

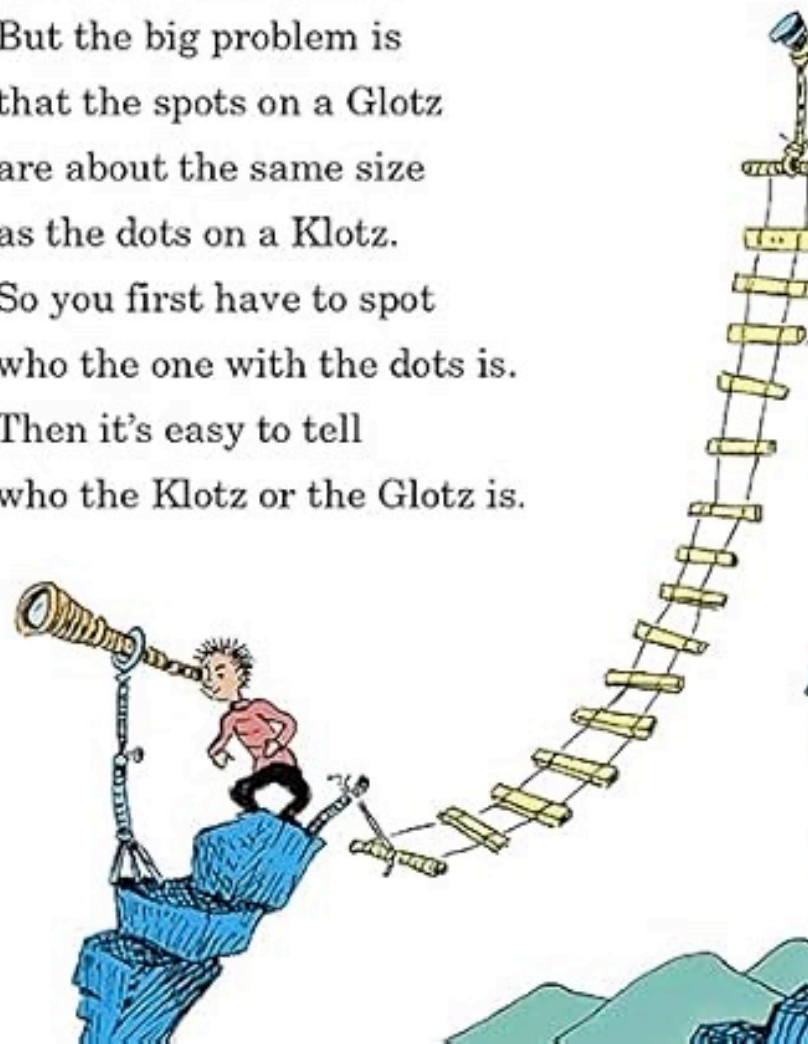
## How to tell a Klotz from a Glotz

Well, the Glotz, you will notice, has lots of black spots.

The Klotz is quite different with lots of black dots.

