



Research Paper

A THEORY OF EMOTIONS
***PLAUSIBLY* CONSISTENT**
WITH CBT

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19/08/18

NIUB. 17285321

DNI. 39469647Z

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Abstract

Emotions are complex phenomena constituted by several dimensions. Among them, their intentionality, their phenomenology, their natural history, their developmental course and their normativity. Focusing on some of these dimensions, several theories of emotions have been proposed. At the same time, there is a scientifically supported therapy for emotional disturbances, Cognitive-Behavioural Therapy (CBT), that points out to the centrality of the normative dimension of emotions. This paper is about finding a theory of emotions, among the already existent, not only consistent with CBT, and the normativity implied by it, but also with a satisfactory explanation of the other mentioned dimensions. That is, a theory of emotions *plausibly* consistent with CBT.

KEY WORDS: Emotions, normativity, Cognitive-Behavioural Therapy, phenomenology, intentionality.

Introduction

The aim of this paper is to present a solution to a puzzle of coherence within the science of emotion. It is a well-known fact that emotions have different aspects (phenomenology, intentionality, conditions of correctness) that have generated different theories. Those theories pay more attention to one of those aspects neglecting the others. For this reason, these theories, yet insightful, are incomplete. Besides, there are several constraints that a theory of emotions has to respect to be plausible. These are constraints of coherence with other related scientific theories like evolutionary biology, which establishes that there must be a continuity between human animals' emotions and non-human animals' ones, and developmental psychology, which establishes that there must be a continuity in the emotional life between human adults and babies. Likewise, such a theory has to also be coherent with the widely accepted existence of emotional phenomena like recalcitrant emotions, emotions that are not influenced or are poorly influenced by reason (e.g. phobias).

There is a therapy, cognitive-behavioural therapy (CBT), which is scientifically supported, as we will see, and that proceeds by normatively evaluating emotions, and the cognitions and behaviours related with them, trying to change all of them through cognitive techniques or behavioural ones. As it will be exposed, these evaluations and modifications are possible because emotions, and the cognitions and behaviours associated with them, are subject to normative standards. So, here is the puzzle. How can it be consistent with evolutionary biology and developmental psychology a therapy that treats emotional disturbances and evaluates them according to normative standards? Is not normativity a human phenomenon? Are human emotions an *imperium in imperio*, an empire in the empire of nature? Answering this question we will see that not all the current theories of emotions can be consistent with CBT and the mentioned constraints at the same time. But we think that, at least, one theory can match both with the normativity of emotions required by CBT and the rest of the mentioned constraints, namely Deonna and Teronni's attitudinal theory of emotions. In that sense, we have a theory of emotions that is not only consistent with CBT but also *plausibly* consistent.

Why arguing from CBT? Because, in my view, CBT clearly points out to an aspect of emotions that is central: their normativity, the fact that there are reasons to have certain emotions or certain others depending on personal and environmental variables. Also because CBT is scientifically supported as we will see. This aspect, the normativity of emotions, established and proven by CBT's success, is central and, hence, it has to work as a criterion to

choose plausible theories of emotion. In other words, plausible theories of emotion have to be consistent with CBT.

An initial objection could be: “But CBT treats pathological moods and not emotions”, understanding moods as dispositions (*e.g.* depressive mood) to feel occurrent emotions (sadness). Another possibility could be understanding moods as emotional processes with a more vague intentional content than emotions. Reply: that is not true, CBT evaluates not only moods but also emotions, cognitions and behaviours, because CBT thinks that all these entities are deeply interrelated. What is more, I think that we can take the normativity of emotions as the paradigmatic case of the normativity of other emotional states and, thus, establish the basis on which CBT is so successful treating not only inappropriate emotions, but also inappropriate moods. Besides inappropriate emotions and inappropriate moods are correlated phenomena.

Thus, the structure of the essay will be the following. Sections (1), “CBT and its success’ conditions of possibility”, is divided in (1.1), “Brief description of CBT and its successful application” and (1.2) “What CBT’s success requires to be, as it is, possible?”. The titles of this first section and these subsections explain themselves. Section (2), “Theories of emotion (in)consistent with CBT”, is divided in (2.1), “What are the requisites to be *plausibly* consistent with CBT?”, (2.2), “Theories of emotion *prima facie* inconsistent with CBT”, and (2.3), “A possible theory of emotions consistent with CBT: The attitudinal theory of emotions”. The titles of this second section also explain themselves. The selection of theories exposed is not exhaustive but, I think, it is representative of the current trends.

1. CBT and its success’ conditions of possibility

1.1. Brief description of CBT and its successful application

CBT has two components: one is cognitive, the other is behavioural. Why these two components? The reason behind the link of these two components is that human psychology is considered as constituted by a complex mix of cognition, behaviours and emotions. Thus, CBT is theoretically grounded in “learning theories, broadly defined, including classical (respondent) learning models, such as associative and single stimulus conditioning, operant learning models, social learning, and information processing models” (Nezu, Ricelli and Nezu 2016: 30). CBT integrates principles from cognitive psychology and from behavioural psychology. That is the reason why “[c]ontemporary cognitive-behavioural therapy is not

monolithic” (Williams and Ferguson 2016: 7). CBT integrates principles so different, although reunited in human psychology as a whole, that “it is really impossible to delineate any necessary or definitional criteria for what constitutes ‘behaviour therapy’ or ‘cognitive-behavioural therapy’” (*Ibid.*: 8). Given the differences in theoretical origins, but having in mind that current cognitive-behavioural psychologists integrate both, it is required to examine both components, the cognitive and the behavioural one.

