

Psycho-Sociology at the Science/Policy Interface

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- Some key explanatory concepts
- A few implications...
 - at an individual level
 - at an organizational level

Some propositions...

- Information has ***no intrinsic value or meaning***
- Meaning and value are ***constructed by individuals*** in context of society & culture
- Science produces ***information***; science has no intrinsic value or meaning
- One of our intellectual tasks is to ***explain why individuals respond the way they do*** in specific contexts to specific information

Some propositions...

In other words....

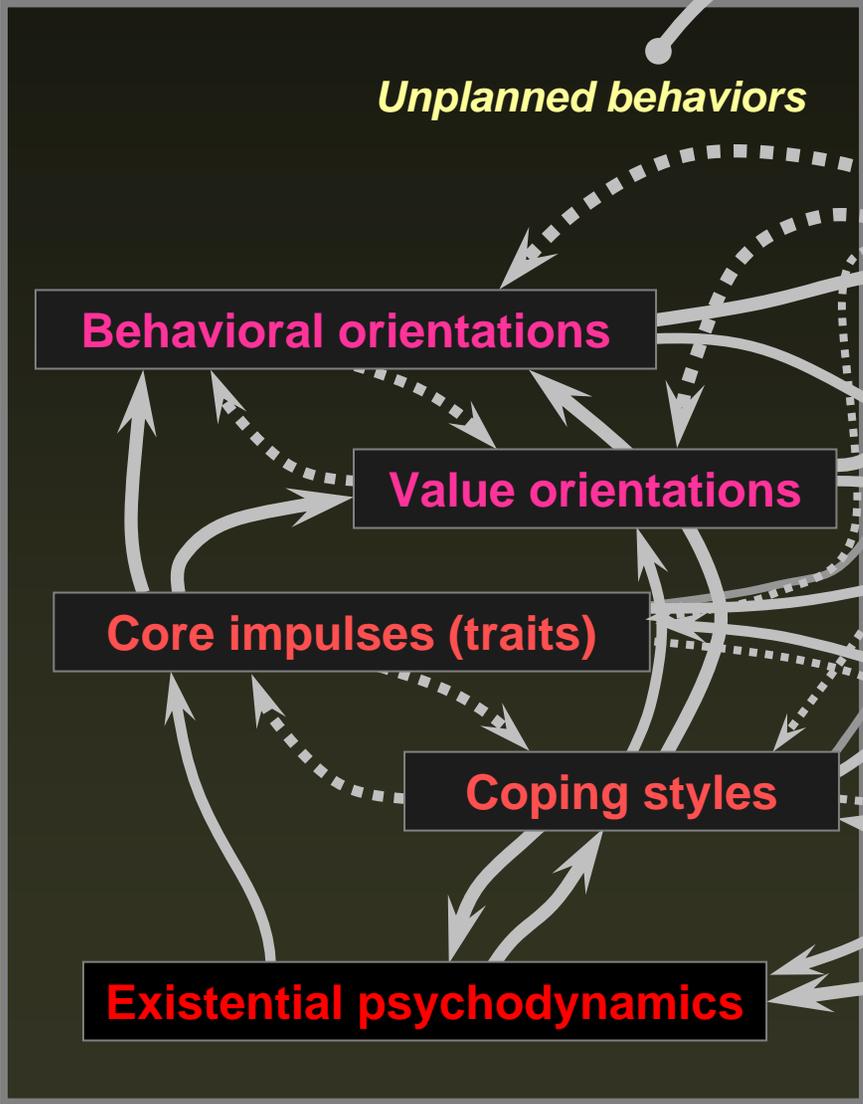
*How is that uttered sounds, marks on paper & computer screens, and other sensory stimuli are ascribed **meaning and value**?*

Psycho-Sociology at the Science/Policy Interface

Some key explanatory concepts

**“Information” (*making meaning*)
in a psychological context**

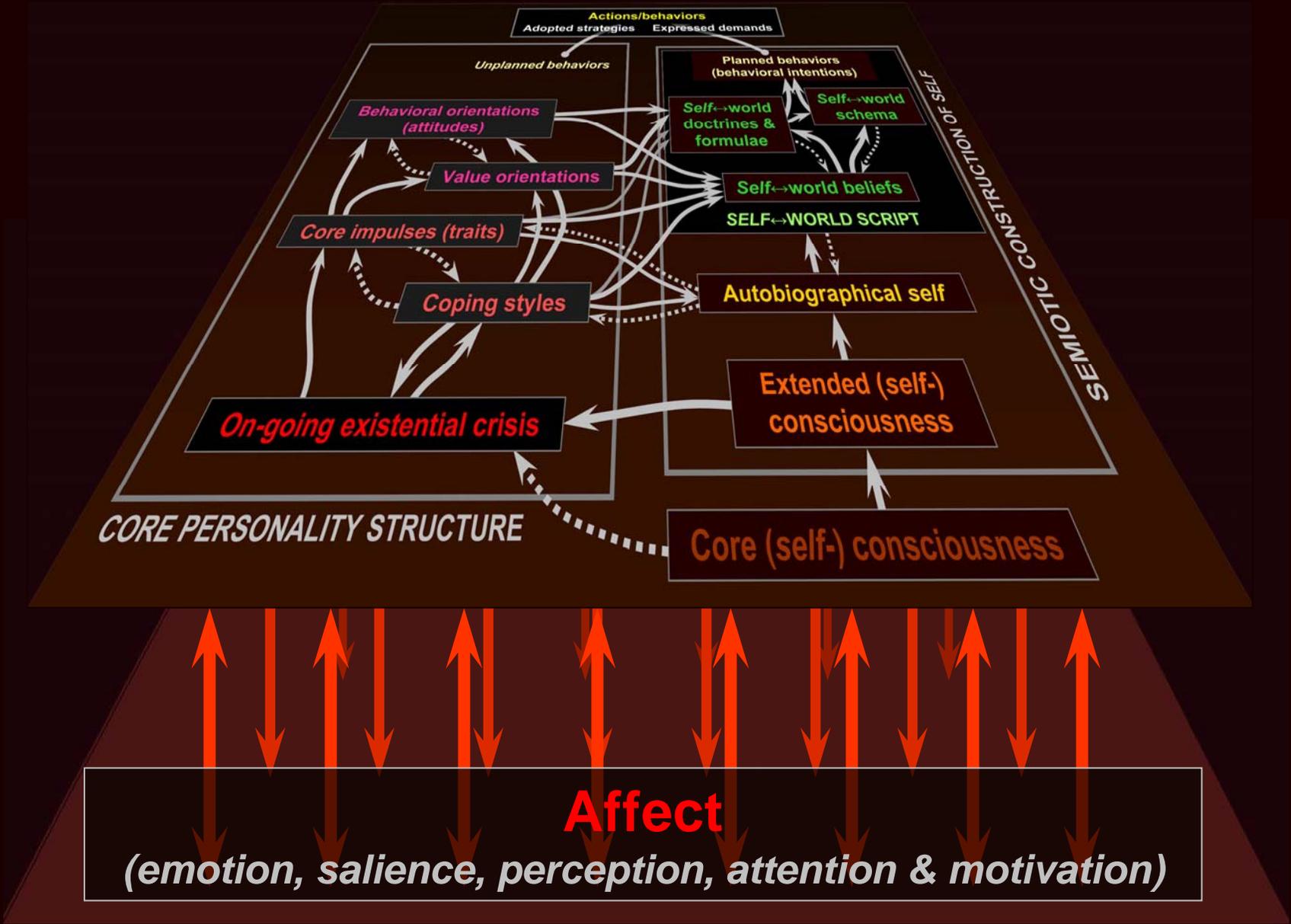
Actions/behaviors
Adopted strategies Expressed demands



CORE PERSONALITY STRUCTURE



SYMBOLIC & NARRATIONAL CONSTRUCTION OF SELF



A. Damasio

Human decision-making has a
fundamentally emotive basis.

“Rationality” affects humans, but primarily
mediated by affective responses to symbolic
constructions of information.

Bounded Rationality

Herbert Simon

Satisficing

decisions by...

Rules of thumb

Rubrics

Simple mental models

shaped by...

World views

Myths

This holds for scientists as well...

