever those may be for the case of emotions), they are also supposed to be sensitive, to be reliably caused by those features of the environment that they aim to track. And there is also an ordinary expectation of sensitivity or perception, namely that if there is a tree in front of one under normal conditions that one will see it.

This is also compatible with the frequent analogy between recalcitrant emotions, those that do not dim down despite the subject's explicit judgment against them (e.g. phobias), and relatively rare 'optical illusions',[10] which suggests that

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[6] Prominent sub-personalists are Prinz 2004; Griffiths 1997; Robinson 2005 and D'Arms & Jacobson 2003.

[7] Robinson allows for some biological pre-programming and further programming that depends on one's developmental history. See Robinson 2005: 63, 70, 71, 72, 74, 75.

[8] Griffiths speaks only of what he calls "basic emotions", which do not involve thoughts, but since the minimalist working definition of this paper does not include thoughts, this distinction is not relevant here.

[9] Philosophers who support a perceptual model for emotions include Charland 1995, Brady 2007, Tappolet 2012, Döring 2010, Debes 2009, Deonna 2006. Prinz is both a sub-personalist and an avowed perceptualist.

[10] Philosophers differ about how to unpack this analogy, but many of them refer to it, including (but not only) Strong Tracking Domgatists, such as Brady (2007), Prinz (2004: 235), Tappolet (2012) and Döring (2003: 223).

perceptualists regard recalcitrance as a marginal phenomenon, as appropriate for a perceptual model. Some philosophers who endorse the perceptual model hold at the same time that recalcitrant emotions "often" (Tappolet 2012: 210) occur, a claim which entails that we often emote unfittingly or that the supposed tracking system is inaccurate. To avoid confusion such philosophers should simply forgo the perceptual model and endorse the Normative Tracking Dogma that forgoes commitments to accuracy.

But to take the analogy with perception *seriously* is to accept the reliability claim. A perceptual system that often fails to detect what it is designed to detect (insensitive) or that often provides false information about the world (inaccurate) is a malfunctioning perceptual system. Presumably those who invoke the perceptual model to explain emotions are not to be credited with that. Emotions are thus understood by many philosophers of emotion to be a kind of a sixth sense: a "bodily radar" as it has been put (Prinz 2004: 240), reliably alerting and telling us where we stand in our natural and social environment.

Except for a few obvious cases such as fear of bears in the forest or anger when someone hits us, what counts as a wrong, as an achievement, as loss of affection, as a shameful failing or weakness or even as a danger and so on typically differs from one social niche to another. And social niches may be as small as we like. Supposing for the sake of argument that emotions track core relational themes then what counts as an instantiation of a core relational theme for a certain individual should by and large correspond to *that individual's endorsed normative standards of fit, qua a member of a certain social niche at a certain stage of life.* None of us invented those norms, but each of us may be said to hold slightly different standards of fit, depending on differences in how we understand or internalize them (cf. D'Arm & Jacobson 2003: 136).

This relativization of a tracking system to large and small social niches is surprisingly conceded by some perceptualists. Tappolet, an avowed perceptualist, calls it "plasticity" (Tappolet 2012: 220-21). Deonna calls it a perspectival "frame of reference" (Deonna 2006: 37).[11] Normal functioning perceptual capacities are nowhere near as variable as our emotional capacities.[12]

As for the sub-personalists, they typically accommodate the social relativity of the supposed reliable tracking system, by presupposing a developmental process of socialization, education and self-training that somehow feeds back into each individual's emotional system, which would then track the socially relevant dangers, wrongs, etc.[13] The attunement need not be one-directional whereby we change our emotional patterns in accordance to our normative judgments and education. In some cases we listen to our gut reactions rather than to our

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[11] Deonna emphasizes that this frame of reference can be unique to an individual. However, since Deonna is committed to the tracking of values or "evaluative properties" (*ibid.*), which are at least in principle public, then for Deonna, this individual is a limit case of the smallest social niche whose other member is a possible, if not an actual other. Taking seriously the grammar of values means that at the very least, someone else at some point in time should be able to track the same values.

[12] For a comprehensive critique of the analogy between emotions and perceptions see Salmela 2011.

[13] See for example Prinz on re-calibration of "calibration files" which encode eliciting conditions that reliably cause emotions in Prinz (2004). And also D'Arms & Jacobson on "immunization" against un-fitting ("natural" or basic) emotions such as fear of harmless spiders, in D'Arms & Jacobson (2003: 144).

endorsed norms of fit, re-adjusting our norms to fit our emotions.[14] Although sub-personalists do not believe that each emotional reaction responds to reasoning, they typically assume some kind of interaction between one's normative and linguistic system and the emotional tracking system, an interaction that works in the long term, that adjusts emotional patterns over time. This is no small assumption, and phrases such as 'top down' do not comprise an explanation for this assumption, but I will not pursue this criticism here.

The basic idea is that, by and large, we are all brought up in light of the (albeit socially relative) Aristotelian ideal of the Phronimos, the well brought-up person who responds to situations with the fitting emotion-type.[15] This means that every *normal* human adult of a specific social niche would have law-like emotional patterns that reliably track what counts as dangers, wrongs, achievements, benefits and so on in her or his social niche.

Now the sub-personalist that allows for this top-down interaction, necessary to account for the plasticity of the wrongs, the dangers, the achievements etc. to which the supposed tracking system is sensitive, can take here two routes in understanding the term 'normal'. If 'normal' means 'normative', then it is possible for the educational and training developmental process to go well or not so well, and respectively it is possible that one's tracking system will be quite inaccurate. In this case, the sub-personalist may join the Normative Tracking camp. This, however, would force sub-personalists to re-think their view, since they would then have to say that their 'programs' to track dangers, wrongs etc. are faulty, and do not lend themselves to 'very reliable prediction'. The other option is to take 'normal' to mean 'statistically normal' and to maintain the socially-relative reliability claim for human adults.

