

On Sexual Lust as an Emotion

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ABSTRACT

Sexual lust – understood as a feeling of sexual attraction towards another – has traditionally been viewed as a sort of desire or at least as an appetite akin to hunger. I argue here that this view is, at best, significantly incomplete. Further insights can be gained into certain occurrences of lust by noticing how strongly they resemble occurrences of “attitudinal” (“object-directed”) emotion. At least in humans, the analogy between the object-directed appetites and attitudinal emotions goes well beyond their psychological structure to include similar ways in which their occurrence can be introspectively recognized, resulting in similar extensions of their functionality and meaningfulness to the subject. I conclude that although further research is needed, given the strength of the analogy, the ability of lust to satisfy some general requirements for being an emotion, and perhaps certain neurological findings, lust may somewhat uniquely straddle the line between appetite and emotion.

Introduction

Sexual lust – understood as a feeling of sexual attraction towards another – has traditionally been viewed as a basic motivational appetite or instinctual urge similar to hunger. In this paper, I argue that such a view is, at best, significantly incomplete and potentially misleading. Further insights into sexual attraction can be gained by noticing how closely it resembles “object-directed” or “attitudinal” emotions such as fear. Both sorts of state combine motivational sensations of somatic conditions with other states representing that at which they are directed – often the states that triggered the somatic conditions to begin with. But at least in humans, the analogy between the two extends beyond their psycho-physiological structure. It also extends to the fact that both sorts of state can be *cognitively recognized* while they are occurring, resulting in similar extensions to their functionality and potential meaningfulness to the subject. I

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will illustrate this point in section 2.2 by describing how cognitively recognizing attitudinal emotions while they are occurring results in the cognitive representation of the *significant relations* that obtain between the subject and various sorts of object, and again in section 3 by explaining how cognitively recognizing feelings of sexual attraction while they are occurring additionally helps to explain the complex intentionality and phenomenal intensity of *interpersonal* (as opposed to merely inter-animal) sexual attraction and arousal, as it has been described by Thomas Nagel (1979, 2017). I hope that this illustration mitigates an understandable humanist concern that scientifically-based approaches to human sexuality are blind to the *meaningfulness* of interpersonal sexual attraction.¹

After demonstrating the explanatory utility of viewing lust as at least strongly analogous to emotion, the question arises as to whether we should simply view it as *being* a sort of emotion. In section 4 I approach this question first by explaining how lust, but not other appetites, might satisfy Paul Ekman's (1999) eleven characteristics of basic emotions. I then discuss Jesse Prinz's (2004) reasons for *denying* that lust is a basic emotion in favor of the view that it is just a basic motivation. After explaining why I find Prinz's reasoning unconvincing, I suggest a different way of drawing the general distinction between emotion and motivation – one that allows some cases of sexual attraction to be emotional. Although, considered in isolation, this way of drawing the line might “prove too much” insofar as it seems to allow certain cases of hunger or thirst to also count as emotional, the fact that those appetites fail to pass other requirements for being emotional might solve that problem. In the end I conclude that, although the argument made here requires further development, there is a fairly strong *prima facie* case for viewing cases of sexual attraction as being emotional.

2. Terminology and Basic Concepts

There are various ways of using mental state terms in any empirically informed “folk psychology”, and I do not claim that my terminological preferences are necessarily any better than others'. However, I do believe that even if one prefers to use terms in a different way, at least the main *distinctions* drawn below must

¹ For a very clear expression of this concern, see Scruton (1986, p. 10). Notably, Scruton (pp. 24-25) favorably cites Nagel's description of interpersonal lust as doing at least *some* justice to the state's complex intentionality and rich phenomenology.

be recognized by any plausible philosophy of mind. Of course, for present purposes what is most important is to make clear how I will be using the terms ‘appetite’ and ‘emotion’, and by doing so to clarify how I conceive of the states they denote, but this can be done only by discussing their functional relations with other types of mental state.

2.1 Appetites and Their Functional Relations with Other Mental State Types

What does it mean to claim that lust is an *appetite*? Paradigmatically, the appetites include hunger, thirst, and perhaps lust.² But what do these types of state have in common that justifies their being categorized under a single heading? Psychologically and physiologically speaking, they all seem to involve sensations produced by predictably recurring bodily conditions such as an empty stomach, dehydration, or hormone levels and associated bodily effects. A predictably recurring felt state such as loneliness seems not to count as appetitive mainly because its occurrence does not seem to involve a prior physiological cause. A central function of any appetite is also to motivate behavior, but before discussing this further, it may be helpful to distinguish appetites from *desires*, particularly given that lust has been called “sexual desire” at least as often as it has been categorized as an appetite.

On my view, to have a desire is at least to be *favorably disposed* towards the occurrence of some represented goal or end-state. One can certainly desire to have sexual relations with another. However, it is obviously incorrect to identify having such a desire with having feelings of sexual attraction toward that other. One may have such a desire merely because one wishes to curry favor with the other, for example. Similarly, one can have strong feelings of sexual attraction towards another without having any desire to have sexual relations with them. This is because *felt impulses* or *urges* can arise independently of desires; they certainly need not be *manifestations* of desires. For instance, I may have an impulse to yawn, but no desire to do so. Impulses can also *conflict* with desires, as when I have both a strong impulse to yawn and a strong desire not to (say, because doing so would insult the person with whom I am conversing). Notice also that having a desire that runs counter to an impulse is clearly not practically irrational in the same way as having contradictory first-order desires would be. So, assuming that feelings of sexual attraction toward another can

² Fatigue, which will be discussed in section 4.2, is sometimes included in this list as a “basic motivation”.

have an impulsive quality, one should identify them neither with desires nor with manifestations of desires. Similarly, if one wishes to use ‘occurrent desire’ to refer to those felt impulses that *are* manifestations of desires (and it is hard to see what else one could use the expression to denote),³ one should keep in mind that there are felt impulses that are not manifestations of any desire, and hence not occurrent desires.

States of desire cannot be “free-floating” or devoid of intentional content. In this they are like intentions, beliefs, and even felt impulses (there being no felt impulse that is not an impulse *to do something*).⁴ As we are about to see, this contrasts starkly with both emotional and appetitive feelings: although each can become “object-directed”, they can also exist independently of the representational states that enable them to be directed; hence such feelings *can* be “free-floating”. In the case of emotions, this claim is supported by the phenomenon of “affective inertia” (de Sousa, 1987), which occurs when the sensation of bodily conditions felt during an episode of, for instance, anger about *P* outlasts the belief that *P* which provided the anger with direction. The point may apply even more clearly to appetites like hunger. One can feel the sensation of hunger without feeling hungry *for* anything in particular (even though the biological function may be to motivate the subject to obtain nutrition).

This brings us to one further point about appetitive sensations that should be discussed before we consider their motivational aspects, namely that as mere sensory registrations of bodily conditions, such sensations do not *perceptually* represent the bodily conditions that reliably and bio-functionally cause them. Here I am applying to appetitive sensations Tyler Burge’s (2010) distinction between mere sensory registrations and sensory perceptions.⁵ On Burge’s view, only *some* sensory systems are perceptual, namely those whose states are evaluable in terms of their *accuracy*, where accuracy is evaluable independently from biological success or adaptive value. Generally speaking,

³ Merely *asserting* that one has a particular desire is of course not a manifestation of that desire nor an occurrent version of it. Rather, it is a manifestation of one’s *belief* that one has that desire.

⁴ A further difference between desires and impulses might be that desires require propositional content while impulses do not. However, although I am inclined to accept that distinction, I am not firmly committed to it.

⁵ Cf. Herzberg (2018), where I use Burge’s distinction to argue against Prinz’s view that emotional feelings can by themselves perceptually represent core relational themes.

sensory states that are evaluable in terms of their accuracy have been processed in accord with *perceptual constancies*, and whether a sensory system incorporates such a constancy can be determined only empirically. Vision, hearing and exteroceptive touch process sensations in accord with such constancies. However, the “chemical senses” of smell and taste apparently do not. If their sensations seem to represent properties of the objects that cause them, this is because of conceptual associations the subject makes between the sensation and its otherwise perceived (e.g., touched or seen) cause.⁶ Like other “mere” sensory registrations, appetitive sensations like hunger register the bodily conditions that reliably cause them, and hence can be used to *infer* that those conditions exist. But sensory registration and inference by themselves do not constitute perceptual representation.