Thomas Kuhn

Actions/behaviors
Adopted strategies Expressed demands

Unplanned behaviors

Planned behaviors (behavioral intentions - preferences)

Behavioral orientations

Self↔world doctrines & formulae

Self↔world projections

Information with greater existential import has greater meaning

Self↔world beliefs
SELF↔WORLD SCRIPT

Core impulses (traits)

Coping styles

Existential concerns
Death
Isolation
Meaning
Responsibility

Existential psychodynamics

Extended consciousness

Autobiographical self

Core (self-) consciousness

CORE PERSONALITY STRUCTURE

Irvin Yalom

SYMBOLIC & NARRATIONAL CONSTRUCTION OF SELF

Actions/behaviors
Adopted strategies Expressed demands

Unplanned behaviors

Planned behaviors (behavioral intentions - preferences)

Behavioral orientations

Self↔world doctrines & formulae

Self↔world projections

Value orientations

“Big 5” personality traits
Extraversion
Openness to experience
Agreeableness
Conscientiousness
Neuroticism

Core impulses (traits)

Self↔world beliefs
Engagement
Self-control
Autobiographical self

“Openness to experience” affects receptivity to novel or challenging information

Coping strategies

Extended (self-) consciousness

CORE PERSONALITY STRUCTURE

Core (self-) consciousness
Bob McCrae *Paul Costa*

SYMBOLIC & NARRATIONAL CONSTRUCTION OF SELF

Actions/behaviors
Adopted strategies Expressed demands

Unplanned behaviors

Planned behaviors (behavioral intentions - preferences)

Self↔world projections

Self↔world doctrines & formulae

Self↔world beliefs

SELF-WORLD SCRIPT

ended

business

Autobiographical self

Somewhere between behavioral orientations & core impulses...

Tough-mindedness

Need for order & structure

Intolerance of ambiguity

Capacity for integrative complexity

Degree of positivism (*Attitude toward reality*)

Hard "thick" boundaries in the mind

Boundaries of the mind affect receptivity to novel or challenging information

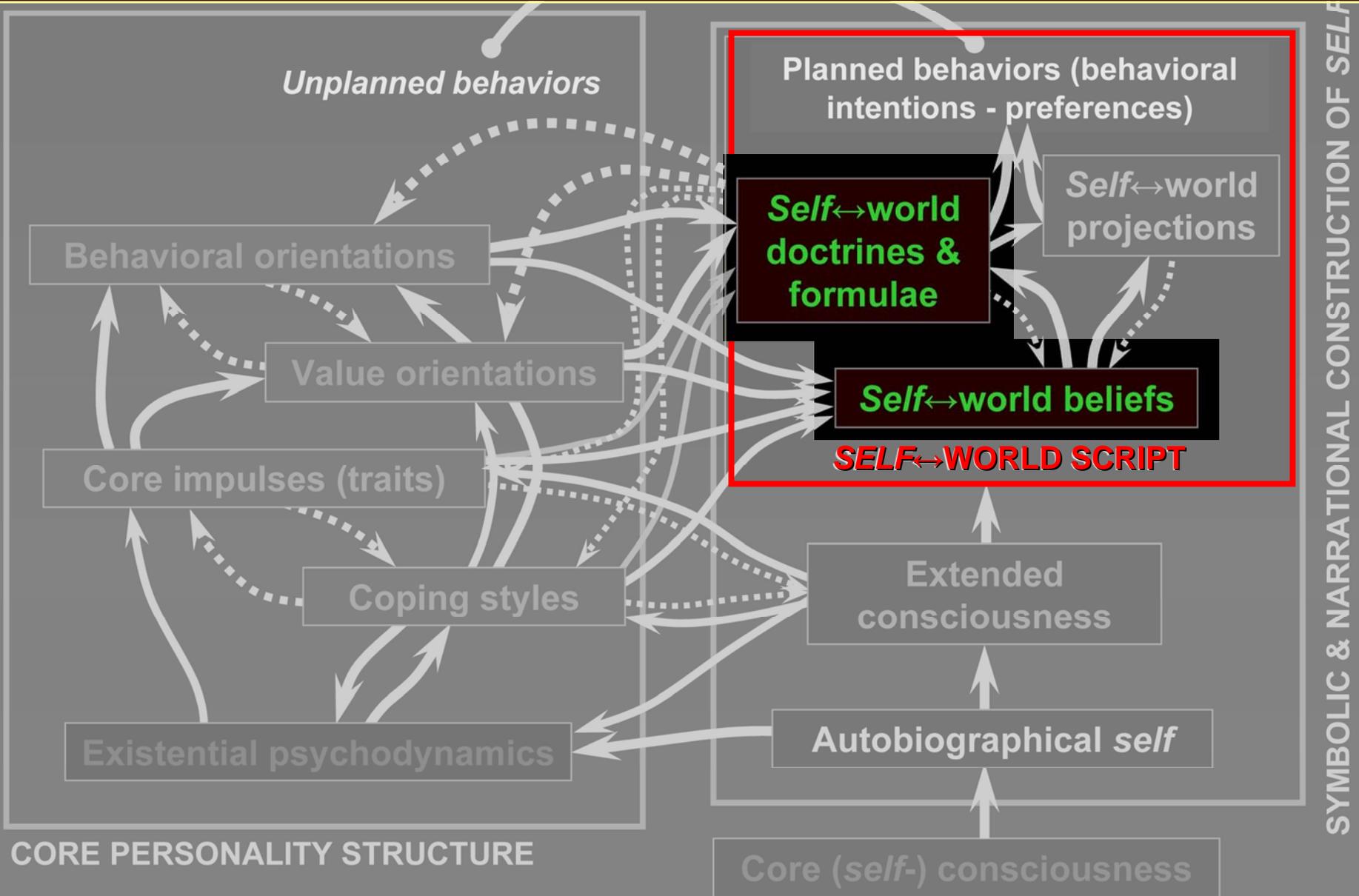
Existential psychodynamics

CORE PERSONALITY STRUCTURE

Core (self-) consciousness

SYMBOLIC & NARRATIONAL CONSTRUCTION OF SELF

Narrative constructive of meaning & consciousness



Worldviews & myth (some propositions)

- ▶ *Worldviews and myths are embedded in “self” script*
- ▶ *Worldviews and related myths embody a set of beliefs and related doctrines and formulae about how the world “is” and “should be.”*
- ▶ *Myths are the (more-or-less) coherent stories we tell ourselves and others to explain the world and project our expectations and demands onto it.*
- ▶ *Our myths intergrade with culture, especially that of our ingroup(s).*

Some prescriptive elements of myth

Doctrine: Assertions about how the world should be, including key words and phrases of particular symbolic import. (e.g., the doctrine of **capitalism**)

Formula: Assertions about how transformation of the world to a “proper” state should be done. (e.g., the institution of **private property rights**)

Miranda: Physical trappings and other symbolic manifestations (e.g., rituals) of the myth. (e.g., the **New York Stock Exchange**, particular kinds of ties and shoes, cell phones perpetually plugged in the ear)

Belief

*Encompasses internalized **worldviews** and **myths**.*

*Also...a condition that engenders **willingness to modify self-narrative** or otherwise act on the basis of received information.*

Belief

Differentiating at least 2 different domains within which individuals respond to, process, and potentially re-project information...

- 1. Psyche or Core Identity**, with existential import, organized around “**belief.**”
- 2. Strategic**, organized around service of perceived **self interests**, of more direct relevance to policy discourses, and not necessarily entailing “belief.”

