THE EMOTIONAL COHERENCE OF DONALD TRUMP

Paul Thagard
University of Waterloo
Outline

1. Political decisions
2. Value maps
3. Emotional coherence
4. Emotions
5. Emotional communication
Individual Decisions
Models of Decision Making

1. Rational choice by maximizing expected utility based on preferences.
2. Prospect theory
3. Fast and frugal heuristics.
4. Inference to the best plan based on emotional coherence, tied to values. Thagard (2006), Hot Thought, MIT Press.
Values in Decision Making

Why did 62 million Americans vote for Trump?

Positive values: America, jobs, military, law and order

Negative values: illegal immigrants, terrorists, Washington insiders, elites

Hypothesis: people vote for candidates whose values are emotionally coherent with their own. Westen 2007: The Political Brain.

Simon, Stenstrom, & Read, JPSP, 2015.
What are Values?

1. Preferences?
2. Abstract ideas?
3. Subjective opinions?
4. Values are mental processes that combine cognitions and emotions in the brain.

Values are not isolated, but occur in systems.
Cognitive-Affective Maps

New kind of concept map that represents values and emotions.

Nodes represent concepts and objects.

Positive: green ovals

Negative: red hexagons

Neutral: yellow rectangles

Lines represent mutual support (solid) or incompatibility (dotted).
Cognitive-Affective Maps

- positive element
- neutral element
- strongly positive element
- negative element

mutual support
incompatibility
Value Map: Hillary

tax evader

Trump

liar

gun loopholes

Hillary

jobs

federal infrastructure

Obamacare

minorities

women

immigrants
Inference (e.g. voting) is not based on argument, but on parallel processing of coherence (Thagard 2000, 2006).

Coherence can be modeled computationally using units that stand for mental representations (e.g. beliefs, concepts) that have excitatory and inhibitory connections.

In emotional coherence, representations have both an acceptability and an emotional valence.
Decisions and other inferences result from an “emotional Gestalt”, in which people figure out what fits best with their beliefs and their goals.

People adopt a plan because it “makes sense”, cognitively and emotionally, i.e. because it is emotionally coherent.

HOTCO (for hot coherence) provides a mathematical/computational model of how emotional coherence produces inferences.

The New Synthesis

Thesis (1950s): Intelligence results from the processing of physical symbols (Herbert Simon, traditional AI, ACT).

Antithesis (1980s): Intelligence results from sub-symbolic processes in neural networks, operating with distributed representations.

Synthesis: Neural networks are capable of symbolic processes, using semantic pointers.

Semantic Pointers
(Eliasmith 2013)

Semantic pointers are patterns of neural firing that:

1. provide shallow meaning through symbol-like relations to the world and other representations;
2. expand to provide deeper meaning with relations to perceptual, motor, and emotional information;
3. support complex syntactic operations;
4. help to control the flow of information through a cognitive system to accomplish its goals.
FORMATTION

semantic pointer

bind bind bind

sensory motor emotional verbal
FUNCTION

semantic pointer

infer

unpack unpack unpack

sensory motor emotional verbal
Emotions are Semantic Pointers

Emotion = bind (representation, cognitive appraisal, physiological perception)

Example: liking Trump = bind (Trump, appraisal, physiology)

Concepts, beliefs, appraisal, and physiology are all patterns of neural firing.

Binding is by convolution as performed in the Semantic Pointer Architecture.

Values are Semantic Pointers

Value = bind (concept or belief, cognitive appraisal, physiological perception)

Example: valuing America = bind (America, appraisal, physiology)

Result: candidates appeal is appealing as the basis for personal decisions if its values fit with your own values and needs.
Trump semantic pointer

situation: Trump (multimodal) appraisal: goals for self, America physiology: high heart rate, vote motor: smile, etc.
Trump's Emotions

Pride: self, America
Sadness, frustration: job loss, decline
Anger, hatred, resentment: terrorists, illegal immigrants, liberals, elites
Fear: terrorists, immigrants
Hope: improve country and people’s lives
Disgust: Hillary
RESULT: Emotional metacoherence
Emotional Communication

- Mirror neurons
- Emotional contagion via mimicry
- Nonverbal spread
- Verbal spread
- Attachment-based learning
- Empathy and emotional analogy

- Altruism and sympathy
- Emotional cuing, e.g. anger -> guilt
- Power: provide something desired, or threaten something feared
- Propaganda, advertising
- Teaching
- Interaction rituals
Conclusions

1. Emotions and values are neural processes – semantic pointers.
2. Voting is driven by emotional coherence.
3. Trump was emotionally coherent with many voters values.
4. Electoral change is a battle of systems of values and beliefs.