Appraisal theories

Что это такое

Emotion is what an individual experiences during an emotional episode, including **cognitive appraisals of an event**, mental states, action readiness, etc.

Appraisal is the mental process that allows to detect objects and events in the environment and evaluate their significance for the immediate well-being.

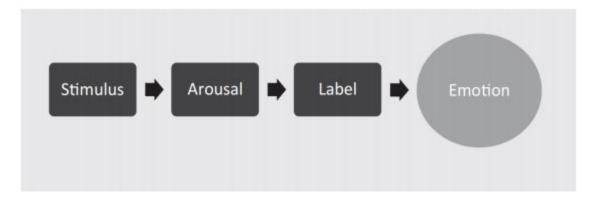
Appraisals are not as simple as judgments of "good" or "bad" for your well-being, though. Circumstances can be appraised in many ways, and it is the pattern of appraisals across those ways that is so important for understanding and predicting emotions.

Schachter's two-factor theory of emotion (1962)

states that the **appraisal** of physiological change defines and determines emotional experience.

Two factors of the theory include

- 1) increased autonomic arousal (physiological)
- 2) appraisal of this arousal (cognitive)



Emotions are differentiated by how an individual appraises the eliciting event.

Richard Lazarus: cognitive theory of emotion

Cognitions (in a broad sense: judgments, evaluations, thoughts) are necessary for an emotion to occur.

- Two steps in appraisal:
- 1. <u>Primary appraisal.</u> Automatic, unconscious, and rapid. Determines mostly valence.
- 2. Secondary appraisal (coping). Conscious; can change the emotion.

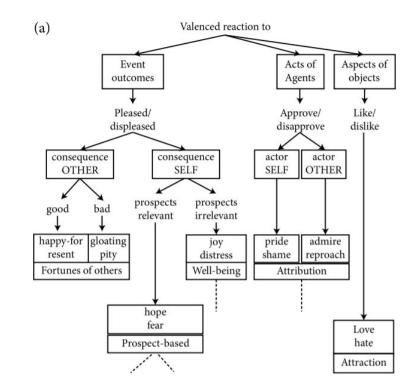
Klaus Scherer: component Process Model: emotions as the synchronization of many different cognitive and physiological components

Primary appraisals: novelty, intrinsic pleasantness, goal relevance

<u>Secondary appraisals:</u> goal conduciveness, agency, responsibility, coping, compatibility with self and societal standards, etc.

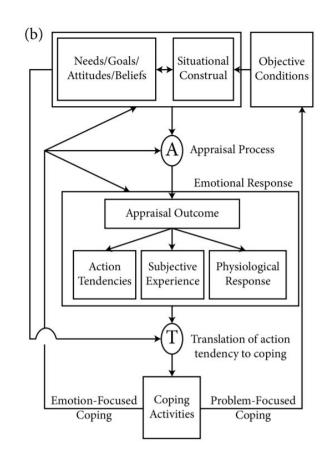
OCC Model (Ortony, Clore, Collins, 1988)

- Structural model (structural equation modeling)
- Posits a small set of criteria (appraisal variables) -> different emotion terms -> decision tree for classifying emotion-evoking situations
- 3 broad classes of emotions:
 - 1. Pleasing/displeasing
 - 2. Differently related to individual goals
 - 3. Differently impacting social norms



Smith & Lazarus, 1990

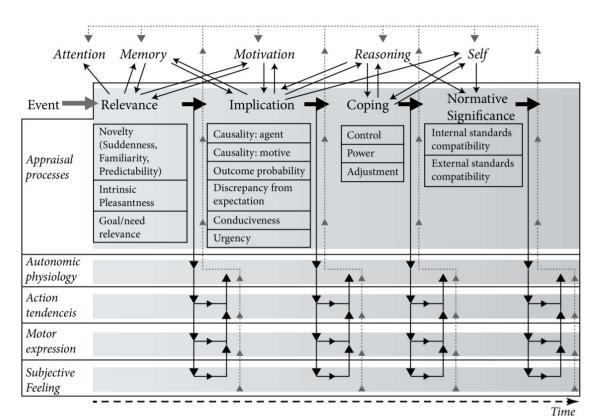
- Emotions arise from patterns of judgements on how objects or events impact beliefs, attitudes, and goals
- Appraisals shape broader patterns of behavior (coping strategies, problem- or emotion-focused)
- Dynamic, cyclical process of appraisal and reappraisal