The Weak Tracking Dogma holds that emotions may be insensitive to all kinds of wrongs, dangers, achievements etc., but that by and large and most of the time when we do emote the tracking system has succeeded in its aim to track purposive themes such as dangers and wrongs. That is, the Weak version forgoes sensitivity but still insists on accuracy. The main camp of philosophers of emotion that presupposes this view includes those who hold that emotions are modes of 'seeing-as', e.g. when one is afraid, one *sees* the situation *as* dangerous. The contemporary philosophers in the seeing-as camp are those who talk about purposive themes as involving concepts. That is, they claim one sees the situation in terms of the concept 'danger' or in terms of a conceptually structured danger-scenario.[16]

The seeing-as relation is famously demonstrated in Wittgenstein's example of the duck-rabbit drawing, an example often mentioned by these philosophers of emotion (e.g. Roberts 1988). When I see a duck in the duck-rabbit drawing, I

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[14] This aspect of this developmental picture emerges from Justin D'Arms' discussion on empathy through contagion, in D'Arms 2000.

[15] Cf. Aristotle (1991: 1106b14-b21). In fact, the Phronimos is also said to emotionally respond at the right or fitting intensity. Interestingly, most tracking accounts either ignore or downplay the intensity factor (is it because of the prevalence of overreactions? Or is it because it is not clear whether overreactions matter and in what way to the evolution of our species?) It is possible to amend the above accuracy and sensitivity definitions to take account of intensity, but I shall not engage in this issue here, if only because of its relative absence from the current philosophical literature.

[16] Prominent seeing-as accounts include de Sousa 1987, Greenspan 1988, Rorty 1980, Lyons 1980 and Roberts 1988.

see the duck-aspect of the drawing, an aspect that is there to be seen. This see-ing-as experience, as is commonly interpreted, requires me having the concept of a duck. Of course, I need not see the duck aspect. Similarly, according to seeing-as accounts, by and large when I see the situation as dangerous, the situa-tion lends itself to the application of the concept 'danger' (accuracy), even if I need not see the situation in this manner in the first place (forgoing sensitivity). The accuracy claim is further implied by the fact that seeing-as philosophers regard recalcitrant emotions as "fringe cases" (Rorty 1980: 103).

2. The Lack of Scientific Evidence for Reliability of Tracking (Sensitivity and Accuracy)

Contemporary philosophers overwhelmingly use the term 'empirical support' to mean 'scientific evidence'. Indeed, sub-personalists often refer to scientific ex-periments to support their claims. In what follows, I summarize the experiments cited in the philosophical literature and then examine what they can be said to verify.

Some (disturbing) scientific evidence is presented for the reliability of cer-tain typical newborn baby responses to certain typical circumstances.[17] Other experiments, such as those that show that we develop phobias to snakes much more easily than we develop phobias to flowers (Ohman, Fredrikson and Hug-dahl 1976, cited in Griffiths 1997: 88), or that we very easily learn to fear spi-ders,[18] demonstrate perhaps that we all have a tendency to fear snakes and also spiders. Perhaps we also all have a tendency to be disgusted by cockroaches and fear earthworms (Griffiths 2004b: 95 and 1997: 28, 93). It seems plausible that newborns reliably emote in certain typical ways in response to the relatively limited set of types of objects and circumstances they relate to (e.g. the presence of a caregiver). But infants beyond the newborn stage already respond to more objects (e.g. they have favorite toys) and have past experiences that may shape or alter in some way or other their emotional responses. So whether or not or to what extent we can generalize from those experiments and claim that infants that are beyond the newborn stage are all more or less the same remains an open question.

What about human adults? One class of experiments makes use of emo-tionally laden memories. Some such experiments specifically ask people to re-call life-changing events such as the death of a loved one, or to recall extreme emotional experiences.[19] If these experiments represent a sample of people's emotional life, then it is the one where people face what we may call 'signifi-cant' circumstances, such as a big failure, a grand success, one's wedding or

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[17] Watson (1924: 229-31), Sroufe (1984: 112). More ethical experiments by Meltzoff and Moore 1977, Field *et al.* 1982, Meltzoff and Moore 1989 and 1995, Izard 1978, Tre-varthen 1984. The first six experiments are cited in Robinson (2005: 37-38); the first three and the last two in Griffiths (1997: 88).

[18] Robinson (2005: 37) refers to Frijda's (1986) reports on many such studies.

[19] For example, Prinz (2004: 70-71) discusses an experiment where people who were injected with adrenaline were asked to recall life-changing events such as the death of a loved-one. He there cites Maranon 1924. See also Prinz's (2004: 96) discussion on exper-iments that ask people to recall occasions where they felt extreme guilt. He there cites Shin, Dougherty, Orr, Pitman, Lasko, Macklin, Alpert, Fischman & Rauch 2000.

graduation ceremony, the first time one saw the ocean, break-up conversations, historical events, etc.

Sub-personalists also tell us about Americans and Japanese that respond with disgust to gory films (Friesen 1972, cited in Robinson 2005: 34; Prinz 2004: 137) and about people getting stressed when subjected to films showing genital surgery (Lazarus & Alfert 1964, cited in Prinz 2004: 30). If we ignore gore fans, certain people with sadistic or masochistic tendencies and doctors who have become acclimatized to such things, then these experiments show that most of us reliably find the insides of bodies and the maiming of bodies disgusting and stressful. We also read about people being conditioned to dislike certain images via electric shocks.[20] Other experiments (Logue, Ophir, and Strauss 1986, cited in Griffiths 1997: 28) talk about disgust of foods that are associated with nausea via conditioning (even when one knows the nausea was not caused by the food). These experiments arguably show a predictability of response to circumstances associated with severe pain. These experiments may be said to be a representative sample of what we may call 'extreme' circumstances. The negative ones include events that we either prefer to avoid or are perversely fascinated with, e.g. rape, torture, a natural disaster, war, the big dipper at the Luna Park, bungee jumping, car crashes, open-heart surgery etc. The positive ones would be events such as winning the lottery.