Negativistic
Dominionistic
Utilitarian

Scientistic
Ecologistic

Moralistic
Humanistic

Naturalistic
Aesthetic

Nature-views

CORE PERSONALITY STRUCTURE

Planned behaviors (behavioral intentions - preferences)

Self↔world doctrines & formulae

Self↔world projections

Self↔world beliefs
SELF↔WORLD SCRIPT

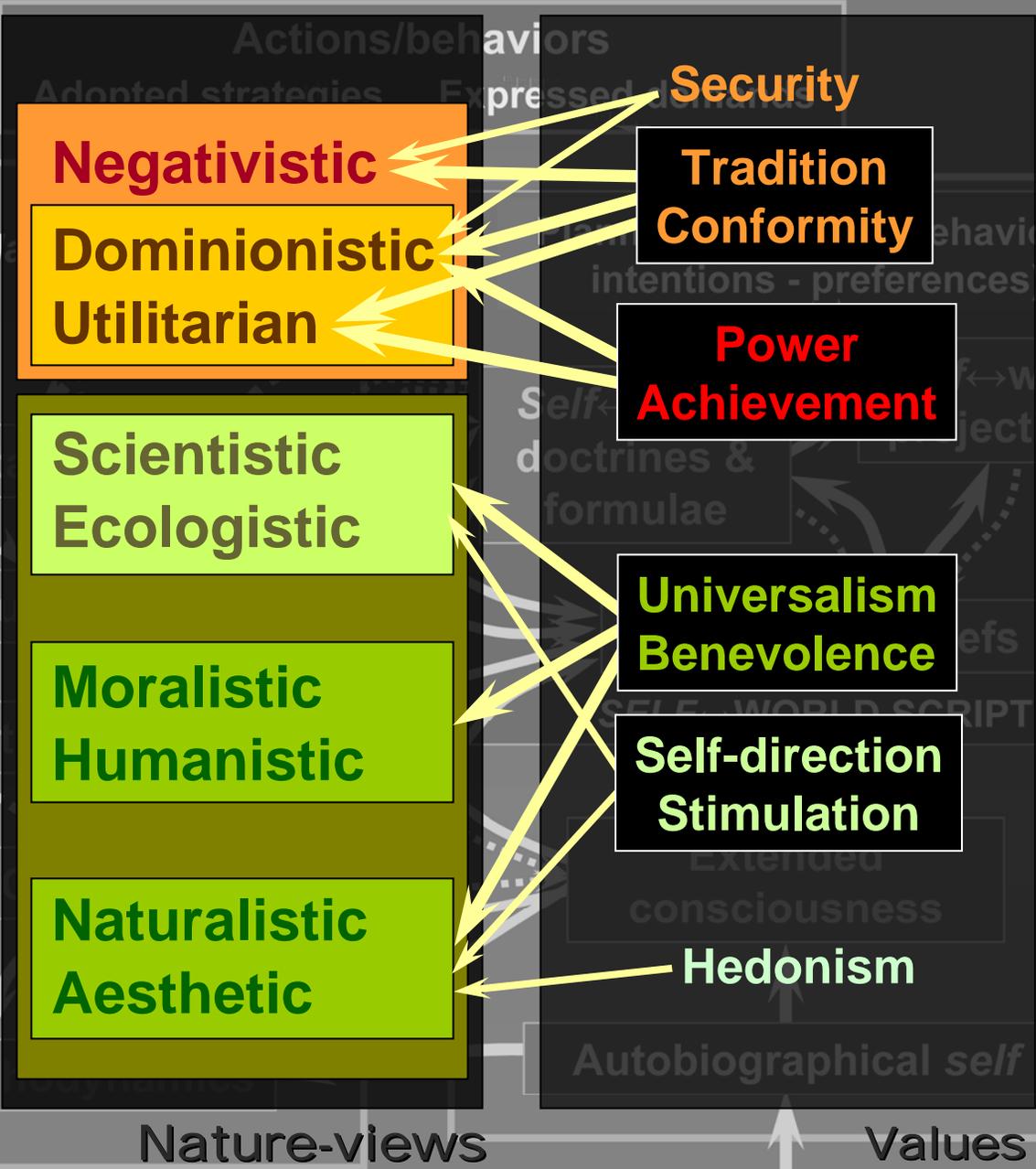
Extended consciousness

Autobiographical self

Stephen Kellert

Core (self-) consciousness

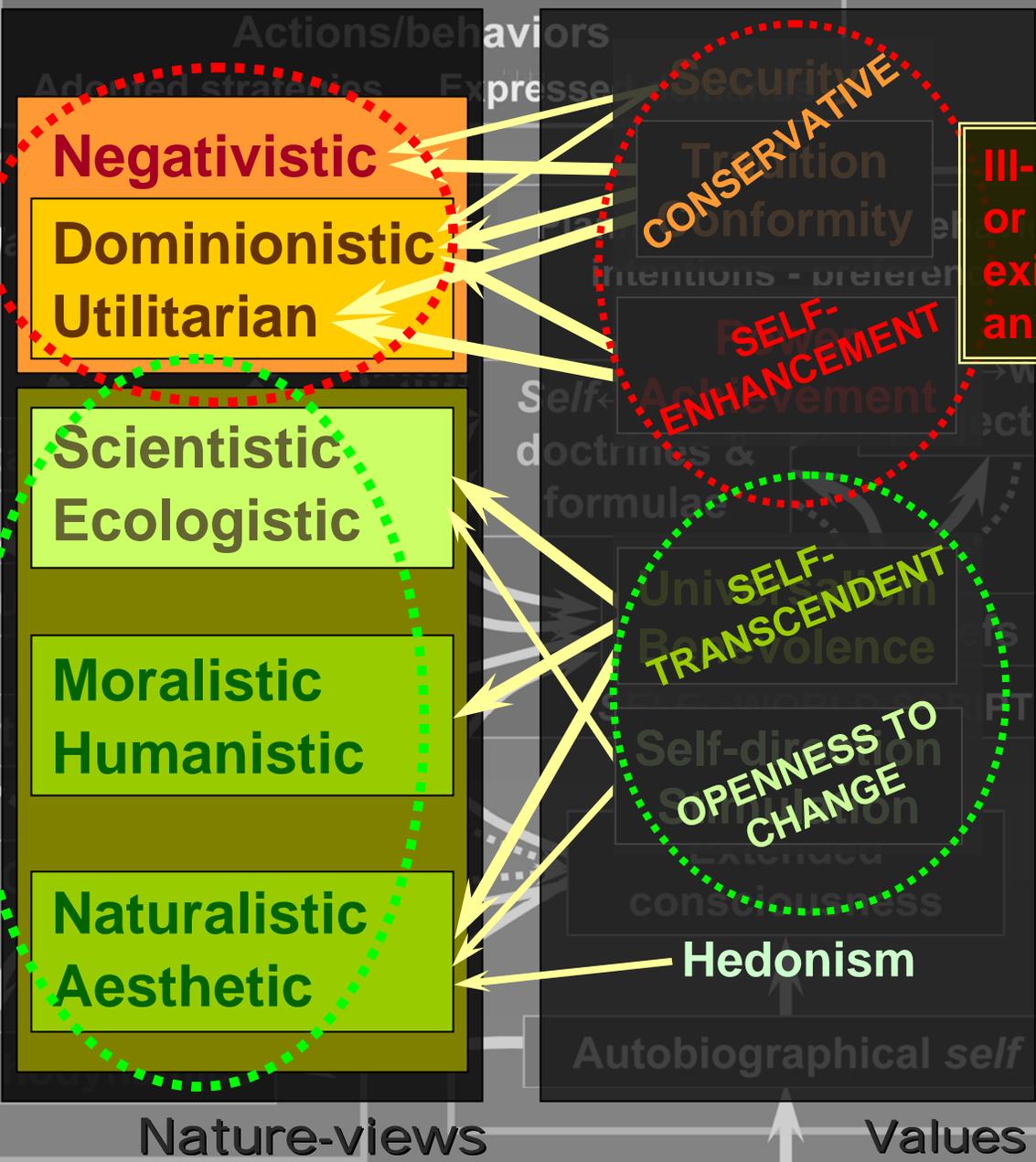
SYMBOLIC & NARRATIONAL CONSTRUCTION OF SELF