The core idea of CBT’s cognitive component is that in the majority of emotional disturbances irrational or dysfunctional thinking is somehow involved (Beck 1995). Among the techniques that constitute this cognitive component are cognitive restructuring, Socratic dialogue, etc . These techniques are applied, given the relevant adaptations, to a wide range of disturbances and disorders (major depression, anxiety disorders, schizophrenia, etc.) and, also, in populations other than psychiatric patients, including children population (*Ibid.*)

The main theories behind CBT’s behavioural component are learning theories. Basically, there are two kinds of learning: (1) classical conditioning and (2) operant conditioning. The former refers to the association between different stimuli contiguous in time. Stimulus A become associated with stimulus B, if, during the conditioning process, immediately after the appearance of stimulus A, stimulus B shows up. This association produces that the emotional response initially and naturally linked with stimulus B, become linked with stimulus A. For instance, imagine the neutral stimulus A (driving) and, immediately after, the aversive stimulus B (other driver’s aggressive behaviour against you) such that the latter became associated with the former. After the association, the same aversive emotional response that characterised stimulus B is likely to occur in the presence of stimulus A. By contrast, operant conditioning explains the way in which we behave at the face of certain situations and stimuli. This kind of learning works through reinforcers, that is, through items of behaviour or responses that work in stable periods of time, either helping us to avoid something negative or to achieve something positive. In both types of learning process, a fundamental characteristic of emotions is involved, their valence. Emotions are positive or negative. As an example, a paradigmatic therapeutic technique that belongs to CBT’s behavioural component is, for instance, exposure therapy, that is used to treat disorders such as phobias or Obsessive-compulsive disorder (Hirai, Vernon and Waller 2006; Abramowitz and Larsen 2007).

Before finishing this section it is important to revise some meta-analysis that speaks in favour of CBT's success treating emotional disturbances. Of course, this empirical data are not indisputable, but it is beyond the scope of this paper to discuss such issues. Thus, CBT has shown to be effective in different emotional disorders like phobias, social anxiety, depression, post-traumatic stress disorder, among others (Hofmann et al. 2012). It has also shown its efficacy in personality disorders and controlling anger (*Ibid.*). In these and other emotional disturbances, CBT is, among the existent therapies, the most effective (García-Escalera et al. 2016; Hofmann et al. 2012). Finally, CBT's techniques and principles could have universal scope, provided the relevant cultural adaptations (Vally and Maggot 2015).

1.2. What CBT's success requires to be, as it is, possible?

The normativity of emotion is a *condition sine qua non* of psychotherapy. In fact, the normative relation of *having reasons to* is so important in CBT and for the concept of psychotherapy in general, that the concept itself entails analytically a normative content. This normative relation is also present in the concept of psychopathology. Let us explore these conceptual relations.

Emotions, behaviours, cognitions, and the relations established among them have to be examined by the psychologist in order to be declared *pathological*, that is, in order to be declared in need of *psychotherapy*. Here, however, "pathological" has a special sense respect to the field of medicine in general. "Pathological" entails within the domain of clinical psychology that someone is not representing, or acting in, the world as one should. Note that representing and acting are both interrelated notions: one cannot act without representing somehow and one cannot represent without acting or having the disposition to act. Thus, there are certain rules one's representations and acts necessarily should try to meet. It is because of these standards of correctness that representations are representations and acts, acts. The notion of representation entails, then, the notion of standards of correctness. By contrast, in medicine in general, "pathological" entails that something is broken, that something is malfunctioning. It simply means that something is not following the causal path that usually follows. For instance, when someone is diagnosed with AIDS, due to HIV, what the diagnosis implies is that her immune system cannot perform its habitual functions because (in a causal sense) a virus is interfering.

The normativity implied by emotions is the normativity that derives from the fact that emotions are, among other things, representations of the world or, better, of the position of the emoter in the world. As such, emotions are subject to standards of correctness. That is the reason why emotions can be pathological, flawed representations that, because of their felt character, used to carry positive and negative sensations. Note, however, that this way of conceiving the normativity of emotions is different from the ethical claim that one's emotions should meet those normative requirements, that is, that one should emote according to certain standards of correctness. That ethical claim entails the notion of responsibility, which is not entailed by the normativity of emotions as representations. Someone who meets the normative standards of emotions as representations might not be responsible for that. In that case, congratulating him would make no sense. He would be lucky that his emotions are accurate representations of his place and situation in the world. Similarly, there are cases in which someone cannot be held responsible for the emotions that one feels (Think about the case of phobias). Yet, in both cases, emotions are either appropriate or not according to their normative standards as representations.