Another class of experiments exposes subjects to basic facial expressions such as smiles, frowns and stares. Some experiments mentioned in the philosophical literature demonstrate, for example, that we reliably prefer images that we previously saw in conjunction with a smiley face (Murphy and Zajonc 1993, cited in Robinson 2005: 39-40). These experiments could be regarded as sampling the category we may call the 'clichéd'. The clichéd may also include the joy football fans feel when their team wins, and the warmth of endearment many people feel when they see babies or kittens.

I have not found in the philosophical literature experiments that test the disgust adults feel when exposed to vomit or rancid food, the startles we experience as a response to a sudden loud noise, the anger we feel when someone hits us, or other emotional responses to objects whose emotional import is clearly inherited from the evolution of our species. Call these the 'biologically basic' objects.

It seems plausible that the experiments cited in mainstream philosophy of emotion show that most of us reliably respond in certain typical and fitting ways to the extreme, the clichéd, and the biologically basic. There are reasons to doubt the experiments that regard significant events. People tend to report or think about themselves in a way that conforms to what they are expected to feel at their wedding, graduation ceremony, or their break-up, and people may recall events in the way that suits them, especially if they are practiced in recalling that specific event and describing and re-describing it. The responses to such events seem complex especially when we begin to describe them in the kind of detail that takes account of that person's biographical particularities. But it seems right that at some general level of description many of us feel sad when our loved one dies, joy and/or nervous when we get married, and have more or less predictable and fitting roughly-characterized emotional responses to events that clearly

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[20] The experiment was conducted by R. Lazarus and R.A. McCleary in the 50's, described in Lazarus (1991: 155-56), cited by Robinson (2005: 40).

stand out in our life as more important than the rest of our everyday life. That most of us emote in predictable and fitting ways to the significant, the extreme, the clichéd and the biologically basic is also evident in the use of those kinds of circumstances in advertisement, soap operas, thrillers, the Luna park, and other commercial and 'formulaic' story-techniques that trade on the relative reliability of those kinds of circumstances.

Importantly, I do not claim that the abstract categories I articulated—the 'clichéd', the 'extreme', the 'significant' and 'the biologically basic'—are core relational themes. I am not claiming that they play any role in our psychology, that we track them under that description or any other, or that they qualify as an ecological category. Rather, I concede that there may be some causal co-variance to be found by science between typical emotional responses and some objects that can be judged to instantiate these abstract concepts, that some such identified co-variances can be further judged as fitting responses, and that people, as theorists with conceptual capacities, can thematize them, as I just did. The question now is: does this evidence of the co-variances described above count as evidence that emotions track purposive themes?

In what follows, I argue that even the emotional reactions to objects from these aforementioned categories do not track core relational themes within a theory of our well-being. Although the objects of the fear responses examined in those experiments can be described by an observer as dangerous, I suggest that those fear responses did not track *dangers*. Only when it comes to the 'biologically basic' objects, or the kind of responses we share with animals, does it make sense to claim that emotions track core relational themes, whose action-tendencies appear purposive, such as running away in fear from a bear in the forest. Even then, I argue, it is neither necessary nor explanatorily fruitful to hold the Tracking Dogma in any of its versions.

It is crucial to remember that the kind of purposiveness Darwin talked about with respect to evolved systems was a purposiveness *without a purpose*. Biological systems may appear *as if* they were designed for a certain purpose but there is no such design, and the purpose is a matter for synoptic judgment when considering populations of the organisms statistically.[21] If we take Darwin seriously, it is crucial that we do not ascribe intentionality or instrumental targeting to biological functions or we will mistakenly turn them into a system governed by the kind of instrumental rationality that we ascribe to our own intentional actions that are carried out "under description" (Anscombe 1963). This line of criticism is well-known from Fodor's criticism against teleosemantic theories of intentional content: "Darwin cares how many flies you eat, but not what description you eat them under" (Fodor 1990: 73).

The temptation to ascribe to biological functions a purpose is two-fold. First, running away from bears in the forest seems purposive because bears can kill us. So we can rightly say, the fear system looks like it has the purpose to avoid death by a bear, but it is only an 'as if' purpose. But this does not mean that we can qualify every purpose we wish with an 'as if', ascribe it to a biological function, and slip into re-introducing a new kind of blind design. The slippage begins when, as persons with concepts and instrumental rationality, we

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[21] See Dennett's (1995: Ch. 21) understanding of evolutionary processes as mindless and mechanistic algorithms.

notice that bears are dangerous, and say that the fear system "as if" has the purpose to avoid dangers. This last claim is false.

The members of the category 'bear' all share a typical visual form (or any other sense modality) and typical motor programs that can plausibly be identified by a biological function as belonging to the same category that is in turn differentiated from other categories. Conversely, the members of the category 'danger' share very few attributes, normally describable by using equally abstract concepts. It is the kind of category that people with conceptual capacities and instrumental rationality have, not the kind that could plausibly be attributed to a biological function.

Arguably we could thin-down the concept 'danger' to a purely ecological category that would mean 'threat to life and limb'. But then the supposed tracking system would be very limited, excluding many if not most of the objects we fear in our everyday life, such as exams, public speaking, being late, being rejected in love or at work, etc. The concept 'danger' as we ordinarily apply it is normatively laden, and does not designate an ecological category.

A sub-personalist could perhaps forgo accounting for most of our fear reactions, limiting them to tracking "dangers" that are stripped of normativity. This is no small concession. But then another option suggests itself, that is, that our emotional system is *not* geared to track threats to life and limb but rather biologically basic *objects* and anything that is similar to or rather that imaginatively connects with them. I show elsewhere why the latter option is more explanatorily fruitful, but here I simply argue that the subset of scientific data invoked by sub-personalists significantly underdetermines their theory (Morag 2016).

In any case, the categories of the significant, extreme, clichéd, and biologically basic that in light of the experiments cited by sub-personalists may be said to include objects toward which we reliably emote in predictable and fitting ways *are not representative of most of our emotional life*. Life is not a soap opera or an advertisement. If it is like fiction, it is closer to the more risky, original and non-formulaic forms of story-telling (as in certain novels, films and TV Drama Series).