CORE PERSONALITY STRUCTURE

Core (self-) consciousness

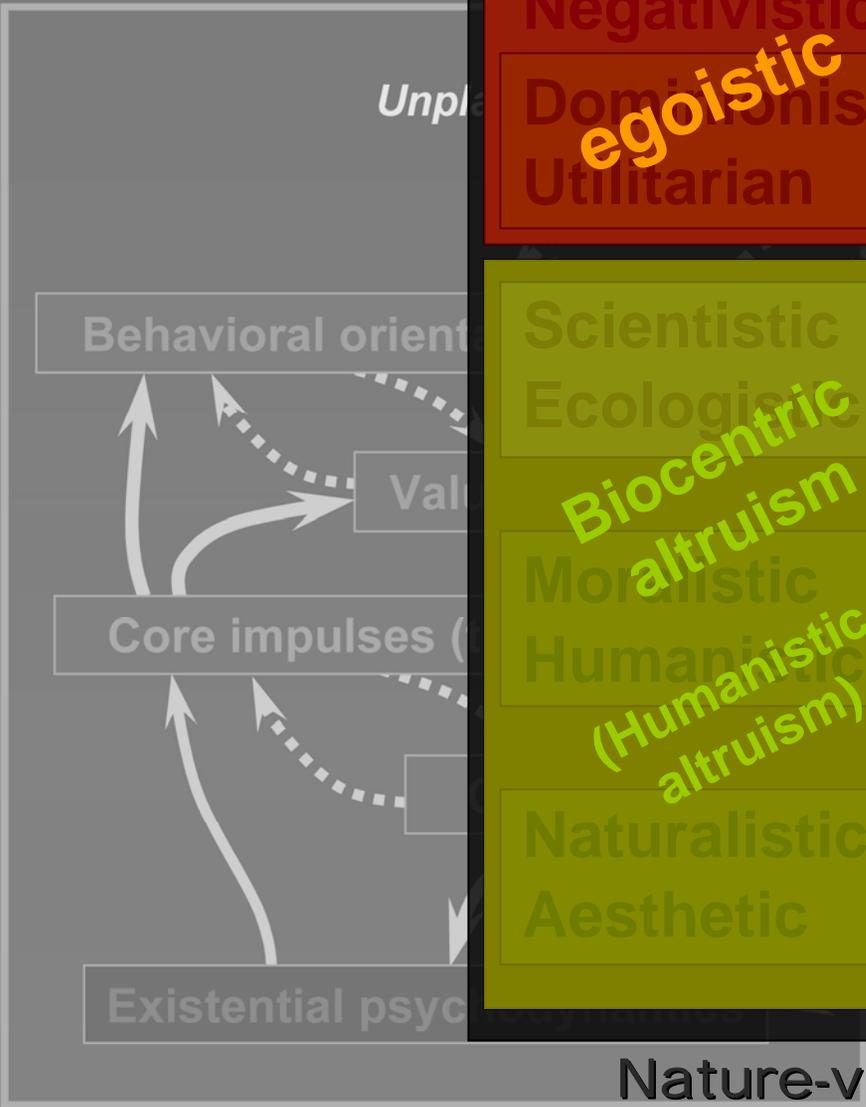
SYMBOLIC & NARRATIONAL CONSTRUCTION OF SELF



CORE PERSONALITY STRUCTURE

Core (self-) consciousness

SYMBOLIC & NARRATIONAL CONSTRUCTION OF SELF



Nature-views

Negativistic

egoistic

Dominant

Utilitarian

Scientific

Ecologic

Biocentric

altruism

Moralistic

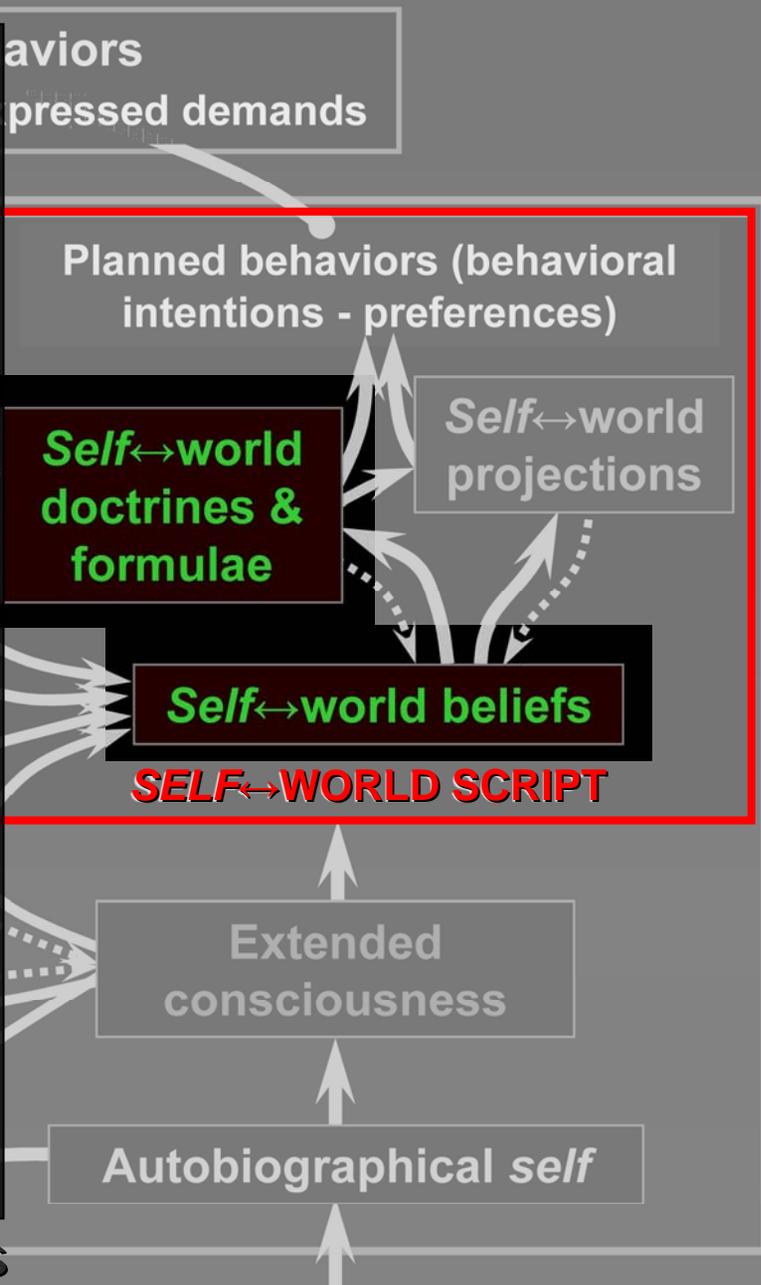
Humanistic

(Humanistic

altruism)

Naturalistic

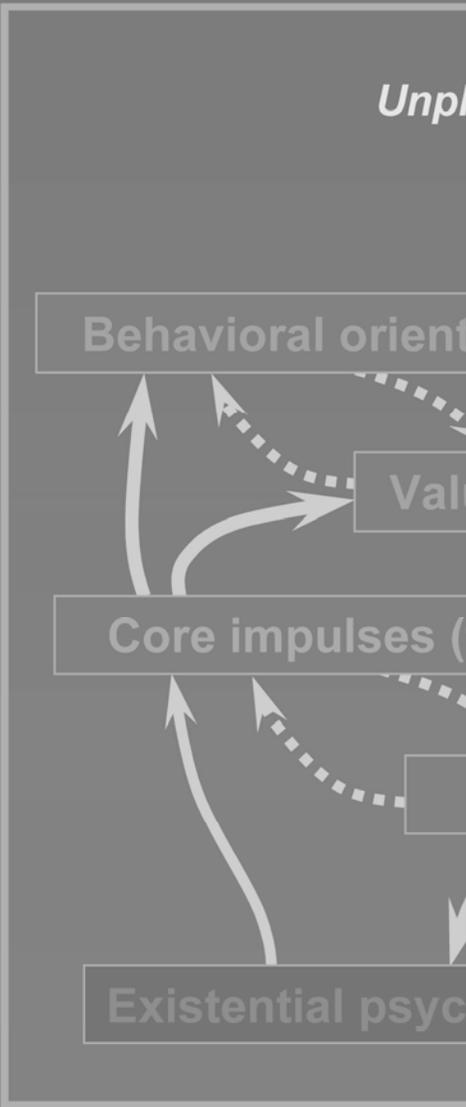
Aesthetic



CORE PERSONALITY STRUCTURE

Stephen Kellert

SYMBOLIC & NARRATIONAL CONSTRUCTION OF SELF



Actions/behaviors

Adopted strategies Expressed demands

Nativistic
egoistic
 Dominant
 Utilitarian

Scientific
Ecologic
Biocentric
altruism

Moralistic
Humanistic
(Humanistic
altruism)

Naturalistic
Aesthetic

Nature-views

Planned behaviors (behavioral intentions)

Ambivalence or hostility toward environmental & conservation policies

Self↔world doctrines & formulae

Self↔world projections

Self↔world beliefs

Advocacy or support for environmental & conservation policies

Extended consciousness

Autobiographical self

Core (self-) consciousness

CORE PERSONALITY STRUCTURE

SYMBOLIC & NARRATIONAL CONSTRUCTION OF SELF

Self-script *or* self-narrative



**Discursive construction
of the policy process**

Individual Responses to Information

Cognitive *Dissonance*

A condition that arises when self-narrative is confronted by disaffirming information.