Here, then, I am using the notion of normativity in the ordinary sense that something which is in a normative relation is subject to *norms*. These norms determine, for instance, that I have reasons to feel anger in the face of an offence and that I have no reasons to feel so in the face of something that is congruent with my goals. They establish, then, when it is appropriate to feel in a certain way, *i.e.*, when it is appropriate to represent emotionally the world in a certain way. Thus, I am using here the notion of *having reasons* in the sense of being in the possession of appropriate felt mental representations of the world. Conversely, I am using the notion of *not having reasons to* in the sense of not being in the possession of appropriate felt mental representations of the world. This is the sense of normativity required by CBT. When the clinical psychologist tries to make her patient see that his emotions (and the behaviours and cognitions related with them) are not appropriate, she is making a normative evaluation of his emotions (and the behaviours and cognitions related with them). According to that normative evaluation, the patient has no reasons to feel in the way he feels, that is, the patient has no reasons to represent the world in the way he represents it. In other words, the patient is not in the possession of appropriate felt mental representations of the world. I will call this type of normativity, *normative evaluation* (NE). Normative evaluation because emotions are evaluated in accordance with certain standards of correctness, that is, in accordance with normative standards.

2. Theories of emotion (in)consistent with CBT

2.1. What are the requisites to be *plausibly* consistent with CBT?

Our theory of emotions, in order to be *plausibly* consistent with CBT, has to respect the following constraints.

First, a theory of emotions consistent with CBT, like any other theory of emotions, has to explain emotions' felt dimension, *id est*, the feelings associated with every emotion or, if you prefer, their phenomenology. It has to explain also emotions' intentionality, which is the fact that emotions are about something or, if you prefer, that emotions are directed towards intentional objects or, even, that emotions represent something.

Second, a theory of emotions consistent with CBT has also to be consistent, to be as *plausible* as possible, with the continuity in emotional life between adult human beings and children and between human animals and non-human ones proclaimed by evolutionary biology and developmental psychology (Griffiths 2008). We need a theory that allows us to make sense of the established fact that there is a successful clinical theory that treats emotional disturbances in human adults and children, from certain age, and the fact that non-human animals and babies have emotions even though their emotions cannot be evaluated, at least *prima facie*, by CBT's criteria.

Third, a theory of emotions consistent with CBT has to be able to explain phenomena like recalcitrant emotions, whose existence is uncontroversial (*e.g.* phobias). Recalcitrant emotions are those emotions that are impermeable to reasoning. In this sense, it is important to notice that CBT has corrective techniques, like *exposition*, for the treatment of phobias, that treat recalcitrant emotions.

Fourth, CBT rests on the assumption that cognitions, behaviours and emotions are strongly tied to each other. Such that changes in cognition would produce changes in behaviour and emotionality. The same can be said about behaviour and emotions, *mutatis mutandis*. So, a theory of emotion has to explain what the relations among these elements are as well.

Fifth, CBT implies the normativity of emotions and, given the link above mentioned, the normativity of the set of cognitions and behaviours related to them. Thus, a theory of

emotions consistent with CBT has to account for the normativity of emotions, which is what allow us to speak about emotional disturbances. This is, I think, the most important aim of this article. It is the normativity of emotions that I believe is clearly pointed out by CBT what is in need of explanation by any theory of emotion. If this feature of emotions, their normativity, is as central as I conceive it to be, at least in adult humans, then only a theory of emotion that explains the central role of such feature, and that is consistent with the previous constraints, would be plausible.

2.2. Theories of emotion *prima facie* inconsistent with CBT

2.2.1. Feeling-centered theories of emotions

The most paradigmatic feeling-centered theory of emotions is the James-Lange's one, whose current version can be found in Damasio's somatic-marker hypothesis. In this section I am going to expose both theories and evaluate their adequacy regarding the requisites that a theory of emotions plausibly consistent with CBT has to meet. As we will see, the following theories point out emphatically to the phenomenological aspect of emotions and, in Damasio's case, to the biological value of this aspect.

According to the James-Lange's theory of emotions, emotions are conscious perceptions of bodily changes triggered by grasping certain objects or facts. That is, emotions are bodily sensations of my body while it passes through different changes: musculoskeletal changes, alterations in the autonomic nervous system, etc. This means that crying or trembling are not effects of the emotion, but constituent causes of them. Thus, James sees emotions as the interaction between a subject and her environment through her body. As evidence for his view, James offers us a convincing mental experiment: *the subtraction argument*. It is as follows:

If we fancy some strong emotion, and then try to abstract from our consciousness of it all the feelings of its characteristic bodily symptoms, we find we have nothing left behind, no 'mind-stuff' out of which the emotion can be constituted, and that a cold and neutral state of intellectual perception is all that remains.

[James 1884: 193]

This argument is really convincing, at least regarding the phenomenology of emotions. Unless we assume that there is something like the phenomenology of cognitive states (Pitt 2004), it seems that the only mental states that have phenomenology are perceptual (both veridical and non-veridical as in the case of hallucinations) and affective (desires, emotions, moods, etc.) ones. What can the phenomenological aspects of emotion be if not the bodily changes that take place during an emotional episode? I think that nothing or, which is the same, that the feeling of the bodily changes that take place in an emotional episode exhaust the phenomenology of emotions. However, how can the James-Lange theory of emotion accounts for the intentionality and normativity of emotions? If emotions are nothing more than feelings of bodily changes, it cannot. Of course, someone could say that the intentionality of emotions is constituted by the parts of the body that are being felt. Nevertheless, this, again, is a controversial issue that mirrors the dispute about whether pains are intentional (Crane 2003). In any case, the realm of the emotional objects is much larger than the realm of the body.