Most of our emotional lives take place in our *ordinary everyday circumstances*, at work, at home, at the café, in the supermarket, at dinner parties. Our emotions usually involve people and things we know—our friends, our colleagues, our roommates, our romantic partners, our family members, our neighbors, the barista, our pets, our stuff. Most of our emotional reactions do not involve the biologically basic (e.g. bears, being hit) or the clichéd (e.g. cute babies, football teams). Although there is a level of description in which romantic partners or family members are biologically basic objects, our quotidian emotional relationships with them involve much more than their sexual or care-giving or care-demanding functions. We react to them, rather, qua having shared experiences that are particular to our lives and qua having distinctive personalities. In fact, even the sexual aspect of our relationships is often idiosyncratic and goes far beyond any reproductive goal (see Freud 1905). The vast majority of our emotional life involves our *intimates*—people, animals and things, with whom we have ongoing and complex relationships, relationships that may go through occasional extreme upheaval or significant cross-roads, but that are emotionally maintained throughout ordinary and everyday situations. The experiments sub-personalists often cite thus do not provide good evidential support for the sensitivity or the accuracy of the supposed emotional tracking system, because they

only cover a relatively small portion of our emotional life. Indeed, it would be extremely challenging to collect enough data about people's everyday personal lives. Presumably, one on one psychotherapy over a few years is the only currently existing medium to study people's private lives, and even then the data is far from objective, as it is largely comprised of recounted memories, and the real-time emotional experiences are either addressed at people who are not present or at the therapist. The Strong and the Weak versions of the Tracking Dogma thus remain unsubstantiated by the philosophers of emotion that hold them.

3. The Empirical Non-Scientific Appeal to Ordinary Psychological Experience and Common Knowledge

So how can we know whether or not the emotions of the human adult by and large track core relational themes? How can we have epistemic access to most of our emotional reactions that take place not in a lab but in our personal everyday lives? Empirical knowledge that we have through experience need not be limited to the conclusions of scientific observation and experiments. Experience also includes *ordinary everyday experience*, the kind of experience that is commonly turned to in other areas of philosophy, even if without explicit discussion.

Consider that in moral philosophy we appeal to moral experience, in aesthetics we appeal to aesthetic experience, and in epistemology we appeal to perceptual experience. So, too, I want to claim in philosophy of psychology we can avail ourselves of *psychological experience*: that is, in addition to knowledge of our own minds,[22] our experience of the beliefs, desires, feelings and sensations of *other* people. In the philosophical literature this is often misleadingly called 'folk psychology' but understanding others cannot be assumed to take the form of a predictive scientific theory or a preliminary attempt at that. In many cases it is more a matter of trying to see things from another's point of view, to imaginatively stand in their shoes. But it also includes our capacity to "read" the meaning or significance of other people's actions, expressions, gestures, style, and so forth. And this, in turn, depends on what we have learnt about the human condition and its complicated modes of expression from how others interpret us and our social relations, from fairytales, art, novels, and also from old adages, proverbs, and aphorisms, which are paradigms of non-scientific modes of understanding. Psychologists attempt to provide a science of mind-reading, but our own ordinary mind-reading skills, assumed by our daily functioning and dependent upon other non-scientific practices, provide us with us with non-scientific empirical knowledge.

The idea that there is a category of non-scientific empirical knowledge is overlooked in contemporary philosophy given the wide popularity of scientific models of what there is and how we know it. We have forgotten that Hume, for example, relied on his own *subjective* experience of his own mental states, which cannot be the subject of scientific study since it does not meet the appropriate standards of objectivity such as impersonal and relatively definite standards of identifiability or verifiability. Such subjective experience can count as data for

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[22] I note that Stanley Cavell (1979: 146) has complained that "the subject of self-knowledge […] as a source of philosophical knowledge has been blocked or denied in modern philosophy".

general statements about the psyche, inasmuch as one can appeal to one's own and others' subjective psychological experiences, based on the reasonable assumption that we all have the same basic psychological capacities. It is also worth recalling that ordinary language philosophers relied on their mastery of their own language, on their own experience of language, to make general claims qua one of many competent language speakers, and not qua linguist who studies language from a detached scientific perspective that links marks and noises (i.e. objects of scientific study) to certain behaviors (Cavell 1969: Ch. 1).

Similarly, each of us is in a good position to "read" and identify the emotional patterns of our intimates. We are in a position to know the emotional lives of the people closest to us, better than those who do not know them well or at all, and perhaps even better than themselves. Reading another's emotion requires more than identifying familiar facial expressions and other prototypical behaviors, which in any case people often successfully inhibit in the company of strangers. People express emotions in many idiosyncratic ways. When it comes to our intimates, we can tell how they feel by the way they say 'hello', by the way they place a glass on the dinner table, by many gestures that are typical to them in particular or by subtle departures from their normal personal style of behavior. Furthermore, although we know well only a limited number of people, we assume that our relationships are not so different to those of others, at least in the sense that we conduct our relationships under the pressure of shared social norms of language, culture and emotion fittingness. In other words, we have *common knowledge* about emotions, a familiarity with the emotional lives of ourselves and of others, on which I rely in the next section. It matters little that this knowledge is defeasible and fallible.

This appeal to common knowledge may go largely unrecognized in the contemporary literature, but it is not unknown in philosophy. Consider G.E. Moore's common sense claims such as that he knows that since his birth he has lived on or near the surface of the earth (Moore 1959: 33). Moore says this about himself, based on his own self-knowledge. He appeals to his readers to acknowledge that they know it too based on their own self-knowledge. This is a good example of an appeal to non-scientific empirical knowledge. Differently to Moore, I shall rely particularly on not my own experience but our common experience of *other* people, qua ordinary emoting subjects that are functioning members of a social niche guided by various familiar social norms, including norms of emotion-fittingness.