Cognitive *Consonance*

A condition that arises when self-narrative is comforted by affirming information.

Cognitive dissonance

The Fundamentally Affective Basis

Dissonance → ***Anxiety***

Consonance → ***Pleasure***

Consistency with existing self-narratives



Level of **dissonance** (*affective & cognitive*)



Level of **negative affect** (*fear, anger, disgust*)

Dissonance can lead to...

Ego Defense/Defense of Self-Narrative

Information

Ignore

Deny

Distort

Discount

Messenger

Ignore

Discredit

Delegitimize

Destroy

So....

Cognitive dissonance

Imagine the response of a Power-oriented person, holding a Dominionistic/Utilitarian world view, to a scientist delivering information that threatens his or her power indulgences and suggests that extracting wealth from nature is “bad.”

Environment

“Adversity Coefficient”



**Levels of negative (*fear, anger, disgust*)
& positive (*sadness ↔ happiness*) affect**

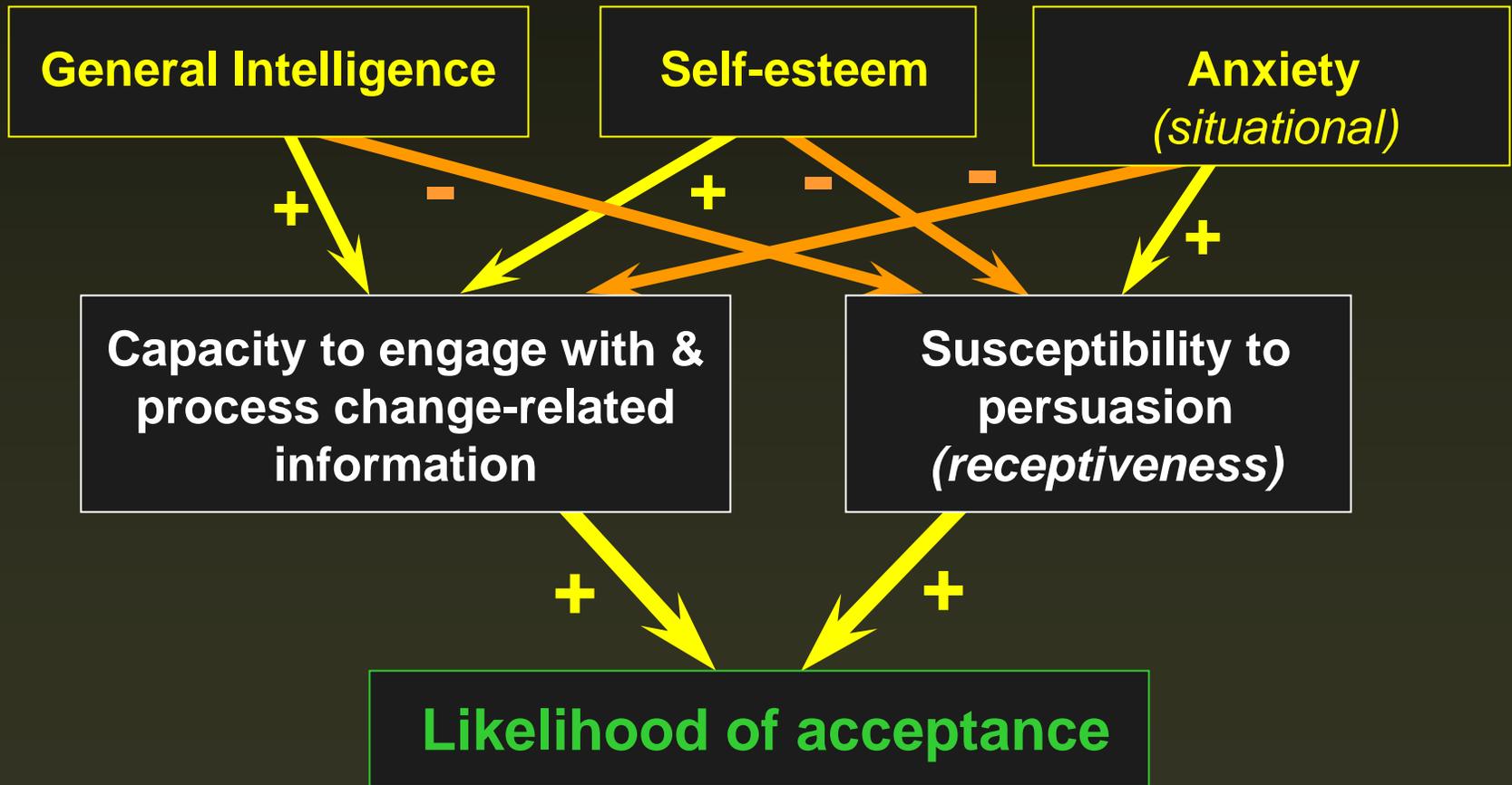
Environment

“Adversity Coefficient”



Levels of situational anxiety

Amenability to persuasion



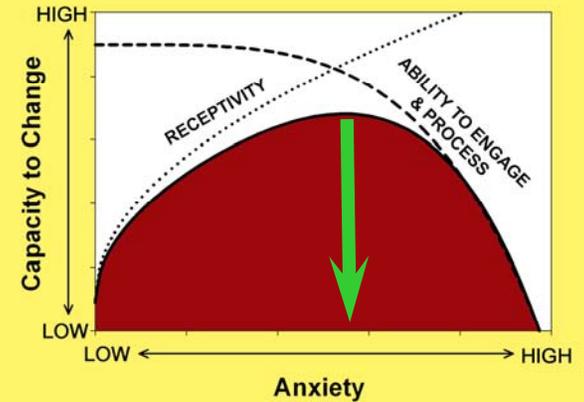
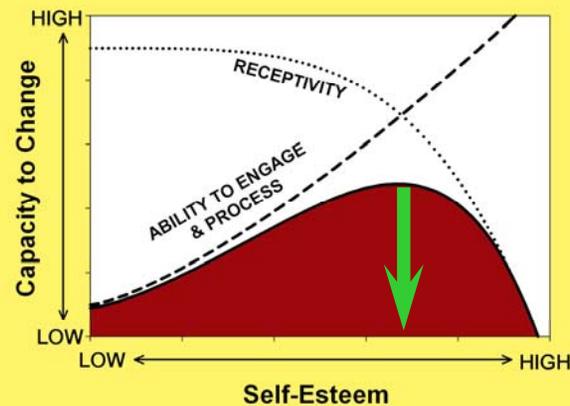
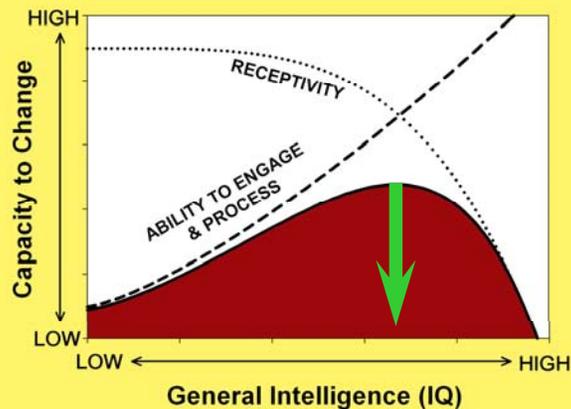
Responses to information: Self factors

Amenability to persuasion

General Intelligence

Self-esteem

Anxiety
(*situational*)