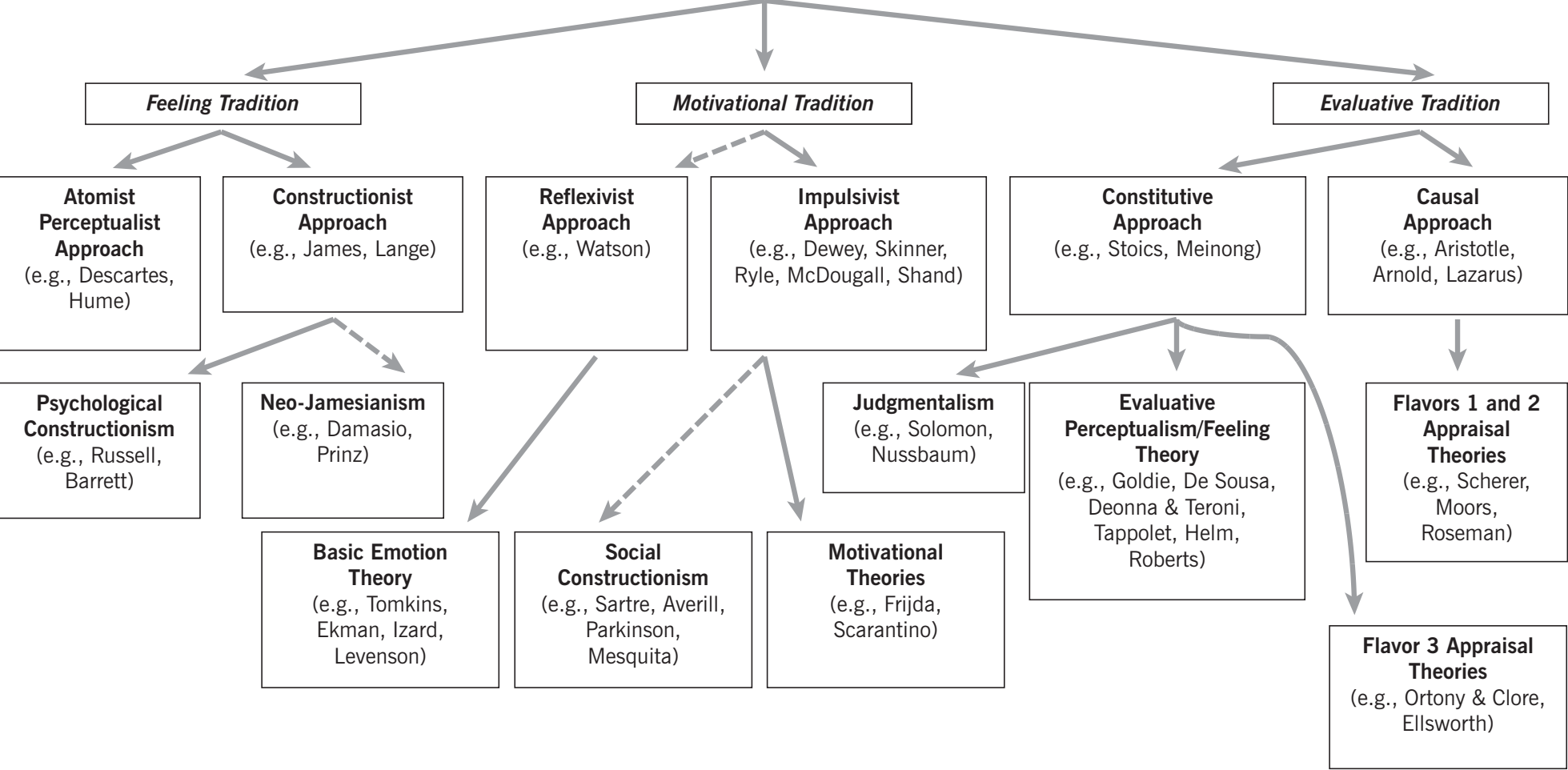
But the big problem is that the spots on a Glotz are about the same size as the dots on a Klotz.

So you first have to spot who the one with the dots is. Then it's easy to tell who the Klotz or the Glotz is.