In fact, I implicitly relied on common knowledge in the previous section when endorsing the plausibility of the claim that we are sensitive to and emote fittingly in the face of the significant, the extreme, the clichéd, and the biologically basic. In what follows I mobilize common knowledge to list a number of common phenomena that do not sit well with the reliability claim. None of the phenomena I mention can refute it on its own. Indeed, clear empirical refutation or verification may be too demanding in the realm of emotion, where, to paraphrase what Aristotle says about ethics, we should not expect much precision (Aristotle 1991: 1094b 12-26). It is rather the cumulative weight of the phenomena listed in the next section that provides a reasonable doubt about the plausibility of sensitivity and accuracy of the supposed emotional tracking system. It is worth recalling that Peirce recommended this methodology for philosophy:

Philosophy ought to imitate the successful sciences in its methods, so far as to proceed only from tangible premises which can be subjected to careful scrutiny, and to trust rather to the multitude and variety of its arguments than to the conclusiveness of any one. Its reasoning should not form a chain which is no stronger than its weakest link, but a cable whose fibres may be ever so slender, provided they are sufficiently numerous and intimately connected (Peirce 1868: 229).

4. Common Knowledge against Reliability of (Thematic) Tracking

4.1 Against Accuracy

1. *Ordinary Language Expressions*

A number of familiar expressions demonstrate that many of our emotional reactions do not serve to track anything that directly bears on well-being, but rather often seem counter-productive. That is, we think that people emote when they should not often enough to have expressions such as the advise to 'not take things personally', and gentle criticisms such as 'touchy!' or 'I guess I hit a nerve'. If such un-called for emotions tell us anything useful, it is about the emoters' "soft spots", as we say, about their issues and sensitivities. In fact, some of us accuse one another for taking advantage of those sensitivities and 'pushing our buttons'. And there is the familiar warning about a potential partner's 'emotional baggage'.

2. *Transference*

As Freud theorized, we often "transfer" and emote toward one person in a way that we would emote toward another person.[23] For example, a man may resent his boss for being domineering and hostile because she reminds him in some way of his mother, who he has been resenting for a long time for being domineering and hostile—whether or not his boss actually is domineering and hostile.[24]

One need not agree with every word Freud wrote or with various familiar psychoanalytic conceptions to see that transference is a commonly acknowledged and frequent enough phenomenon, as is attested by known expressions such as 'don't shoot the messenger', 'don't take it out on me', 'I am not your mother!', '*She's* having a good/bad day', and so on. In such cases we do not think people track anything with their emotion but rather expose to us their "emotional baggage" concerning other people and other (past and present) sets of circumstances. Whereas the Tracking Dogma identifies the here-and-now emotionally salient object of the emotion as its principal cause, experience often suggests that this here-and-now emotionally salient object is merely a causal trigger, and that there are other more significant causes and objects that are not even present, nor straightforwardly similar to the here-and-now circumstances. Whereas the Tracking Dogma assumes a purposive and instrumental relation between the emotion and the object it makes salient, the phenomenon of transference assumes an *imaginative* relation.

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[23] Freud discovered the phenomenon of transference in the context of psychoanalytic therapy, when patients would emote toward the therapist in ways that are typical of their relationships with others in their lives. See for example Freud 1914.

[24] See the example of Jonah's resentment to his boss Esther in Rorty 1980.

3. *Projections*

Freud also spoke of "projections" whereby we ascribe to people (often falsely) qualities or emotions that we have ourselves. For example, people who entertain unfaithful thoughts often ascribe such thoughts or even actions to their romantic partners thereby suffering from what Freud called "projected jealousy" (Freud 1922: 224). In such cases, one's jealousy is not tracking any defection of affection. Such projected suspicions may give rise not just to jealousy, but also to anger and fear that do not track anything objective. The process of projection is familiar to many people who have never read Freud, and it has been made use of in novels before the term was coined. Just as an example, consider the old Hebrew saying that originates from the Talmud Bavli, written many centuries before Freud was born: "The fault one finds in another is one's own".[25] Here, once more, we see how imagination and emotion interconnect to make certain objects salient without it being instrumental or conducive to the subject's well-being. If transference-emotions or projective-emotions tell us anything at all—it is about the person's own subjective "soft spots."

4. *Practices of Emotion Inhibition*

Consider the prevalence of various strategies of self-management to dim down our emotions (but not through direct rational criticism of them). For example, we are told to count to ten before we express anger so that it will give us a moment to see if indeed the situation merits this anger.[26] Another familiar strategy to control unfitting emotions of all kinds consists in the recurrent advice or decision to 'just get over it' or 'stop thinking about it' and 'move on'. We learn, train ourselves, transmit and sustain social practices of controlling the expression of our emotions, at times by ignoring our emotion and focusing our attention on something else. Emotion inhibition is also exercised when emotions are fitting but otherwise socially unacceptable.[27] But at least some cases of emotion inhibition demonstrate our familiarity with the large scope of unfitting emotions.

5. *Psychotherapy*

The prevalence of unfitting emotions is explicitly acknowledged by the very existence of the practice of psychotherapy and the large number of people who seek psychoanalytic, psychological or psychiatric help to resolve emotional issues that appear to them to be out of kilter with reality. This provides *prima face* evidence of actual mismatch. In fact, psychoanalytic practice presupposes that emotions are not a rational phenomenon, and should not be judged as "fitting" or "unfitting". This is a claim about the practice rather than about specific theories one can find in the psychoanalytic literature—a claim that I defend elsewhere (Morag 2016: Ch. 6).

6. *Love*

'Love is in the eyes of the beholder'. 'Love is blind'. It is so well-known that love, especially romantic love but also friendship, cannot be judged as fitting or unfitting, that its object may often be not at all conducive to one's well-being,

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[25] My translation of the known Hebrew saying: "Haposel Bemumo Posel".

[26] James: "Count ten before venting your anger, and its occasion seems ridiculous" (James 1983: 178).