If appetitive sensations by themselves lack representational content, and motivational impulses are always impulses to do some (represented) thing, how can appetitive sensations have any motivational aspect prior to their being directed? On my view, in their undirected forms their motivational potential arises entirely from their positive or negative “valence”. Valence can at least preliminarily be understood in hedonic terms, positively valenced sensations being pleasurable, negatively valenced ones being painful. But ‘valence’ has been defined not only hedonically, but also motivationally, and even cognitively. Setting aside the cognitive view here,⁷ I coordinate the hedonic and motivational views of valence as follows. One typically desires to obtain or maintain pleasurable sensations, and not to obtain or maintain painful ones. That which is recognized to cause pleasure is typically approached or at least not avoided; that which is recognized to cause one pain is typically avoided or at least not approached.⁸ These correlations between valences and action tendencies are

⁶ Cf. Burge (2010, Chapter 8). On Burge’s view, a single neurologically individuated sensory system can include different sub-systems, only some of which are perceptual. For instance, the exteroceptive somatosensory sub-system responsible for producing tactile sensations is perceptual, but the interoceptive sub-system responsible for producing sensations of pain is not.

⁷ On Gordon’s (1987, 31) cognitivist view of emotional valence, an emotion has a positive valence about *P* only if the subject *wishes* that it be the case that *P*; an emotion has a negative valence about *P* only if the subject wishes that it *not* be the case that *P*. I do not think that such wishes are logically or causally determinative of valence.

⁸ Masochists show the need for the use of ‘typically’ here. On my view, masochists do not feel pain as pleasure (which would be a paradoxical state). Rather, they achieve a non-sensual state of satisfaction by achieving the goal represented by their desire to feel pain.

flexible. For instance, *negatively* valenced appetitive sensations such as hunger typically motivate one to *approach* that which one believes will *mitigate* or extinguish it.⁹ I assume that some innate, instinctive urge motivates a hungry or thirsty infant to suckle at the teat pressed against their lips, but experience subsequently teaches them the sorts of things that will mitigate those negatively valenced sensations. Thereafter the appetitive sensation's occurrence may elicit images of what has mitigated it in the past, and once hunger has been associated with an image of a likely mitigator, it may properly be said to have "taken on" or become "directed at" that mitigator. Also, for present purposes it is important to note that one who is not yet feeling an appetitive sensation might start to do so when presented with something that stimulates their appetite. In such cases what results is typically not undirected hunger, but rather *hunger for* the represented stimulus. Finally, it is worth noting that an appetite's valence might depend on its degree and/or the context of its occurrence. For instance, while intense hunger may always be negatively valenced, mild hunger seems to be positively valenced if it occurs just before an anticipated meal.

Everything just said of hunger sensations seems to apply to lust sensations as well. Due to their valence, the sensations of lust are potentially motivational even when they are not yet directed. Just as feelings of hunger sensorially register somatic conditions such as an empty stomach or low blood sugar, feelings of lust register threshold levels of hormones and associated somatic and neurological conditions. Just as hunger sensations do not perceptually represent the bodily conditions they register, neither do sensations of lust. Just as one can infer from sensations of hunger that one's stomach is empty (if one has the necessary concepts), one can infer from sensations of lust that one's hormone levels are at some threshold level. Just as a feeling of hunger may be for no particular food until an appetizing option is presented, a feeling of lust may be directed at no particular other until an attractive candidate becomes available. Indeed, just as one might not feel hungry at all until one is in the presence of appetizing food, one may not feel lust at all until one is in the company of an attractive other. And finally, assuming that sensations of lust are valent, their valence may vary even more than hunger's. That is, mild lust may motivate behaviors that result in its intensification before motivating behaviors that result in its mitigation.

⁹ Of course, this should be prefaced with a *ceteris paribus* clause. The same is true for practically every generalization made in the philosophy of mind.

If this were all there is to say about lust from the perspective of a scientifically based philosophy of mind, the humanist concern I mentioned in the introduction about analyzing human interpersonal sexual relations in these terms would be justified, for nothing I have yet said about lust indicates how such relations could have representational and phenomenal dimensions that go beyond those that are involved in non-human animal sexuality. But this is precisely where insights drawn from the psychology and philosophy of *emotion* can make a valuable contribution to our understanding of lust.

2.2 Attitudinal Emotion and The Cognitive Recognition Theory

My view of emotion combines aspects of the views of many others, including most prominently those of psychologists Richard S. Lazarus (1991, 1999) and Paul Ekman (1999), neurologists Joseph LeDoux (1996) and Antonio Damasio (1994), and many philosophers from Aristotle¹⁰ through Jesse Prinz (2004).¹¹ On this view, emotions are composed of three main elements. Following James (1884), Damasio (1994) and Prinz (2004), I hold that the core of any genuine emotion is a somatosensory sensation registering a pattern or profile of bodily conditions and/or their neurological surrogates. Although these bodily conditions may arise in other ways, they typically are triggered by mental states with distinctive sorts of representational content, including perceptions, judgments, memories, desires, wishes, intentions, and so on. I agree with Prinz, *contra* Lazarus and other causal-evaluative appraisal theorists, that the state that triggers an emotion need not be cognitive or have conceptual content.¹² However, having some types of emotion may require one to possess certain concepts (e.g., feeling guilty may require one to possess a concept of moral blame), and normally even when a non-conceptual state triggers an emotion, it can do so only if the subject has certain standing goals or desires that *do* have

¹⁰ See Aristotle's analyses of emotion types in *Rhetoric*, Book II, for an early version of a "hybrid" theory like my own.

¹¹ Cf. Herzberg (2009), (2012), (2016), and (2018).

¹² This is supported by Ledoux's (1996) argument that there is a "low road" to fear that bypasses cortical regions of the brain, and his speculation that there are similar pathways for other sorts of basic emotion.

conceptual content.¹³ Finally, for an emotional sensation to be *about* or *directed at* something, it must be properly associated with a representational state that need not be the triggering state.¹⁴ I follow Prinz (2004) in calling the resulting combination of sensational and representational components an “attitudinal emotion”, and in calling the directing representation’s content the attitudinal emotion’s “particular object”.

I also agree with Prinz and many others that emotions have motivational properties that are only weakly predictive of behavior (beyond immediate expressive effects).¹⁵ Partly because emotional feelings are, like appetitive ones, interoceptive sensory registrations of bodily conditions, they usually have positive or negative valence. But in the case of emotion, the bodily conditions that are somatosensorially registered include complex patterns of autonomic nervous system activity, visceral reactions, releases of hormones such as adrenaline, patterns of muscular tension, and so on. Where such patterns are distinctive, they likely had an evolutionary origin as adaptive preparations for action.¹⁶ This helps to explain why basic emotions are associated with expressive behaviors (facilitated by particular somatic profiles that can be felt): we jump for joy, slouch in grief or sadness, shrink in embarrassment or shame, adopt aggressive stances in anger, flee or freeze in fear, and so on.¹⁷ Finally, although one generally desires to experience positively valenced sensations and not to experience negatively valenced ones, in cases of emotion this pattern may not hold for a variety of reasons. For instance, one might desire to experience a

¹³ To represent some state of affairs *as one’s goal* or as the end-state of one’s desire just is to represent it as a state of affairs that on balance one *should* strive to produce (even if one presently feels no impulse to do so). Hence my view that to desire that *P* is to have a pro-attitude towards the occurrence of the state of affairs represented by *P*.

¹⁴ Cf. Herzberg (2009). In this I disagree with Prinz’s claim (2004, p. 62) that to say that one’s emotion is *about* *x* is to say that *x* *caused* it.

¹⁵ The idea that emotions involve expressive behaviors, and beyond those, *impulses* to act in various ways, can be found in views of emotion from Aristotle’s through recent “affect-program” theorists’. See Griffiths (1997) for an extended defense of an affect program theory that emphasizes the expressive and behavioral “outputs” of emotions.

¹⁶ Ekman (1999, p. 50) writes: “Our presumption is that these ANS patterns evolved because they subserve patterns of motor behavior which were adaptive for each of these emotions, preparing the organism for quite different actions. For example, fighting might well have been the adaptive action in anger, which is consistent with the finding that blood goes to the hands in anger.”

¹⁷ Of course, culturally specific “display rules” can result in the modification of such behaviors.

negatively valenced emotional feeling, either *directly* (e.g., because one values the challenge, or believes that they deserve to feel badly), or else *indirectly* (because one desires that the event represented by the triggering cause should occur). What seems clear, however, is that in most cases of emotion the hedonic and motivational dimensions of valence align, and even if we are unsure of how to describe a particular emotional feeling's hedonic quality or motivational tendency, most will agree that attitudinal emotions are partly constituted by valent sensations or felt impulses.

