

Teoria Neurobioética das Emoções: Spinoza, Damasio, Prinz

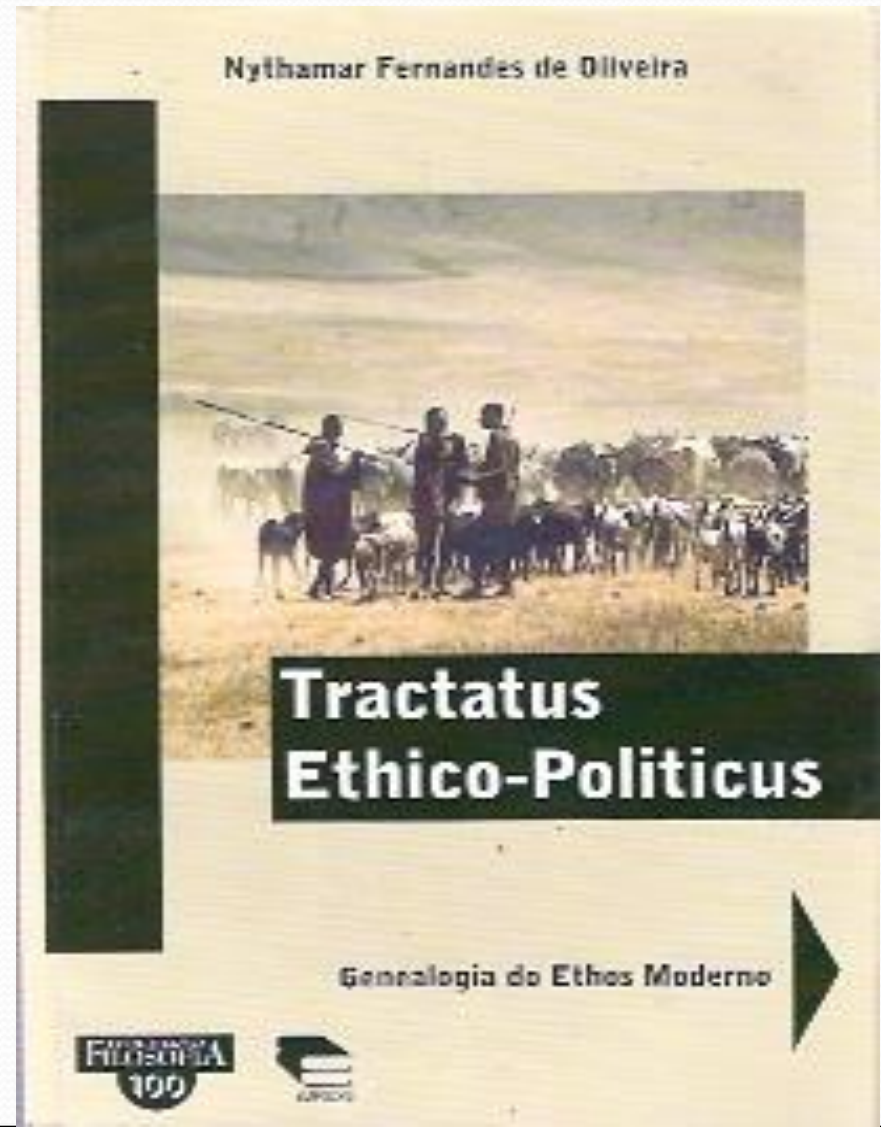
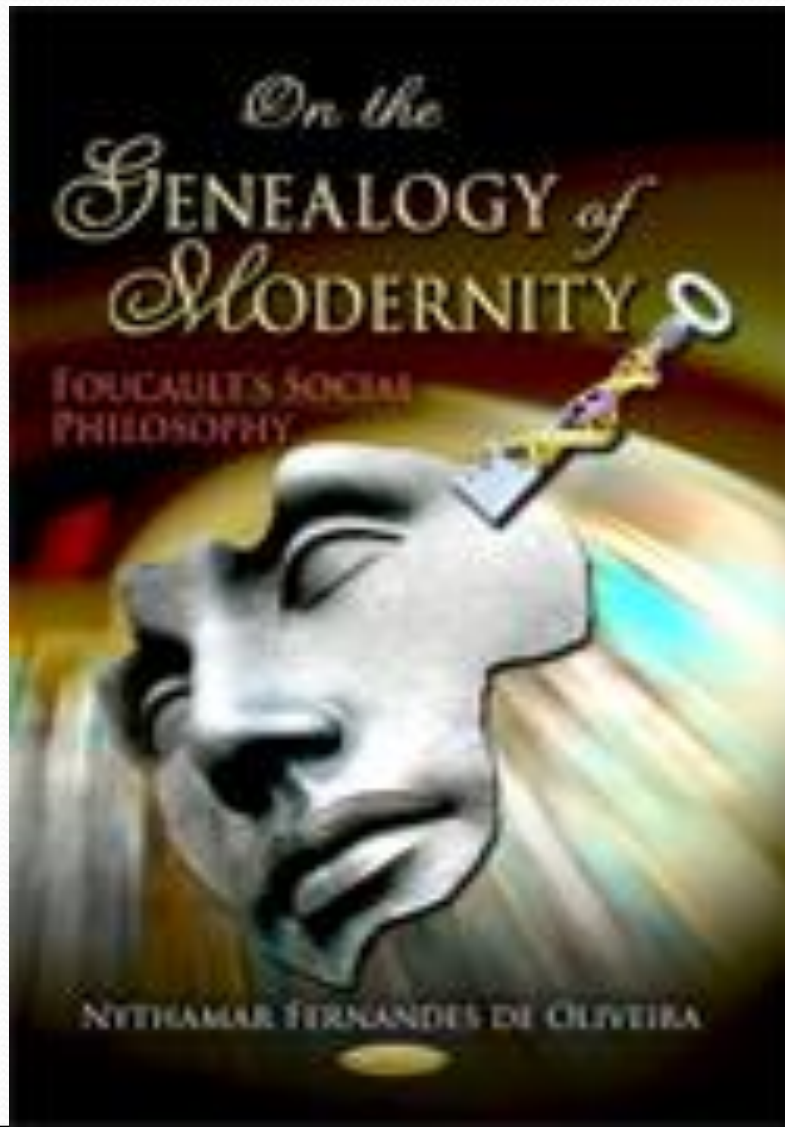


Research Projects (1995 – 2024)

- A comparative study of theories of social justice in **Kant, Hegel, Rawls, Habermas, and Honneth** (since 1995)
- **Social Movements: Brazil & Germany** (Probral, 2002-03)
- **Juridification & Secularization**
- The philosophical foundations of **human rights** (2004-05
Universität **Kassel**, Prof. Dr. Hans-Georg **Flickinger**)
- **Critical Theory & Social Epistemology** (2006-10)
- **The Normative Deficit of Brazilian Democratic *Ethos***
- **Social Neurophilosophy & Neuroscience** (since 2012), **AI**

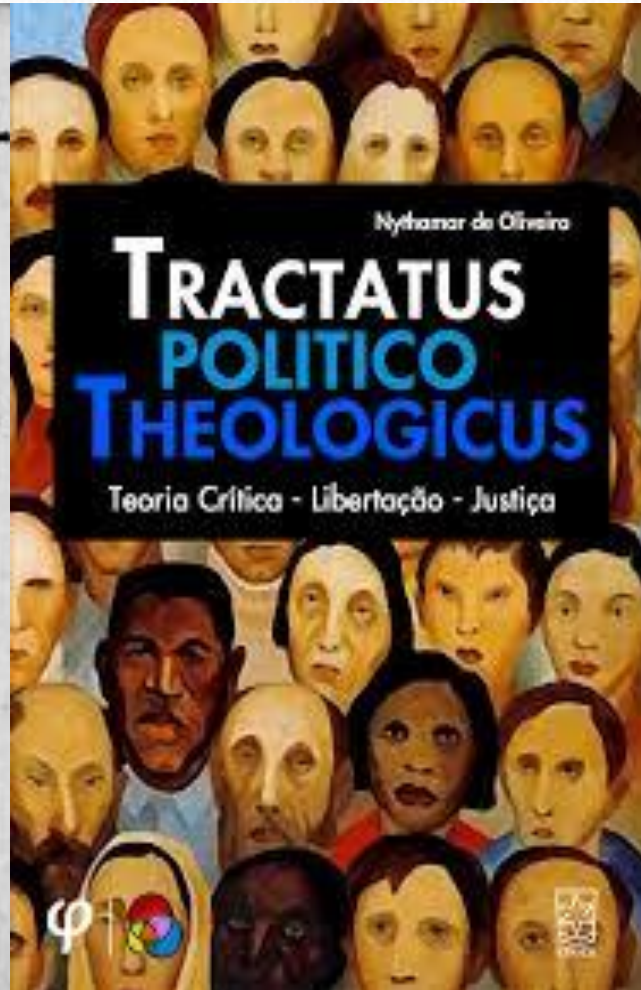
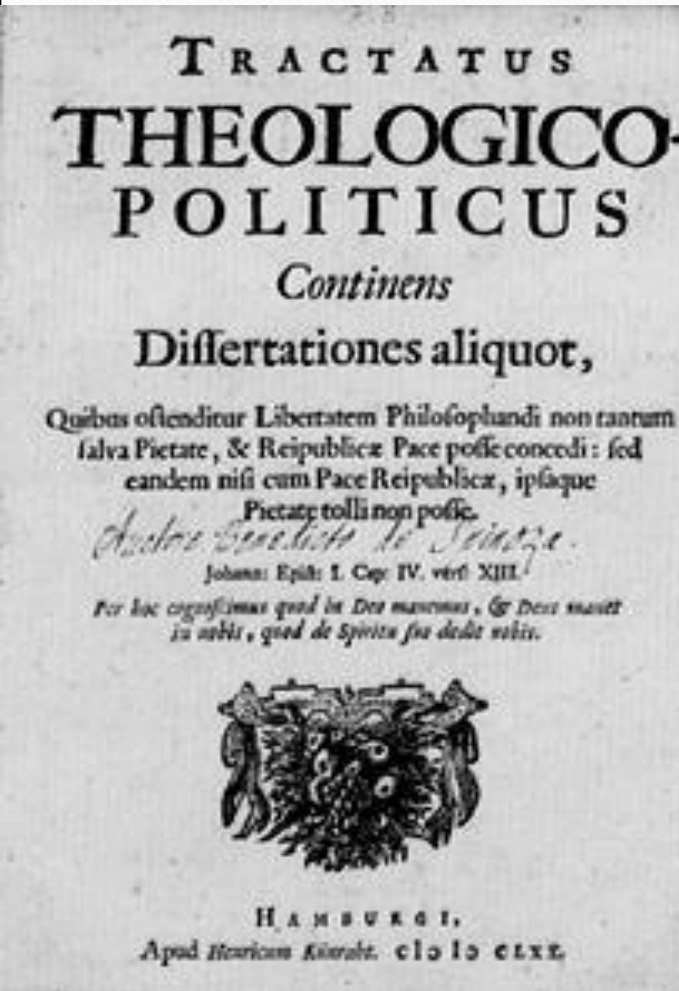
Supported by: Brazilian National Research Council (CNPq),
Alexander von Humboldt Stiftung, Capes,
PUCRS (Pontifical Catholic University at Porto Alegre, RS)

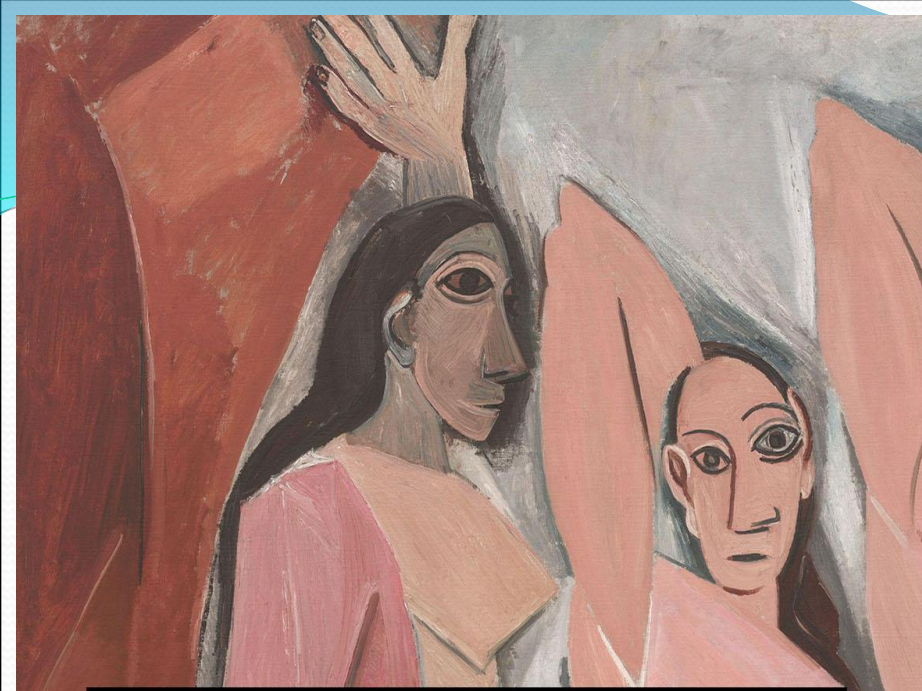
The Social Ethos of Modernity: Normativity, Subjectivity, Power