[27] See Ekman and Friesen (1975: Ch. 2, 11). Display rules include not just rules of emotion inhibition but also of emotion exhibition.

and that it does not track anything that can be characterized in rough-and-ready terms, that most modern philosophers of emotion have simply excluded it from their list of emotions. Love may be painful, it may involve someone whose character is incompatible to ours, but such judgments are not expected to cause love to end. And yet, love is not merely a disposition to emote in various ways, as some philosophers claim (Roberts 1988). Love, in one important sense at least, is an emotion; it has an occurrent form with its own prototypical physiological and behavioral manifestations. We speak of having "butterflies" when we are in love. We can tell when someone is in love even when that person forcefully denies they are in love, for example, by the way they look at their love interest.[28]

7. *Moods*

Moods are by and large defined as affective states that do not make any particular object in the environment emotionally salient. The question of fittingness or of accuracy of tracking does not arise for them. Together with love, the overwhelming majority of philosophers of emotion have excluded moods from their accounts. And yet moods fit the minimalist definition of emotions presented in the beginning of this paper. They are characterized by longer episodes of the same types of other emotions: depression is like sadness, euphoria is like joy, irritability like anger, anxiety like fear. Moods may not make a specific object within the environment emotionally salient, but they do color the experience of one's environment as a whole with their affect. The world looks generally gloomy when we are depressed, or feels full of opportunities when we are optimistic. Saying that moods are not emotions since they do not make specific objects emotionally salient or because they do not have norms of fit and do not appear to track anything useful is an *ad hoc* claim, motivated by theoretical considerations. Why is it assumed that the emotionally salient object of a certain affective experience is its "intentional object" or "target"? Why could this object not simply be the causal trigger of the emotion or some other object in the nearby environment that the emoting subject is focusing on? Why must we assume that emotions are short-lived episodes? If we see moods as emotions, then their prevalence does not sit well with the idea that emotions reliably track purposive themes or that they track anything at all for that matter.

4.2 Against Sensitivity

If our emotional tracking system, said to be aimed at tracking dangers, wrongs, benefits, achievements, etc., were a sensitive system, then by and large most of the time we would respond in fitting ways to dangers, wrongs and other core relational themes. *And yet it is often the case that we can appreciate a situation as meriting an emotional response and fail to emote.* Let us call this the Emotionality Problem. Sometimes we are annoyed with drivers that cut in front of us on the road and sometimes not, even when our appreciation of their rudeness has not changed. Sometimes we may feel great sadness when we hear about the fighting in Syria and sometimes we hardly feel anything at all. Sometimes we jump in

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[28] That love has an episodic nature with prototypical physiological "activation" is common knowledge but has also been recently proved scientifically (cf. Nummenmaa, Glerean, Hari & Hietanen 2014).

joy when a good old friend calls after a long period of absence and other times we remain indifferent.

Jenefer Robinson, after laying out her sub-personalist account, acknowledges the Emotionality Problem and the way it clashes with the Strong Tracking Dogma as follows: "Why am I emotional about something on some occasions and on other occasions not?" (Robinson 2005: 95). Robinson attempts to add other "variables" to the tracking system in order to account for this variability. As I show elsewhere (Morag 2016: Ch. 2, 3), Robinson's suggestions amount to relying on moods, whether these are caused by a certain physiological cause (e.g., hormones, drugs, fatigue, energy levels) or by an earlier event (e.g., confidence due to a promotion), or somehow otherwise caused.

Moods seem to indeed have an effect on our susceptibility to have shorter and more intense affective episodes that make specific people and things emotionally salient. Furthermore, often when people we know well emote in unfitting ways we ascribe to them such moods. We assume that the specific affect is already present, coloring the day's experiences accordingly. Some experiments show that manipulating aspects of physiology that are relevant to emotion, by forcing certain facial expressions (Ekman 1984: 324-28, cited in Robinson 2005: 36)[29] or levels of physical arousal through receiving drugs, can effect emotional experiences and the manner in which they are reported.[30]

But if moods were the only variable to explain the irregularity of our emotional reactions to otherwise fitting circumstances that bear on our relevant cares and concerns, then we would be obliged to attribute to ourselves moods every time we emote. This is *ad hoc*, and one would need a full account of moods to augment any account of emotions, to explain their emotionality. Whatever such an account may be, this would mean that emotions are constantly biased by our mood, thereby failing to track any purposive theme that does not fit an affective state that is not that mood. The idea that emotions track core relational themes would be effectively given up.

5. Alternatives to the Strong and Weak Versions of the Tracking Dogma

The above considerations cast serious doubt on the plausibility that the emotional system is sensitive to core relational themes or that whenever we do have an emotional reaction it accurately tracks dangers, wrongs, achievements, etc. Consequently I contend that the Strong and the Weak versions of the Tracking Dogma are implausible views. Two alternatives now suggest themselves.

The first is the Normative Tracking Dogma, a fallback position for those who still want to maintain that emotions aim to track purposive themes. Indeed, anyone who holds that emotions have intentional content is obliged to endorse this normative position, namely that emotions at least *aim* at fittingness, even if they often fail. Many philosophers who hold the Normative version of the Tracking Dogma are optimistic about our capacity to improve the accuracy our supposed tracking system, about our chances of becoming the Phronimos. It is

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[29] See also Zajonc, Murphy & Inglehart 1989; as well as Strack, Martin & Stepper 1988 (cited in Prinz 2004: 35-36).
[30] Recall the famous Schachter and Singer (1962) experiment, discussed for example in Griffiths (1997: 25, 81), Prinz (2004: 71), Robinson (2005: 83-85).

what Karen Jones has named the contemporary "Pro-Emotion Consensus" according to which "emotions can, with experience and regulation, become reason-tracking mechanisms that enable an agent reliably to track the way her concerns are implicated in concrete choice situations" (Jones 2006: 4). But in light of the considerations presented in this paper, these philosophers should admit that the Aristotelian Phronimos who emotes fittingly is either extremely rare or non-existent. They can still claim that the Phronimos is a worthy ideal toward which we should all strive. To say it all too briefly, once we take seriously the variety and frequency of cases where emotions are not fitting to their circumstances, the Normative Tracking Dogma faces two main problems: 1) It assumes implausibly far-reaching irrationality in all adults, and 2) It lacks explanatory resources that would account for unfitting emotions.

