

LA1020 assignment

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Q2: Emodiversity: Provide a critical evaluation of the concept of emodiversity with references from ‘Inside Out’

Emodiversity is one’s ability to experience a diversity of emotions simultaneously. I comment on the concept and it’s validity with references from ‘Inside Out’ in this report.

To credibilize my arguments, I will be quantifying Emodiversity with Shannon’s entropy as is promoted in academia ¹.

$$Emodiversity = - \sum_{i=1}^S P_i \cdot \ln(P_i)$$

where S is the total variety of emotions and P_i is the proportion of a particular emotion.

The film is based on Paul Ekman’s ^{2 3} research , bucketting emotions into 7 fundamental categories (the five in the film plus contempt and surprise).

The moment Riley is born, only Joy exists : implying a numerical emodiversity of zero. As she grows up, 4 more personified emotions are introduced : anger, fear, disgust and sadness. Riley now posseses some non-zero emodiversity; note that the film shows experiences as orbs of memories colored with *discrete* emotions as of now.

Sadness is presented as being good for nothing and never volitionally given control of the headquarters by the other emotions. During a scene near the stairs when sadness tints a happy memory of sliding down the railing, the others immediately stop her and that signifies the inherent hedonistic nature of all humans : the avoidance of pain and seeking pleasure.

Further into the plot, Joy and Sadness end up in the memory dump, away from the headquarters. Riley is left in the control of Anger, Fear and Disgust in these situations (numerical emodiversity decreases) and is depicted to be depressed which is supported by Quoidbach ⁴ (linking low emodiversity to depression).

Sometime later, Joy and Bing-Boing are stuck in the depths of the memory dump where Joy first realizes the importance of feeling sad and herself feels so.

Fast-forwarding to Joy reaching the headquarters, for the first time, a *mixed* memory orb (of Joy and Sadness) is produced when Riley reunites with her parents and expresses how she genuinely feels. Note that this increases her potential for higher numerical emodiversity as, with the same amount of emotions, an orb can contribute to multiple proportions in the measure stated initially.

A year later : the control panel is expanded to fit all the personified emotions’ contributions - indicating emotional maturity.

¹<https://www.emodiversity.org/download>

²Ekman, Paul. “Expression and the nature of emotion.” (1984)

³Ekman, P. (2003). Emotions inside out. 130 Years after Darwin’s” The Expression of the Emotions in Man and Animal”.

⁴Quoidbach J. et al (2014). Emodiversity and the emotional ecosystem.