Tractatus Practico-Theoreticus

Tractatus Politico-Theologicus





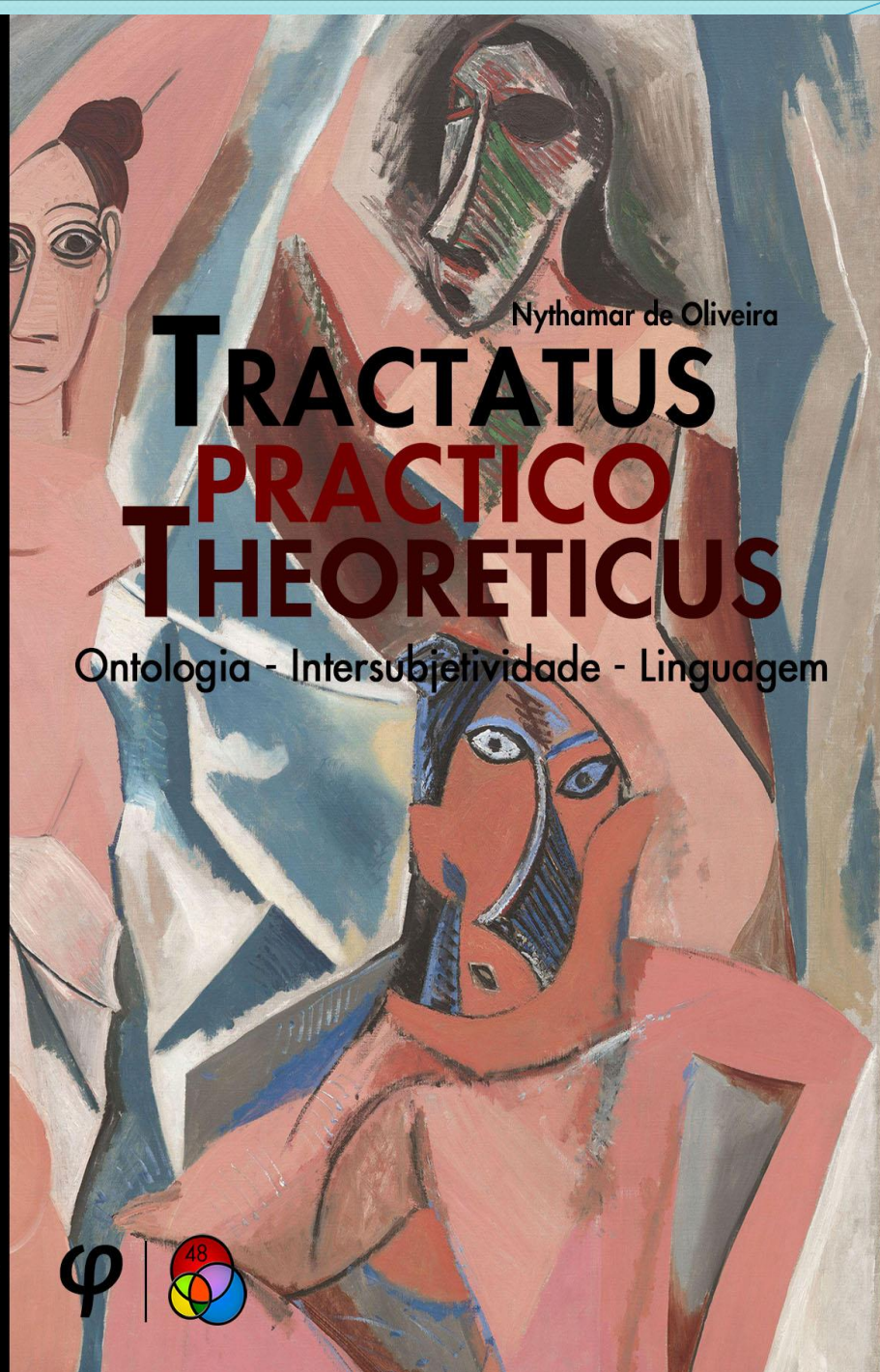
Um tratado prático-teorético é fundamentalmente um tratado de filosofia social e de metafísica, na medida em que trata da filosofia prática em sua relação específica, por um lado, com uma teoria do conhecimento e da linguagem, e por outro lado, com a própria questão da teoria do social, enquanto teorização do ser social (ontologia social e epistemologia social), da intersubjetividade (teoria moral, filosofia política, antropologia e psicologia filosóficas) e dos domínios regionais de objetos de investigação (sobretudo as ciências empíricas, incluindo, além da antropologia cultural e da psicologia social, a própria lingüística e abordagens neurocientíficas da linguagem e de fenômenos mentais), em sua diferença programática entre um uso teórico e um uso prático da razão em suas tentativas de fundamentar ou justificar a crença de que as coisas são o que são, em contraposição a por que devem ser assim e não de outro modo.



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Nythamar de Oliveira

TRACTATUS PRACTICO-THEORETICUS



Nythamar de Oliveira

TRACTATUS PRACTICO THEORETICUS

Ontologia - Intersubjetividade - Linguagem



Um tratado político-teológico é fundamentalmente um tratado de filosofia social e de metafísica, na medida em que trata da teologia em sua relação prática, por um lado, com uma teoria política e social, e por outro lado, com a própria questão metafísica da teologia filosófica enquanto teorização do ser absolutamente necessário, causa sui ou substância infinita, sem necessariamente pressupor uma concepção teísta de divindade. Com efeito, as celebradas preleções (Gifford Lectures, 1936) de Werner Jaeger sobre a teologia dos gregos antigos mostraram precisamente isso: que na concepção originária de uma teologia filosófica não se pressupunha nenhuma distinção entre o natural e o sobrenatural, mas na verdade a teologia naturalis dos antigos preparou o terreno para a theologia supernaturalis dos cristãos.



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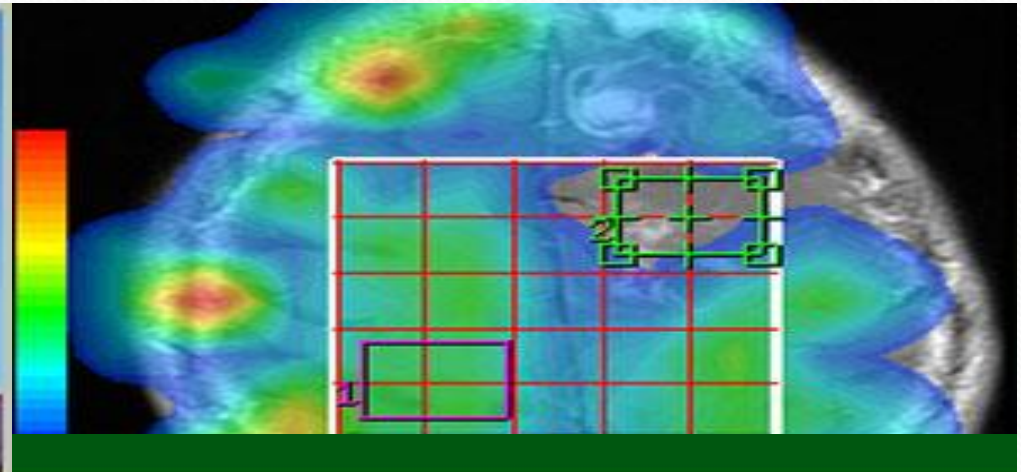


Nythamar de Oliveira

TRACTATUS POLITICO THEOLOGICUS

Teoria Crítica - Libertação - Justiça

The Normative Challenges of the “Social Brain”



UNIVERSITY
OF MIAMI
ETHICS PROGRAMS



 **InsCer**
Instituto do Cérebro

Nythamar de Oliveira - PUCRS / CNPq

**The Brain Institute (InsCer, Porto Alegre) - Connectivity and Cognition
Laboratory - Dept of Psychology University of Miami, 2016-18**

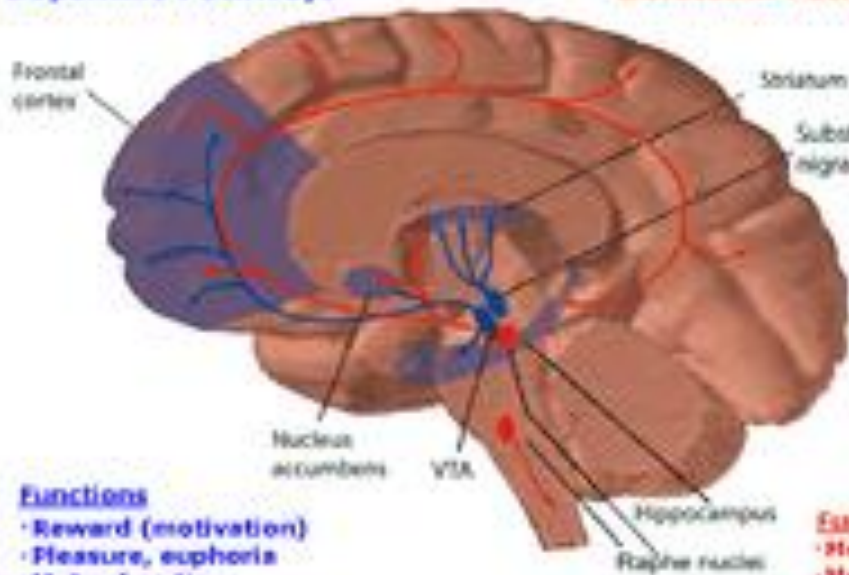
Assuming that there has been a **neuroscientific turn** in moral philosophy & social psychology, I would like to see how **neurophilosophy** may shed light on the **normative problems** raised by **naturalistic** projects of **ethical and social research**, esp. at the articulation between the **neurobiological evolution** of **human species** and the **social & historical evolution** of **society** and social groups. By taking a **critical-theoretical** approach to both **naturalism & normative** theories, I argue that there is a **neurophenomenological deficit** in naturalism (e.g. in the versions of naturalism that follow the program of a **naturalized epistemology**) and in **normative theories of self** (particularly in **critical theory**). I thus propose a **mitigated** version of **social constructivism** that combines a **normative reconstruction** of critical theory (**Habermas, Honneth, Forst**) with nonreductive, **neurophilosophical** models of the **social brain** programs (**Spinoza, Antonio Damasio & Jesse Prinz**).



Neuro Hypes Neuro-crap

- About 31,600,000 results (0.22 seconds)

Dopamine Pathways



Functions

- Reward (motivation)
- Pleasure, euphoria
- Motor function (fine tuning)
- Compulsion
- Perseveration

Serotonin Pathways

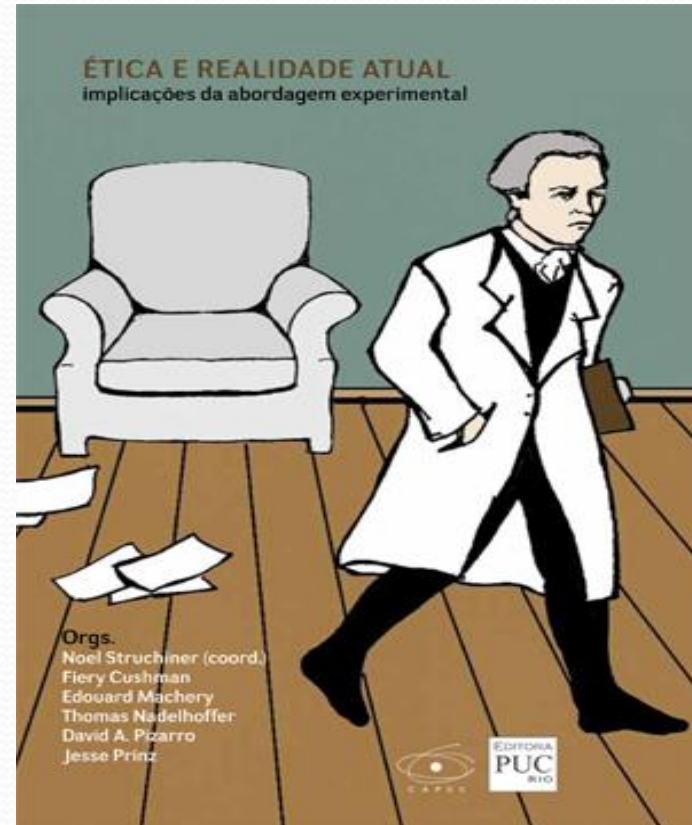
- Mood
- Memory processing
- Sleep
- Cognition



An interdisciplinary research program in Ethics, Social & Political Philosophy

- I have tried to investigate in what sense a **social**, political **constructivism** (Rawls) and a pragmatic, **normative reconstruction** (Habermas, Honneth, Forst) may be taken as defensible instances of a **weak** or mitigated methodological **social constructionism** to the extent that it both preserves the idea of **objectivity** and can be articulated in terms of a **hybrid, cognitive moral normativity**.
- My working hypothesis is that by meeting the challenges of **naturalism** and **cultural relativism** without giving up on a conception of **social normativity**, I would be able to resort to new interfaces between neuroscience and ethics so as to revisit the explanatory gaps between **mitigated** conceptions of **naturalism** and **normative, empirical** takes on **culture**.

From Bioethics to Neuroethics: The Neuroscientific Turn of Moral Philosophy



Research in Neurophilosophy

The Brain Institute at PoA (InsCer)