Damasio (1994) departs from James' insightful theory of emotions. According to Damasio, like James, emotions are bodily feelings, corresponding to bodily changes. However, emotions play an important role, within Damasio's framework, in decision making and, hence, in survival, action, behaviour, etc. Emotions or, preferably, certain emotions *mark somatically* information relative to the object that triggered those emotions. Thus, if the object that triggers fear is a big lion, then the perception of the lion and the ideas associated with it become marked by the characteristic negative (painful, unpleasant, etc.) symptoms of an episode of fear: trembling, overwhelming tension, certain facial expressions, etc. These somatic markers are generated by primary emotions, that is, bodily sensations that are innate and that are naturally triggered in the face of certain stimuli (loud noises) or the lack of them (darkness); also by secondary emotions, that is, emotions built on the basis of the primary ones associated with high cognitions such as desires, beliefs, evaluations, etc. Damasio has performed several studies in which he establishes a correlation between emotions and bodily sensations (Damasio et al. 2000) besides the well-known ones commented in *Descartes' Error*. Even though Damasio's theory of somatic markers has been criticised for being too vague (Colombetti 2008), its core idea stands out, the idea that emotions, positive or negative, play an important role in decision making through their phenomenology, that is, through the feeling of bodily changes.

Damasio pointed out to a fact that seems to be essential to emotions, the fact that every emotion has valence, which is the property of being positive or negative. The majority of bodily

changes are felt as pleasurable or painful. That is, they have a hedonic tone. For that reason, it is easy to identify valence and hedonic tone and, in fact, many authors have done that (e.g. Fridja 1993). However, depending on the theory that you hold, that felt feature of emotions can be the result of the feelings derived from the bodily changes themselves (as in Prinz 2004) or the result of the valence, positive or negative, that supplement these bodily feelings and divide them, precisely, into positive or negative ones. In James and Damasio's case, even though their reflections on valence are not explicit, it seems that they tend to think that it is a part of the bodily feelings and, hence, a felt constituent of the emotion experience that determines both its biological and psychological value. For Prinz, by contrast, valence has no phenomenology in itself. Valence would just be a non-felt mental state whose informational content is an imperative order of encouraging the continuation or cessation of the emotion so-marked.

In any event, as we have seen, both James and Damasio can explain perfectly and plausibly the phenomenology of emotions. They can also explain easily the continuity in emotional life between adult-humans and children and non-human animals. Phenomena like recalcitrant emotions are also explained by both theories: it would be no more nor less than emotions in whose causal chain there is no cognitive basis. However, neither James' theory of emotions nor Damasio's one can meet all our requisites, particularly those referred to the intentionality and the normativity of emotions and, hence, both James and Damasio's theories are both inconsistent with CBT.

James cannot account for the intentionality of the emotions because, for him, simply, emotions are not intentional states. Even if, within the Jamesian theory, we consider that emotions have as intentional objects bodily parts, it is clear that their objects are not only bodily parts but, also, axiological properties, memories, perceptions, propositions, etc. As it has been said, the realm of the emotional object is larger than the realm of the body. Regarding normativity, it seems that only intentional states are intrinsically normative. Even if we consider, in a reinterpretation of James' theory, bodily parts as the intentional content of emotions, the normativity that could be implied would not be the normativity required by CBT. This is so because CBT's normativity is directed not only inwards the body but towards the world. It has to do not only with the way in which we represent our body, but with the way in which we represent it in relation to the world. As we will see, what produces *fear*, the bodily sensation, is a *danger*, something which is placed in the world, in a wide range (from predators to Pascal's infinite spaces). Thus, James can neither account for the normativity of emotions nor the normativity of emotions required by CBT.

Despite including beliefs, evaluations and, in general, cognitive states in the emotional processes, within Damasio's framework emotions are intentional states whose content is the body and which have the function of marking the other intentional states about the world. Hence, emotions cannot be appropriate or inappropriate in themselves, they are just perceptions of bodily feelings. They can mark erroneously (e.g. fear something that is harmless) but they are not subject to standards of justification. However, I think, and CBT seems to imply it also, that emotions can be appropriate or inappropriate in themselves. For instance, in the case of extreme phobias, which do not depend on the subject's beliefs and evaluations, emotions are normatively inappropriate in themselves. For Damasio, by contrast, phobias would not be inappropriate fears, but defective somatic markers, product of a defective system, conceiving its defectiveness in (biologically) functional terms rather than in normative ones. It seems that neither Damasio nor James can give an account of the cognitive and intentional components of emotions.

2.2.2. Cognitivist theories of emotion

The insufficiency of the previous models to explain the whole phenomenon of emotions explains, partly, the raise of cognitivist theories of emotion (Deigh 1994). The basic idea behind the different cognitivist theories of emotion is that cognitions, in a wide sense, from beliefs-desires sets to evaluations, are essential parts of emotion. In this section I will examine Lazarus', Marks' and Nussbaum's cognitivist theories.