Despite these areas of agreement, my view of attitudinal emotion differs from Prinz's in a few key respects.¹⁸ Most importantly, due to my acceptance of Burge's distinction between mere sensory registration and perception, I object to Prinz's central thesis that emotional feelings can by themselves perceptually represent significant relations of the sort summarized by Lazarus' "core relational themes."¹⁹ I argue that Prinz's view here rests on an unacknowledged hypothesis that is unlikely to be confirmed, namely that the somatosensory subsystem responsible for emotional sensations incorporates a *perceptual constancy* enabling it to perceptually represent instances of significant relations.²⁰ However, I allow that an emotional sensation might still *contribute* to the representation of a significant relation. Just *how* it makes this contribution is part of what I call "the cognitive recognition theory of significant relation representation during attitudinal emotion occurrence", or, less verbosely, "the cognitive recognition theory".

On this theory, attitudinal emotions at least sometimes activate schematically relational emotion-type concepts having at least three parameters or "slots": one for the phenomenal sensation-type, another for the particular object type, and a third for the relevant subject-type. Each of these slots is associated with a "file" – presumably stored in long-term memory – of typical slot-fillers.²¹ Some of the slot-fillers in the particular object file may be innate;

¹⁸ See Herzberg (2018) for the details of my main disagreements with Prinz.

¹⁹ For Lazarus (1991, 1999), a *core relational theme* is a *summary* of six distinct dimensions of evaluative appraisal that a subject must make (either consciously, or sub-consciously and automatically) prior to any emotion occurrence. The core relational theme of fright, for instance, is "Facing an immediate, concrete, and overwhelming physical danger".

²⁰ This follows from Burge's (2010) distinction between perception and mere sensory registration.

²¹ Prinz (2004) similarly uses the metaphor of a "mental file" when he discusses how representations can cause bodily reactions and subsequent emotional sensations.

others are learned by experience. But the main idea is that an attitudinal emotion will activate an emotion-type concept only if there is sufficient similarity between the emotion's components and a concept stored in the file associated with each slot. For instance, suppose that I see a snake slithering towards me, and the content of this visual percept triggers a profile of bodily reactions that are then registered by my somatosensory system, causing an emotional sensation that is directed at the represented snake. On the cognitive recognition theory, if this sensation is sufficiently similar to a phenomenal concept ("stored quale")²² in the file associated with the sensation-type slot of my fear-concept, the match might activate my three-place fear-concept, allowing for that initial match to be confirmed by a second match between my emotion's particular object and a sufficiently similar member of the file linked to my fear-concept's particular object slot.²³ Finally, my awareness that the snake is approaching *me* fills in my fear-concept's subject slot with my own self-concept. Note that if I saw the snake approaching my child, then a representation of my child would fill the subject slot; *the subject feeling the emotion is not always the subject of the significant relation*. This will play an important role in my analysis of interpersonal lust below.

Two points are worth noting here. The first is that a similar process of automatic, non-inferential conceptualization often occurs during perception. I assume that when I see an object *asa* chair, I am applying my concept "chair" to the visually represented object. If I lack the concept, I cannot see the perceived object as a chair. However, when such post-perceptual conceptualization

²² Some might be concerned that 'stored quale' is oxymoronic, because qualia are properties only of (conscious) experiences, and hence cannot be stored. But as I use the phrase, 'stored quale' refers only to a state with the power of producing an experience with a certain quality, as when one recalls how it felt to burn one's hand; such a state need not *itself* have any qualitative properties. For more on phenomenal concepts and how a quale might be "embedded" in a phenomenal concept, see Chalmers (2003) and Gertler (2001).

²³ The concepts in this file are likely to include "paradigm scenarios" of the sort Ronald de Sousa (1987) discusses. Notice also that the *order* in which the various matches are made need not be what they were in this example. For instance, in a case of jealousy, I may experience only a vague or ambiguous but negatively valenced feeling, along with a cognitive representation of my relationship with a significant other being threatened by a third party. In such a case, the first match to be made may well be between the content of the emotion's particular object and a member of the file associated with the particular object slot of my jealousy concept, and the sensation may only subsequently be conceptualized as being a feeling of jealousy.

occurs,²⁴ the concept is being applied not to the perceptual state *per se*, but rather to its content. I am not applying my concept “visual percept of a chair” to my visual representation of the chair, although of course I *could* do so if I were conceptualizing my visual state *per se* rather than its content. In the case of the cognitive recognition of my attitudinal emotion type, however, it is this latter sort of introspective conceptualization that is occurring. Hence it cannot occur unless I possess a concept of the emotion type. Secondly, I consider three-place relational emotion concepts to be fairly minimal, although perhaps not the most minimal possible. One might have a concept of fear, for instance, that consists only of the phenomenal sensation type. On the other hand, one’s fear concept might include many other features of fear, such as the degree to which its occurrence in various situations is socially endorsed or not. I focus on the three-place “core” concept because I believe that having such concepts amounts to having concepts of *significant relations*.

To understand this, let us return to my fear example. Once all three slots have been filled in, my relational fear-concept has been fully activated and particularized. In effect, the significant relation (roughly, of a subject’s *being endangered by* something) that exists between *me* and *that snake* has been conceptually represented, even if I lack the concept of a “significant relation” *per se*. For if I truly possess the three-place concept of fear, then I am capable of discriminating situations in which it applies from those in which it does not; hence, I have at least implicit knowledge that fear is a felt response to *X’s endangering Y*, or that the type of objects that are to be feared are those that are dangerous to the subject. Notice that it does *not* follow that if I merely were able to reliably feel fear in response to all and only objects that are dangerous to me, then I would thereby possess the relational concept of fear. I assume that most mammals are able to reliably feel fear when they merely sense or perceive objects that are in fact dangerous to them, but I doubt that any mammal other than a human has the relational concept of fear.

Before I explain how this framework helps to illuminate aspects of interpersonal lust, it may be worth emphasizing how the cognitive recognition theory differs from both Prinz’s and Lazarus’ accounts of how significant relations are represented during emotion occurrence. First, both hold that an emotion occurrence *always* includes the representation of a significant relation.

²⁴ I assume that this process is post-perceptual because it involves the activation of stored concepts, but others would refer to it as “high-level” perceptual processing. Nothing here rides on that terminological issue.

For Lazarus (and other causal-evaluative appraisal theorists), such representation must occur *prior to* the emotion, as its cause. For Lazarus, the resulting “appraisal outcome” or evaluative judgment then becomes a *part of* what he calls the “emotional response configuration”.²⁵ Note, however, that cognitive causation is not necessary for cognitive recognition, and the concepts required by the two processes are different. For Prinz, significant relation representation is a *perceptual* feature of the emotional sensation, and hence occurs whenever emotional feelings do. I have already noted my disagreement with Prinz about that, but I do agree with Prinz *contra* Lazarus that an emotion need not have a cognitive cause. Although the emotional system must produce a somatic profile based on the representational content or qualitative properties of some triggering state, this does not require the triggering state to have conceptual (or, for that matter, perceptual) content. On the other hand, I agree with Lazarus *contra* Prinz that significant relation representation is cognitive rather than perceptual. Finally, only on the cognitive recognition theory can an attitudinal emotion occur *without* significant relation representation, for the subject might not have the necessary emotion-type concepts, or the recognition may fail to occur for some other reason.²⁶

Why might we have developed the ability to conceptualize our emotions and represent significant relations while they are occurring? Well, once I conceptualize my fear of the snake, I can rationally assess the occurrence itself. By cognitively recognizing the significant relation it indicates (namely the relation of the snake’s being dangerous to me), I can consider the possibility that *this* snake may *not* be dangerous to me. I can also engage in practical reasoning and deliberate about what to do if it *is* dangerous to me. Of course, when an immediate danger is approaching, deliberation might be counterproductive, and the intensity of my fear might in any case adaptively motivate me to flee or freeze. But when facing less immediate or more complex dangers, such as those presented by certain sorts of social situation, recognizing the situation’s particular relation to my well-being may allow me to more reasonably and successfully deal with it.

²⁵ Cf. Lazarus (1999).

²⁶ The cognitive recognition theory also differs from “cognitive labeling theories” such as Schachter and Singer’s (1962), for on their view the emotion’s type seems to be *determined* by the subject’s cognitive labeling of the otherwise indeterminate state of arousal (in light of the context of its occurrence), while on the cognitive recognition theory the emotion’s type is only cognitively *recognized*, fallibly.

3. “Directed” Lust and Its Cognitive Recognition

In this section I explore the similarities between valent feelings of lust directed towards others and valent emotional feelings directed towards particular objects. When described that way, the “structural” analogy between the two sorts of state seems obvious. But here I wish to argue that there is also a strong *functional* analogy between the two having to do with the subject’s cognitive recognitions of the states while they are occurring. Once I have argued for this further analogy, we will be left with a choice: we can either add sexual attraction to our list of emotion types, or we can more conservatively recognize that, for cognitively capable humans, appetites are more complex than we previously may have thought. In section 4 I explain why I believe that, although the call is close, we would be justified in accepting the former option.