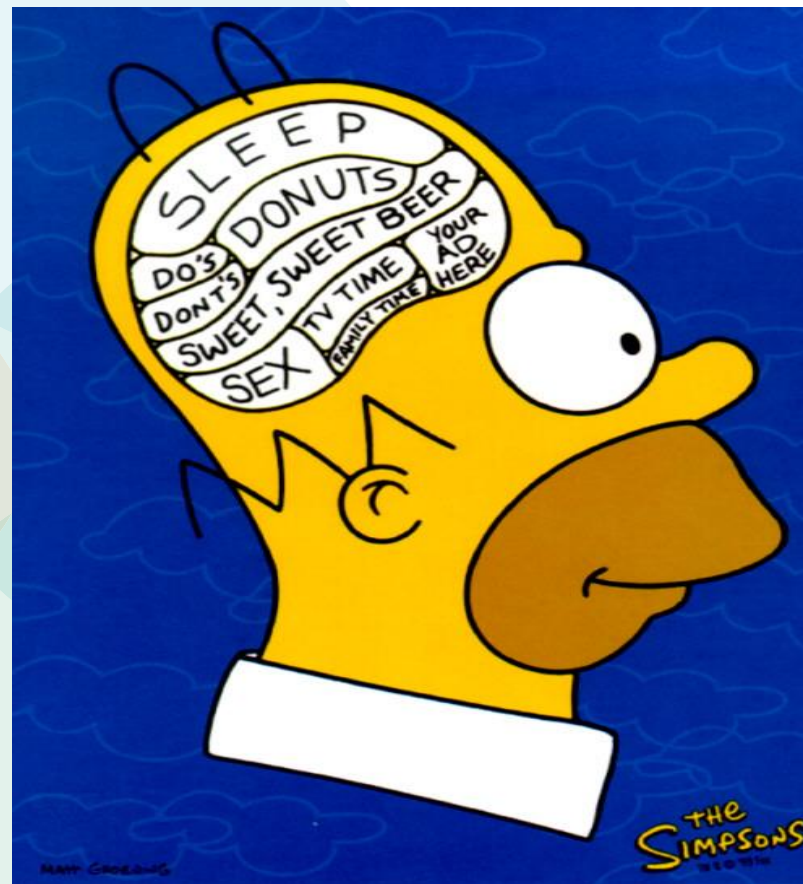
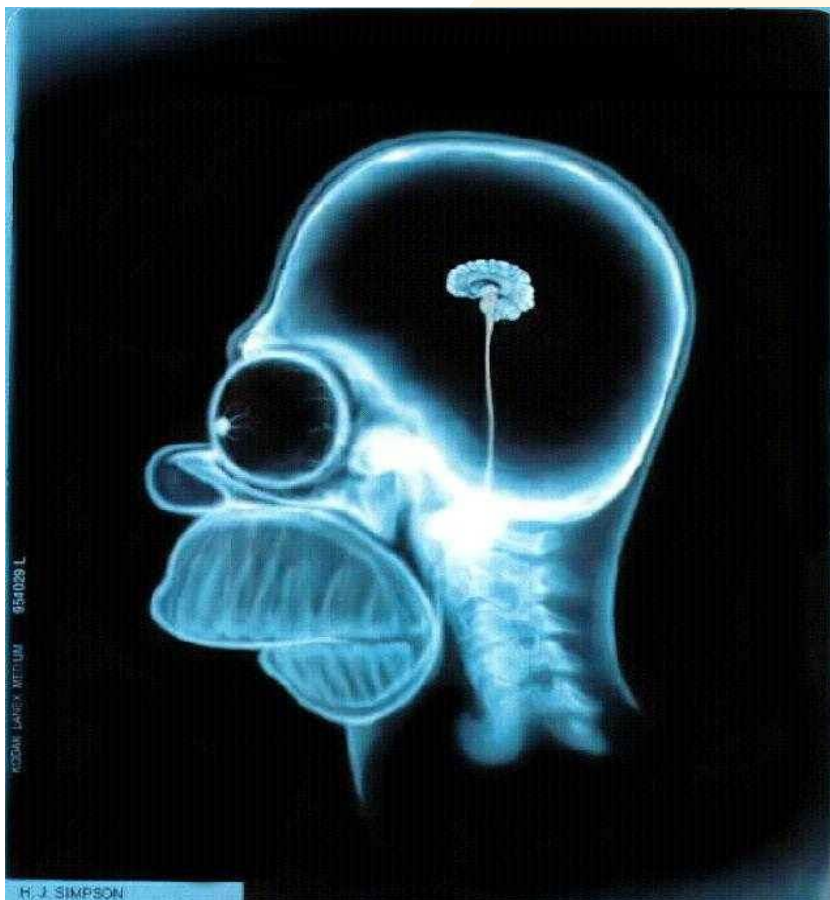


- **Interdisciplinary research in "Social Media and Decision-Making Processes: Reason and Emotion in Social Relations" (CNPq/InsCer):** we set out to investigate the processes of **moral decision-making** that materialize in everyday, **off-line practices** and in **online, social media** (particularly on **Facebook**), e.g. Ultimatum & Dictator games

MRI vs. fMRI

MRI shows brain anatomy

**functional Magnetic Resonance
Imaging maps the brain's **function****



**fMRI measures brain activity by detecting changes associated with blood flow:
NB: Not all neural correlates are causally correlated!**

Social Media & Decision-Making Processes:

Reason & Emotion in Social Relations

(405998/2012-0 MCTI/CNPq/MEC/CAPES 18/2012)

- These processes are investigated within an **interdisciplinary** perspective of **neuroscience**, more specifically, from the standpoint of the **neural basis** of these processes. This is a **multidisciplinary** research project in **neuroscience**, **normative ethics**, **bioethics** & **experimental philosophy** with particular emphasis on **moral dilemmas**, **decision-making**, and **regulatory problems** concerning **neurotechnologies**, **social behavior** and **technological innovations**.

Joshua Greene: Moral Dilemmas & the “Trolley Problem” (2003)



The switch dilemma

From neural ‘is’ to moral ‘ought’: what are the moral implications of neuroscientific moral psychology?

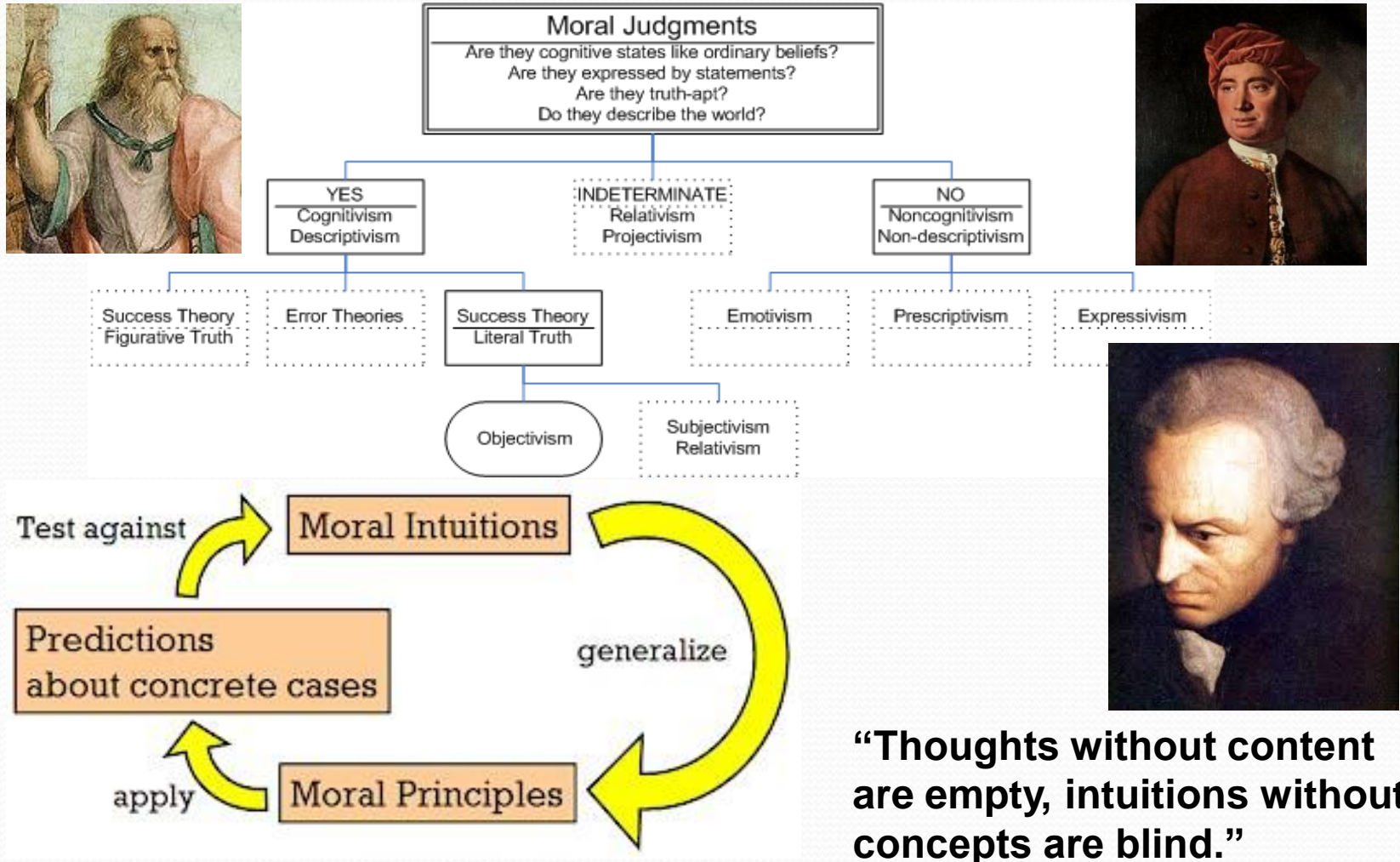


The footbridge dilemma

The recent emergence of **hybrid** theories in **metaethics** in the past decades just attest to the fact that, by trying to accommodate both **belief-like** and **desire-like** features of **moral, normative judgments**, **metanormative** theories have allowed for **complex mental states**, constituted by both **affective** states and **ordinary beliefs** that people hold whenever they make normative claims. Now, Ethics has been traditionally divided into: Metaethics, Normative Ethics, and Applied Ethics.



Reflective Equilibrium, or how to avoid ethical extremes





- **Neuroethics**, on its turn, deals with **bioethical, moral problems** both in abstract, theoretical terms (such as in metaethics and normative ethics, for instance, to define what is morally good, whether there is free will or freedom of choice, what selfhood is all about) and in practical, concrete terms (applied ethics), especially informed by the **empirical sciences and recent findings in neuroscience**. Like bioethics and applied ethics overall, neuroethics also might resort to **metaethics and normative theories** when dealing with the moral, epistemic justification of **given procedures and possible scenarios** relating to practical problems such as the ones involved in **neural, cognitive enhancement** and the **use of smart drugs**.

Founding Women of Neuroethics



Patricia Churchland



Adina Roskies



Martha Farah

Naturalizing Social Epistemology

where shall we place epistemology ?

sociology < psychology < biology <
molecular biology < chemistry < physics
< observation language

science wars

scientific realism vs the social
construction of everything that moves

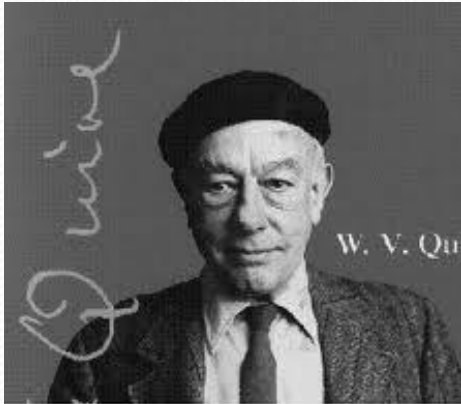
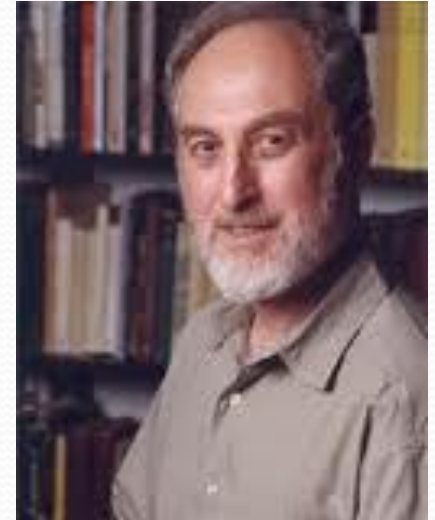


Photo by Kelly Wise
from Quine's *Time of My Life*, 1985



1. One definition: a version of the **theory of knowledge** which fully acknowledges our **dependence on other people** in this matter, and does not relegate it to the marginal or supplementary status of '**testimony**'. All but the most elemental knowledge —of the sort possessed by infants and animals— presupposes the mastery of the indisputably **social institution of language**.

2. A second, and less philosophical: a concern with the **social** determinants of belief. It has obvious relevance to **moral and political convictions**. Attempts to apply it to the findings of natural science —let alone those of mathematics—are less persuasive.

II. Well-ordered Society

Public Conception of Justice

Free & equal citizens with two moral powers:

- sense of justice
- conception of the good

"Circumstances of Justice"

Stability

John Rawls's Reflective Equilibrium and the 3 standpoints: OP, WOS, Ourselves / **social ethos**
Ken Baynes, Normative Grounds of Social Criticism

III. The Original Position (as "Device of Representation")

"the Reasonable"

Veil of Ignorance

Symmetry Conditions

"the Rational"

Parties with rational autonomy

"Maximin Rule"

Primary Goods

Formal Conditions

Basic Structure as Primary Subject

I. "Ourselves"

"we who are
faced with the task
of settling questions
of justice"

"considered
judgments"

Moral
Principles

Particular
Judgments

Theory of Human
Nature (Psychology)

Economics

Sociology

Theory of Meaning

History

Narrow
Reflective
Equilibrium

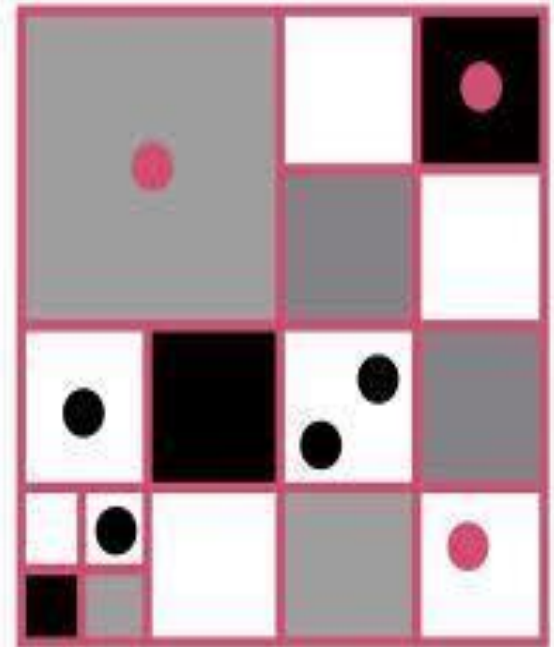
Wide
Reflective
Equilibrium

Two Principles of Justice

- The method of reflective equilibrium has been advocated as a coherence account of justification (as contrasted with an account of truth) in several areas of inquiry, including inductive and deductive logic as well as both theoretical and applied philosophy... we “test” various parts of our system of beliefs against the other beliefs we hold, looking for ways in which some of these beliefs support others, seeking coherence among the widest set of beliefs, and revising and refining them at all levels when challenges to some arise from others.