The challenge for all views of emotions, a challenge that the Strong and Weak versions of the Tracking Dogma hardly admit let alone answer, is to explain how the relatively small pool of objects to which we reliably react in predictable and fitting ways in infancy develops into a much bigger pool of objects to which we *often* do not react in predictable or fitting ways. I conclude by briefly introducing the alternative vision and the specific account I favor and defend elsewhere as an account that can meet his challenge (Morag 2016).

Rejecting the Strong and the Weak versions of the Tracking Dogma already renders less appealing the idea that emotions *aim* at fittingness, that they are representational, that they have intentional content or some other form of information embedded in them. If this supposed representation is often mistaken, then perhaps the very idea of emotions as having content that either fits or does not fit the situation in which it arises is misguided. Emotional representationalism seems, in light of the considerations I have amassed here less compelling than the idea—defended most famously by Plato, Hume and William James in the philosophical tradition and taken for granted by the practice of psychoanalysis—that emotions are not representational and are not rationally assessable in terms of "fit".[31]

According to my version of this non-representationalist vision, emotions should not be seen as either succeeding or failing to be revelatory about the world, as the Tracking Dogma takes them to be. Rather, emotions are revelatory of the inner life of the mind that embeds one's past experiences. To summarize all too briefly an account I present elsewhere,[32] I propose what we may call an imagistic seeing-as account, whereby I see here-and-now people and things in terms of other people and things that were emotionally salient in the past, and not in terms of concepts such as danger or wrong. That is, when I imaginatively connect a here-and-now "object" (through similarity, inversion or part-whole relations) to past "objects" of past or remembered emotional experiences, the here-and-now "object" becomes emotionally salient. According to this alternative then, all emotions are transference or projection emotions, and their fitting-

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[31] Hume writes: "A passion is an original existence, or, if you will, modification of existence, and contains not any representative quality, which renders it a copy of any other existence or modification" (Hume 1738: Book II, Part 3, Section 3). I defend the (controversial) claim that psychoanalytic practice assumes a non-representational view in Morag 2016: Ch. 6.

[32] See Morag 2016: Part 2 for my proposed positive account for the formation and subsidence of emotional reactions.

ness to the here-and-now is a contingent matter of an after-the-fact normative judgment. Emotions, in other words, do not detect how the world objectively relates to us and our well-being, but rather express our subjective and personal way of seeing the world through the imaginative lens of our experiences and memories.[33]

References

Anscombe, E. 1963, *Intention,* Oxford: Basil Blackwell, 1985.

Aristotle 1991, *Nicomachean Ethics*, in *The Complete Works of Aristotle*, Vol. 2, Barnes, J. (ed.), Princeton: Princeton University Press.

Baier, A. 2004, "Feelings that Matter", in Solomon, R. (ed.), *Thinking about Feeling*, New York: Oxford University Press, 200-13.

Brady, M. 2007, "Recalcitrant Emotions and Visual Illusions", *American Philosophical Quarterly*, 44, 3, 273-84.

Cavell, S. 1969, *Must We Mean What We Say?*, Cambridge: Cambridge University Press.

Cavell, S. 1979*, The Claim of Reason*, Oxford: Oxford University Press.

Charland, L. 1995, "Feeling and Representing: Computational Theory and the Modularity of Affect, *Synthese*, 105, 3, 273-301.

D'Arms, J. 2000, "Empathy and Evaluative Inquiry," *Chicago-Kent Law Review*: *Symposium on Law, Psychology and the Emotions*, 74:4, 1467-1500.

D'Arms, J. and Jacobson, D. 2003, "The Significance of Recalcitrant Emotion (or, Anti-Quasijudgmentalism)", in Hatzimoysis, A. (ed.), *Philosophy and the Emotions,* Cambridge: Cambridge University Press, 127-46.

De Sousa, R. 1987, *The Rationality of Emotion*, Cambridge (MA): MIT Press, 1990.

Debes, R. 2009, "Neither Here nor There: The Cognitive Nature of Emotion", *Philosophical Studies*, 146, 1, 1-27.

Dennett, D. 1995, *Darwin's Dangerous Idea: Evolution and the Meaning of Life,* New York: Simon and Schuster.

Deonna, J.A. 2006, "Emotion, Perception and Perspective," *Dialectica*, 60, 1, 29-46.

Döring, S. 2003, "Explaining Action by Emotion," *The Philosophical Quarterly,* 53, 211, 214-30.

Döring, S. 2010, "Why Be Emotional?", in Goldie, P. (ed.), *The Oxford Handbook of Philosophy of Emotion*, Oxford: Oxford University Press, 283-302.

Ekman, P. 1984, "Expression and the Nature of Emotion", in Scherer, K.R. and Ekman, P. (eds.), *Approaches to Emotion*, Hillsdale (NJ): Lawrence Erlbaum Associates, 319-44.

Ekman, P. and Friesen, W. 1975, *Unmasking the Face: A Guide to Recognizing Emotions from Facial Expressions*, Cambridge (MA): Maylor Books, 2003.

Field, T. *et al.* 1982, "Discrimination and Imitation of Facial Expressions by Neonates", *Science*, 218, 179-81.

Fodor, J. 1990, *A Theory of Content and Other Essays*, Cambridge (MA): MIT Press.

Freud, S. 1905, *Three Essays on the Theory of Sexuality*, S.E., Vol. 7, 123-243.

Freud, S. 1914, "Remembering, Repeating, and Working-Through", S.E., Vol. 12, 147-56.

Freud, S. 1922, "Some Neurotic Mechanisms in Jealousy, Paranoia and Homosexuality", S.E., Vol. 18, 223-32.

Friesen, W.V. 1972, *Cultural Differences in Facial Expressions in a Social Situation: An Experimental Test of the Concept of Display Rules*, Doctoral dissertation, San Francisco: University of California.

Frijda, N. 1986, *The Emotions,* Cambridge: Cambridge University Press.

Greenspan, P. 1988, *Emotions and Reasons,* London: Routledge.

Griffiths, P. 1997, *What Emotions Really Are: The Problem of Psychological Categories,* Chicago: Chicago University Press, 1998.

