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Emotional range in value-sensitive deliberation

This is the author's manuscript

Original Citation:

Availability:

This version is available <http://hdl.handle.net/2318/147231> since 2016-11-30T12:15:38Z

Publisher:

IFAAMAS

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2. RELATED WORK

causal interpretation

3. BACKGROUND AND MOTIVATIONS

liking *praiseworthiness* *desirability*

- *Event-based*
- *Attribution*
- *Attraction*
- *Compound*

emotional reward

you ought to have tried harder *you ought not*
to do things that upset other people

praiseworthiness

thinness

blamewor-

bility of success

required

probab-
importance

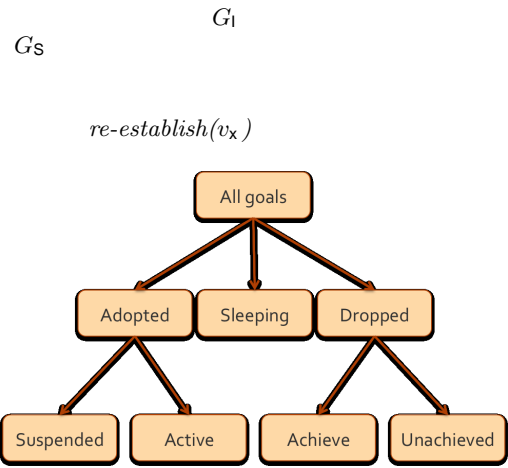


Figure 1: Taxonomy of goals states

4. VALUE-SENSITIVE AGENT MODEL

(MS, E)

V B $V_{atStake}$ G
 $v \in V$ $v(r, d, Vc)$ r
 d $-$ $-$
 Vc $vc_i \in Vc$
 $g(Ac, Sc, Fc, S,)$ Ac g $ac_i \in Ac$
 Sc $sc_i \in Sc$ Fc fc_i
 $\in Fc$

$e(Type, Int, Obj, Ag)$ $Type$
 Int
 Obj

$\pi(G, T, u)$ G
 u

5. MORAL EMOTIONS IN DELIBERATION

$UASet$ $Updates$ $Action$ Set π_{opt} $updates,$
 $action$ $updates$
 B
 Ac Sc Fc
 Vc $action$

- $g_i \in G_1$
Distress $e(\text{Distress}, I_D, g_i, \text{self})$

Example

- $v_i \in V$
 V_{atStake} Pride $e(\text{Pride}, I_P, v_i, \text{self})$

Example

Goal/plan selection
 $g_i \in G$

$\pi_{i,k} \in$

Execution

π_{opt}

π_{opt}

Monitoring
 $(\text{update}(B))$

- $v_i \in V$
Self-Reproach $e(\text{Self-reproach}, I_{SR}, v_i, \text{self})$

Example

Emotional Appraisal

- $v_i \in V$
 V_{atStake} Admiration $e(\text{Admiration}, I_A, v_i, \text{other})$

expect utility model

g_i

Example

- $v_i \in V$
 v_i, other Reproach $e(\text{Reproach}, I_R, v_i, \text{other})$

Example

- $g_i \in G_1$
Joy $e(\text{Joy}, I_J, g_i, \text{self})$

Example

- $g_i \in G_1$
 $v_i \in V$
 V_{atStake}

Table 1: Emotion generation rules

Category	Eliciting condition	Agent	Intensity
Joy	a goal $g_i \in G_I$ achieved	self/other	$Imp(g_i) * E(\pi_{i,k})$
Distress	a goal $g_i \in G_I$ not achieved	self/other	$Imp(g_i) * E(\pi_{i,k})$
Pride	a value $v_i \in V_{atStake}$ balanced	self	$(r(v_i) + Imp(g_i) + d(v_i)) * E(\pi_{i,k})$
Self-reproach	a value $v_i \in V$ at stake	self	$(r(v_i) + Imp(g_i) + d(v_i)) * E(\pi_{i,k})$
Admiration	a value $v_i \in V_{atStake}$ balanced	other	$r(v_i) + Imp(g_i)$
Reproach	a value $v_i (r, C) \in V$ at stake	other	$r(v_i) + Imp(g_i)$
Gratification	a goal $g_i \in G_I$ achieved, a value $v_i \in V_{atStake}$ balanced	self	$I(Joy) + I(Pride)$
Gratitude	a goal $g_i \in G_I$ achieved, a value $v_i \in V_{atStake}$ balanced	other	$I(Joy) + I(Admiration)$
Remorse	a goal $g_i \in G_I$ achieved, a value $v_i \in V$ at stake	self	$I(Self-reproach) + I(Distress)$
Anger	a goal $g_i \in G_I$ not achieved, a value $v_i \in V$ at stake	other	$I(Reproach) + I(Distress)$

Gratification
 $e(Gratification, I_G, v_i, self)$

6. DISCUSSION AND CONCLUSIONS

Example

- $$g_i \in G_I$$

$$v_i \in V_{atStake}$$

Gratitude $e(Gratitude, I_G, v_i, other)$

Example

- $$g_i \in G_I$$

$$v_i \in V$$

Remorse $e(Remorse, I_R, v_i, other)$

Example

- $$g_i \in G_I$$

$$v_i \in V$$

Anger $e(Anger, I_A, v_i, other)$

Example

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