CAMBRIDGE STUDIES IN PHILOSOPHY AND PUBLIC POLICY

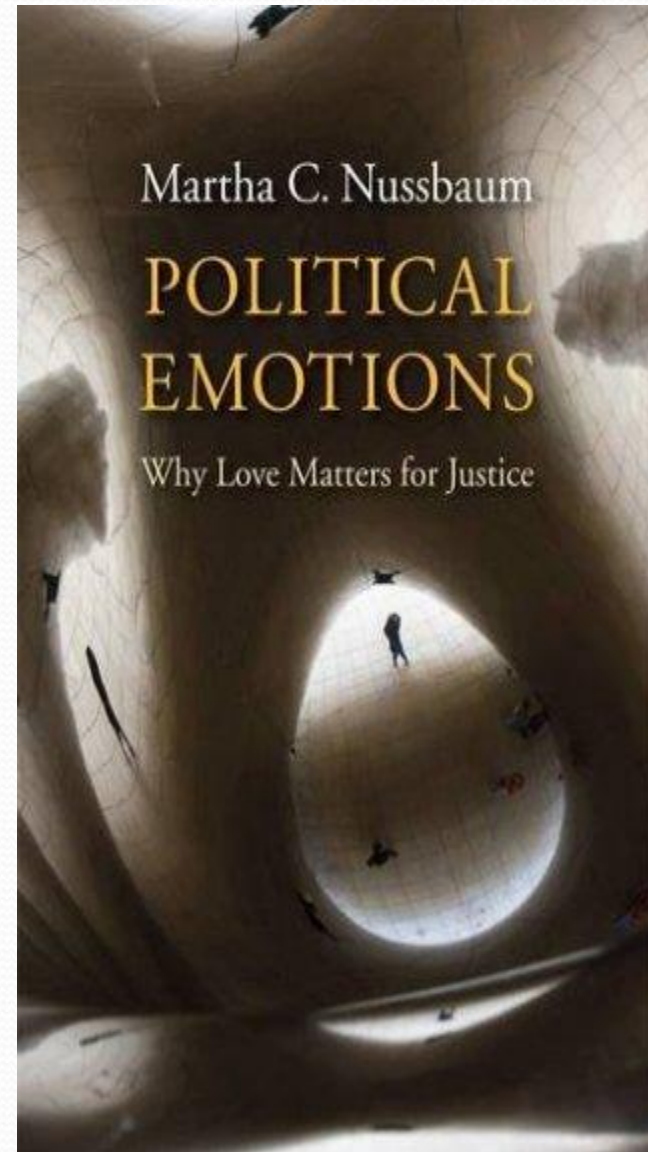
JUSTICE and JUSTIFICATION

REFLECTIVE EQUILIBRIUM
IN THEORY AND PRACTICE

NORMAN DANIELS

Recasting Political Emotions: Critical Theory, Social Epistemology, and Neurophilosophy

In order to account for the normative significance of emotions, feelings, passions and affects in politics I will argue for the primacy of the social (*das Soziale*) over the political (*das Politische*), in the light of evolutionary, neurobiological findings relating basic emotions to social, moral sentiments and social evolution. Social normativity is shown to be co-constitutive of moral agency, as suggested by Jaeggi's conception of social life-forms (*Lebensformen*) as lifeworldly intertwined features of pre-theoretical practices and relations that are prior to institutional and systemic arrangements such as the State, governmental, juridical, and political structures, and in opposition to Martha Nussbaum's favoring a Schmittian-like misreading of both Hobbesian and Spinozan accounts of the state of nature and their respective criticisms of Aristotelian naturalism, as passions are deemed opposed to rational choice.



- Because authors like Sara Ahmed and Martha Nussbaum fail to account for such a distinction, their respective conceptions of political emotions end up favoring a Schmittian-like misreading of both Hobbesian and Spinozan accounts of the so-called state of nature and their respective criticisms of Aristotelian naturalism, so that passions and affects seem to be disconnected from rational choice and decision-making processes. Critical theory's normative reconstruction of sociality, I will argue, must be thus complemented with correlated accounts of social emotions, such as the ones offered by neuroscience and cognitive science. By resorting to António Damásio's contention that "emotion, feeling and biological regulation all play a role in human reason" and to Jesse Prinz's reformulation of social cognition in embodied, embedded, extended, enactive and affective terms, I will recast a view of political emotions that critically avoids both normativism and reductionist versions of naturalism. By revisiting cognitivist and functionalist views of empathy, compassion, and social emotions, I will propose to rethink them as highly flexible, context-dependent responses to different environments, through networks of varieties of basic homeostasis (nonconsciously guided) and sociocultural homeostasis (created and guided by reflective conscious minds), ultimately leading to cooperation and the evolution of social norms, especially norms of fairness.

Accordingly, a **homeostatic** understanding of the development of moral rules, laws, and justice systems can be regarded as a promising response to the detection of **imbalances** caused by **social behaviors** that endanger **individuals and the group**.

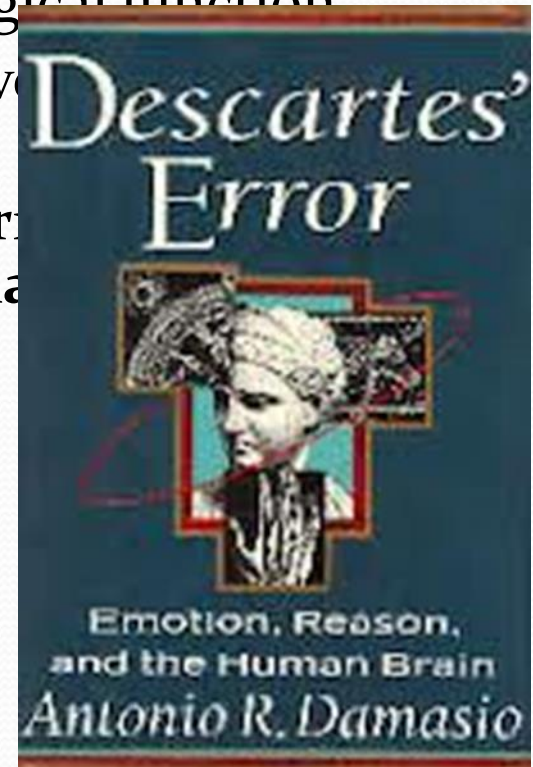
The **social, cultural devices (dispositifs)** created in response to the imbalance aim to restore the desirable **equilibrium** between **individuals** and **political institutions**. Hence, humans are **capable of social cooperation & empathy**, but they alone cannot account for the **normative thrust of moral agency**.

I will thus argue that both **Damásio and Prinz** succeed in showing that **social homeostasis** rather than **individual voluntarism** and the **social brain** rather than the **solipsist mind** are what must ultimately account for a scientifically informed theory of **normativity**, as mitigated versions of **naturalism** meet halfway with **mitigated** conceptions of normativity in **weak social constructivism**, insofar as social evolutionary processes are guided by normative claims, in both reflexive and social terms, with a view to realizing universalizable, valid claims that are justified from the normative standpoint precisely because they are **fit for the survival** and preservation of the species.

This is in full agreement with **Spinoza's (Jewish-Christian)** conception of the **individual** morality of conscience, human liberties and liberal democracy in correlation with **natural (neurobiological), social-cultural determinism**

Phineas Gage: Damasio's Somatic Marker Hypothesis

- Originated from the observation of individuals who had sustained damage to the ventromedial prefrontal cortex (VMPFC).
- Normal intellectual function
- Normal neuropsychological function
- Normal on tests sensitive



What are Emotions all about ?



Wiki on “Emotion”

- The word "emotion" dates back to 1579, when it was adapted from the French word *émouvoir*, which means "to stir up".
- In psychology, philosophy, and their many subsets, **emotion** is the generic term for subjective, conscious experience that is characterized primarily by psychophysiological expressions, biological reactions, and mental states.
- Baruch de Spinoza's emotivism



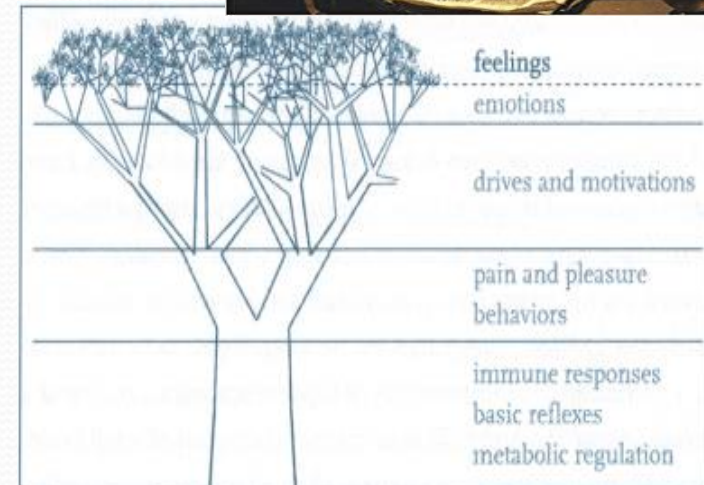
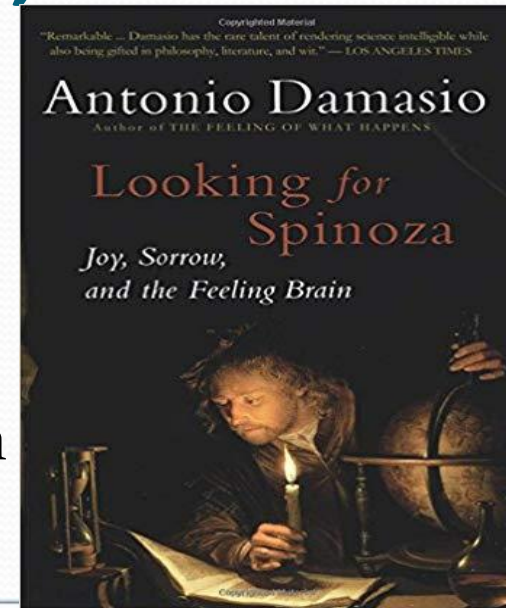
Perception, Emotion, Feeling, Mind, Self, Consciousness, Reason

... human reason depends on several brain systems, working in concert across many levels of neuronal organization, rather than on a single brain center.

Feeling is the second and central topic of this book, and one to which I was drawn not by design but by necessity, as I struggled to understand the cognitive and neural machinery behind reasoning and decision making.

Emotions: Cognitive & noncognitive, volitional features

[biological evolution] **brain** → [social evolution] **mind** → **self** → **mind + self = consciousness**

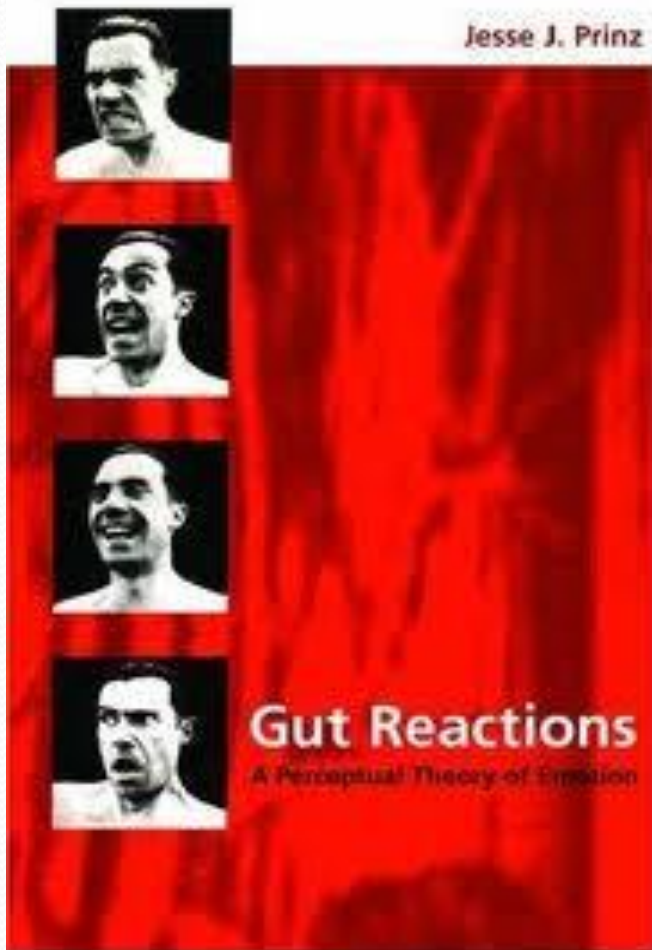


Prinz's Naturalist-Conceptualist Neuropsychology of Emotions

“... **emotion is a form of perception**. Having an emotion is literally perceiving our relationship to the world. Like perceptions, **emotions can be inaccurate or even unjustified**... But they can also be revelatory.” “[Emotions] are **triggered by judgments** and **amenable to cultural influence**. They are central to our **comprehension of morality** and other lofty domains...

How do **palpitations, pangs, and twinges in the gut** play these kinds of roles? This book is an attempt to answer that question.

I defend a **Jamesian theory with smarts**. So, rather than adding to the proliferation of theories, I hope to show that an old theory can be modified to do the work of many of its competitors.



Theories of Emotions

Emotion episode component	Emotion theory
Conscious experience	Feeling theories
Changes in body and face	Somatic theories
Action tendencies	Behavioral theories
Modulations of cognitive processes	Processing mode theories
Thoughts	Pure cognitive theories

Hybrids: Aristotle, Descartes, Spinoza, Hume (**impure cognitive theories**)

In cognitive theories, intentionality is at center stage, our thoughts are directed at something in the world; in neo-Jamesian theories, passivity is at centre stage, we are struck by or afflicted by something.

AIR theory of consciousness: *attended intermediate-level representations* ; **attention** is the mechanism that separates **conscious** from **unconscious emotions**.

Philosophy of Emotion

Contemporary **analytic philosophy of emotions** is currently dominated by two opposing camps. In one camp we have those generally labelled **cognitivists** and in the other those who favour a **Jamesian** approach, the neo-Jamesians and **noncognitivists**. Pure cognitivists: Solomon (1976 & 2003c), Taylor (1985) and Nussbaum (2004); and those who might be termed hybrid cognitivists: Goldie (2000) Greenspan (1993) Nash (1987) and Stocker (1987). Neo-Jamesianism, as the name suggests, brings together philosophers and psychologists who advance a contemporary variant of William James's account of emotion and in doing so often align themselves with the research program initiated by Darwin ([1872] 1965) and later Ekman (1972); those Darwinian claims are often buttressed by theoretical claims drawn from neuroscience, cognitive science & philosophy of mind: Damasio (1994), Prinz (2004) and Robinson (1995).

For **Spinoza**, emotions are not lodged in a **separate body** in conflict with the soul, since **soul and body are aspects of a single reality**; but emotions, as **affections of the soul**, make the difference between the best and the worst lives, as they **either increase the soul's power to act, or diminish that power**.