Thus, the psychologist R. Lazarus conceives emotions as complex processes that involve, essentially, cognitive appraisals of a situation, which explain why "the arousal of emotion actually depends on reason and follows clear rules" (Lazarus 1999: 86). Emotions depend, then, on *cognitive mediation* to the extent that they "follow an implacable logic, as long as we view them from the standpoint of an individual's premises about self and world even when these are not realistic" (*Ibid.*: 87). This way of looking at emotions allows us to give an account of the normativity of emotions, since there are "emotions that are inappropriate to the realities of the situation we are facing" (*Ibid.*: 88). Thus, it seems that the normativity of emotions is transmitted from their constituent appraisals dimensions (goal relevance, ego involvement, coping potential, etc.) to the emotion themselves. In other words, several dimensions of the appraisal, taking different values in accordance with different situations, determine, in a synthesized unit of information, different *core relational themes* to different

emotions. The core relational theme “for each emotion expresses a synthesis of the whole relational meaning underlying each emotion” (*Ibid.*: 94). Thus, the core relational theme that, for instance, correspond to tokens of sadness is “irrevocable loss”. However, where is the feeling of sadness and its associated behaviour and bodily symptoms? For Lazarus, these elements come at the end of the appraisal process. They are the effects of it.

Lazarus called his theory the Cognitive-Motivational-Relational theory of emotions. Regarding its cognitive component, Lazarus’ theory can account the normativity of emotions required by the possibility of the existence of CBT. Simply, as it has been already said, emotions follow an “implacable logic”, whose deviations constitute normative inappropriateness, in the NE’s sense pointed out in (1.2). Their motivational component, related with the involvement of the subject’s goals, together with the cognitive one, explains, or might explain, the functional relations among behaviour, cognitions and emotions. However, Lazarus’ theory seems to be unable to explain the phenomenology of emotions, related almost indisputably with bodily sensations and perceptions of bodily changes. How can we explain the relation between those bodily feelings and the appraisals that happened in the “head”? Magoula (2002) says that Lazarus’ theory establishes a fortuitous connection between those essential elements of emotion. Fortuitous because the causal chain might be deviant and, hence, we cannot affirm that there is an essential connection between the intentional and phenomenological components of emotions. Deviant chains in the sense that there could be irrelevant intermediate causal stages between the appraisal and the physiological reaction. From a different perspective, that of the enactive and embodied mind, Colombetti (2007) accuses Lazarus of forgetting that the body is not an objective recipient of emotions, but a lived body which plays a role in the appraisal process characteristic of emotions. In other words, Lazarus fall short of tools to explain the phenomenology and corporal component of emotions. Neither can Lazarus’ theory explain phenomena which do not follow his emotional logic, phenomena like recalcitrant emotions. Neither, again, can Lazarus’ theory explain the admitted fact that non-human animals and human babies have emotions, lacking, presumably, the capacity to elaborate such complex appraisals. Hence, even though Lazarus’ theory is consistent with CBT, it is not *plausibly* consistent with CBT.

Nussbaum’s judgementalism is similar, but in philosophical jargon, to Lazarus’ appraisal theory of emotions. Judgementalism conceives of emotions as evaluative judgements. What does it mean that these judgements, which putatively are emotions, have an evaluative content? The evaluative content depends on axiological concepts which represent properties of

objects related to our well-being as living agents. Thus, emotions “have to do with me and my own, my plans and goals, what is important on my own conception [...] of what is for me to live well” (Nussbaum 2003: 33). Emotions are evaluative judgements and they do not merely involve these judgements, since “if the emotion is not there, we are entitled to say that the judgements themselves are not fully or really there” (*Ibid.*: 44). They are sufficient and necessary conditions to emote. The felt part of emotions is, for Nussbaum, something that the majority of time accompanies emotions, but it is not a necessary element of them. Is it true that evaluative judgements are necessary and sufficient conditions for emotions? I do not think so. Evaluative judgements are not necessary, since we might have an emotion without making an evaluative judgment or, better, making just the opposite evaluative judgement (e.g. phobias). Neither are evaluative judgements sufficient to have the relevant emotion. I, as a climber, can judge that climbing the Himalaya is dangerous and yet feel amusement and glad to go on an expedition towards its top. It seems, then, that emotions, as felt representations, cannot be explained by appealing to evaluative judgements. There must be other candidates, other intentional states. As we will see, maybe attitudes, in Deonna and Teronni’s framework, can play that role. In any event, judgementalism forgets, as Lazarus, the fact that emotions are intrinsically felt. Their felt dimension cannot be a mere accompaniment.

Another attempt to explain emotions in cognitive terms is the mixed theory, with Marks’ proposal as paradigmatic. According to Marks’ mixed theory of emotion, emotions are constituted by the conjunction of beliefs and strong desires. The strength of the desires has to do, according to Marks, with the phenomenological aspect of emotions. The evidence on which Marks’ theory rests has two sources: (1) considerations of examples of sets of beliefs and desires from which one can generate all of the types of phenomena that are naturally associated with emotion (bodily symptoms, feelings, etc.) and (2) considerations of some characteristics of emotions that are also characteristics of sets of beliefs and desires (semantic problems that has to do with the reference and sense of emotions).