Sequential Checking Theory (Scherer, 2005)

Positing fixed sequential structure to appraisals of novel events:

- 1. Self-relevance
- Implication for the individual's goals
- 3. Coping potential
- Compatibility with social norms

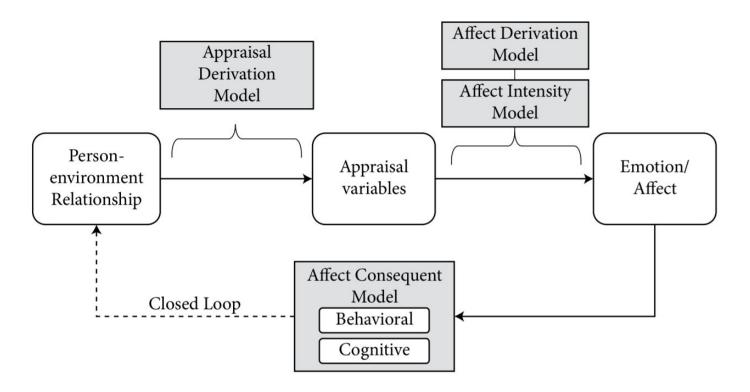


Computational Appraisal Theory

Emotion emphasize appraisal: central process to be modeled

Appraisal is typically modeled as the cause of emotion

A component model view



Smith and Kirby's two-process model of appraisal distinguishes between slow appraisals based on more or less extensive reasoning from fast appraisals that are associative or memory-based.

These slow and fast appraisal processes work in parallel and are integrated to arrive at overall appraisal of an event. This two-process model presents an alternative explanation of the bird scenario. The initial response of the actor that suggests surprise could be the result of a fast appraisal process.

On the other hand, the expression that suggests concern for others might be the result of the slow appraisal process. The intermediate responses that suggest fear and anger may be some blend or integration of fast and slow appraisals.

EMA (**EM**otion and **A**daptation): a process model of appraisal dynamics

Relevance, valence and intensity

Future implications

Blame and responsibility

Power and coping potential

Coping strategies

Сейчас вылетит птичка...

- surprise at an unexpected event (frame 5),
- fear (frame 9),
- an aggressive stance of self-protection (frames 13–23),
- relaxation (frame 29),
- concern for others (frames 29–60), specifically for the bird that caused the initial negative reaction and, finally,
- an active helping strategy (frames 62–80) combined with relaxed facial features and smiling suggestive of relief.