Biology, Psychology, Philosophy

Paul Ekman, *Emotions in the Human Face* (1972)

Emotions Revealed

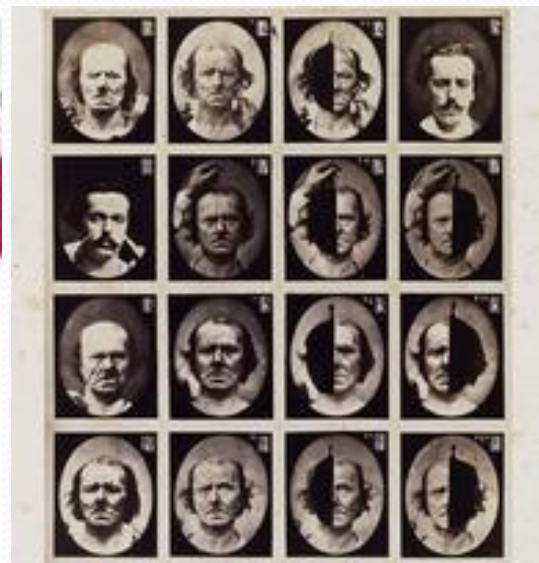
Decoding Faces and Feelings to Improve Communication and Emotional Life



Paul Ekman

Illustrations by Ekman

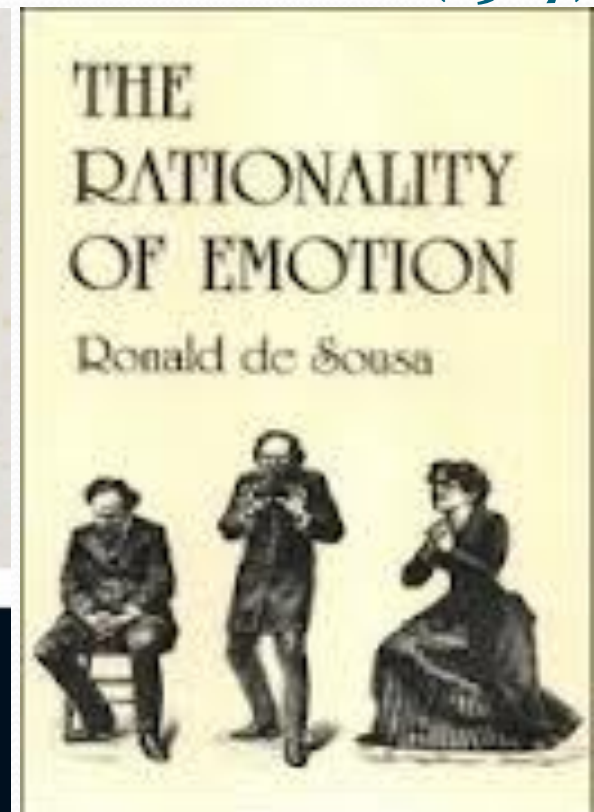
Ronald de Sousa, *The Rationality of Emotion* (1987)



PENGUIN CLASSICS

CHARLES DARWIN

The Expression of the Emotions in Man and Animals

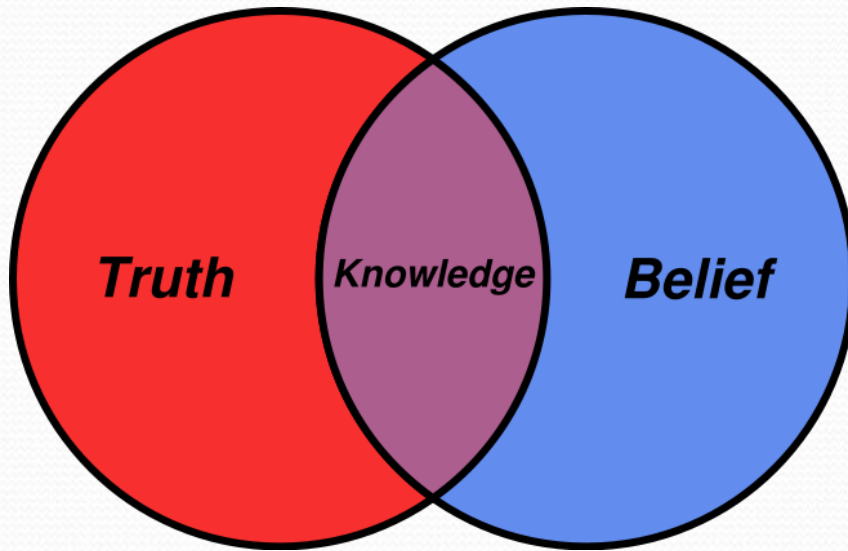


Charles Darwin, *The Expression of the Emotions in Man and Animals* (1872)

Belief in Contemporary Analytic Philosophy of Mind

The [propositional] attitude we have, roughly, whenever we take something to be the case or regard it as true. To believe something, in this sense, needn't involve actively reflecting on it: Of the vast number of things ordinary adults believe, only a few can be at the fore of the mind at any single time. Nor does the term “belief”, in standard philosophical usage, imply any uncertainty or any extended reflection about the matter in question... Many of the things we believe, in the relevant sense, are quite mundane: that we have heads, that it's the 21st century, that a coffee mug is on the desk. Forming beliefs is thus one of the most basic and important features of the mind, and the concept of belief plays a crucial role in both philosophy of mind and epistemology.

K = Justified (T & B)



p : The Earth is round (true)

Bp : S believes that p

Kp : S knows that p

Perceptual data as evidence of p / Reliable testimony

A **belief** is an **internal thought** or **memory** in one's **mind**. Most people accept that for a **belief** to be **knowledge** it must be, at least, **true and justified**.

K = JTB (Plato's *Theaetetus*) + G

• The Tripartite Analysis of Knowledge:

• S knows that p iff

• p is true;

• S believes that p ;

• S is justified in believing that p .

• **Foundationalist** vs **Coherence** theory of justification, also known as **coherentism**: a belief or set of beliefs is justified, or justifiably held, just in case the belief **coheres** with a set of beliefs, the set forms a **coherent system** or some variation on these themes.

• + Gettier (problem) condition

- Swinburne's **basic belief** that **mental events** (consisting in the instantiation of **mental properties** – sensations, thoughts, purposes, desires, and beliefs) are distinct from **physical events** (such as **brain events**), although in **causal interaction** with them.
- If **Plantinga's** basic belief in the **theist, personal God** is **properly basic**, then it would seem that belief in **inerrancy** would be, within the circumstances of **Christian faith**, a **properly basic belief** as well?

A Neurotheology of Revelation

- “the nature of the mind is the primary cause of divine revelation... we must concede without qualification that the [universal] divine law began from the time when men by express covenant promised to obey God in all things, thereby surrendering, as it were, their natural freedom and transferring their right to God” (TTP, 10, 188)



Workshop Interdisciplinar dos Programas de Pós-Graduação em Filosofia e Teologia:



Neuroteologia: *Cérebro e Crença Religiosa*

Prof. Dr. Érico Hammes

Prof. Dr. Nythamar de Oliveira

Dia: 26 de outubro de 2015

Hora: 14h às 17h30

Local: Auditório do Prédio 5 (FFCH) - PUCRS

Entrada Franca

Evento:

PPG Filosofia
P U C R S
www.pucrs.br/pgfilosofia

PUCRS
DO TAMANHO DO FUTURO

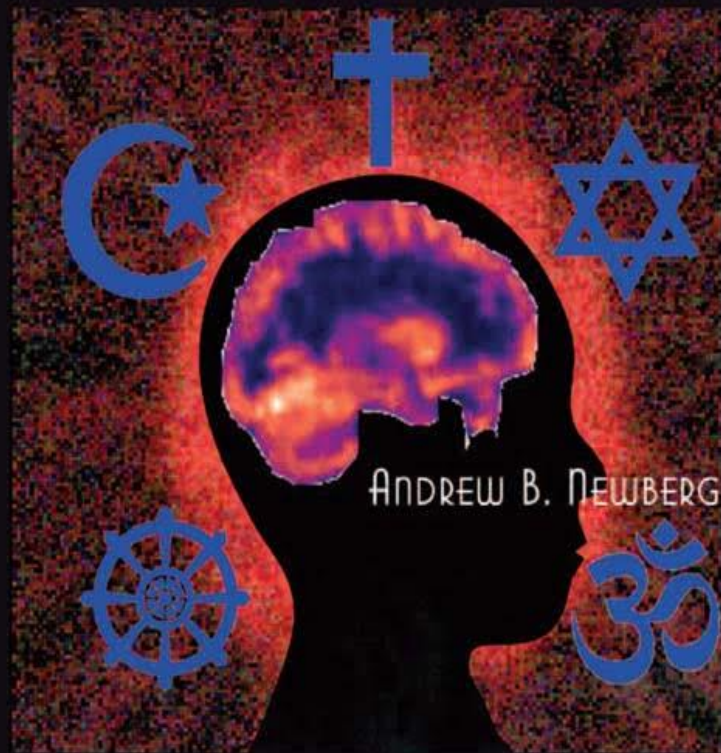
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“If neurotheology is to be considered a viable field going forward, it requires a set of clear principles that can be generally agreed upon and supported by both the theological or religious perspective and the scientific one as well... Laying the groundwork for a new synthesis of scientific and theological dialogue, this book proposes that neurotheology, a term fraught with potential problems, is a highly useful and important voice in the greater study of religious and theological ideas and their intersection with science.” (Andrew Newberg, p.)



PRINCIPLES OF NEUROTHEOLOGY



ASHGATE SCIENCE AND RELIGION SERIES

- “To date, the accumulated research pertaining to the accuracy of our memories and beliefs can be summarized as follows: all memories, beliefs, and assumptions are subject to change and possibly distortion over time; beliefs and assumptions are highly dependent on language, emotion, and social interaction; the older the memory, the more difficult it is to ascertain its accuracy; and neurological disorders and drugs can disrupt the brain” (p. 78)

- “Our intellect, our memory, our affectivity, our learning, our intuitions, our **religious** motivations, our state of mind, and the world of our emotions may be associated with **observable neurological events** as part of our normal brain function... When we die our consciousness ceases to have the appearance of **particles** to assume the **eternal** aspect of **waves**... If brain functions were lost, as in clinical or cerebral death, **memories** and **consciousness** would continue ... Consciousness can be experienced independently of the brain functioning, which may in the future lead to a huge change in the paradigms of medicine, with the possibility of admitting itself that death, just like birth, is merely the passage from one state of **consciousness** to another” (p. 117)



Raul Marino Jr.

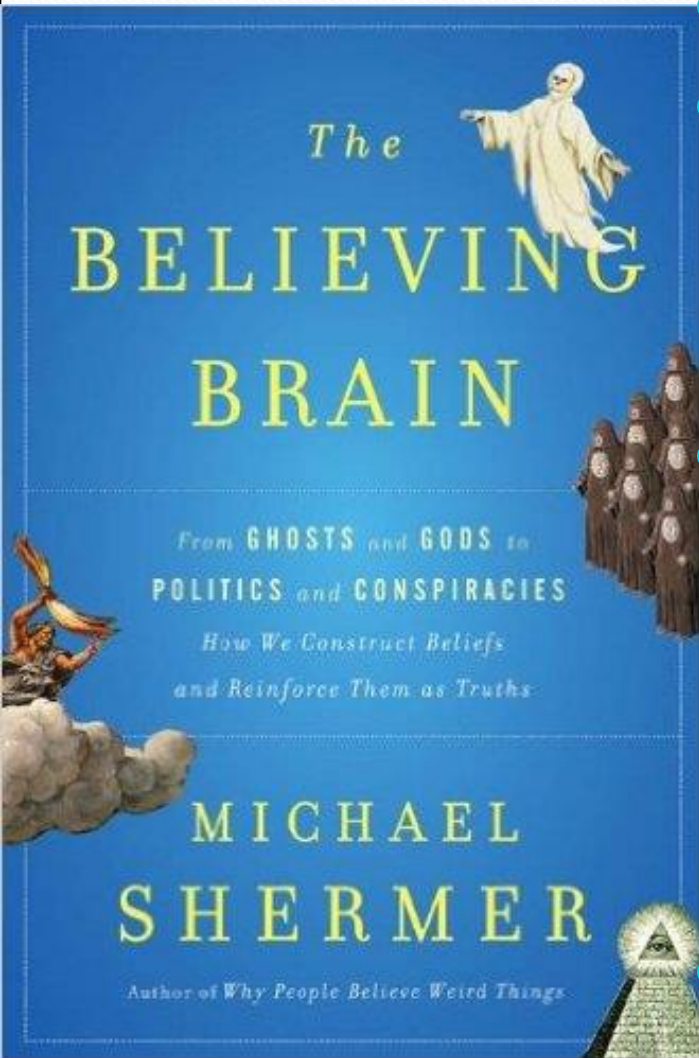
A RELIGIÃO DO CÉREBRO

As novas descobertas da neurociência
a respeito da fé humana

Gente
editora

7ª Edição

Michael Shermer: “why so many people believe in what most scientists would consider to be the unbelievable?”



