Predictive Power of Emotion Analytics

Australian and US Elections
Polling industry fails on its biggest stage: the U.S. election
The philosophy behind 538 is: Prove it. Doesn't mean we can't be wrong (we're wrong all the time). But prove it. Don't be lazy.

4:38 PM - 5 Nov 2016
Nobody would say, “I’m voting for this guy because he’s got the stronger chin,” but that, in fact, is partly what happens.

Daniel Kahneman
Where do we find the answer in the sea of data?
Human brain has the data, **BUT** how do we extract it?
Conscious feelings, like the feeling of being afraid or angry or happy or in love or disgusted, are in one sense no different from other states of consciousness, such as the awareness that the roundish, reddish object before you is an apple.

*Joseph LeDoux, Rethinking the Emotional Brain, 2012, Neuron*
HEARTBEAT is based on W. G. Parrott’s Classification of Emotions and recent findings in Affective Neuroscience (including the work of J. LeDoux, R. Davidson and J. Panksepp).

W. Gerrod Parrott’s Emotion Classification

Clusters of Joy

Admiration w/Something
Power & Confidence
Optimism & Encouragement
Peace & Relaxation
Hope & Contentment
Gratitude
Pleasure & Sensuality
Guilty Pleasure
Excitement & Thrill
Curiosity & Wonderment
Luck & Happy Surprise
Achievement, Pride & Success
Inspiration & Enthusiasm
Zest & Celebration
Courage
Togetherness
Humour, Fun & Play
Fun Fear & Excitement
Clusters of Anger

- Fury, Rage & Wrath
- Aggression & Violence
- Hatred & Hostility
- Angry Surprise
- Resentment & Disapproval
- Frustration & Disappointment
- Envy & Jealousy
- Remorse & Anger at Self
- Annoyance & Exasperation
- Irritation & Aversion
- Impatience
- Criticism
- Uptightness
- Arrogance
- Assertiveness
- Rightful Anger
Clusters of Fear

- Horror, Terror & Despair
- Remorse
- Hatred & Resentment
- Distrust
- Embarrassment & Humiliation
- Anxiety & Worry
- Nervousness & Stress
- Submission
- Pain & Suffering
- Aversion & Phobia
- Fear of Change
- Timidity
- Fear of Separation
- Fear of Inadequacy
US Election Polling Report:
Malcolm Turnbull 50.36%

Bill Shorten 49.64%
Australian Election Polling

- Google Consumer Surveys platform
- N=943
- National Sample
- May-July 2016
Q.: How do you feel about Bill Shorten/Malcolm Turnbull becoming the next PM of Australia?
Who would you vote for?

Bill Shorten

Who would you vote for?

Malcolm Turnbull

Voter Preference

Voter Expectations of who would be next PM

RATIONAL MODEL COMPONENT

EMOTIONAL MODEL COMPONENT

Training data n=700
Validation data n=243
Anger MT 19%
Anger BS 19%
Trust MT 13%
Joy MT 27%

Resentful, disapproval, critical, irritation
Surprise, anger, frustration, disappointment
Confidence and certainty
Vs
Intimacy, community, faith, belief, relief, acceptance

Hope, contentment, optimism, encouragement, peace, relaxation, humour, fun & play
Achievement, pride, success, power, confidence
US Election Polling

- Google Consumer Surveys platform
- N=2034
- “Swing States”: Florida, Iowa, Ohio, and Pennsylvania
- September-November 2016
<table>
<thead>
<tr>
<th>State</th>
<th>Florida</th>
<th>Iowa</th>
<th>Ohio</th>
<th>PA</th>
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<tbody>
<tr>
<td>Actual</td>
<td>51 / 49</td>
<td>55 / 45</td>
<td>54 / 46</td>
<td>51 / 49</td>
</tr>
<tr>
<td>Predicted</td>
<td>52 / 48 (92.7%)</td>
<td>58 / 42 (96.4%)</td>
<td>63 / 37 (95.2%)</td>
<td>54 / 46 (94.4%)</td>
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Emotion is the secret sauce
Thank you for your attention :-)