Just how does the cognitive recognition theory apply to cases of sexual attraction? Well, given the structural similarity just mentioned, the theory requires a relational concept of lust that has at least three “slots”: one for the subject experiencing the feeling, a second for the other at whom the feeling is directed, and a third for the phenomenal qualities of the feeling itself. Our concept of sexual attraction seems to be precisely such a relational concept. Arguably, this relational concept of lust *includes* the concept of *undirected* lust, since the relational concept does not require that all three slots be “filled in”. Indeed, if one has the relational concept and it is activated by a feeling of lust that is neither triggered by nor directed at a represented other, one may have the immediate impression that something is missing, namely a “particular object” for the lust. The same would be true if the relational concept of anger were to be activated by an undirected feeling of anger.²⁷ Just as we have two concepts of lust, the relational (or directed) including the non-relational (undirected), we have two similar concepts of emotion. Indeed, Prinz makes this conceptual point explicit by distinguishing between attitudinal (directed) emotions and what he calls “state emotions”, which lack particular objects.²⁸

Now, why might we have developed the ability to activate our relational lust concept during occurrences of sexual attraction? What *use* could such activations have? Well, we suggested above that activations of one’s relational

²⁷ It is true that undirected feelings of emotion are much less common than undirected feelings of lust or hunger, and this is because, as I mentioned in Section 2.1, appetitive states cyclically recur due to recurrent bodily conditions, but emotions typically do not.

²⁸ Cf. Prinz (2004, Chapter 8).

fear concept during fear occurrences could be adaptive, particularly in social situations where the “dangers” to which the subject is responding might be better coped with by behaving not in accord with the action tendencies of pre-conceptualized fear, but rather in accord with our understanding of the significant relation to which fear is an appropriate response. Similarly, recognizing a particular other as being sexually attractive to you – and hence, at least potentially as *being a suitable sexual partner for you*²⁹ – and then deliberating on whether or not to act on that attraction (and if so, *how*) is obviously socially adaptive. So there is ample reason to think that activation of our relational lust concept during occurrences of sexual attraction is quite functional. But there is a further reason to think that such activation occurs in *certain* cases of sexual attraction and arousal, for in those cases it provides a powerful explanation of phenomena that may otherwise remain mysterious.

This sort of case is found in Thomas Nagel’s article “Sexual Perversion” (1969, 2017), in which Nagel imagines Romeo and Juliet meeting for the first time. For ease of exposition, Nagel begins by stipulating a definition of ‘senses’: ‘X senses Y’ means ‘X regards Y with sexual desire.’ For reasons discussed in section 2.1, I will substitute ‘lust’ or ‘sexual attraction’ for ‘sexual desire’ here. As Nagel sets up the scenario, Romeo and Juliet first *sense* each other through a mirror, neither of them realizing that the other senses them. Secondly, Romeo notices Juliet’s signs of sexual arousal, which intensifies his own arousal. Thirdly, he suddenly realizes that Juliet has been aroused by sensing *him*, and this new development “gives him a sense of *embodiment* not only through his own reactions but also through the eyes and reactions of another.” (p. 44) Surges of mutual attraction and arousal then ensue:

Let us suppose that Juliet... now senses that he senses her. This puts Romeo in a position to notice, and be aroused by, her arousal at being sensed by him. He senses that she senses that he senses her. This is still another level of arousal, for he becomes conscious of his sexuality through his awareness of its effect on her and of her awareness that this effect is due to him. Once she takes the same step and senses that he senses her sensing him, it becomes difficult to state, let alone imagine, further iterations. ... Physical contact and intercourse are natural

²⁹ I will consider in section 4.1 whether *being a suitable sexual partner* might constitute the “core relational theme” of lust (as Lazarus would call it).

extensions of this complicated visual exchange, and mutual touch can involve all the complexities of awareness present in the visual case, but with a far greater range of subtlety and acuteness. (p. 45)

Let us suppose that this is an accurate description of the psychological complexity of interpersonal sexual arousal. Notice that, as Nagel describes Romeo and Juliet's lust at first *sight*, no *cognition* seems necessary to get the ball rolling; Romeo and Juliet merely *see* each other in the mirror, and each feels sexually attracted to the other (by the mere sight of the other). Just as there is a "low road" to fear – as LeDoux (1996) puts it – that bypasses cognitive-evaluative processes, Nagel seems to be presupposing, quite plausibly, that there is a non-cognitive pathway to sexual attraction. Note also that at each phase of their growing arousal, it does not seem that cognitive *appraisals* involving applications of increasingly superlative evaluative concepts are employed to causally stimulate the increasing *intensity* of their mutual arousal. That is, it does not seem that each of them must be thinking, in succession, "That individual is attractive; that individual is very attractive; that individual is very, very attractive..." and so on. Rather, using the cognitive recognition theory, we can account for the growing complexity, intensity, and meaningfulness of their encounter as follows.

When Romeo and Juliet first see each other in the mirror, their visual percepts (perhaps combined with threshold levels of predisposing hormones) cause each of them to feel an initial sexual attraction towards the other. At this stage, if each of their lust states activate each of their relational lust concepts, the particular object slot of Romeo's concept is filled with a representation of Juliet (at least as her body is represented by his visual percept), and the subject slot of his concept is filled with his own self-concept. Notice that at this stage Romeo need not represent the particular object of his lust as a person or even as a sentient being; he might be sexually attracted merely to the appearance of her body. *Vice versa* for Juliet. But then, *Juliet senses Romeo sensing her* (perhaps by noticing his facial expression and the direction of his gaze), and she becomes *further* aroused by her representation of Romeo's being attracted to her. How can the cognitive recognition theory account for this?

The key here is to understand how the cognitive recognition theory coheres with a simulation theory of empathy.³⁰ On such a theory, in order for

³⁰ Cf. Goldman (2006).

Juliet to represent Romeo's feeling of sexual attraction towards her, she must attempt to simulate and hence to *replicate* his state of feeling sexual attraction towards her. The cognitive recognition theory explains *how* she does this: cognitively, by reactivating her *entire* relational lust concept, but this time with a representation of Romeo filling the *subject* slot, and her own self-concept filling the *particular object* slot. At this stage, the *subject* slot can be filled only with a *person* – or at least with a sentient being – that has its own point of view and its own mental states; it cannot be filled by a mere body (because *mere* bodies do not have mental states and hence cannot be aware of anything). Note that the reactivation of Juliet's entire relational lust concept includes a second activation of her *phenomenal* lust-concept (associated with the relational concept's feeling-type slot): the first activation represented *as a feeling of lust* her own feeling of sexual attraction towards Romeo; the second activation represents *as a feeling of lust* Romeo's feeling of sexual attraction towards her. Since activations of phenomenal concepts have qualitative properties, each activation presumably *adds to the sensation of lust that she feels*.³¹ Exactly the same sort of *amplification* of lustful feeling should occur in Romeo as well, once he senses Juliet sensing him sensing her.³² I of course do not wish to argue that such phenomenal-conceptual amplification is the *only* way in which lustful feelings might increase during such an encounter, but it is an interesting empirical question whether such conceptual reactivations might partially trigger increases in the underlying somatic conditions (rather than merely involve repeated or recursive activations of neurological surrogates of those conditions).³³ Presumably there is also a physiological and/or neurological limit to such increase in the feeling's intensity. But, as Nagel noted above, once Romeo and Juliet make bodily contact, a similar round of cognitive-sensational dynamics could ensue, this time triggered by touching as well as by seeing, and likely further increasing their mutual arousal and attraction.

Nagel writes of a "lacuna" in his discussion of this scenario-

³¹ Given the differences between male and female physiology and possibly neurology, heterosexual simulations of their partners' feelings of lust may be somewhat inaccurate. However, if the function of the simulation is to increase the emotional subject's own feeling of arousal, such inaccuracy is not dysfunctional.

³² Note that such complex representation would involve not merely *repeated* activations, but (concurrently) *recursive* ones. One act of representation would have to be "nested" in another, and this nesting of representations could have any number of levels (up to the subject's psychological limit).

³³ This latter option would be consistent with Damasio's (1994) "as-if-body-loop" hypothesis.