- Belief-dependent Realism.
- The brain is a machine for generating beliefs. They come first. It is only then that we elaborate on explanations that justify them.
- "My current belief that there is no such thing as a mind and that all mental processes can be explained solely by the **neural correlates of behavior** was shaped by Skinnerian philosophy"
- "No brain, no mind, no soul"

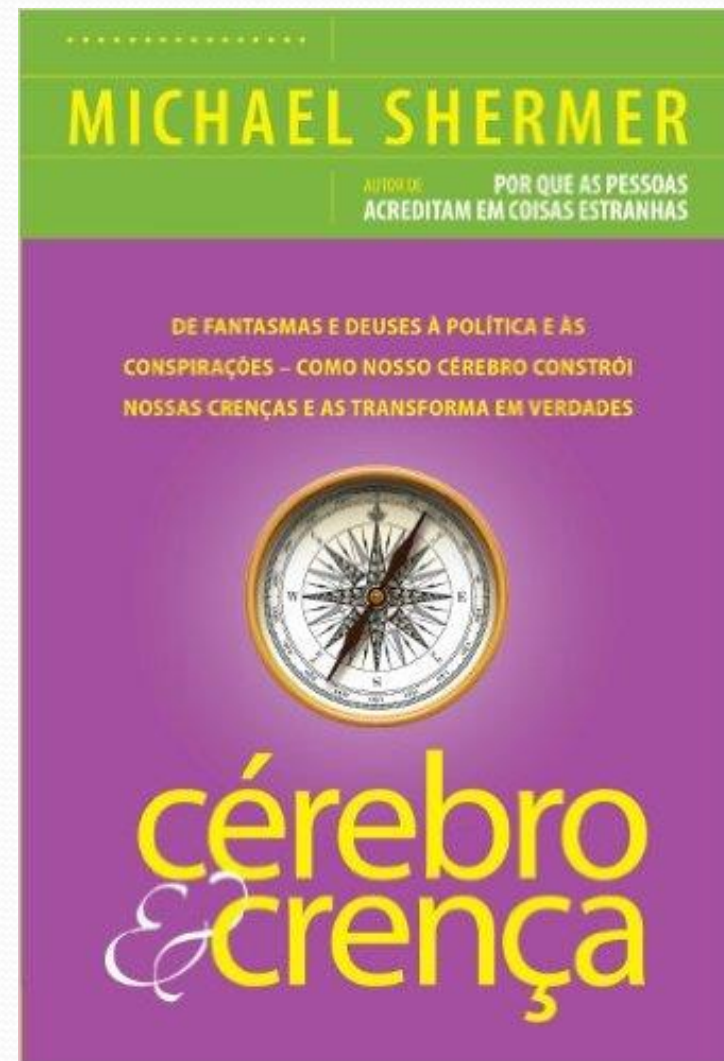
On what foundation should we ground our moral decisions? We have to ground the foundations of morality on something, and secularists (skeptics, humanists, atheists, et al.) are in agreement that “divine command theory” is untenable not only because there probably is no God, but even if there is a God, divine command theory was refuted 2500 years ago by Plato through his Euthyphro’s dilemma, in which he asked “whether the pious or holy is beloved by the gods because s/he is holy, or holy because s/he is beloved of the gods?”, showing how it must be the former— **moral principles must stand on their own with or without God.**

Rape, for example, is wrong whether or not God says it is wrong (in the Bible, in fact, God offers no explicit prohibition against rape). Adultery, which is prohibited in the Bible, would still be wrong even if it were not listed in the Decalogue.

“What makes **1 meter** [measure] **1 meter**?”
(Wittgenstein, *Philosophical Investigations* §50)

The Normativity-Naturalism Debate

Recasting the Judeo-Christian Worldview



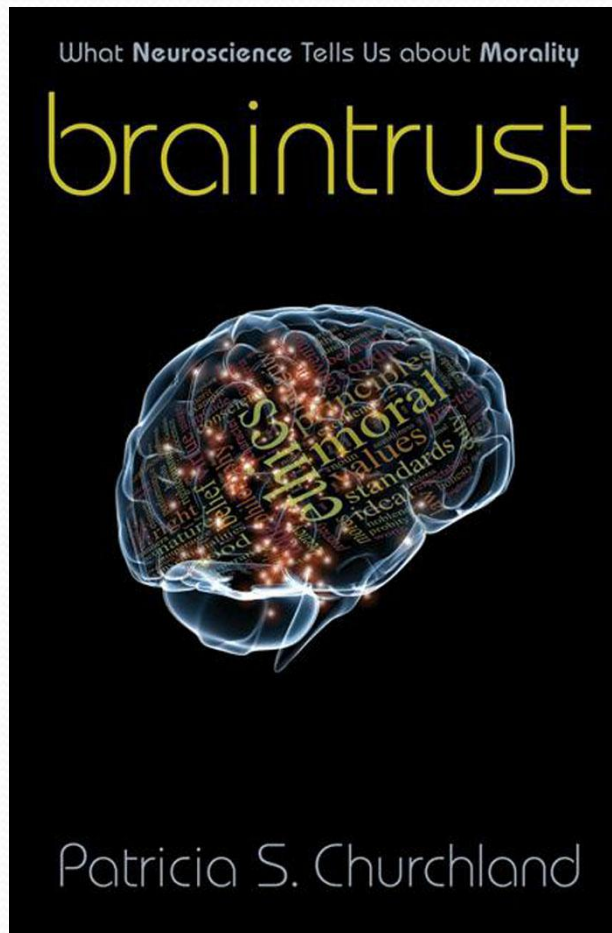
Pat Churchland, From Neurophilosophy to Neuroethics and Braintrust (2010, p. 9)



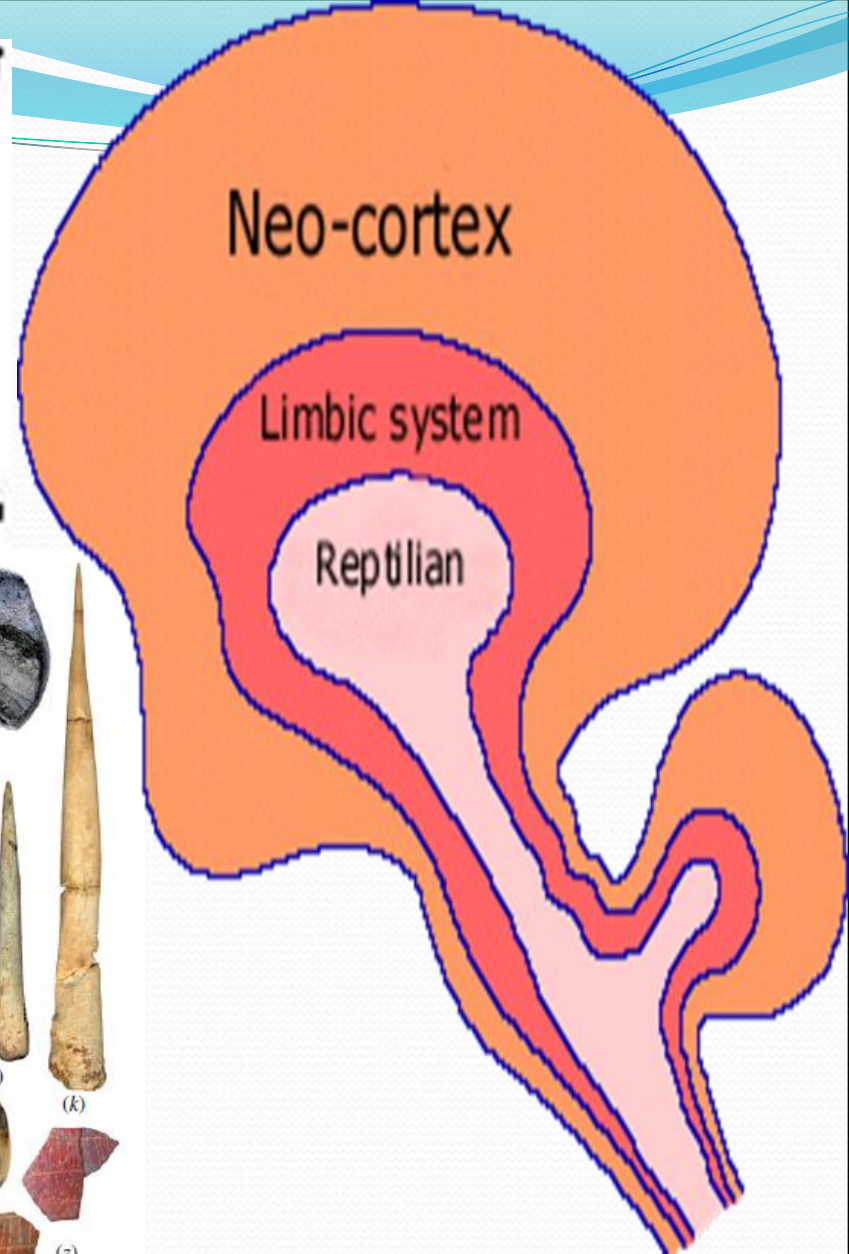
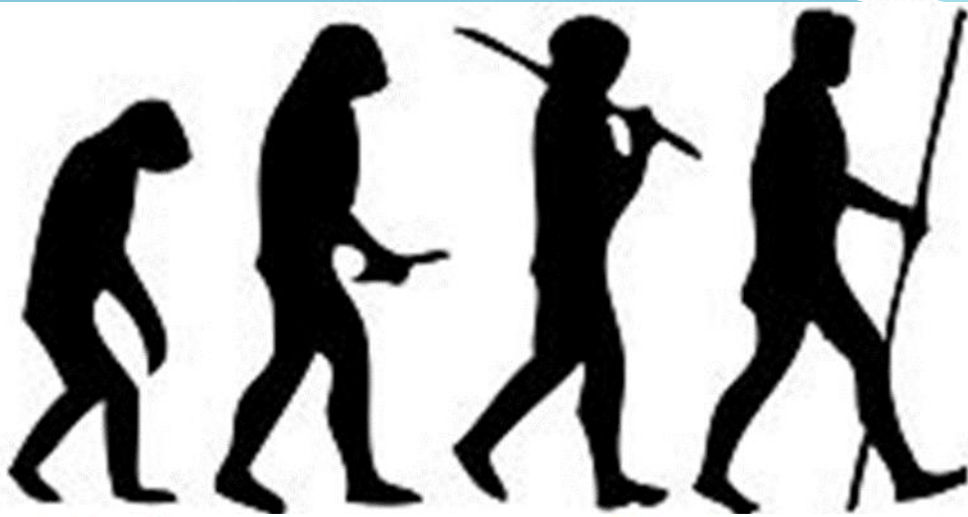
Neurophilosophy: Toward a Unified Science of the Mind-Brain (1986)

• "what we humans call **ethics** or **morality** is a four-dimensional scheme for **social behavior** that is shaped by interlocking **brain processes**: (1) **caring** (rooted in attachment to kin and kith and care for their well-being), (2) **recognition of others' psychological** states (rooted in the benefits of predicting the behavior others), (3) **problem-solving** in a social context (e.g., how we should distribute scarce goods, settle land disputes; how we should punish the miscreants), and (4) **learning social practices** (by positive and negative reinforcement, by imitation, by trial and error, by various kinds of conditioning, and by analogy)."

Moral values ground a life that is a *social life*



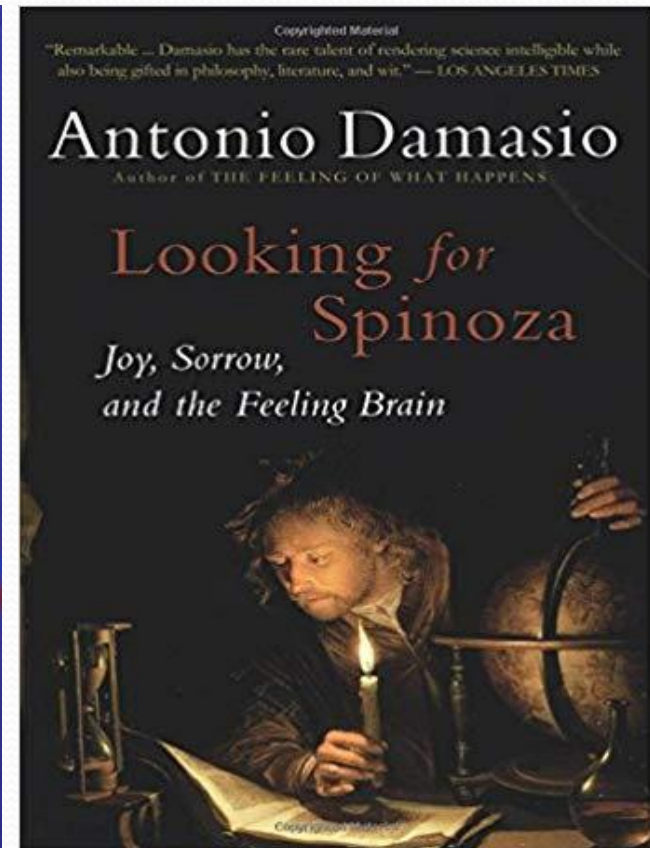
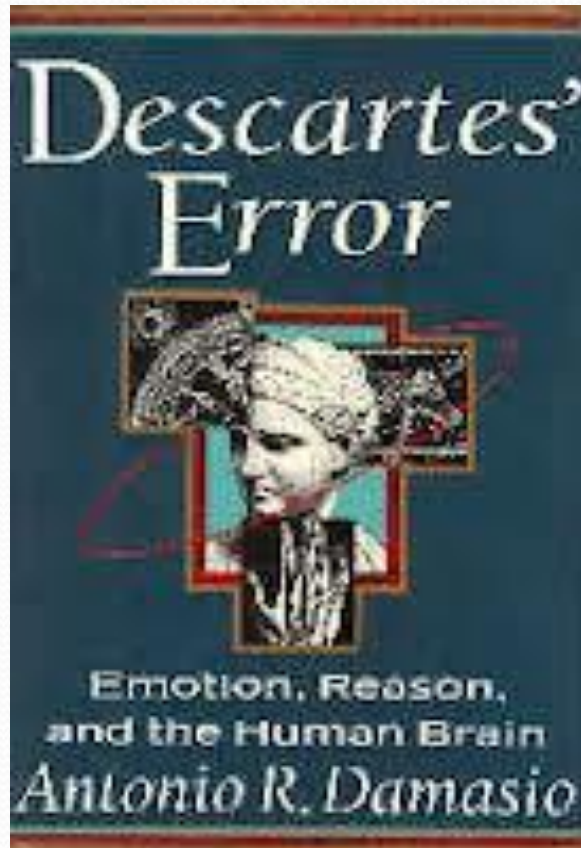
“At the root of *human moral practices* are the **social desires**; most fundamentally, these involve attachment to **family members**, **care for friends**, the **need to belong**. Motivated by these **values**, individually and collectively we try to solve **problems** that can cause misery and instability and threaten **survival**. Since our brains are organized to value **self-welfare** as well as **welfare** of kith and kin, conflicts frequently arise between the **needs of self** and the needs of **others**.” (p. 43)



Paul MacLean,
The Triune Brain in Evolution

What is, after all, Descartes' Error?