Is Marks’ theory convincing? I do not think so. It cannot account for objectual emotions, *i.e.*, emotions that are not propositional. Besides, Marks’ theory has to face the same lethal objection that every mixed theory of emotions has to face: the problem of the individuation of emotions types and tokens (Deonna and Teronni 2012). If the desires considered by the theory were “restricted” ones (e.g. I desire to avoid *this* snake, *this* exam, etc., in the case of fear), the mixed theory could explain a token emotion but could not explain what all the restricted desires would have in common, *id est*, a type of emotion (e.g. what all

instances of fear would have in common). If the desires were “open” (e.g. I desire to avoid harm *in general* in the case of fear), the mixed theory could explain what a type of emotion would be (e.g. fear = avoid harm in general + the relevant beliefs of the subject about her circumstances), but not the relationship between this type of desire and the particular beliefs that accompany them. This is so, because the content of open desires is disconnected from the subject’s relevant particular beliefs’ content about her environment. Thus, until the subject includes intermediate mental states that shows how those particular beliefs about her environment are relevant to her open content desires, we could not explain a token emotional episode. However, once these states were included, we would have more than an open desire and particular beliefs about the subject’s environment and, then, this version of the mixed theory would not be true.

Sets of beliefs and desires cannot be what constitutes the representational and, hence, normative component of emotions. Even if Marks’ theory overcame these difficulties, it still cannot meet our requisites for a *plausible* theory of emotions consistent with CBT. As Lazarus’, Marks’ theory cannot explain satisfactorily the phenomenology of emotions, associated with bodily changes, and phenomena like recalcitrant emotions. Desires seems to trigger only two possible bodily states, satisfied or unsatisfied, while emotions seems to trigger many different ones, from fear and disgust to joy and sadness, for instance. Finally, are children’s and beasts’ emotions sets of beliefs and desires? This is a controversial issue that would require, from Marks, argumentation.

It seems natural to think that CBT and its essential implication of normativity in the emotional life can be explained by cognitivist theories of emotion. Cognitions, as representations in general, are subject to normativity, to what I called NE. A paradigmatic example are beliefs. I have reasons (perceptual, logical, conceptual, etc.) to have certain beliefs and not others. I have reasons to represent the world in a certain way and not in others. Thus, it seems that if emotions imply essentially cognitions, either practical or theoretical or both, then emotions are subject to normativity. Cognitivism can also explain the functional relationships among beliefs, emotions themselves and behaviours, at least in adult humans. However, cognitivism is unable to give an account of the rest of our constraints. Cognitivist approaches cannot explain the continuity between beasts’ and babies’ emotions and adult humans’ ones because babies and beasts do not have complex cognitions, as the ones required by cognitivists to have emotions. Neither can cognitivists explain recalcitrant emotions because they occur despite appropriate cognitions that should have prevent the subject from feeling

them. Finally, being so focused in the intentionality of emotions, cognitivist do not have tools to explain their phenomenology. In other words, the cognitivist framework cannot explain the behavioural component of CBT, more related with emotional recalcitrance, stereotyped behaviours and courses of action linked with bodily changes. In conclusion, cognitivist theories of emotion are consistent with CBT but not in a *plausible* way.

2.2.3. Neo-Jamesianism: Prinz's theory of emotions as embodied appraisals

It can be said that Prinz's theory (Prinz 2004) is a mix of Lazarus' appraisal theory and James' feeling-centred one. Prinz, like James, considers that emotions are perceptions of bodily changes and that those bodily changes, rather than being effects of emotions, are their causes. However, like Lazarus, Prinz considers that emotions represent core relational themes. How is it possible that, being perceptions of bodily changes, emotions represent core relational themes? The reason is that emotions *register* bodily changes but *represent* core relational themes.

But how is it possible that bodily feelings, triggered by corresponding bodily changes, can represent core relational themes? Here, Prinz follows the teleosemantics' path, considering that, like concepts of natural kinds, emotions have *nominal* content and *real* content. The nominal content of the concept of water is its appearances (transparent, liquid, etc.), its real content, the chemical essential structure that conforms it: H₂O. Similarly, the nominal content of a given type of emotions would be the feelings of bodily changes and the real one, the corresponding core relational theme. Natural selection has made it that core relational themes, danger, for instance, and bodily changes that are felt, fear in this case, co-occur reliably. Thus, the bodily changes that are characteristic of a type of emotion track its real content, that is, its core relational theme, as the appearances of water track its chemical structure. Besides, this bodily feelings are accompanied by "valence markers". They have been already described as imperative intentional mental states, with no phenomenology in themselves and that are internal reinforces. It is also important to note that Prinz appeals, following Millikan (1984), as we will see in the moment of criticizing him, to consumer-based semantics. Thus, the semantic content of the emotions, the core relational themes, were fixed because they were beneficial for the emotive subject to fulfil her biological functions.