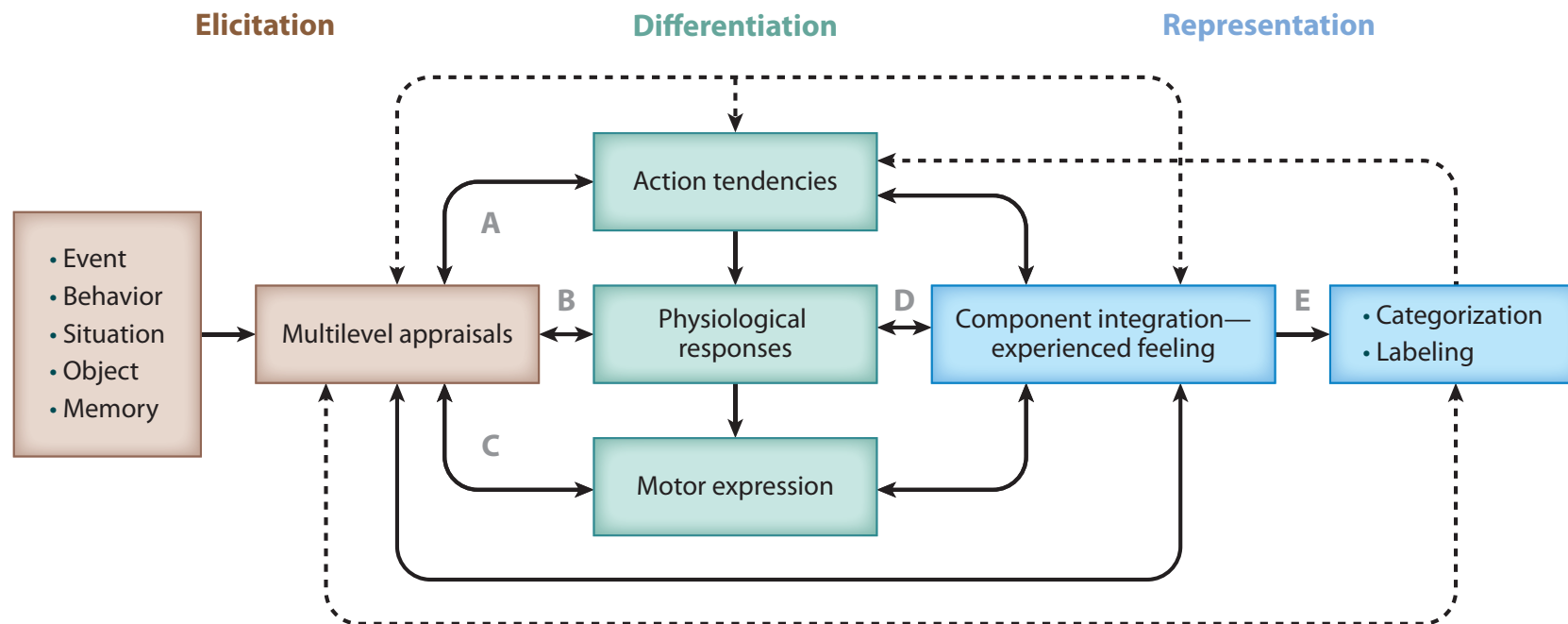
**Emotion Theories: A Family Tree**



# Teorie dell'appraisal

Approccio **componenziale**; le emozioni sono il prodotto di **processi scomponibili**

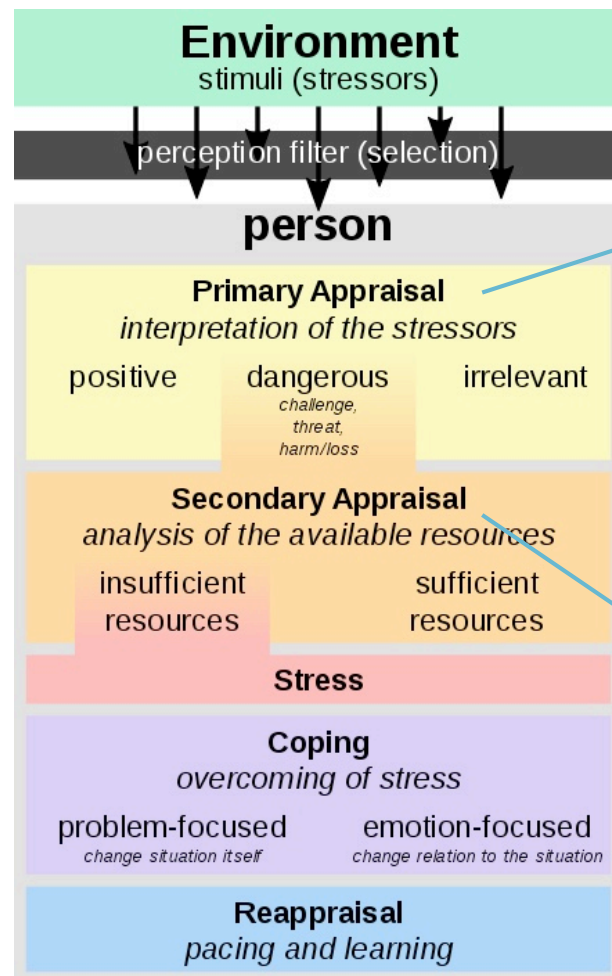
→ Le emozioni sono causate da un processo di **valutazione (appraisal)**



- L'appraisal avviene in base a determinati **criteri** e/o dimensioni di valutazione
- **Diverse configurazioni** (pattern) dei criteri di appraisal causano emozioni distinte
- L'appraisal può avvenire a **diversi livelli**, più o meno automatici vs. coscienti/deliberati



## Richard Lazarus: appraisal e coping



### 1. Appraisal primario

- rilevanza per gli scopi
- congruenza con gli scopi
- tipo di coinvolgimento (ego-involvement)

#### Ego-involvement

1. Self- and social esteem
2. Moral values
3. Ego-ideals
4. Meanings and ideas
5. Other persons and their well-being
6. Life goals

#### Emotions

- Anger, Pride  
Guilt  
Shame  
Anxiety  
All emotions  
All emotions

### 2. Appraisal secondario

- colpa/merito
- potenziale di coping
- aspettative future

3. Integrazione: “temi relazionali centrali”

4. Emozioni



**Table 3.2.** Core relational themes for each emotion

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*Anger* A demeaning offense against me and mine.