It is not easy to define the basic types of awareness and arousal of which these complexes are composed, and that remains a lacuna in this discussion. *In a sense, the object of awareness is the same in one's own case as it is in one's sexual awareness of another, although the two awarenesses will not be the same, the difference being as great as that between feeling angry and experiencing the anger of another.* (p. 46, italics added)

The analysis above allows us to explain both the sense in which the “objects of awareness” are *the same* in one's own case as they are in the sexual awareness of the other, and the sense in which they are different. For, after the initial (pre-conceptualized) occurrences of their sexual attraction to each other, there are successive activations and reactivations of their relational lust concepts, with each activation involving the filling-in of the subject and particular object slots with representations of individuals, and with each activation adding to the lust that they feel. But, as Nagel aptly notes, the *difference* in the objects of awareness (i.e., direct awareness of one's own lust versus *empathetic* awareness of the other's lust) is *precisely* as great as the difference between feeling anger towards another and experiencing – or, more precisely, empathetically simulating – the anger of that other towards oneself.

As mentioned above, the possibility of such a complex and dynamic encounter seems to depend upon Romeo and Juliet's having concepts of each other as conscious and self-aware *persons*, or at least as sentient beings, and not just as objects or bodies. The *meaningfulness* of the encounter will depend partly on the degree of sophistication or richness of those concepts. It is an empirical question whether a non-human animal can perceive or conceive of another animal as being aware of it, and in just what contexts such representation is operative. But we humans conceive of others quite variously. In some contexts we may regard others as not even sentient beings, let alone as persons with inner lives as rich and complex as our own.³⁴ For this reason, if the “meaningfulness”

³⁴ Kant famously thought that this sort of *objectification* infected all sexual relations: “When a man wishes to satisfy his desire, and a woman hers, they stimulate each other's desire; their inclinations meet, but their object is not human nature but sex, and each of them dishonours the human nature of the other. They make humanity an instrument for the satisfaction of their lusts and inclinations, and dishonour it by placing it on a level with animal nature.” (Kant in his *Lectures*, as quoted by Alan Soble 2017, 295) If I am correct, Kant's pessimism is justified only for *some* cases of human sexual arousal and attraction.

of a sexual encounter to a participant at least partly follows from the psychological depth the participant attributes to the “object” of their attraction, there seems to be an ascending order of potential meaningfulness in human sexual relations. I might, for instance, feel attraction towards mere visual representations of non-sentient bodies; unconscious (e.g., sleeping) sentient beings; sentient beings who are awake but *unaware* of me; sentient beings who *are* aware of me; sentient beings who are *attracted* to me; sentient and self-aware persons who are attracted to me in part because they sense that I am attracted to them; and so on. The apex of any such ordering will depend on what a given individual is psychologically capable of representing.

However, there is plainly no guarantee that even when one is capable of representing the object of one’s attraction meaningfully, one will do so. So, as is perhaps obvious, humans seem capable of both what might be called *basic* lust or sexual attraction (which non-human animals seem to experience) and various levels of *non-basic* sexual attraction in which one cognizes the object of one’s attraction as at least another sentient being.³⁵ It is an open question, of course, as to which form of human lust is statistically normal. Nagel seems to assume that the Romeo and Juliet scenario sets an *ideal* of what human sexual relations *should* be like (so that falling short of the ideal is to engage in a kind of perversity, even if it is not to act immorally).³⁶ For our purposes we can safely ignore such normative issues. However, it may be worth noting that if feelings of sexual attraction and arousal are hedonically pleasurable (at least when there is a prospect of their soon being satisfied), and interpersonal sexual arousal of the sort described above involves *amplification* of such pleasurable feelings, then – *ceteris paribus* – it seems that non-basic lust should be valued over basic lust for at least *hedonic* reasons.

4. Should We Consider Lust To Be A Basic Emotion?

On the strength of the structural and functional analogies outlined above, a natural question to ask next is whether lust might be a “basic emotion” as Paul Ekman (1991) has defined the term. In section 4.1 I explain why I believe that certain occurrences of sexual attraction *can* pass Ekman’s requirements, but

³⁵ One may of course also represent a sexual encounter as serving some purpose beyond mutual sexual satisfaction, such as procreation. Arguably, this can add a further level of meaningfulness to sexual relations, at least if the sexual encounter itself is interpersonal and not merely inter-animal.

³⁶ Hence the title of Nagel’s article.

here I can provide only the outline of an argument that needs to be further developed (with additional empirical support) elsewhere. I then examine Prinz's argument that lust is only a basic motivation, not a basic emotion, and object that it rests on a faulty general principle for distinguishing emotions from motivations. Finally, in section 4.3 I suggest a different sort of principle for distinguishing emotions from motivations, one that allows at least *some* appetitive state occurrences to count as emotional.

4.1 Basic Lust and Ekman's Eleven Characteristics of Basic Emotions

According to Paul Ekman (1999), emotions are "basic" to the extent that they "evolved for their adaptive value in dealing with fundamental life tasks..." (p. 46) This is consistent with Lazarus' view that the core relational theme of each emotion type was originally determined by the "common adaptational tasks" that responses of that type helped to facilitate.³⁷ It is important to point out, however, that Ekman does not hold that biological evolution alone is responsible for the development of basic emotion types. Although he holds that such emotions originally evolved in response to adaptive challenges, he allows that they have been further shaped by social conditions.

Ekman lists eleven characteristics that distinguish basic emotions from one another and from other affective phenomena, namely "(1) distinctive universal signals; (2) distinctive physiology; (3) automatic appraisals, tuned to: (4) distinctive universals in antecedent events; (5) distinctive appearance developmentally; (6) presence in other primates; (7) quick onset; (8) brief duration; (9) unbidden occurrence; (10) distinctive thoughts, memories, images; and (11) distinctive subjective experience." (1999, p. 56) He speculates that there are fifteen distinguishable "families" of states that probably all share these characteristics (although he admits that for several of them, the empirical data so far is inconclusive): "amusement, anger, contempt, contentment, disgust, embarrassment, excitement, fear, guilt, pride in achievement, relief, sadness/distress, satisfaction, sensory pleasure, and shame." (p. 55) Putting aside concerns one might have about some of the states on this list,³⁸ it seems clear that at least hunger and thirst are rightfully *excluded*

³⁷ Lazarus (1991, p. 202), as cited by Ekman (1999).

³⁸ For instance, sensory pleasure seems to be a mere sensation (that is, the sort of sensation that one might get from scratching an itch) rather than an emotion, and guilt might require concepts

from it, due to the fact that they clearly lack “distinctive universal signals” (e.g., distinctive facial expressions or body postures indicating their occurrence), and fail to have short duration when physical satisfiers are unavailable. But what about lust as a feeling of sexual attraction towards another? Should it be on this list?

Note first that it seems relatively uncontroversial to claim that lust has a distinctive physiology, distinctive appearance developmentally (during puberty), presence in other primates, unbidden occurrence, distinctive subjective experience, and distinctive thoughts, memories and images,³⁹ although in a more complete argument one would have to provide empirical support. Another characteristic, quick onset, may seem questionable, since in some cases sexual attraction seems to slowly develop only in the context of an extended relationship. However, even in such situations, the actual onset of feelings of sexual arousal and attraction may be relatively quick, and certainly in cases like Nagel’s Romeo and Juliet scenario (lust at first sight), onset is quick. One may also question whether certain other emotions on Ekman’s list, such as anger and shame, may not develop slowly in certain cases (e.g., when they arise only after the subject has ruminated about a situation).

The characteristic of *brief duration* is also controversial, since several of the emotions on Ekman’s list seem capable of having widely varying durations. For instance one may feel sadness about a serious loss without interruption for days at a time. Ekman insists that “those who claim that emotions endure for much longer time periods are summing what is actually a series of briefer emotion episodes,” (p. 54) but such a claim is obviously difficult to confirm. For present purposes, however, the point is moot. Ekman defines “brief duration” as “*less than hours*”, and it does seem that uninterrupted feelings of sexual attraction seldom last longer than hours without their being resolved by the subject’s engaging in sexual relations, masturbation, or distracting activities that mitigate the feeling. Of course, undirected feelings of sexual *arousal* may last for longer periods, but whether such “appetitive moods” should count as emotions at all will be discussed in section 4.3.

that non-human primates do not have. However, the text indicates that the inclusion of guilt on the list may have been a mistake, since just three sentences later Ekman seems to refer to it as a state that has been *omitted* from the list, and is only “a likely candidate” about which he has no reason “to make a guess one way or another.” (p. 55)

³⁹ As to the last of these characteristics, a person sexually attracted to a willing other will usually plan how to have relations with them, or fantasize about activities to come. When a partner is *not* available, undirected feelings of lust may stimulate sexual fantasies, instigate a search for a potential partner, or elicit memories of past relations.