Clue: Spinoza's Substance Monism



(Not to be confused with Descartes Error)

René Descartes, *Meditationes de prima philosophia* (1641)



- « Dans la seconde, l'esprit, qui, usant de sa propre liberté, suppose que toutes les choses ne sont point, de l'existence desquelles il a le moindre doute, reconnaît qu'il est absolument impossible que cependant il n'existe pas lui-même »

Discours de la méthode (1637)

Principia philosophiae (1644)

- «Mais aussitôt après je pris garde que, pendant que je voulais ainsi penser que tout était faux, il fallait nécessairement que moi qui le pensais fusse quelque chose ; et remarquant que cette vérité, ***je pense, donc je suis***, était si ferme et si assurée que toutes les plus extravagantes suppositions des sceptiques n'étaient pas capables de l'ébranler» (IV)
- "Ac proinde hæc cognitio, *ego cogito, ergo sum*, est omnium prima & certissima, quæ cuilibet ordine philosophanti occurrat." (*Principia* §7)
- English: "This proposition, *I think, therefore I am*, is the first and the most certain which presents itself to whoever conducts his thoughts in order."

(dubito) → cogito → sum

- 1. Not a syllogism or deduction (A.J. Ayer) :

$C \rightarrow S \ \& \ C \therefore S$ (modus ponens)

“For if 'cogito' is taken in this sense, his initial principle, 'cogito ergo sum,' is false. 'I exist' does not follow from 'there is thought now'.”

- 2. Not a proof for a substantialist self (Kant)
- 3. Not a causal, existential inference:

“The *sum* is not a consequence of the thinking, but vice versa; it is the ground of thinking, the *fundamentum*”
(M. Heidegger) /S. Kierkegaard

Norman Malcolm, “Descartes’ Proof that His Essence is Thinking” (1965)

- “x is my essence if it is the case that (a) if I am aware of x then (necessarily) I am aware of myself, and (b) if I am aware of myself then (necessarily) I am aware of x. Thinking satisfies these conditions.*Ergo*, thinking is my essence.”
- “(a) is true solely because the statement ‘I am not aware of myself’ is self-defeating . . . (b) is true because the awareness of anything is thinking, and also because of Descartes’ doctrine that one cannot think without being aware of thinking.”

“Brain in a Vat” : Hilary Putnam, *Reason, Truth, and History* (1981)



- “De sorte que, após ter pensado bastante nisto e de ter examinado cuidadosamente todas as coisas, cumpre enfim concluir e ter por constante que esta proposição, eu sou, eu existo, é necessariamente verdadeira todas as vezes que a enuncio ou que a concebo em meu espírito”. (Medit. II)

Reason, Feeling, Perception, Emotion

I began writing this book to propose that **reason** may not be as **pure** as most of us think it is or wish it were, that **emotions** and **feelings** may not be intruders in the bastion of reason at all: they may be enmeshed in its networks, for worse and for better. The **strategies of human reason** probably did not develop, in either evolution or any single individual, without the guiding force of the **mechanisms of biological** regulation, of which **emotion and feeling** are notable expressions. Moreover, even after **reasoning** strategies become established in the formative years, their effective deployment probably depends, to a considerable extent, on a continued **ability to experience feelings**.

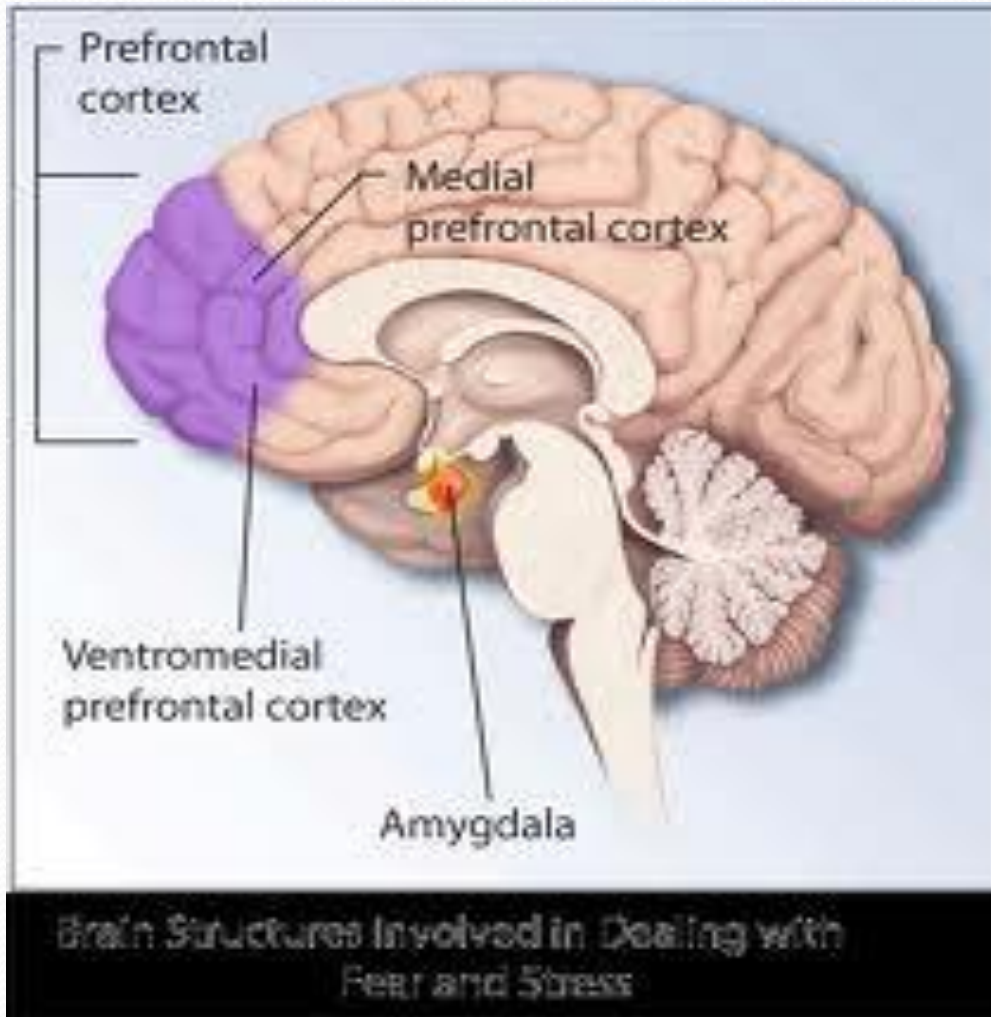
somatic marker hypothesis : **experiences** in the world normally **trigger emotional** experiences... human **reason** depends on **several brain systems**, working **in concert** across many levels of neuronal organization, rather than on a single brain center.

Feeling is the second and central topic of this book, and one to which I was drawn not by design but by necessity, as I struggled to understand the cognitive and **neural machinery behind reasoning and decision making**. A second idea in the book, then, is that the essence of a feeling may not be an elusive mental quality attached to an object, but rather the direct **perception** of a specific landscape: that of the body.

Emotions: Cognitive & noncognitive, volitional features

Cognition: Embodied, Embedded, Extended, Enactive, Affective (“4EA Theories”; Dreyfus, Varela, Wheeler, Freeman)

Deficit in reasoning is secondary to deficits in emotional processing



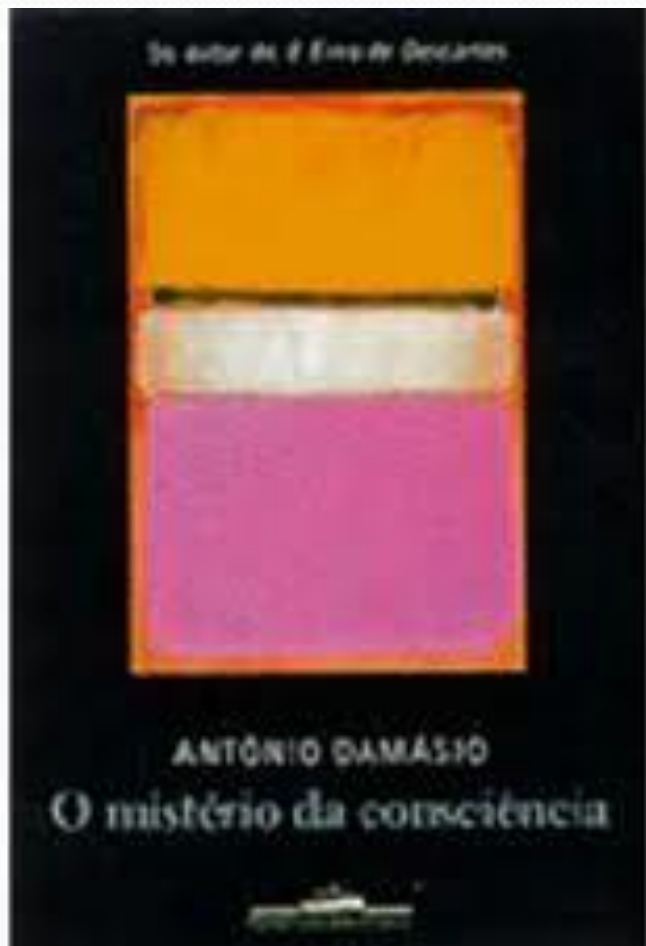
Difficulty with planning in the immediate and the future.

No longer able to make personally **advantageous** decisions.

Often sustain **social, personal, economic** losses.

The only **deficit** that could be detected was one in which these individuals failed to **display emotion** in situations in which **emotion** would be **normatively expected**.

The feeling of what happens: Body and emotion in the making of consciousness



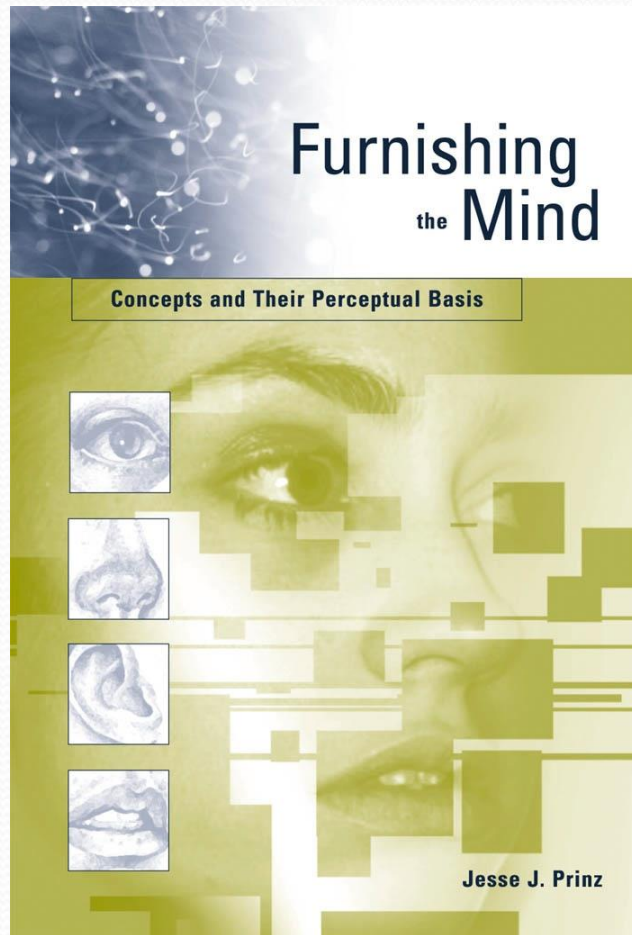
- As emoções têm função social e papel decisivo no processo da interação. As emoções são adaptações singulares que integram o mecanismo com o qual os organismos regulam sua sobrevivência orgânica e social. As emoções acabam por ajudar a ligar a **regulação homeostática** e os **valores de sobrevivência** a muitos eventos e objetos de nossa experiência **autobiográfica**.

A Treatise of Human Nature: Of the Understanding, Passions & Morals



Jesse Prinz's Transformation

Naturalism: Concept Empiricism



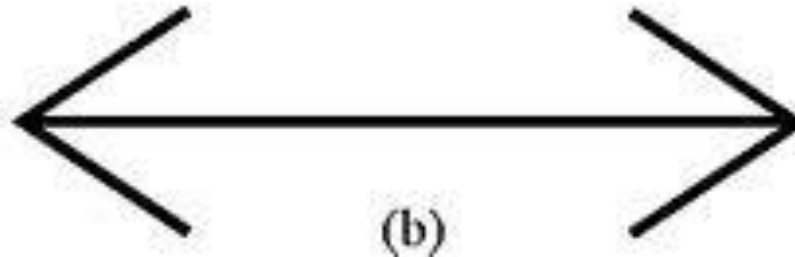
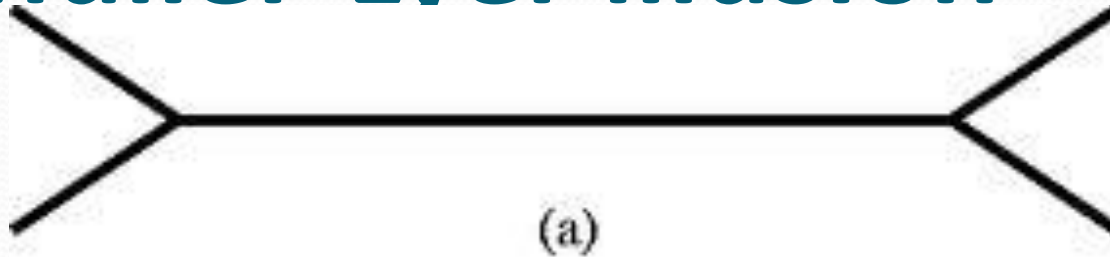
- “all [human] **concepts** are **copies** or combinations of copies of perceptual representations” (p. 108)
- **perceptual representation**: “a representation in a dedicated input system” (p. 115)

We take our **natural kind** concepts to pick out **unique natural kinds**, not **disjunctive sets** of natural kinds. I believe that my MONARCH concept refers to **one kind of butterfly** even if I suspect that I am frequently duped by mimics. There are, of course, cases in which we take a concept to refer to a single kind, and it turns out to be disjunctive for one reason or another (to wit, **jade**). What is at issue here is not the possibility of concepts with disjunctive contents. **The question is whether concepts *must be disjunctive whenever we cannot distinguish two things that reliably cause their tokenings.***