*Anxiety* Facing uncertain, existential threat.

*Fright* An immediate, concrete, and overwhelming physical danger.

*Guilt* Having transgressed a moral imperative.

*Shame* Failing to live up to an ego-ideal.

*Sadness* Having experienced an irrevocable loss.

*Envy* Wanting what someone else has.

*Jealousy* Resenting a third party for loss or threat to another's affection or favor.

*Disgust* Taking in or being too close to an indigestible object or idea.

*Happiness* Making reasonable progress toward the realization of a goal.

*Pride* Enhancement of one's ego-identity by taking credit for a valued object or achievement, either one's own or that of someone or group with whom we identify.

*Relief* A distressing goal incongruent condition that has changed for the better or gone away.

*Hope* Fearing the worst but yearning for better, and believing a favorable outcome is possible.

*Love* Desiring or participating in affection, usually but not necessarily reciprocated.

*Gratitude* Appreciation for an altruistic gift that provides personal benefit.

*Compassion* Being moved by another's suffering and wanting to help.

*Aesthetic experiences* Emotions aroused by these experiences can be any of the above; there is no specific plot.

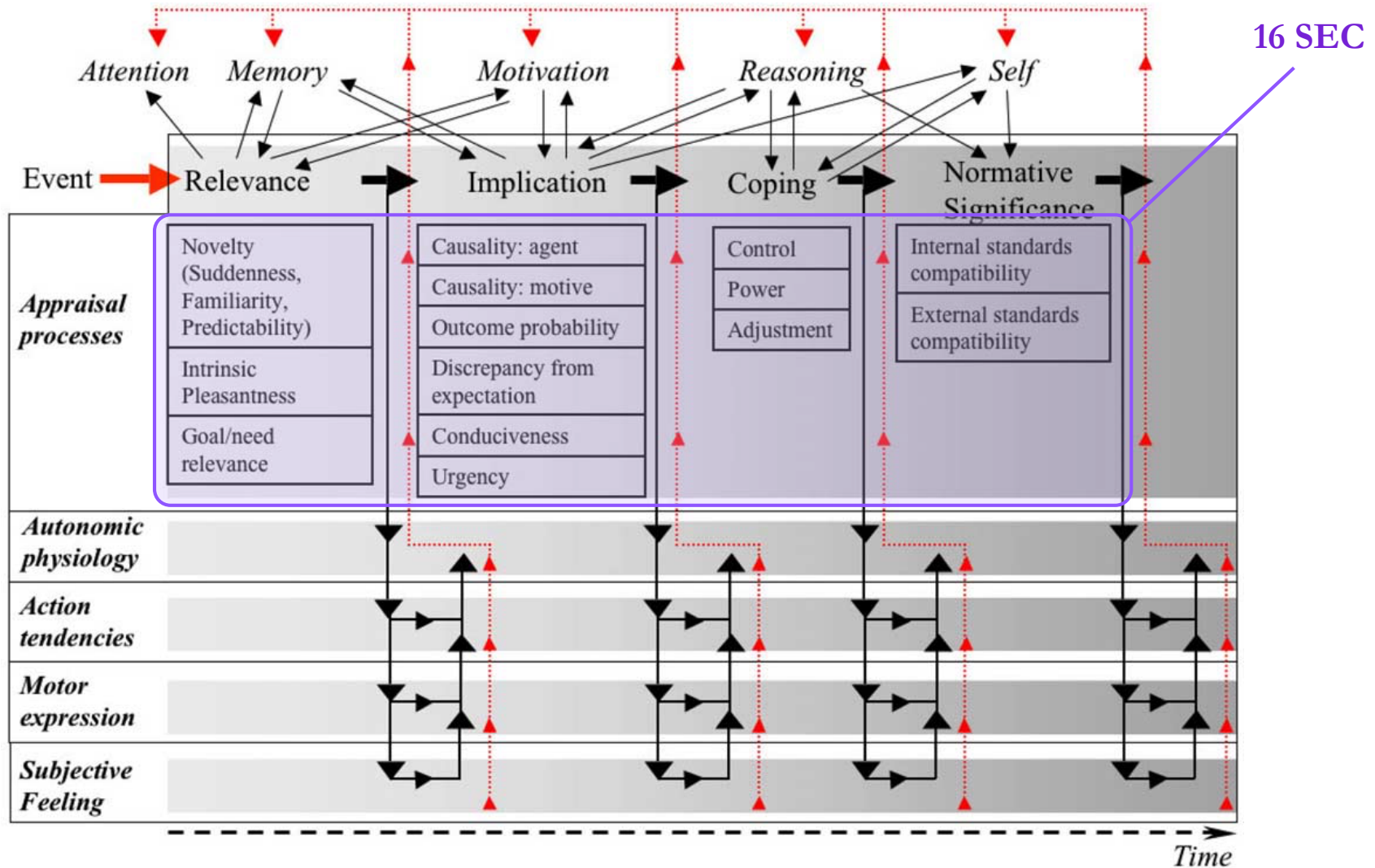
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- I temi relazionali centrali sono **gestalt integrate** che unificano i vari criteri (parziali) di appraisal
- Molecolare → molare ("Flavor 1" theory)

