

### Discordantly Meaningful: Examining Cognitive Mechanisms of Culture and Action

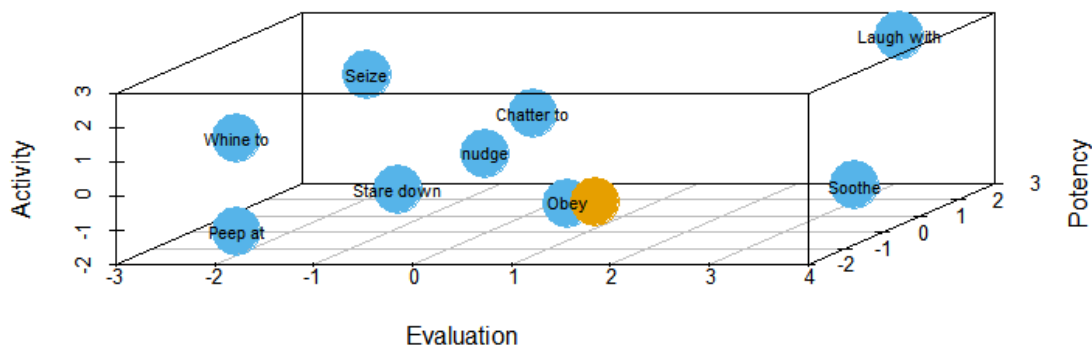
Affect Control Theory has a long history of robust predictive ability. As we usually do not create and test events we know to be illogical, however, it is possible that results thus far have been unintentionally biased in favor of deflection's significance. In order to create a rigorous test and verify the predictive ability of deflection, I devised and orchestrated a validation study which removed the possibility of researcher bias. A representative identity and behavior was selected from the origin and from each octant of EPA space, and respondents were asked to choose the best possible behavior to complete the 81 events generated by crossing each of the 9 identities. If ACT's mechanism of deflection is a definitive predictor, respondents should choose from the possible behavior choices the one that is closest in EPA space to that of the mathematically optimal deflection-reducing behavior for each of the 81 events. Results from a negative binomial regression showed that deflection is indeed significantly predictive. The difference in the log of expected counts of respondent choice decreases by .052 units ( $p < 0.001$ ) per every unit increase in overall deflection score; deflection does in fact appear to be a cognitive mechanism that guides affective decisions and event evaluations. Deflection, however, is not the only predictive mechanism.

ACT's predictions are predicated on the mechanism of deflection reduction, with the presumption that social institutions impose cognitive constraints on this process. The newly-developed ACT of Institutions (ACT-I) has specified a new mechanism of cognition, one which explicitly takes into account the necessity of identity selection's adherence to social institutions. This calls in to question what must occur when an event is either institutionally sensible or low deflecting, but not both. How do these mechanisms work in concert? Evidence from a 3-condition experiment shows that in contrast to ACT predictions, but consistent with ACT-I predictions, respondents reported that high deflecting, institutionally concordant events were more plausible and more likely than low deflecting, institutionally discordant events: meaning disruptions elicited by institutionally out-of-place behaviors or identities are as or more impactful than affective meaning disruptions captured by ACT's impression change equations. In keeping with the results of the validation study, deflection remained highly significant; a linear mixed model showed that when controlling for institutional concordance, deflection had a nearly 1:1 ratio with likelihood ratings. Institutional concordance, however, is paramount. The mechanism of deflection reduction is highly predictive of likelihood ratings and remains so when controlling for institutional concordance, but the mechanism is not initially activated unless the event first possesses institutional concordance. This has been the missing puzzle piece in the equations (though not the assumptions) of Affect Control Theory. While both mechanisms significantly determine estimations of event likelihood, institutional concordance is essential to event processing and must be incorporated into ACT's formalized equations. This research offers a clearer picture of the tandem operation of two distinct cognitive mechanisms, helping to link the unconscious and the conscious elements of cognitive processes for the understanding of social interaction.

Validation Tables/Figures:

*Representative Octant Space Identities and Behaviors*

Octant Space	Behavior	EPA Profile	Identity	EPA Profile
HHH	Laugh with	3.23 2.48 2.53	firefighter	3.26 3.01 2.31
HHL	Soothe	2.92 2.11 -1.64	psychiatrist	1.78 1.80 -1.15
HLH	Chatter to	0.45 0.06 1.43	child	1.97 -1.17 2.01
HLL	Obey	0.91 -0.25 -1.05	janitor	1.49 -0.99 -1.02
LLL	Peep at	-2.13 -1.05 -1.5	coward	-2.35 -3.05 -2.08
LLH	Whine to	-2.01 -1.37 1.40	crybaby	-2.47 -2.08 1.94
LHL	Stare down	-1.43 1.40 -1.41	drug dealer	-2.26 1.57 -0.73
LHH	Seize	-1.91 1.84 1.74	gossip	-2.27 0.99 1.74
neutral	nudge	-0.03 0.01 0.29	stranger	-0.05 -0.17 -0.20



Above figure depicts the EPA space locations for the validation study's representative behavior options (blue) alongside the mathematically-optimal deflection-reducing behavior for the event "A janitor is likely to \_\_\_\_ a janitor"

Mechanism Experiment Tables:

*Mean Likelihood Ratings by Condition*

Condition	Mean Likelihood Rating (1-100)
1. Institutionally concordant, high deflection	80.36
2. Institutionally concordant, low deflection (control)	89.07
3. Institutionally discordant, low deflection	12.17

*Effects on Event Likelihood Ratings: A Linear Mixed Model*

Predictor	Coefficient (standard error)
Event deflection score	-0.81*** (0.22)
Institutional concordance	77.85*** (3.36)
Constant	15.05*** (2.54)

$p < .001^{***}$