At the beginning, the correlations take place between innate basic emotions (fear, sadness, etc.) and particular emotional objects that cause innate reactions (darkness, the absence of caregivers, etc.) and that instantiate core relational themes (danger, loss, etc.) ending up in durable and reliable correlations between those basic emotions (or bodily feelings) and those core relational themes. In subsequent stages of psychological development, these limited basic emotions are associated with other stimuli in the process of *recalibration*. This process is driven by judgements that imply axiological concepts that represent core relational themes that have been acquired by abstraction, like “danger”. This way, these judgments end up causing emotions and correlating with them durably and reliably. For instance, after having experienced fear in the face of different primitive objects (predators, loud noises, etc.) I end up acquiring the axiological concept of danger; axiological concept that I apply to *new* different situations using axiological judgements that trigger the *familiar* bodily feelings of fear. Thus, the reference of the axiological concept of danger is extended through this associative process. This way, from a limited set of basic correlations between emotions and core relational themes, through associative learning, Prinz would be able to explain why judgments play a role in our emotional life as well as the richness of the reign of the emotional objects that goes from predators to complex social circumstances¹.

Emotions are, then, embodied appraisals plus a valence marker. That way, Prinz’s theory seems the perfect synthesis. It seems that, preserving Lazarus’ core insights and James’ core ideas, it will meet all our requirements. Indeed, it meets most of them. However, there is one that it does not meet, the requirement pointed out by CBT, the fact that emotions themselves have a normative dimension.

Let us see first how Prinz’s theory meets the rest of constraints other than the one of the normativity of emotions. Prinz’s model explains very well the intentionality of emotions, the core relational themes, which are their formal objects, instantiated in their particular objects. These core relational themes are represented by the bodily feelings that register bodily changes. In that way, Prinz can also explain the phenomenology of emotions, exhausted by bodily feelings. Prinz’s appealing to natural selection as a way to understand what emotions are, is sympathetic with evolutionary biology’s claim that there is a continuity in the emotional life of humans and non-human animals. Besides, Prinz’s concept of recalibration explains facts

¹ Due to space limitations it is not possible to explain how Prinz explain secondary emotions like nostalgia or jealousy.

widely accepted by developmental psychology like the continuity between the emotions of the child and the emotions of the adult. Finally, Prinz can explain phenomena like recalcitrant emotions appealing to the distinction between cognitive systems and emotional ones, constituting, such emotions, evidence in favour of the modularity (Fodor 1983) of the latter. This distinction is based on the empirical data supported by Ledoux (1996) and Zajonc (1989). However, these empirical data face nowadays numerous antagonist results (Bluhm 2008; Groenewegen and Uylings 2000).

Now, can Prinz explain the normativity of emotions required by CBT? I think that Prinz's teleosemantic proposal faces the same problems than those faced by one of its inspirers (Millikan 1984), as it has been pointed out by Bickhard (2008). According to teleosemantics, the representational content of a sign is acquired alongside the evolutionary history of that sign, driven by natural selection. That way, representation turns out to be an epiphenomenon: something has the function of representing something if the former has the right kind of evolutionary selection history. This approach traces a "magical" line between the moment in which one sign acquired its representational function and the previous times in which it lacks it. This magical line leads to the odd consequence that instances of relevantly identical systems to those which are considered representational after the line, are not considered representational before the line, because it had not been traced yet. What is more, given that no organism has access to its evolutionary history or at least not directly, "no organism (or system) has access to its own representational contents. Therefore system detectable error is not possible" (*Ibid.*: 33). Let us see how this applies to Prinz's view.

According to Prinz, emotions represent core relational themes by means of the bodily changes that have co-occurred with them in their evolutionary history. Thus, emotions are signs whose function is to represent core relational themes from the moment in the past in which they acquired such function. Likewise, like Millikan (1984), Prinz appeals to the function performed by the organism that uses the signs, the emotions, which turn out to be a benefit from an evolutionary perspective and, hence, naturally selected. Thus, the emotions represent what is required for the organisms to perform their functions. Finally, those contents are naturally selected. Thus, emotions currently represents the core relational themes that helped the emoters' ancestors to survive and with which they, the emotions, have co-occurred reliably.

Now, the following question arises. Are not the emoters before the line (actual emoters), line that constitute the point of fixation of the representative content of the emotions, and the

emoters after the line (their immediate ancestors) having equivalent mental representations, normatively speaking? My intuition is to answer affirmatively to that question. The organisms that used the emotions after the line, like the ones before it, were subject to conditions of correctness in their use of them. The emotions of emoters' immediate ancestors were relevantly similar, normatively speaking, to the current emoters' ones. Thus, the current emoters' ancestors had or lacked reasons to represent parcels of the world as dangerous, in the case of fear, or as goal congruent, in the case of joy. These reasons, given that the line had not been traced yet, depend on the representational power of the emotion. The normativity of the emotions is intrinsic to them, instead of resulting epiphenomenally from their natural history. Prinz cannot explain how was it possible that the immediate current emoters' ancestors represented the world emotionally as (in-) adequate. Those ancestors are under the scope of the normativity of emotions required by CBT. However, Prinz's model cannot account for the normativity of their emotions and, hence, it cannot account for the normativity required by CBT.

2.3. A possible theory of emotions *prima facie* consistent with CBT: The attitudinal theory of emotions

We have come, if I am right, to the end of our pursuit. The attitudinal theory of emotions, proposed by Deonna and Teronni (2012), can meet our requisites. It is *plausibly* consistent with CBT.