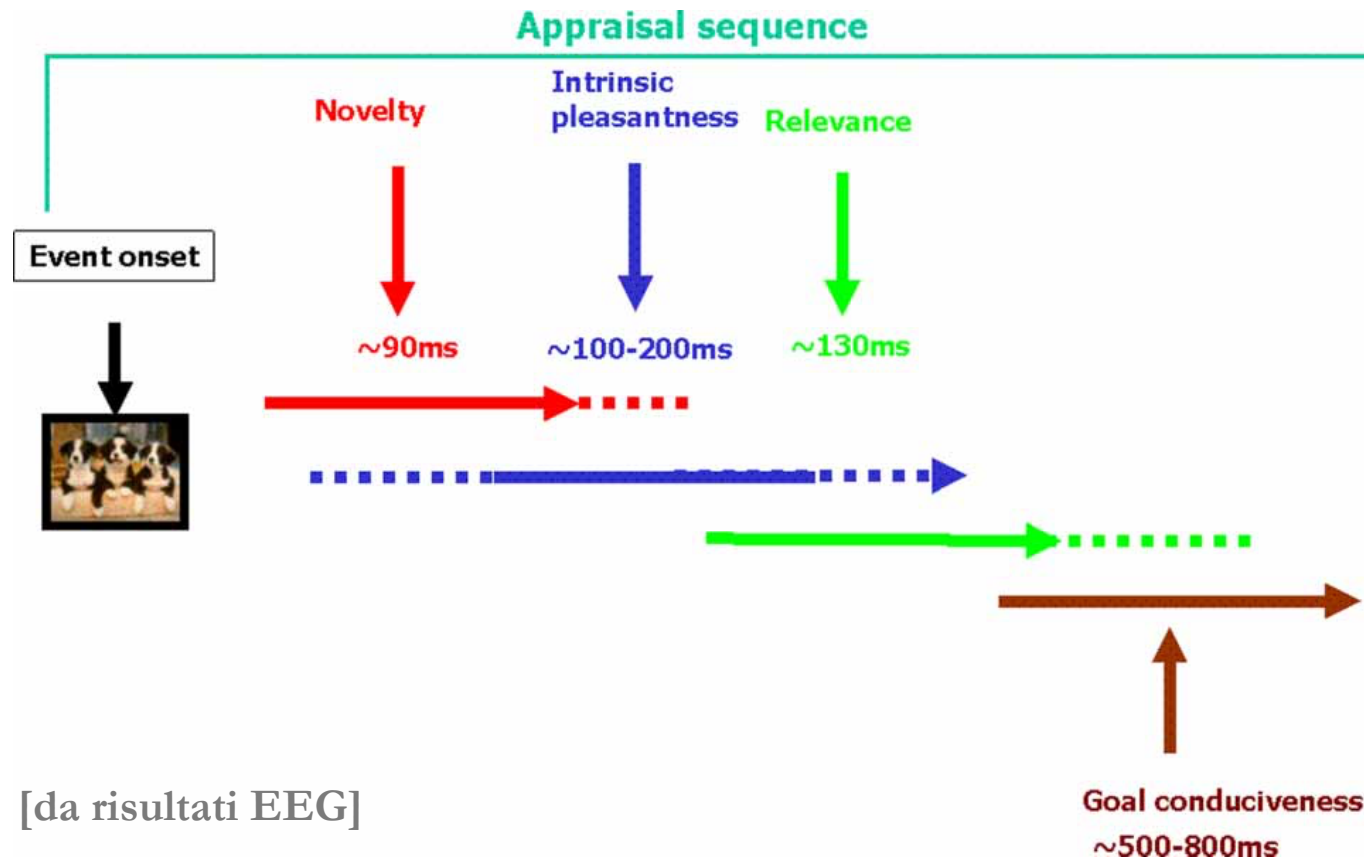


## Klaus Scherer: il modello delle componenti processuali

Appraisal = sequenza di **controlli di valutazione dello stimolo**  
(stimulus evaluation checks, SECs)



<i>Stimulus Evaluation Checks (SECs)</i>	<i>Organismic/Social functions</i>	<i>Component patterning</i>
<b>Relevance (A stimulus event is considered as requiring attention deployment, further information processing, and potential action)</b>		
<i>Novelty</i> (Abrupt onset, familiarity, predictability)	<i>Novel and goal relevant:</i> Orienting, Focusing/ Alerting	Orienting response; EEG alpha changes, modulation of the P3a in ERPs; heart rate deceleration, vasomotor contraction, increased skin conductance responses, pupillary dilatation, local muscle tonus changes; brows and lids up, frown, jaw drop, gaze directed; interruption of speech and action, raising head (possibly also preparatory changes for subsequent effort investment given relevance appraisal at this stage, in particular increased cardiac contractility as indicated by, e.g., decreased pre-ejection period)
<i>Goal relevance</i> (Does the event have consequences for my needs or goals?)	<i>Pleasant:</i> Incorporation/ Recommending	Sensitisation; inhalation, heart rate deceleration, salivation, pupillary dilatation; lids up, open mouth and nostrils, lips part and corners pulled upwards, gaze directed; faucal and pharyngeal expansion, vocal tract shortened and relaxation of tract walls (“wide voice”—increase in low frequency energy, F1 falling, slightly broader F1 bandwidth); centripetal hand and arm movements, expanding posture, approach locomotion
<i>Intrinsic pleasantness</i> (Is the event intrinsically pleasant or unpleasant, independently of my current motivational state?)	