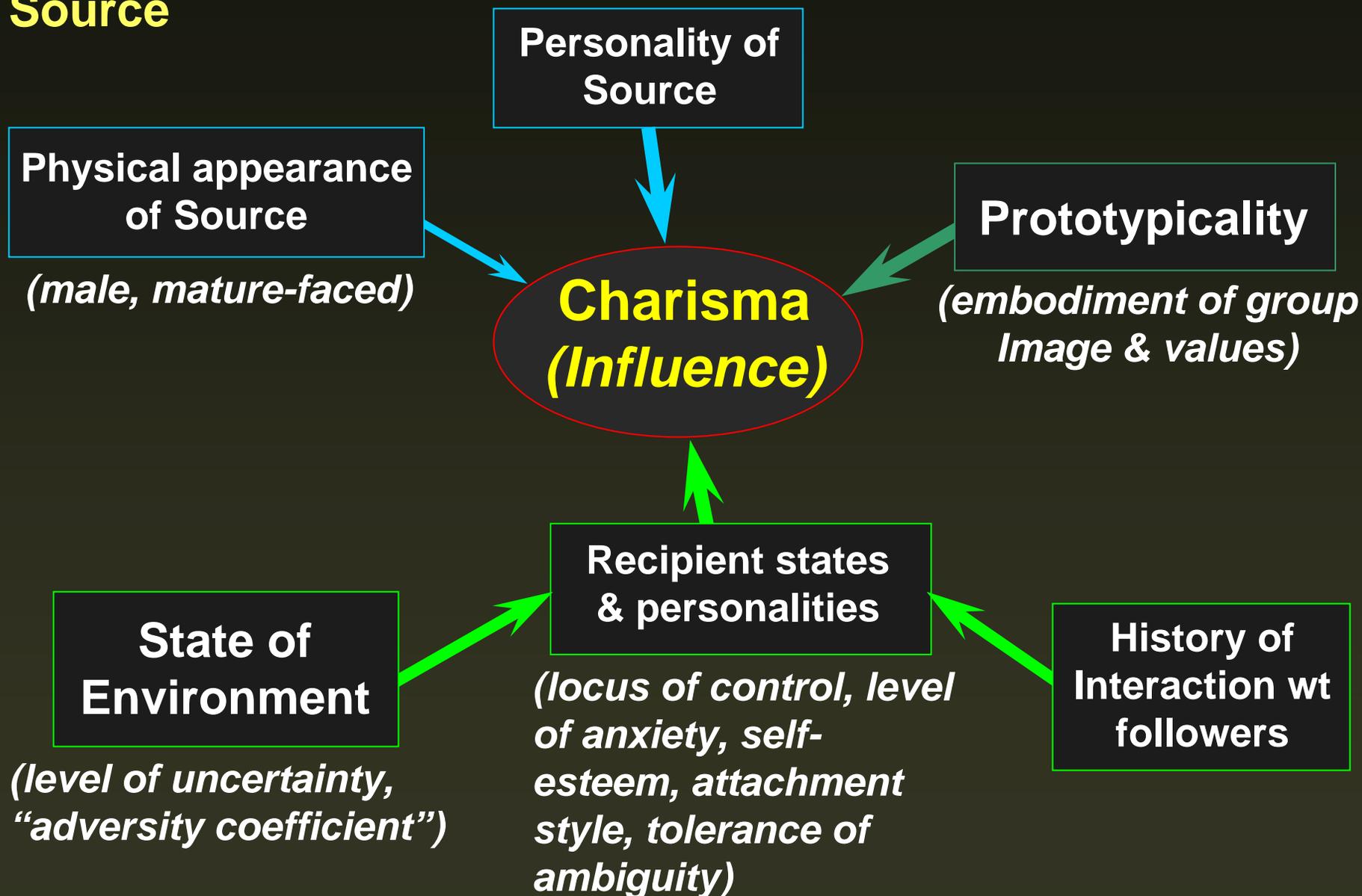


Most amenable to accepting new information?

Of moderate intelligence & self-esteem, experiencing moderate levels of situational anxiety

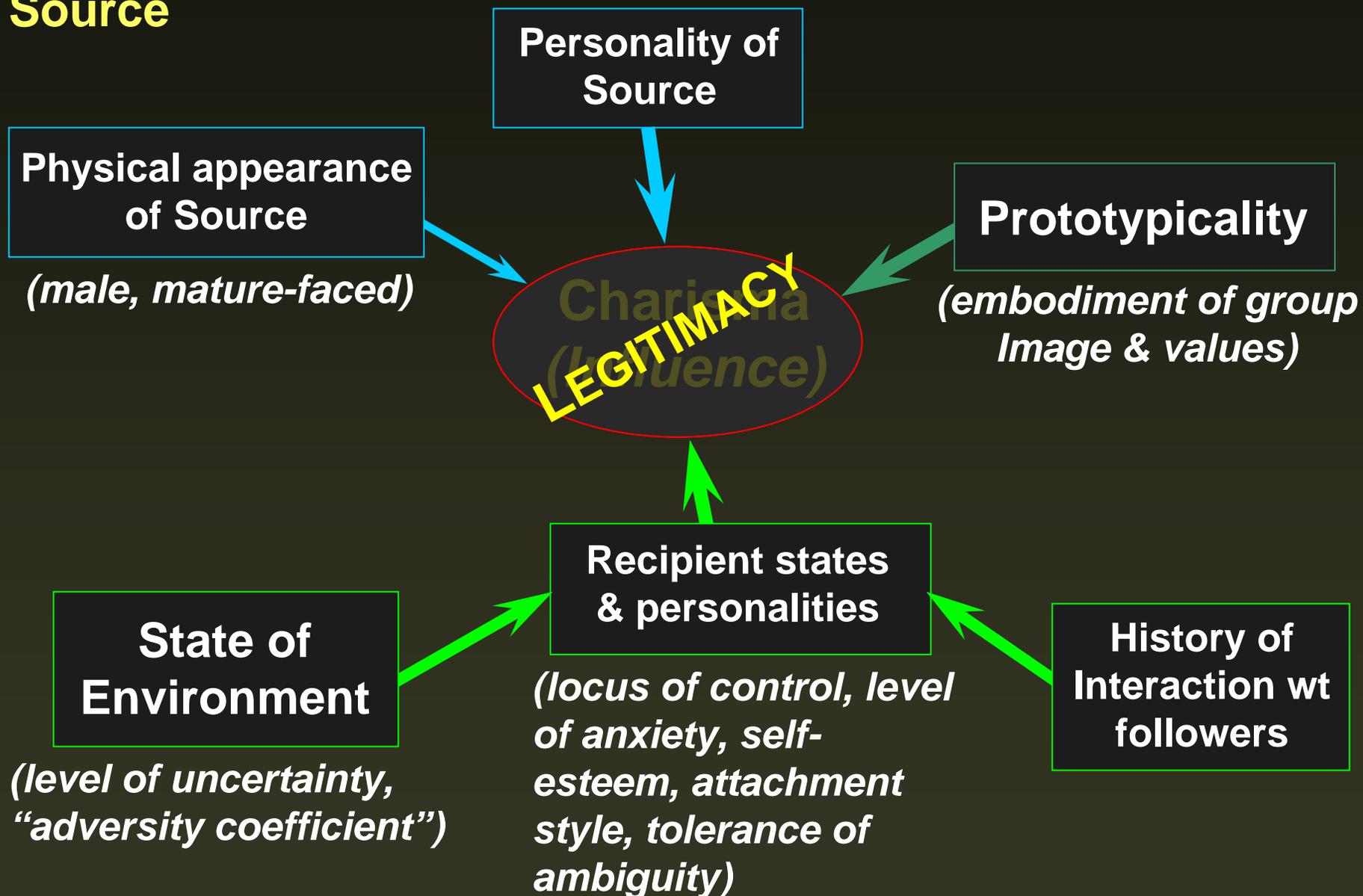
Responses to information: Self factors

Source



Responses to information: Self factors

Source



Discounting

In this context...