According to the attitudinal theory, emotions are attitudes towards a given emotional object, which is constituted by a particular object (some entity in the world) and a formal object (an evaluative property or what Lazarus called "core relational theme") instantiated by the former. The particular object exists in itself and is provided to the emoter through certain cognitive bases (perceptions, memories, imaginations, etc.). The formal object is mind-dependent, depending on the subject existence and the determinations of her existence. That does not mean that the evaluative property exists only when the agent is aware of it. It just means that it depends on the agent as a living organism in the pursuit of her well-being and survival.

Emotions are, then, attitudes toward emotional objects. As attitudes, emotions are intentional states. Their intentionality can be, however, propositional and non-propositional. That way, unlike cognitivists, Deonna and Teronni's theory gives an account of objectual emotions. At the same time, an attitude can be experiential or non-experiential. Emotions, understood as occurrent mental states, are experiential attitudes, that is, they have phenomenology. Emotions are attitudes processed by the body towards certain intentional objects. Thus, an episode of anger, for instance, is an occurrent corporal attitude (characterised by facial and muscular tension, tendency to hitting objects with parts of the body, etc.) towards something that constitutes an offense, like the vexation of a relative. Thus, bodily feelings, with their corresponding bodily changes, are constituent parts of the emotional attitude. In fact, it is this felt character of emotions what gives them, besides their cognitive dimension, their conative one. That is why emotions are connected with types of action readiness.

According to Deonna and Teronni the felt attitudes that are called emotions are subject to standards of correctness, that is, they can be justified or unjustified, appropriate or inappropriate. They are normatively assessable. Here, contrary to Prinz, the predicates 'appropriate' and 'justified' are applied to the emotions and "they mean what they are customarily taken to mean in other areas of discourse, namely that there are good reasons for representing the facts as these emotions do..." (*Ibid.*: 101). Their appropriateness or inappropriateness is not a result of emotions' evolutionary history, but of emotions' structure of its representational content. Emotions are the type of thing you should have reasons to have. You can always ask someone what the reason is for why she is having this or that emotion. If she has fear of something that is dangerous, then she has reasons to feel fear and, then, her emotion is justified. So, when we ask why-questions concerning emotions, we "expect the answer to provide more than a causal explanation" (*Ibid.*: 93).

What makes a justified emotion, a justified emotion?

An emotion is justified if, and only if, in the situation in which the subject finds herself, the properties she is (or seems to be) aware of and on which her emotion is based constitute (or would constitute) an exemplification of the evaluative property that features in the correctness conditions of the emotion she undergoes.

[*Ibid.*: 97]

So, justified emotions are those in which the formal object of the emotion, the core relational theme, is instantiated on the natural properties the subject is aware of through perception, memory, thinking, etc. Indeed, emotion types are individuated in the light of their

correctness conditions, which are based on the type of evaluative property that the emotion reveals (danger, irrevocable loss, etc.). For instance, my joy is justified if and only if its particular object involves a progress in achieving my goals, which is the emotion's formal object and, hence, what constitutes its conditions of correctness. What is more, what constitutes my joy as joy is that its formal object is the core relational theme of congruence with my goals. These standard of correctness allow us to explain the possibility of NE, *i.e.*, the normativity of emotions required by CBT. Notice, however, that justified emotions do not presuppose justified normative judgements. An emotion is justified if its formal object, its core relational theme, is really instantiated in the natural properties of the particular object the emoter is aware of, not if she judges that it is.

Let us sum up. The attitudinal theory explains the phenomenology of emotions, its bodily felt dimension. Emotions are felt bodily attitudes. This is what allows the attitudinal theory to explain the continuity between human animals and non-human animals' emotions and, also, between human adults and babies. All these creatures have bodies relevantly similar with the capacity of emoting. It also explains the intentionality of emotions. Emotions are about particular objects (snakes, the Normandy's landing, etc.) which instantiate formal objects or core relational themes (fear, sadness-anger, etc.). Having explained the felt dimension of emotions and its intentionality, the attitudinal theory can explain the relations among behaviours (action tendencies derived from the bodily feelings), cognitions (the cognitive bases of emotions that provide the object that constitutes their intentionality) and emotions (bodily felt attitudes towards certain objects, provided by certain cognitive bases, that determine behaviour). Besides, unlike Prinz's theory, the attitudinal theory explains the normativity of emotions required by CBT. Finally, departing from these conditions of correctness, the attitudinal theory can explain phenomena like recalcitrant emotions that would be no more no less than unjustified emotions that have to be changed (perhaps through CBT). Therefore, the attitudinal theory of emotions is a theory of emotions *plausibly* consistent with CBT.

Conclusion

Emotions have a cognitive, a conative and a normative dimension. Emotions are shared by different species in the phylogenetic tree. Emotions are about complex issues and easier ones, so that humans begin to feel about the former only when they have felt about the latter as children. Emotions have a normative dimension. Emotions are, hence, a complex phenomenon

that require an adequate explanation. After having examined different paradigmatic theories we found the one that we were searching for. Deonna and Teroni's attitudinal theory of emotions is *plausibly* consistent with CBT. The reason is, perhaps, that conceiving of emotions as felt attitudes gives us room for accommodating all the features and constituent parts, each of which was prioritized by the other theories at the time that they neglected the others. Attitudes are, perhaps, the point in which the cognitive, the conative and the normative dimensions of emotions converge.

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