<i>Unpleasant:</i> Rejection/Warning	Defence response, heart rate acceleration, increase in skin conductance level, decrease in salivation, pupillary constriction; slight muscle tonus increase; brow lowering, lid tightening, eye closing, nose wrinkling, upper lip raising, lip corner depression, chin raise, lip press, nostril compression, tongue thrust, gaze aversion; faucal and pharyngeal constriction, vocal tract shortened and tensing of tract walls (“narrow voice”—more high frequency energy, F1 rising, F2 and F3 falling, narrow F1 bandwidth, laryngopharyngeal nasality, resonances raised); centrifugal hand and arm movements, hands covering orifices, shrinking posture, avoidance locomotion



- Nel modello di Scherer, i SEC **non convergono** in una sintesi unificata (“Flavor 2” theory)
- Specifici componenti “molecolari” dell’appraisal causano specifici componenti dell’emozione
- L’episodio emozionale è integrato dalla **coerenza dinamica** tra vari sottosistemi
- Infinite combinazioni di appraisal (= emozioni); quelle frequenti danno luogo a “**emozioni modali**”



Criterion	ENJ/HAP	ELA/JOY	DISP/DISG	CON/SCO	SAD/DEJ	DESPAIR	ANX/WOR
Relevance							
Novelty							
Suddenness	Low	High/med	Open	Open	Low	High	Low
Familiarity	Open	Open	Low	Open	Low	Very low	Open
Predictability	Medium	Low	Low	Open	Open	Low	Open
Intrinsic pleasantness	High	Open	Very low	Open	Open	Open	Open
Goal/need relevance	Medium	High	Low	Low	High	High	Medium
Implication							
Cause: agent	Open	Open	Open	Other	Open	Oth/nat	Oth/nat
Cause: motive	Intent	Cha/int	Open	Intent	Cha/neg	Cha/neg	Open
Outcome probability	Very high	Very high	Very high	High	Very high	Very high	Medium
Discrepancy from expectation	Consonant	Open	Open	Open	Open	Dissonant	Open
Conduciveness	Conductive	Vcon	Open	Open	Obstruct	Obstruct	Obstruct
Urgency	Very low	Low	Medium	Low	Low	High	Medium
Coping potential							
Control	Open	Open	Open	High	Very low	Very low	Open
Power	Open	Open	Open	Low	Very low	Very low	Low
Adjustment	High	Medium	Open	High	Medium	Very low	Medium
Normative significance							
Internal standards	open	Open	Open	Very low	Open	Open	Open
External standards	Open	Open	Open	Very low	Open	Open	Open