The three remaining characteristics are, I think, the most important and interesting for present purposes. The first, which stems from Ekman's work on facial expressions, is "distinctive universal signals", expressive effects that can be recognized by others. It seems clear that, in humans at least, facial expressions do communicate sexual attraction. Men are often described as "leering" at those they find attractive, and even in its milder forms, the "male gaze" is somewhat notorious. Of course, arousal and attraction in women is often signaled facially as well; Nagel notes the "subtle signs of female sexual arousal: heavy-lidded stare, dilating pupils, faint flush, and so forth." (2017, p. 44)⁴⁰ In humans, vocal tones can also express sexual arousal or attraction, and in both humans and other mammals body postures can signal sexual interest or receptivity.⁴¹ Such signals can be – and perhaps often are – *misread* or merely wishfully imagined by potential partners, but, as unfortunate as this can be, any signal that can be read can also be misattributed. Finally, such signals are of course species-specific, and in humans cultural influences may limit a given signal's universality. However, that there are culturally prescribed "display rules" for most emotions is not disputed.

The last two remaining characteristics, (3) and (4), combine to yield "automatic appraisals, tuned to: distinctive universals in antecedent events". Few would dispute the claim that the appraisal of another that causes one to feel sexually attracted to them is *automatic*, in the sense that it typically occurs non-deliberatively. But whether such appraisal is *tuned to distinctive universals* instantiated by the "antecedent event" (here, the perceived individual being appraised) is another question. Distinctive universals are *properties* of the

⁴⁰ Nagel wrote his essay when uses of 'female' and 'woman' were taken to be synonymous in contexts restricted to humans. The terms were never considered to be synonymous when 'female' was used to refer to a non-human individual, of course. In this essay, I am using the terms 'man' and 'woman' as gender terms, and 'male' and 'female' only to refer to biological or physiological classifications. For humans, gender categories are co-extensive with biological or physical categories only for cisgender individuals. I assume that intersex individuals are, like every other person, free to identify with whatever gender(s) they prefer, or to create new gender identities. It may be doubtful that the "male gaze" is solely used by males or men, and whether the signals mentioned by Nagel are restricted to women or females. But regardless of whether there are gender-specific or biological-sex-specific signals of sexual attraction, the important point for which I am arguing here is simply that there *are* such signals.

⁴¹ Whether we should consider signals of *receptivity* indications of sexual arousal or attraction is, I realize, a further question.

antecedent event – or *relations* holding between it and the subject – that tend to trigger the emotional response (for Ekman and Lazarus, *adaptively*). They are also “universal” in the sense that they are somewhat trans-cultural. However, Ekman adds that “This is not to presume that every social context which calls forth an emotion will be the same for all people within or across cultures.” (p. 53) Here Ekman cites a cross-cultural study that concludes that *the loss of a significant other* is “an antecedent to sadness in many, perhaps all, cultures. But who a significant other is or can be will differ from culture to culture.”⁴² On Lazarus’ appraisal theory, “having suffered an irrevocable loss” is the core relational theme of sadness, and this similarity strongly suggests that ‘distinctive universals in antecedent events’ is at least extensionally equivalent to ‘core relational themes’. So, to determine the distinctive universals to which the automatic appraisals that trigger sexual attraction are “attuned”, we can more simply ask, “What is the core relational theme of lust?”, assuming for the moment that lust is an emotion.

Recall that in section 3 I suggested that “being a suitable sexual partner” might be the *significant relation* that is being conceptually represented when one cognitively recognizes an instance of sexual attraction towards another *per se*. Perhaps this is the core relational theme of lust. Call this “the sexual proposal”. Ekman and Lazarus would likely reject it, given the emphasis they place on the “common adaptational tasks” emotional responses of a given type supposedly evolved to facilitate. They would probably propose instead “being a suitable reproductive partner”, for reproduction is obviously an “adaptational task” of the right (biologically relevant) sort. Call this “the reproductive proposal”. Which proposal is theoretically better?

Note first that the reproductive proposal should immediately raise the objection that non-heterosexuals do not appraise those to whom they are sexually attracted in terms of their being suitable reproductive partners. However, proponents of this proposal might reply that at least the perceivable properties correlated with reproductive fitness (e.g., being a member of the same species, being of reproductive age, and appearing to be healthy), as well as the observable character traits that plausibly make someone a better reproductive partner (e.g., trustworthiness, kindness, and generosity), seem to be had by the sorts of individuals that people tend to find sexually attractive,

⁴² Ekman is here quoting Boucher (1983, p. 407).

regardless of their sexual orientation. This may be because certain traits, such as health, are preferable to have in sexual partners regardless of reproductive consequences.⁴³ Proponents of the reproductive proposal may also point out that it does *not* imply that non-heterosexual attraction and subsequent relations (or, for that matter, attraction and subsequent relations between non-reproductively capable heterosexuals) is inherently maladaptive. For due to the monthly fertility cycle, even among reproductively capable heterosexuals most of the sexual relations resulting from sexual attraction cannot possibly result in reproduction, yet we correctly do not identify those relations as maladaptive. This is because reproduction is obviously not the only *adaptive* function of engaging in sexual relations. The building of stronger social bonds between participants is another such function (similar to that of mutual grooming among other primates). However, these points also suggest that the reproductive proposal is unnecessarily narrow. Given that the biologically adaptive function of sexual attraction is not limited to reproduction, and that there may be beneficial psychological and social functions that go beyond biologically adaptive ones, I continue to prefer the sexual proposal: “being a suitable sexual partner”, where suitability is determined relative to the subject’s and potential partner’s sexual preferences. However, if one were to insist that the reproductive proposal is more in keeping with the spirit of Ekman’s and Lazarus’ theories, that would not diminish the main point for which I am arguing here: the automatic appraisals that elicit lust are attuned to distinctive universals in antecedent events.

This is only the barest outline of an argument for the view that lust has all eleven of the characteristics Ekman requires for an affective state to be an emotion. However, as we shall see at the end of section 4.3, that such an argument can plausibly be made for lust but not for hunger or thirst will provide us with a crucial point in favor of viewing lust as an emotion rather than merely as a motivation, all things considered.

⁴³ For a review of the extensive empirical literature involving evolutionary approaches to appraisals of facial attractiveness, see Little et al. (2011). The authors write: “There are many aspects of [biological] ‘quality’ that can be associated with certain [perceivable] traits but these can broadly be split into two types of benefits for the perceiver: direct benefits, whereby the perceiver directly gains for themselves or their offspring, and indirect benefits, whereby the perceiver gains genetic benefits to their offspring. The former [e.g., selecting a partner on the basis of a perceivable feature correlated with their being contagious-parasite-free and hence likely parasite-resistant] is relevant to both same- and opposite-sex attractiveness judgments, whereas the latter has consequences for reproductive pairings.” (p. 1639)

4.2 Prinz's Argument That Lust Is A Basic Motivation Rather Than A Basic Emotion

Prinz accepts Ekman's view that basic emotions evolved for their adaptive value in dealing with fundamental life tasks. However, he holds that this biological condition should be supplemented with a psychological one, namely that a *basic* emotion is one that "contains no other emotions as parts" or, less restrictively, "is *not derived* from another emotion." (Prinz, 2004, p. 88) Given that emotions that originally biologically evolved are innate, Prinz then provides the following analysis of emotional basicity: "Basic emotions are innate emotions that are not derived from other emotions." (Ibid.) He then lists three ways of trying to *identify* such emotions: Ekman's search for culturally universal facial expressions, Plutchik's (2004) search for emotions that correspond to fundamental environmental challenges faced by our ancestors, and Panksepp's (2000) search for distinctive neural circuits. Prinz concludes (correctly, I think) that none of these approaches by themselves are likely to provide necessary and sufficient conditions for a state's being a basic emotion in his bio-psychological sense, and that "converging evidence" of an emotion type's being basic should be sought from (1) neurological evidence that a given type of emotion is not derived from another emotion (i.e., it does not supervene upon a majority of the other's neurological correlates), (2) developmental evidence (early appearance often indicating innateness), and (3) evidence derived from psychological and philosophical research into the content of emotion concepts. For instance, if most people report that they could not feel jealousy without feeling anger, this would provide some evidence that jealousy is non-basic (because it seems to include another emotion as a part, and hence to be partly "derived" from it). Prinz also notes that jealousy seems to appear later developmentally than anger.⁴⁴

I find Prinz's views here to be fairly plausible, but I would add a few caveats, particularly when it comes to applying such criteria to lust. First, regarding the developmental test for innateness, an innate trait clearly need not be manifested early. For instance, one might be genetically predisposed at birth to develop late-onset Alzheimer's disease, but that trait will not be manifested until one is quite old (if at all). Therefore, the mere fact that lustful urges tend not to be felt until puberty should not be viewed as evidence that they are not innate. Secondly, in regard to employing conceptual analysis as a source of

⁴⁴ Prinz (2004, pp. 89-90).

evidence of an emotion's basicity, since lust is not commonly considered to be a type of emotion at all, any argument that it should be so considered is necessarily an attempt at conceptual reform. It therefore cannot be confirmed by the same sort of analysis Prinz uses to argue that anger, but not jealousy, is a basic emotion. Finally, since Prinz notes that neurological evidence, like each of the other two sources, is not dispositive on its own, before using it we should be certain that its terminology coheres with the terminology found in the functionalist psychological literature. Although sometimes it does, as in the case of, say, Antonio Damasio's or Joseph LeDoux's work, to my knowledge neither of those neurologists identify lust as an emotion. By contrast, Jaak Panksepp (2000) argues that lust *is* a "blue-ribbon, grade-A emotion", but his use of 'emotion' does not cohere strongly with the way the term is used in the psychological literature.

