

# Pleasure, the Common Currency of Emotions

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The old controversy on whether emotion is independent of cognition<sup>1,2</sup> or dependent on it<sup>3,4</sup> has now advanced considerably. The solution fundamentally depends on how one defines both terms, emotion and cognition. Most authors would agree that emotion could be elicited in the absence of conscious cognition mediation. But, if “cognitive” is taken in a broad sense including basic sensory information processing, virtually all agree that some cognitive processing is required for most, if not all, emotions.<sup>5</sup> And even if emotion—at least in its broadest meaning, including feelings, mood, and temperament—can be elicited with minimal cognitive prerequisites, via noncognitive routes,<sup>6</sup> the cognitive appraisal is putatively necessary for its elicitation.<sup>7</sup>

Physiologically, there is a two-way interaction between emotion and cognition made possible by the bidirectional connections existent between the main anatomical structures subserving both of them, the amygdala and the neocortex,<sup>8</sup> and by the distribution of neuropeptides in their circuits.<sup>9</sup>

As a follow-up to a definition of sensation as a four-dimensional experience (quality, intensity, hedonicity, and duration),<sup>10</sup> and accepting that sensation is the origin of all consciousness, that model should apply to all forms of mental experience,<sup>11</sup> including emotion, which is just a special case of consciousness: if emotion takes place in consciousness, it should also possess those four dimensions. Actually, Cabanac<sup>12</sup> proposes that *emotion is any mental experience with high intensity and high hedonic content*, expanding on a thesis that motivational states can be compared to each other by a common currency, which would be pleasure.

This conception, which facilitates the understanding of emotions, can be reached by introspective intuition, but direct evidence of its validity can also be tested by deduction, based on experimental results, such as those obtained by our research group, which described verbal analysis of the mental experience and the expression of anger in different cultures<sup>13,14</sup> and the relationship between aggression, impulsiveness, and hedonicity.<sup>15</sup> We recognize that all these elements possess a strongly hedonic dimension, either positive or negative.

Generalizing our findings to other emotions, it may be concluded that hedonicity would be the dimension of consciousness that motivates the subject towards useful behaviors. This contention matches with Damasio's<sup>16,17</sup> observation that impairment of emotional process in patients undermines their capacity to make decisions: this is what one would expect to find when the hedonic dimension is severed. The lack of pleasure thus impairs emotion.

Consequently, pleasure/displeasure is the common currency for accessing behavior in response to the various emotions; no emotion is hedonically indifferent. The hedonic dimension is what pathognomonically defines emotion.<sup>12,18</sup> Pleasure thus makes emotion a motivating experience.

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