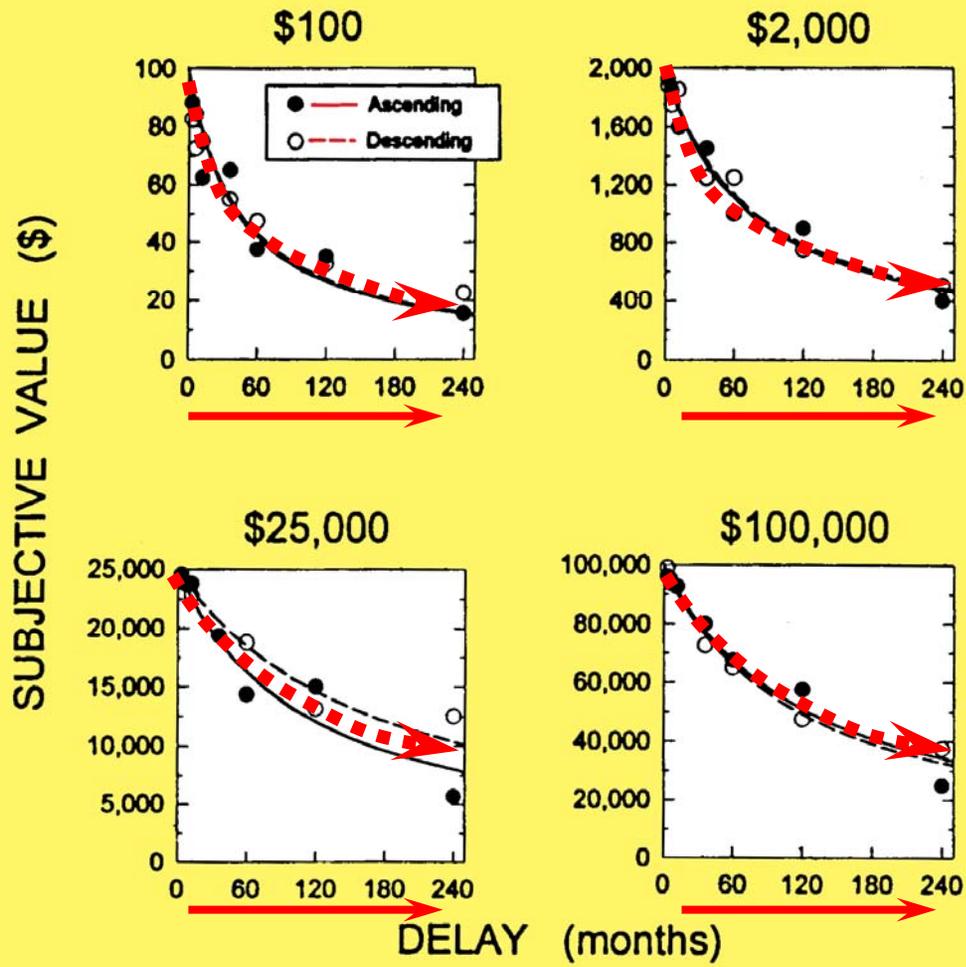
Discounting: *salience contingent on whether information pertains to events **nearer or farther in time and space**, or pertains to effects **nearer or farther removed in terms of implicit genetic considerations**.*

Discounting

Humans intrinsically discount penalties and rewards farther removed in time and space (*as is the case for related information*).

Responses to information: Self factors

Discounting



Discounting

Given evolutionary theory...

R. Trivers

W. Hamilton

- I. Self
- II. Family (*near "kin"*)
- III. The group of immediate resource sharers (e.g., agencies or interest groups)
- IV. *The "greater good"???*

CONSCIENCE

Belief

Contingencies of *Believing* new information

Consistent with existing self-narrative (*low dissonance*).

Originating from a trusted or otherwise authoritative source (*high source legitimacy*).

Moderate situational anxiety.

Germane to prioritized values (*salient*).

Of near import (*low temporal or spatial discounting*).

High perceived certainty (*salient*).

Rational or logical according to self standards.

Information most likely to be **Believed**?

Wendy Wood

- Delivered by a trusted charismatic source
- Linked to outcomes prized by the audience
- Constituting a low challenge to audience “self”
- Delivered in a “safe” microcosm

Information most likely to be Believed?

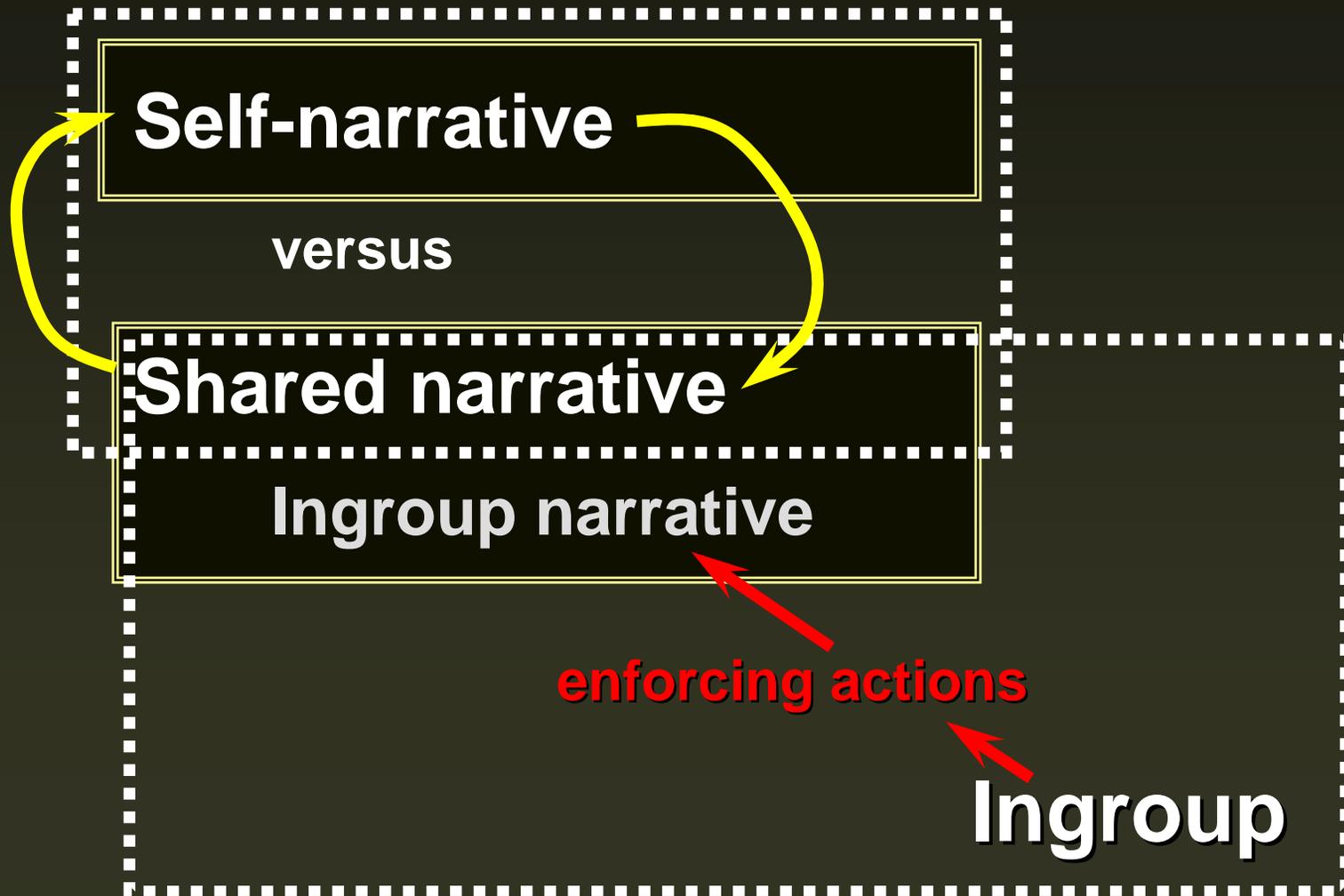
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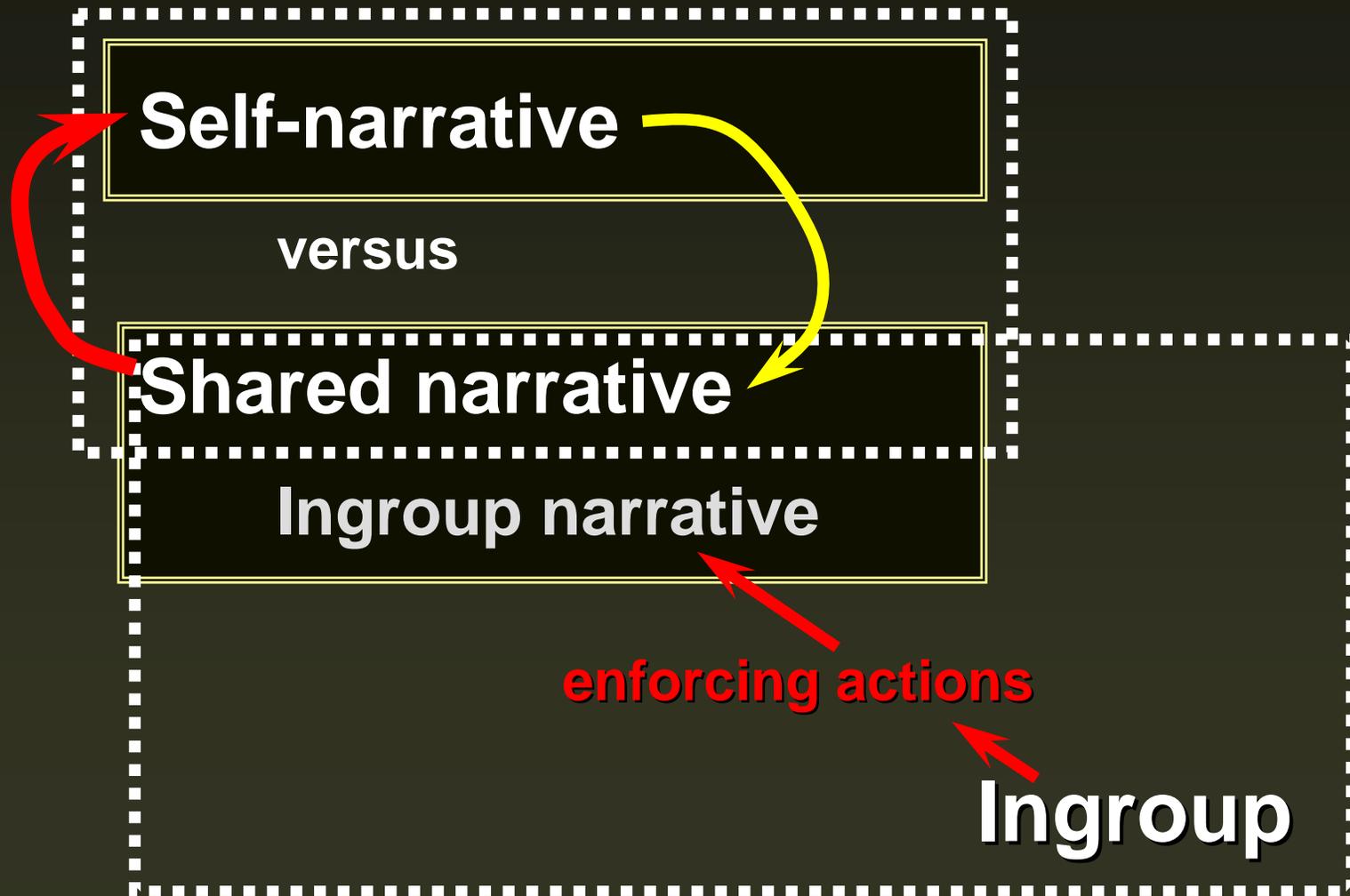
MINIMIZING NEGATIVE AFFECT
MAXIMIZING POSITIVE AFFECT