This apparent lack of coherence is confirmed by even a cursory examination of Panksepp's theoretical framework, which is founded on a tripartite classification of affective state types that sandwiches "Category 2 (Blue-Ribbon, Grade-A Emotions)" between "Category 1 Reflexive Affects" and "Category 3 (the Higher Sentiments)". Category 1 states, such as startle reflex, gustatory disgust, and pain, are distinguished by being "closely time-locked to precipitating conditions" and by having "comparatively simple circuitries" found in "quite low regions of the brainstem." (Panksepp, 2000, p. 142) However, in the psychological literature, startle reflex is generally not considered an emotion at all, nor is pain, but (as Ekman's list shows) disgust is. Category 3 covers "the more subtle social emotions" perhaps found only in humans, including "shame, guilt, contempt, envy, humor, empathy, sympathy, and certain forms of jealousy." (p. 143) These states "emerge from the recent evolutionary expansion of the forebrain" (Ibid.), and may include Category 1 and 2 states as components, which is consistent with Prinz's psychological way of distinguishing non-basic from basic emotions. However, three of the states on this list – contempt, shame, and humor – appear on Ekman's list of *basic* emotions, at least if humor is a type of amusement. That leaves Panksepp's Category 2 "blue-ribbon" emotions, which are produced by systems found in the intermediate (periaqueductal gray) areas of the brain, and which "orchestrate coherent behavioral, physiological, cognitive, and affective consequences that can markedly outlast precipitating conditions [compared to Category 1 states]." (pp. 143-144.) According to Panksepp, each of these emotions can be distinguished from the others by virtue of their associations

with both distinctive groupings of brain regions and distinctive combinations of neuromodulators. They include the following combinations of neurological systems and psychological states: seeking/expectancy, rage/anger, fear/anxiety, lust/sexuality, care/nurturance, and panic/separation. Although lust/sexuality does appear on this list, the only other systems/states on it that fall squarely within the category of emotion according to most psychological views are rage/anger, fear/anxiety, and perhaps panic/separation. Panksepp defends the inclusion of lust/sexuality by noting that “Although sexuality has commonly been neglected by emotion theorists, many agree that this is a short-sighted view of the concept of emotionality” (p. 147), but he does not explain why he thinks it is short-sighted.

So it is apparent that the framework Panksepp applies to emotion is quite different from those of psychologists like Ekman or Lazarus. For that reason, I believe that an argument that lust is an emotion in the functionalist sense should place little weight on his neurological insights. However, that does not mean that we should place *no* weight on them, and it is worth noting that by categorizing seeking/expectancy as a “blue-ribbon” emotion, and further asserting that the seeking system “may be best conceptualized as a generalized positive *appetitive* motivation system” (p. 145, italics added),⁴⁵ Panksepp clearly implies that appetitive (motivational) and emotional systems at least *overlap* neurologically, and hence *may* also overlap functionally. That coheres with the *analogy* I have been drawing between lust and attitudinal emotion, and it also coheres with the positive suggestion I will make in section 4.3 for distinguishing emotional from merely motivational cases of lust.

Before I make that suggestion, however, I need to discuss Prinz’s way of distinguishing between emotion and motivation, for he uses it to argue that lust is *not* an emotion. Prinz analyzes *romantic love* as a blend of lust and attachment, and hence as a non-basic *emotion*. However, he classifies only *attachment* as a basic emotion (consistent with Panksepp’s identification of *nurturance* as a “blue-ribbon” emotion), viewing lust instead as merely a valent “urge for sex” (Prinz, 2004, p. 191), a state similar to hunger, thirst, and

⁴⁵ If thinking of *expectancy* as a sort of *emotion* seems conceptually farfetched, consider certain felt states of *anticipation*, which I suppose would be produced by the seeking/expectancy system.

fatigue.⁴⁶ However, Prinz clearly recognizes that lust, like other motivations, can become object-directed, and thus can develop a componential structure similar to that of an attitudinal emotion's.⁴⁷ How then does he distinguish basic emotions from basic motivations?

He nearly does not. At one point, Prinz suggests in passing that "Perhaps all emotions really count as motivations, insofar as they are valent... This would not be a terribly infelicitous conclusion." (p. 193) But he then goes on to develop a distinction between emotions and motivations that hinges upon a further distinction between motivations and *motives*. As he puts it, "A motive provides a reason for action, and a motivation is that which impels us to act. I think that all emotions are motives. ... The link between emotion and action tendencies is weaker than the link between motivations and action." (Ibid.) A feeling of anger, for instance, registers bodily reactions to a represented insult; those bodily conditions *enable* the subject to act aggressively or vengefully towards the insulting person, but neither they nor the sensations that register them *motivate* this behavior; the angry person must still choose (deliberately or not) to behave aggressively. By contrast, Prinz asserts, "Hunger actually commands us to eat." (p. 194)

There appear to be clear counterexamples to this way of distinguishing emotion from motivation. Just as an angry person can resist any urge to take revenge, a hungry person can resist the urge to eat. Similarly, hunger – once cognitively recognized – can provide a *reason* (motive) to eat, just as attitudinal anger – once cognitively recognized – can provide a *reason* to seek revenge. I think that Prinz relies on the motive/motivation distinction here only because he thinks that he has foreclosed all other options for distinguishing between emotions and motivations. But has he? Prinz correctly objects to all of Plutchik's (1984) ways of distinguishing between emotion and motivation, including the view that motivations are *always* aroused endogenously, whereas emotions tend to be elicited exogenously. He even cites lust as a counterexample: "The sight of a potential sexual partner can cause a feeling of sexual attraction. The sight of a succulent fruit can spark hunger." (p. 192) Similarly, we may note, emotions

⁴⁶ Note that fatigue qualifies as an appetitive feeling if one views it as the registration of a recurrent bodily state that is normally satisfied by rest or sleep. It seems that fatigue, however, is never object-directed or object-triggered in the same ways that lust, hunger, and thirst can be.

⁴⁷ This is evident when Prinz notes that "Feeling attachment toward the *objects of lust* is not inevitable." (2004, p. 145, italics added)

can be *endogenously* caused, as when the feeling of an irregular heartbeat causes the subject to feel anxiety about it.⁴⁸ Prinz also correctly rules out the possibility of distinguishing emotions from motivations (like fatigue) in terms of their *representational contents*, although I think that he does so for the wrong reason. Perhaps, he speculates, all motivational feelings are *valent representations of bodily conditions* while all emotional feelings are *valent representations of core relational themes*. He then rules this out only because defining all and only motivations as valent representations of bodily states would include too much: “tickles and pains are also valent representations of bodily states, but they do not fit into the folk category of motivations.” (Ibid.) On my view, distinguishing emotional from motivational sensations on the grounds that they have distinct representational contents should rather be ruled out because there is no empirical reason to believe that *either* type of sensation is representational; both (along with tickles and pains) rather merely sensorially *register* bodily conditions.

4.3 A Positive Suggestion for Distinguishing Emotional From Motivational States

So then, how *should* the distinction between basic motivation and basic emotion be made? One approach I find tempting starts from the observation that few functional concepts are one-dimensional. Consider the concept of furniture, for instance. We distinguish pieces of furniture by their typical functions, but some pieces of furniture (e.g., sofa-beds) are designed to play multiple roles, given different contingencies. Similarly, whether a feeling of a single qualitative type plays a *motivational* or *emotional* role could depend on the contingency of how the bodily conditions it registers were caused. Rather than focusing on their endogenous or exogenous causation, which Prinz appropriately criticizes, we might focus instead on what those different locations of origin tend to indicate: namely, that sensations of bodily conditions arising exogenously are triggered by other mental states, while those arising endogenously usually are not.