Criterion	FEAR	IRR/COA	RAG/HOA	BOR/IND	SHAME	GUILT	PRIDE
Relevance							
Novelty							
Suddenness	High	Low	High	Very low	Low	Open	Open
Familiarity	Low	Open	Low	High	Open	Open	Open
Predictability	Low	Medium	Low	Very high	Open	Open	Open
Intrinsic pleasantness	Low	Open	Open	Open	Open	Open	Open
Implications							
Cause: agent	Oth/nat	Open	Other	Open	Self	Self	Self
Cause: motive	Open	Int/neg	Intent	Open	Int/neg	Intent	Intent
Outcome probability	High	Very high	Very high	Very high	Very high	Very high	Very high
Discrepancy from expectation	Dissonant	Open	Dissonant	Consonant	Open	Open	Open
Conduciveness	Obstruct	Obstruct	Obstruct	Open	Open	High	High
Urgency	Very high	Medium	High	Low	High	Medium	Low
Coping potential							
Control	Open	High	High	Medium	Open	Open	Open
Power	Very low	Medium	High	Medium	Open	Open	Open
Adjustment	Low	High	High	High	Medium	Medium	High
Normative significance							
Internal standards	Open	Open	Open	Open	Very low	Very low	Very high
External standards	Open	Low	Low	Open	Open	Very low	High

*Abbreviations.* ENJ/HAP, enjoyment/happiness; ELA/JOY, elation/joy; DISP/DISG, displeasure/disgust; CON/SCO, contempt/scorn; SAD/DEJ, sadness/dejection; IRR/COA, irritation/cold anger; RAGE/HOA, rage/hot anger; BOR/IND, boredom/indifference.

## Applicazioni del modello alle espressioni facciali

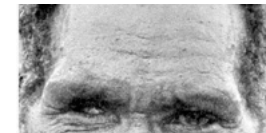
- Le espressioni sono indicatori di **stati mentali e processi di valutazione**
- Diverse componenti dell'appraisal (SEC) si traducono in **specifici movimenti muscolari**