Frame 2

Frame 5

Frame 9

Frame 22



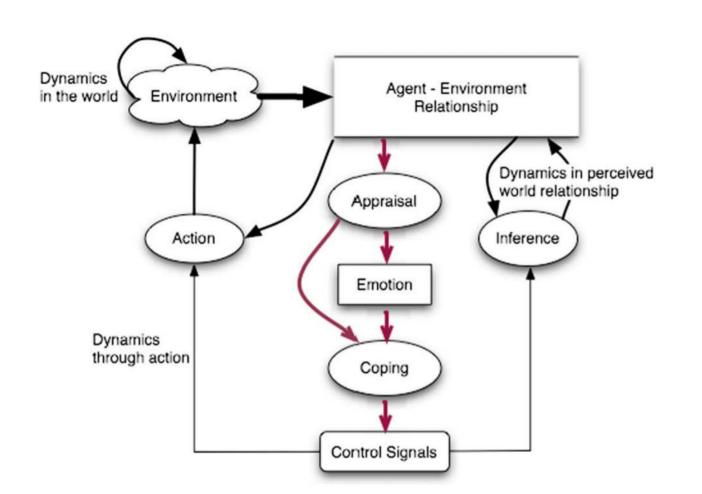


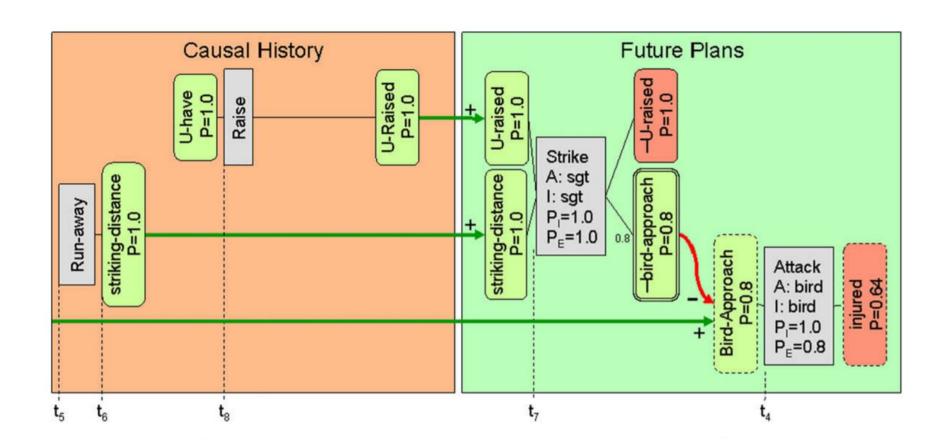


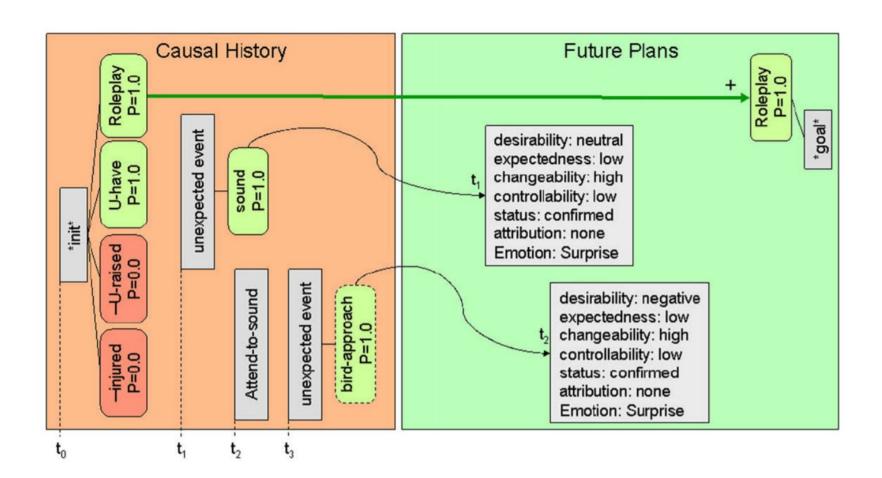
Frame 60

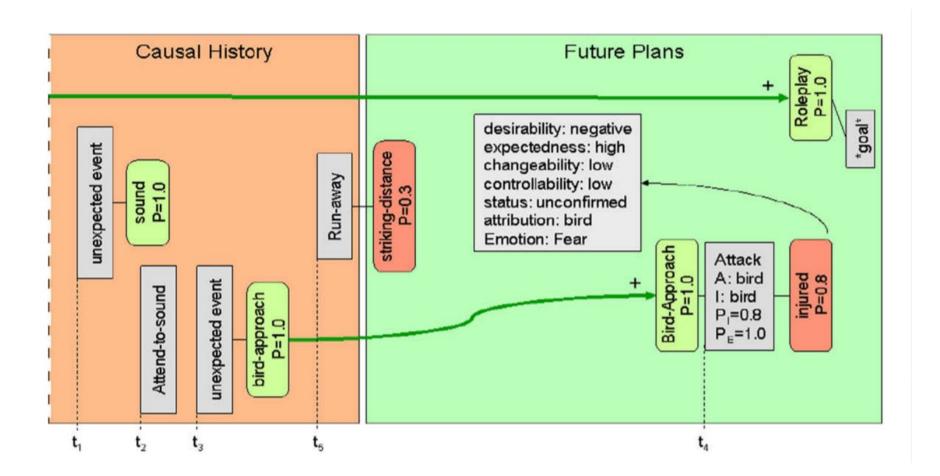
Frame 80

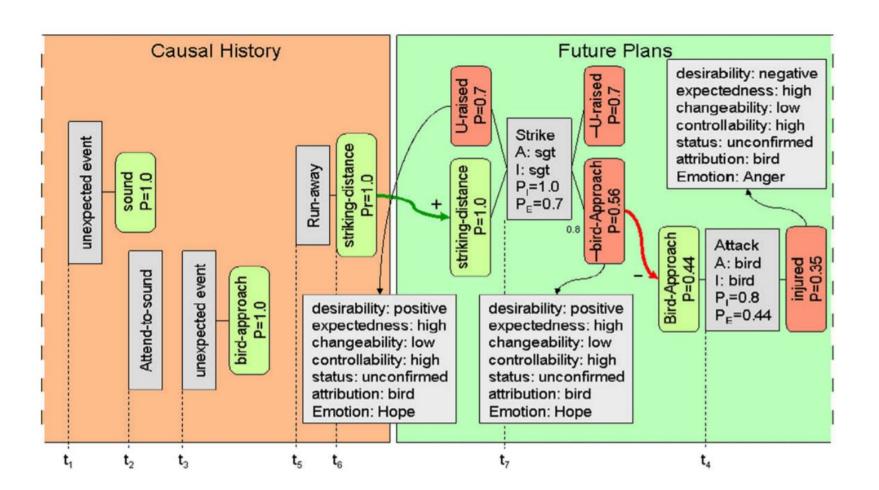
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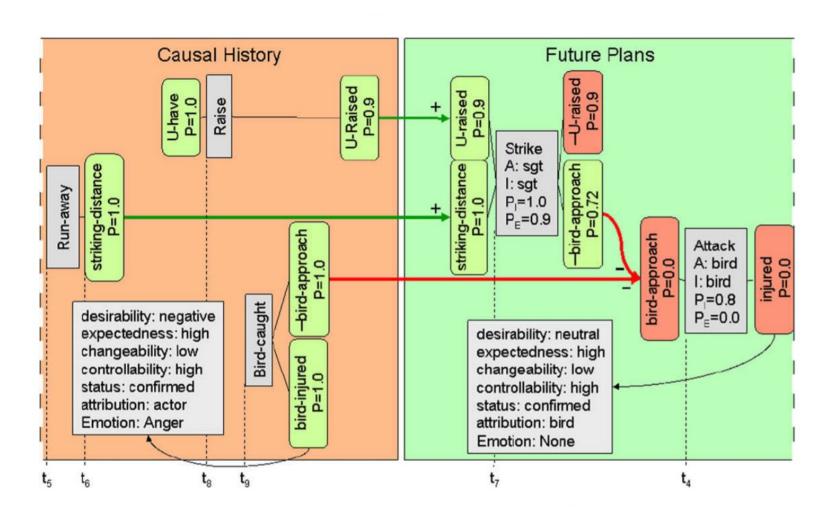


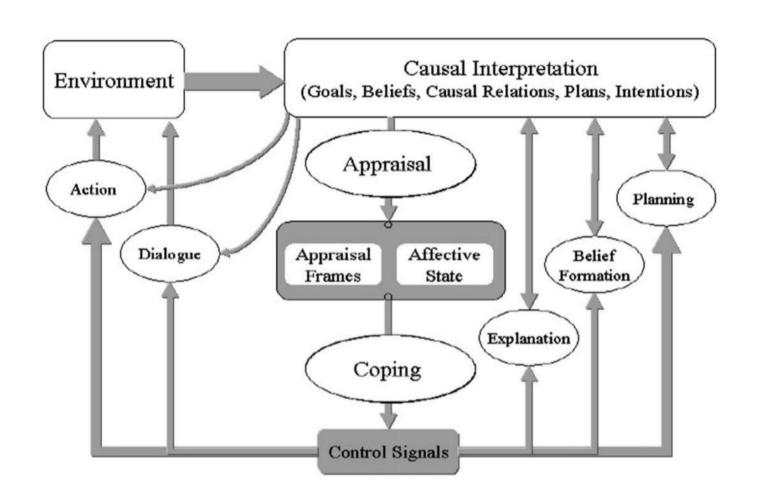












Summary

EMA provides a framework for exploring and explaining emotion dynamics and makes specific commitments to how those dynamics are realized.

The simulation of the bird example, and the emotional dynamics it reveals, argues that the temporal characteristics of appraisal may be a by-product of other perceptual and cognitive processes that operate on a uniform, common representation scheme of the person-environment relation, the causal interpretation.

It supports not only appraisals but also the agent's other cognitive and perceptual processes. By modeling appraisal as a fast, uniform processes operating over the causal interpretation, EMA roots the temporal dynamics in those other processes that operate on the causal interpretation. EMA's description of appraisal is not requiring appeal to alternative fast and slow appraisal processes. Further, coping is also rooted in other cognitive processes, leveraging them to adjust the causal interpretation.

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