The view I find tempting, then, is that sensations of a single *qualitative* type, registering a single profile of bodily conditions, should be viewed as being of different *functional* types depending on how particular instances of them were caused. On this view, valent sensations of bodily conditions should be viewed as *motivational* when the bodily conditions arise independently of any triggering

⁴⁸ Thanks to an anonymous reviewer for Humana.Mente for providing this example.

mental state, and as *emotional* when those conditions would not have arisen but for a triggering mental state. Importantly, this may also allow us to distinguish *lust* from *hunger* (along with thirst and fatigue) in a principled way, beyond the fact that lust but not hunger seems to pass Ekman's test for being a basic emotion. For as I mentioned in section 2, all types of appetitive sensation regularly arise in response to cyclically recurring bodily conditions (hormone levels, empty stomachs, dehydration, and diurnal periods in the case of fatigue). However, a stomach does not become more empty upon perception of an appetizing object, nor does dehydration increase upon perception of a thirst-quencher. Assuming that hormone levels and other bodily conditions associated with lust *do* increase or intensify in response to representations of sexually attractive others, sensations of lust could be viewed as *emotional* on just those occasions when the bodily conditions they register increase or intensify due to a triggering mental state. Emotions, then, could functionally be distinguished from appetitive motivations not by how directly they relate to action (as Prinz suggests), nor by whether they arise endogenously or exogenously (as Plutchik suggests), but rather by whether or not they are felt bodily responses to mental states.

As tempting as it may be, this suggestion is too simple as it stands. For instance, one may question whether it is the triggering of the bodily conditions that is most important, or whether it is rather the triggering of the conscious feeling of those conditions. For example, when one's stomach is *partly* empty, one may not notice or consciously feel that emptiness until one perceives appetizing food. Should we then say that, despite the fact that the perception of the food did not literally make one's stomach emptier, the role played by the perception in triggering the *sensation* of the partly empty stomach suffices to make the sensation emotional? If so, the hoped for contrast between lust and hunger would be lost. Similarly, just as lust is associated with bodily conditions other than hormone levels, hunger is associated with bodily conditions other than an empty stomach. When one sees appetizing food, for instance, one secretes saliva, and it seems likely that other changes occur to prepare the body for digestion. This again diminishes the hoped for contrast between lust and hunger. Finally, consider the case in which one is already mildly feeling hungry, and one's perceiving food merely *amplifies* the intensity of the hunger sensation by focusing one's attention on it (and by associating the sensation with the perception of the potential satisfier). In such a case should we say that only the *amplified* portion of the sensation is emotional?

One might be willing to bite the bullet here and allow *all* appetitive sensations to count as emotional in cases where a mental state triggers either an increase in the bodily conditions that are felt or an increase in the intensity of the feeling itself. Also, in either sort of case, when appetitive sensations are already occurring and are only increased or intensified by a mental trigger, one may stipulatively allow only the amplified portion of the sensation to count as emotional. However, if one is *unwilling* to bite this bullet (perhaps because one can accept that the relevant cases of lust are emotional but not the parallel cases of other appetites), there are two complementary ways of dodging it. First, despite my reservations about placing much weight on Panksepp's neurological work here, one might try to find a way of coordinating his framework with a more traditional psychological one. He does have principled reasons for denying that appetites and motivations other than lust are emotional: "Why should we not consider the feelings of hunger, thirst, pain, and tiredness to be emotions? They are certainly strong affective feelings. However, *they do not fulfill all the neural criteria for an emotional system...*" (2004, p. 47, italics added) However, the fact that lust can apparently pass Ekman's basic emotion test while other types of appetite clearly cannot (due to their lack of distinctive universal signals and their long duration when satisfiers are unavailable) perhaps provides a more direct way of dodging the bullet.⁴⁹

5. Conclusion

Lust may somewhat uniquely straddle the psychological line between appetitive motivation and attitudinal emotion. It may count as a basic emotion when the bodily conditions it registers are triggered by mental states, but count only as a basic motivation when those bodily conditions arise from merely physiological causes. As a valent motivational state, it can instigate a search for either an intensifier or a mitigator, depending on contingencies of the subject's psychology and situation. As an emotional state triggered by and directed at another individual, it can take on a much more complex intentionality and a far richer phenomenology. As my discussion of Nagel's Romeo and Juliet scenario

⁴⁹ One might even admit that cases of object-triggered hunger (for instance) show that hunger is sensitive to "automatic appraisals attuned to distinctive universals in antecedent events". The distinctive universal here might be narrowly described as "being suitably nutritious" (to emphasize the biological adaptiveness of hunger sensations) or more broadly described as "being suitable to eat" (note the similarity to "being a suitable sexual partner" in the case of lust). But hunger still fails to pass Ekman's basic emotion test for the reasons just noted.

suggests, once cognitively recognized, the meaningfulness and intensity of sexual arousal and attraction is limited only by each participant's conception of the other, of the project in which they are engaged, and their neurophysiological capacities to experience sensual pleasure. In the end, given how *sui generis* lust seems to be, it may not matter whether we induct it into the family of basic emotions or not, as long as we understand that, psychologically speaking, it is not *merely* an appetitive sensation.

REFERENCES

- Aristotle (1954). *Rhetoric*, Rhys Roberts (Trans.), New York: Modern Library.
- Boucher, J. D. (1983). Antecedents to emotions across cultures. In S. H. Irvine & J. W. Berry (Eds.), *Human Assessment and Cultural Factors*. New York: Plenum, 407-420.
- Burge, T. (2010). *The origins of objectivity*, Oxford: Clarendon.
- Chalmers, D. (2003). The content and epistemology of phenomenal belief. In Q. Smith & A. Jokic (Eds.), *Consciousness: new philosophical perspectives*. Oxford: Clarendon Press, 220-272.
- Damasio, A. (1994). *Descartes' error: emotion, reason and the human brain*. New York: Avon Books.
- De Sousa, R., (1987). *The Rationality of Emotion*, Cambridge, MA: MIT/Bradford.
- Ekman, P. (1993). Facial expression of emotion. *American Psychologist*, 48, 384-392.
- Ekman, P. (1999). Basic Emotions. In T. Dalgleish & M. Power (Eds.), *Handbook of cognition and emotion*, Sussex, U.K.: John Wiley & Sons, Ltd, 45-60.
- Gertler, B. (2001). Introspecting phenomenal states. *Philosophy and Phenomenological Research*, LXIII(2), 305-328.
- Goldman, A. I. (2006). *Simulating Minds*. New York: Oxford University Press.
- Gordon, R. M. (1987). *The Structure of Emotions: Investigations in Cognitive Psychology*, Cambridge: CUP.
- Griffiths, P. (1997). *What Emotions Really Are: The Problem of Psychological Categories*. Chicago: University of Chicago Press.
- Herzberg, L. A. (2009). Direction, Causation, and Appraisal Theories of Emotion. *Philosophical Psychology*, Vol. 22, No. 2, 167-186.

- Herzberg, L. A. (2012). To Blend or To Compose: A Debate About Emotion Structure. In Wilson, P. A. (Ed.), *Dynamicity in Emotion Concepts*. Lodz: Studies in Language, Volume 27, Frankfurt a. Main: Peter Lang, 73-94.
- Herzberg, L. A. (2016). On Knowing How I Feel About That: A Process-Reliabilist Analysis. *Acta Analytica*, 31(4), 419-438.
- Herzberg, L. A. (2018). Can Emotional Feelings Represent Significant Relations? *Acta Analytica*, 34(2), 215-234.
- Lazarus, R. S. (1991). *Emotion and Adaptation*. New York: Oxford University Press.
- Lazarus, R. S. (1999). The Cognition-Emotion Debate. In T. Dalgleish and M. Power (Eds.), *Handbook of Cognition and Emotion*. West Sussex: John Wiley & Sons Ltd., 5-19.
- Ledoux, J. (1996). *The emotional brain*. New York: Simon & Schuster.
- Little A. C., Jones B. C., DeBruine L. M. (2011). Facial attractiveness: evolutionary based research. *Phil. Trans. R. Soc. B* 366, 1638–1659.
- Nagel, T. (1969, 2017). Sexual Perversion. Reprinted in R. Halwani et al. (Eds.), *The Philosophy of Sex* (7th edition), London: Rowman & Littlefield, 39-52.
- Panksepp J. (2000). Emotions as natural kinds within the mammalian brain. In M. Lewis & J. Haviland-Jones (Eds.), *Handbook of emotions* (2nd edition). New York: Guilford Press, 137-156.
- Panksepp, J. (2004) *Affective Neuroscience : The Foundations of Human and Animal Emotions*, New York: Oxford University Press.
- Prinz, J. (2004). *Gut reactions: a perceptual theory of emotion*. New York: Oxford University Press.
- Schachter, S., & Singer, C. (1962). Cognitive, social, and physiological determinants of emotional state, *Psychological Review*, 69, 379-399.
- Soble, A. (2017). “Sexual Use”, in R. Halwani et al. (Eds.), *The Philosophy of Sex* (7th edition), London: Rowman & Littlefield, 293-320.