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Lower-level Cognition in Emotions

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Introduction

The cognitive theory of emotions maintains that emotions necessarily involve cognition, and typically considers emotions as judgment in *higher* forms (or, in the form of complex appraisal judgments). It is especially in the form of thoughts, beliefs, conceptualization and propositional attitudes. Such a theory is challenged by somatic theory, which conversely regards emotions as non-cognitive, by taking emotions to be effects (or sensations) of neural responses to changes of bodily states. Reasons taken to support the somatic theory typically resorts to the affective phenomena that seem to lack cognition at all. The present paper, in contrast, aims to argue that even such affective phenomena remain cognitive, because they have *guidance of actions* that is immanent in emotions. It is, however, not cognitive in the aforementioned *higher* forms, but instead in certain lower-level forms. The present paper asks and answers why certain emotions can be considered to be cognitive in such lower-level forms.

Cognition at Various Levels

The cognition involving in emotions is, indeed, subject to various levels, each of which is manifested in a prototype of cognitive activities. Among those various levels, let us consider only five levels, relating respectively to five cognitive prototypes involving in emotions. Firstly, consider the prototype of belief or reasoning, which involves in anger, disgust, jealousy, and fear-of-circumstance. Secondly, at a lower level can we find emotions responding to the nonconceptual contents of world states. Thirdly, at an even lower level is the fear-of-predator (for example, fear of snakes); the involving cognition is the prototype of detecting certain visual features, including shapes and color patterns. Those features can be regarded as *affordances* associated with certain actions of avoidance, such as keeping-away and running-away. Fourthly, at a very low level is the prototype of detecting bodily wounds involving in bodily pains. The above four levels of cognition are conscious in nature, yet this is not necessary for emotions to have cognition. The fifth level of cognition is unconscious, as evident in the preference effect, where preference is associated with certain previously observed features in an unconscious way. The cognitive association, hence, turns up in experiences in an implicit manner.

Based on the above discussions of various levels, the present paper will disclose the cognitive ground hidden in certain paradigmatic examples of the somatic theories.

Responding to the Somatic Theory

The somatic theory takes direct physical means of emotions as its evidence (e.g. Zajonc (1984), Prinz (2004)). However, in this regard can the cognitive theory still be defended. Physical stimulation of sexual organs, for example, would bring about sexual excitement (arousal), which not only is accompanied with sexual feelings but also stands as a potent disposition to carry out further activities in pursuit of romantic love. Sexual excitement, hence, can be regarded as a signal (hence, a judgment in the sense of lower-level cognition) in support of certain love-pursuing activities. Similarly, laugh is a bodily activity that can evoke the joy-like feeling without involving beliefs and thoughts, yet the joy-like feeling is associated with the memory of several amusing activities or contented circumstances.

Zajonc (1984) raises exposure effects (or, preference effects) to contend that emotional reactions can be established without appraisal. When humans see a stimulus on one occasion, a preference on future occasions is generated, even if they have no recollection of the prior encounter. Here in this example, we can boldly grant that a preference effect manifests a genuine emotion with a cognitive role. This is a case of unconscious learning, in which implicit knowledge is a way of establishing cognition.

In addition, as a theory in the camp of the somatic theory initiated by William James and Karl Lange, Prinz's (2004) *embodied appraisal theory* proposes that emotions are perceptions of bodily changes and that emotions represent organism-environment relations. Prinz states that there are firm correlations between an agent's bodily changes and her detection of emotions' *core relational themes*—such as danger and offensiveness. He consequently regards emotions as perceptions of bodily changes.

Despite Prinz's (2004) intended support of the somatic theory, his notion that emotions *represent* organism-environment relations implicates a cognitive ground. Furthermore, being scary, for example, is an organism-environment relation with evaluation. An earthworm looks scary for some but not for others. Different people *evaluate* the scary conditions differently; hence, a cognitive role is immanent in the evaluated organism-environment relation.

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