Information in a Policy & Organization Context

An organizational & policy context



An organizational & policy context



Belief

Contingencies of *Believing* new information

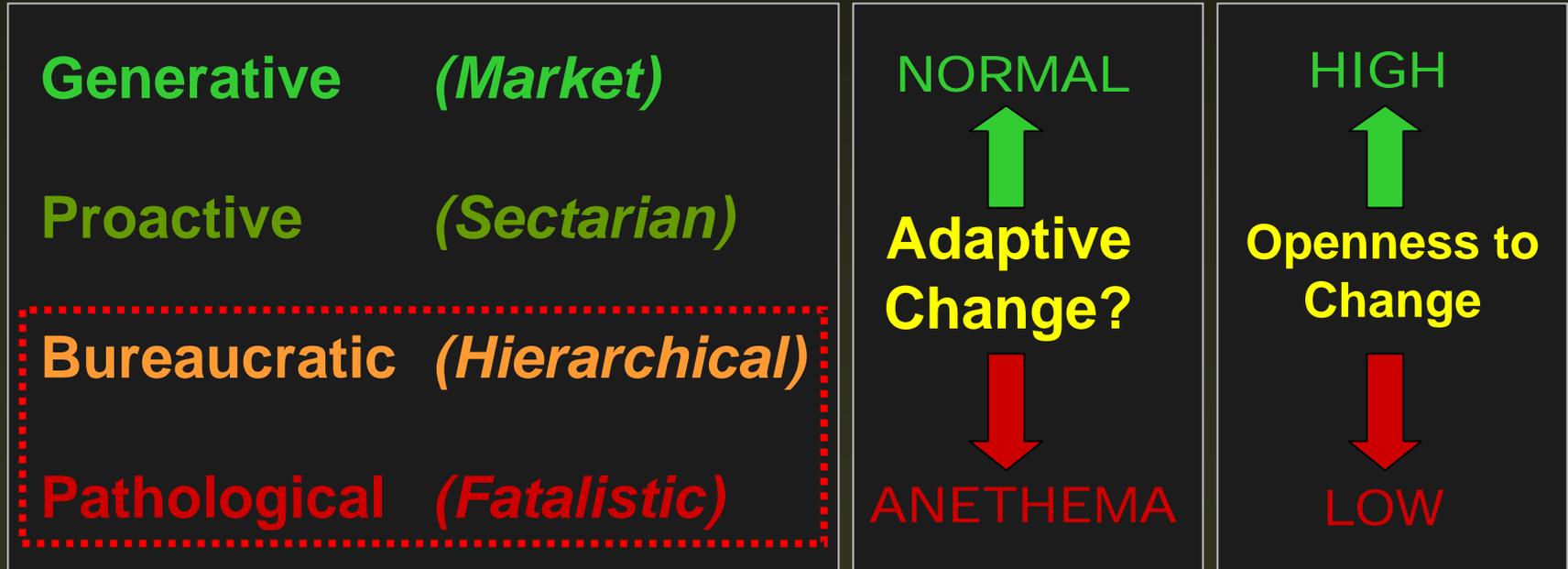
Consistency with shared ingroup narrative.

Strength of ingroup enforcement mechanisms.

Strength of loyalty to or dependence on ingroup.

INGROUP

Organizational Culture



Sub-cultural differences

Management and Science

Norms & expectations of *management* culture:

- Values: **power**, **wealth**, & **respect**
- Cooperation
- Being “a team player”
- Uniformity of purpose
- Obedience to authority
- Adherence to policy

Norms & expectations of the culture of *science*:

- Values: **enlightenment**, **skill**, & **rectitude**
- Individualism
- Critical-mindedness
- Objectivity
- Adherence to the protocols of science

Sub-cultural differences

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**CONFORMITY
COERCION**

Management and Science

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**INDEPENDENCE
PERSUASION**

Value dynamics

Power

Wealth

Respect

Affection

Well-being

Rectitude

Skill

Enlightenment

As Scope Values

Value dynamics



As Base Values

Value dynamics

The Power-Oriented Personality



Natural Resources Organizations

Assuming there is selection for individuals with a **power**, **respect**, and **wealth** (i.e., “budget”) orientation in higher-level bureaucratic positions...

but also holding a worldview that has strong elements of the **ecologistic/scientistic** and **naturalistic/aesthetic**.

An organizational & policy context

Natural Resources Organizations

Some predictions based on strategic considerations

Source	Content	Salient (1) (relative to prioritized values)	Salient (2) (emanating from a source wt authority over prioritized values)	Certain (relative to effects on prioritized values)	Pertaining to near-term effects (on prioritized values)	IMPACT
<i>Agency elites</i>	<i>Standing in agency; career prospects; budgets</i>	Y	Y	Y	Y	High
<i>Regional political elites</i>	<i>Budgets; career prospects</i>	Y	y	Y	y	High
<i>Scientist</i>	<i>Effects of grazing on biodiversity</i>	n	N	N	N	Low

An organizational & policy context

Natural Resources Organizations

But some countervailing (cultural & existential) effects...

Source	Content	Culturally legitimized source	Trusted	Consistent wt self-narrative (<i>about how the world is or ought to be</i>)	IMPACT
<i>Agency elites</i>	<i>Standing in agency; career prospects; budgets</i>	Y	?	n	Mod. low
<i>Regional political elites</i>	<i>Budgets; career prospects</i>	?	N	n	Low
<i>Scientist</i>	<i>Effects of grazing on biodiversity</i>	Y	?	y	Moderate