Griffiths, P. 2004a, "Is Emotion a Natural Kind?", in Solomon, R. (ed.), *Thinking about Feeling: Contemporary Philosophers on Emotion*, Oxford-New York: Oxford University Press, 233-49.

Griffiths, P. 2004b, "Towards a Machiavellian theory of Emotional Appraisal", in Evans, D. and Cruse, P. (eds.), *Emotion, Evolution and Rationality*, Oxford: Oxford University Press, 89-105.

Hume, D. 1738, *A Treatise of Human Nature*, Selby-Bigge, L.A. (ed.), Oxford: Clarendon Press, 1978.

Izard, C.E. 1978, "On the Ontogenesis of Emotions and Emotion-Cognition Relationship in Infancy", in Lewis, M. and Rosenblum, L. (eds.), *The Development of Affect*, New York: Plenum Press, 389-413.

James, W. 1983, "What is an Emotion?", in Burkhardt, F. *et al.* (eds.), *The Works of William James*, Vol. 13, *Essays in Psychology*, Cambridge (MA): Harvard University Press, 1983, 168-87.

Jones, K. 2006, "Quick and Smart? Modularity and the Pro-Emotion Consensus," *Canadian Journal of Philosophy*, 36, Suppl. Vol. 32, 3-27.

Lazarus, R.S. 1991, *Emotion and Adaptation*, New York: Oxford University Press.

Lazarus, R.S. and Alfert, E. 1964, "Short-Circuiting of Threat by Experimentally Altering Cognitive Appraisal", *Journal of Abnormal and Social Psychology*, 69, 195-205.

Logue, A.W., Ophir, I. and Strauss, K.E. 1986, "Acquisition of Taste Aversions in Humans", *Behavioural Research and Therapy*, 19, 319-33.

Lyons, W. 1980, *Emotion*, Cambridge: Cambridge University Press.

Maranon, G. 1924, "Contribution a l'etude de l'action emotive de l'adrenaline", in *Revue Francaise d'Endocrinologie*, 2, 301-325.

Meltzoff, A.N. and Moore, M.K. 1977, "Imitation of Facial and Manual Gestures by Human Neonates", *Science*, 198, 75-78.

Meltzoff, A.N., and Moore, M.K. 1989, "Imitation in Newborn Infants: Exploring the Range of Gestures Imitated and the Underlying Mechanisms", *Developmental Psychology*, 25, 954-62.

Meltzoff, A.N. and Moore, M.K. 1995, "Infants' Understanding of People and Things: From Body Imitation to Folk Psychology", in Bermudez, J., Marcel, A. and Eilan, N. (eds.), *The Body and the Self*, Cambridge (MA): MIT Press.

Moore, G.E. 1959, "A Defence of Common Sense", in *Philosophical Papers*, London: Allen & Unwin, 32-45.

Morag, T. 2016, *Emotion, Imagination, and the Limits of Reason,* London: Routledge.

Nummenmaa, L., Glerean, E., Hari, R. and Hietanen, J.K. 2014, "Bodily Maps of Emotions", *Proceedings of the National Academy of Sciences of the United States of America*, 111, 646-51.

Ohman, A., Fredrikson, M. and Hugdahl, K. 1976, "Premiss of Equipotentiality in Human Classical Conditioning", *Journal of Experimental Psychology*, 105, 313-37.

Peirce, C.S. 1868, "Some Consequences of Four Incapacities", in Buchler, J. (ed.), *Philosophical Writings of Peirce*, New York: Dover, 1955, 228-50.

Prinz, J. 2004, *Gut Reactions: A Perceptual Theory of Emotion,* New York: Oxford University Press.

Roberts, R. 1988, "What an Emotion Is: A Sketch", *The Philosophical Review*, 97, 2, 183-209.

Robinson, J. 2005, *Deeper than Reason*: *Emotion and its Role in Literature, Music and Art*, Oxford: Clarendon Press.

Rorty, A. 1980, "Explaining Emotions", in Rorty, A. (ed.), *Explaining Emotions*, Berkeley: University of California Press, 103-26.

Salmela, M. 2011, "Can Emotion be Modeled on Perception?", *Dialectica*, 65, 1, 1-29.

Schachter, S. and Singer, C. 1962, "Cognitive, Social, and Physiological Determinants of Emotional State," *Psychological Review*, 69, 379-99.

Shin, L.M., Dougherty, D.D., Orr, S.P., Pitman, R.K., Lasko, M., Macklin, M.L., Alpert, N.M., Fischman, A.J. and Rauch, S.L. 2000, "Activation of Anterior Paralimbic Structures During Guilt-Related Script-Driven Imagery", *Biological Psychiatry*, 48, 43-50.

Sroufe, A.L. 1984, "The Organization of Emotional Development", in Scherer, K.R. and Ekman, P. (eds.), *Approaches to Emotion*, Hillsdale (NJ): Lawrence Erlbaum Associates, 109-28.

Strack, F., Martin, L.L. and Stepper, S. 1988, "Inhibiting and Facilitating Conditions of Facial Expressions: A Nonobstrusive Test of the Facial Feedback Hypothesis", *Journal of Personality and Social Psychology,* 54, 768-77.

Tappolet, C. 2012, "Emotions, Perceptions, and Emotional Illusions", in Calabi, C. (ed.), *Perceptual Illusions: Philosophical and Psychological Essays,* London: Palgrave Macmillan, 207-24.

Trevarthen, C. 1984, "Emotions in Infancy: Regulators of Contact and Relationship with Persons", in Scherer, K.R. and Ekman, P. (eds.), *Approaches to Emotion*, Hillsdale (NJ): Lawrence Erlbaum Associates, 129-57.

Watson, J.B. 1924, *Psychology from the Standpoint of a Behaviorist*, 2nd edition, Philadelphia: Lippincott.

Zajonc, R.B., Murphy, S.R. and Inglehart, M. 1989, "Feeling and Facial Efference: Implications of the Vascular Theory of Emotion, *Psychological Review*, 96, 395-416.