**Novità:** frontalis (AU1 + AU2)

**Valenza:**

**Positiva** (piacevolezza intrinseca, facilitazione degli scopi):  
zygomaticus (AU12) [+AU6?]



**Negativa** (spiacevolezza intrinseca, ostruzione degli scopi):  
corrugator (AU4) [+AU7?]

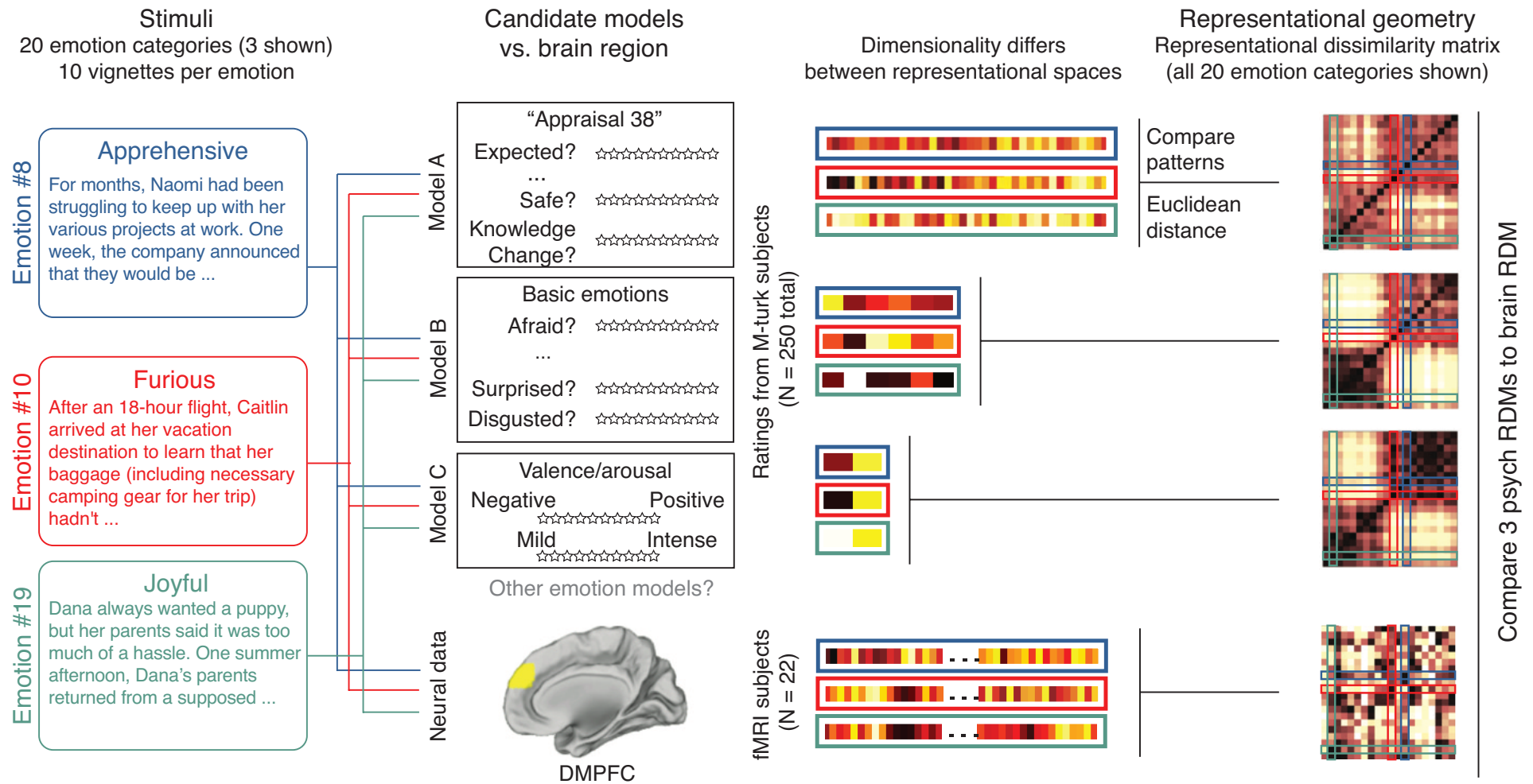
Configurazioni frequenti (“modali”) di componenti espressive vengono interpretate come espressioni emotive discrete (ad es. rabbia, paura, gioia...)

Appraisal Dimensions	Sadness <sup>a</sup>	AUs <sup>b</sup>	Hot Anger	AUs	Pleasure Happiness	AUs	Elation	AUs
Suddenness	low	—	high	AU1b + AU2b + AU25	low		high/medium	AU1b + AU2b + AU25
Familiarity	low	AU4a + AU7	low	AU4a + AU7	high			
Predictability			low	AU4b	medium		low	
Intrinsic pleasantness					very high	AU6 + AU12c + AU43	high	AU6 + 12b
Concern relevance			high				high	
Outcome probability	very high		very high		very high		very high	
Expectation			low		high		low	
Conduciveness	obstruct	AU4b + AU7b	obstruct	AU4b + AU7b + AU17b + AU23b	medium	AU6 + AU12c + AU17b + AU23b	very high	AU6 + AU12d
Urgency	low		high	intensification, high tension	very low	deamplification, low tension	low	
Cause agent			other					
Cause motive	chance	intent					chance/intent	
Control	very low	AU1c + AU15c + AU41 + AU64	high					
Power	very low	AU20c + AU26	high	AU17c + AU24				
Adjustment	medium	high			high		medium	
External norms		low		AU10c	medium		high	
Internal norms		low			medium		high	

*Note.* AU numbers and names: 1 (inner brow raise); 2 (outer brow raise); 4 (brow lowering); 5 (upper lid raise); 6 (cheek raise); 7 (lids tight); 10 (upper lip raise); 12 (lip corner pull); 15 (lip corner depress); 17 (chin raise); 23 (lips tight); 24 (lip press); 25 (lips part); 41 (lid droop); 43 (eyes closed); 63/64 (eyes up/down); for some AUs, intensity is coded from a to e.

Kaiser & Wehrle (2001)





**FIGURE 9.3.** Representational similarity analysis of emotion concepts. The figure schematizes the flow of an experiment that used multivariate RSA to ask how people conceptualize emotions, from reading brief written scenarios (Skerry and Saxe 2015). See the text for details. Reprinted with permission from Dubois and Adolphs 2015.