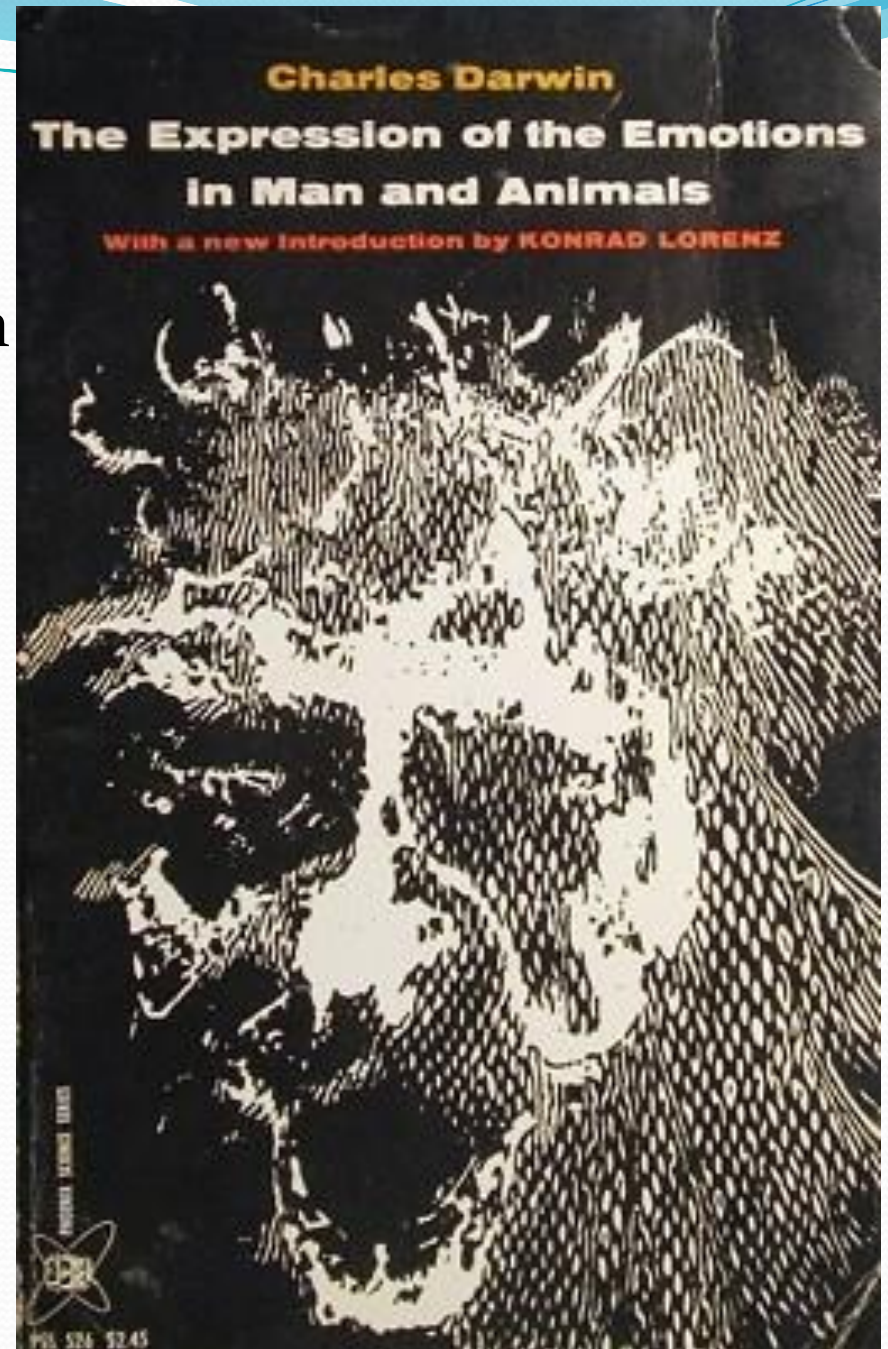
This interplay between **nominal** and **real** stems from an underlying faith in the **reality of natural kinds**, coupled with the fact that we **must track** these kinds by their appearances. To cope with this **predicament**, we search for **appearances** possessed **exclusively by members of unique natural kinds...** Real contents exert **normative control over proxytypes**. Proxytypes transform because they are **designed** to help us **track real contents.**

The Müller-Lyer illusion



- Jerry Fodor's **Modularity of the Mind: Informational encapsulation**: basic **perceptual modules** are partly closed off from the cognitive background knowledge and beliefs on the part of the individual. The flip side is **inaccessibility to central monitoring**: the intermediate-level representations that it computes prior to producing its output are inaccessible to consciousness, and unavailable for explicit report.

- “The theory I defend is an attempt, in part, at a synthesis. I try to provide a simple, uniform account with ample explanatory power. The theory is an attempt to **reconcile** a number of debates in the **emotion** literature. It bridges the gap between **cognitive** and **noncognitive** theories and between **biological reductionism** and **social constructionism**”



Prinz: Emotions are gut reactions

- “The theory that I defend is not entirely new. It is a variation of an account that was pioneered by William James and Karl Lange and has recently been resuscitated by **Antonio Damasio**.

According to this tradition, emotions are perceptions of patterned changes in the body...

Theories of this kind have never been popular in philosophy or psychology. They seem ill equipped to explain many of the things that a theory of emotions should account for. Most notably, they fail to explain the significance of emotions.

Emotions contribute to reasoning, action & the election of ends.”

Basic Emotions



Anger

Sadness

Disgust

Joy



“[Emotions] are triggered by judgments and amenable to cultural influence. They are central to our **comprehension of morality** and other lofty domains (as I shall argue in the sequel to this book [*Emot Const of Mor*]). How do palpitations, pangs, and twinges in the gut play these kinds of roles? This book is an attempt to answer that question.

I defend a **Jamesian theory with smarts**. So, rather than adding to the proliferation of theories, I hope to show that an old theory can be modified to do the work of many of its competitors.

... Emotions are relatively **simple entities**... They are comprised of just two parts: **embodied appraisals** and **valence markers**. But these two parts have considerable explanatory power. They are **action-beckoning, body-registering, memory-** and **attention-facilitating** thoughts that can be **consciously experienced**.”

Damasio's somatic feeling theory

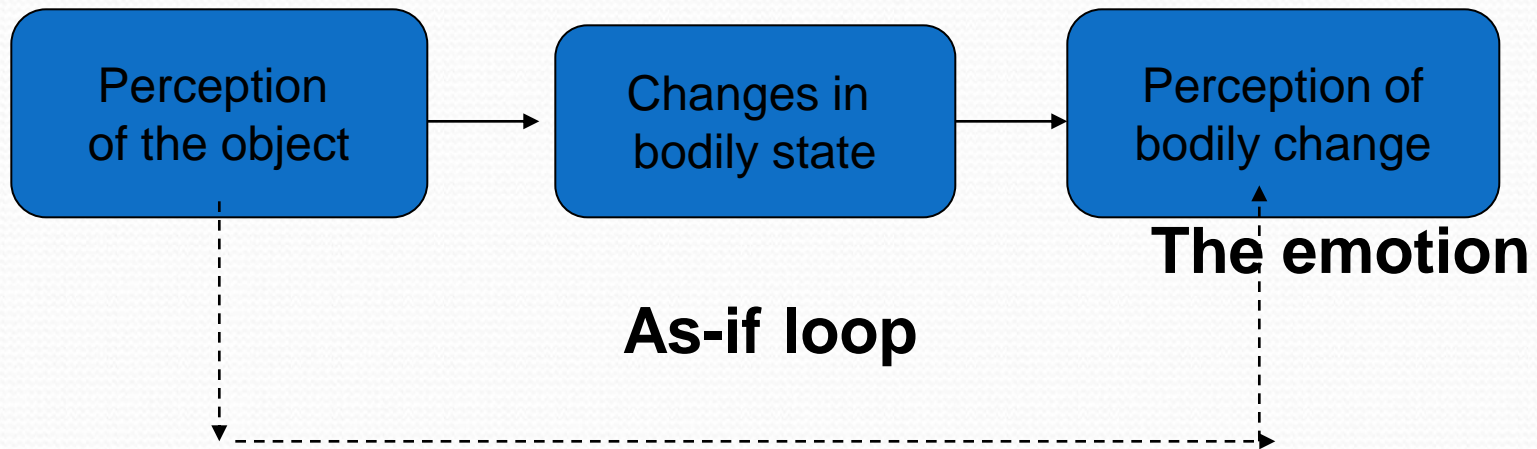
First, Damasio expands the range of **bodily states** underlying our emotions to include states of the "internal milieu." Emotions can register changes in the levels of chemicals in the brain, such as changes in hormone levels caused by the endocrine system.

Second, Damasio emphasizes the possibility that **emotional response** can occur in the absence of bodily changes when brain centers ordinarily associated with bodily change are active. The brain can enter the kind of state it would be in if various bodily changes had taken place, in the absence of those changes.

object → perception → change → feeling

Sensory areas of the brain can be activated endogenously. Damasio calls the pathway that leads to endogenous stimulation of somatic brain areas the "as-if loop": when this pathway is used, the brain functions as if the body had been perturbed in an emotionally relevant way. In a footnote, James anticipates Damasio's as-if loop proposal, saying: "it is of course possible that the cortical centres normally percipient of . . . organic sensations due to real bodily change, should become *primarily excited in brain disease* and give rise to an hallucination of the changes being"

Damasio's Somatic Marker Hypothesis



When individuals make **decisions**, they must **assess** the **incentive value** of the **choices** available to them, using **cognitive** and **emotional processes**. When the individuals face **complex and conflicting choices**, they may be **unable to decide** using only cognitive processes, which may become **overloaded**.

In these cases, **somatic markers** can help **decide**. Somatic markers are **associations** between **reinforcing stimuli** that **induce** an associated physiological **affective state**, so as to guide **behavior** in favor of **more advantageous choices** and, therefore, are **adaptive**.

Damasio goes a step beyond James

- James does not consider the possibility that everyday emotional experiences also bypass the body... [Damasio] suspects that emotions may bypass the body quite regularly. Just as visual brain centers become active when we form visual images of objects, somatic brain centers become active when we imagine undergoing an emotion. Neither case requires an actual stimulus (i.e., a visually perceived object or a bodily change).
- The third contrast between Damasio and James is the most important. Like James, Damasio argues that emotional feelings are feelings of bodily changes.
- But Damasio (1994) does not imply that emotions are exhausted by feelings. The brain can register changes in bodily states without conscious awareness. Those unconscious neural responses to changes in bodily states count as emotions for Damasio. Emotions *can be conscious, but they need not be*.
- Thus, Damasio holds a somatic theory of emotion, and a somatic theory of emotional feelings, but not a somatic feeling theory of emotion (fig. 1.2).

4 properties for the paradigm cases of perception → emotion

- 1. Perception takes place in modality-specific input systems;
- 2. perceptions represent things;
- 3. perceptions can be consciously experienced;
- 4. perceptions are quasi-modular.
- I suggested that anything exhibiting **all four of these characteristics** deserves to be called a **case of perception... emotions** exhibit all four characteristics, and it is therefore appropriate to think of **emotions as a form of perception.**

Prinz and the *Emotion Problem*

- So we have a **serious puzzle**. The fact that emotions are **meaningful**, reason **sensitive**, and **intentional** suggests that they must be cognitive. The fact that some emotions arise **without intervention of the neocortex** suggests that emotions cannot *all* be cognitive. The emotions that arise in this way seem to be meaningful. This seems to suggest that being **meaningful** does not require being **cognitive**. **Noncognitive** states are explanatorily anaemic and cognitive states are explanatorily superfluous. **Noncognitive theories** give us too little, and **cognitive theories** give us too much. Call this the **Emotion Problem**.

- **Cognitive theories:** emotions are **propositional attitudes**. A propositional attitude is a **mental state** consisting of a **representation** of a **proposition** and an **attitude** toward that **proposition**:
- “a person can be afraid that the sea is shark infested...[or] she has mentally represented the proposition that the sea is shark infested *and that she has an emotion, fear, directed* toward that proposition. Fear can be considered independent of the propositional object it happens to attach to.”

Prinz's *Emotion Problem* as a syllogism

Cognition is absent. [put Prinz's way: nothing is taking place in the brain which involves the intervention of the neocortex]

(while cognition is absent), the person is in an emotional state and this suggests that something akin to cognition—something that fulfils the outward criteria for being cognition—is taking place. [i.e. something akin to the perception and evaluation of an object]

the conclusion drawn is that something else, other than the involvement of the neocortex must be playing the role of cognition; something noncognitive must give-forth meaning, and must be directed onto things in the world: must be intentional. [Since cognition-as-neural-activity-involving-the-intervention-of-the-neocortex (what Prinz takes to be cognition) is not present, but a meaningful emotional episode is, meaning must emerge from an embodied emotion having semantic properties which enable it to refer in the absence of cognition (in the absence of neocortical intervention).]

Prinz's 'solution' to his 'problem'

Emotions can be individuated by their reliable elicitors. This suggestion can be taken a step further. According to prevailing theories of mental representation, a mental state gets its intentional content in virtue of being reliably caused (or having the function of being reliably caused) by something (Dretske, 1981, 1988; Fodor 1990).

Let's assume that a theory of this kind, whatever the details, is correct. There is some causal relation that confers content. If emotions are perceptions of bodily states, they are caused by changes in the body. But if those changes in the body are reliably caused by core relational themes, then our representations of the body may also represent those themes. (Prinz, 2004: 55)

... many of the bodily changes that co-occur with emotions prepare us for behavioral response. Changes in our muscles prepare us for movement, and a racing heart supplies the body with blood. No one observed the connection between body changes and emotion better than Darwin (1872/1998). For example, Darwin surmised that our hair stands on end when we are afraid because in earlier, hairier mammals this would have increase apparent body size, scaring off predators.

Prinz's positive theory of emotions: 10 questions

- 1. Do emotions necessarily involve cognition?
- 2. What, if anything, do emotions represent?
- 3. Are emotions a natural kind?
- 4. Are certain emotions universal and biologically based?
- 5. Can emotions be culturally determined?
- 6. How are emotions related to other affective constructs?
- 7. What distinguishes positive and negative emotions?
- 8. What is the basis of emotional consciousness?
- 9. Is emotion a form of perception?
- 10. Do emotions have many component parts?

Social constructivism built on a core of biologically basic emotions

- In response to the 1st question, I will argue that emotions are not cognitive. Prevailing cognitive theories of emotion are fundamentally mistaken (ch. 2). In ch.3 I argue that emotions nevertheless represent core relational themes, just as prevailing cognitive theories maintain. Then I take up the question of whether emotions form a coherent class (ch. 4). I argue that they do, rejecting influential arguments to the contrary. Chapters 5-6 address the nature/nurture debate. I think all emotions that we care about involve both dimensions. I also reject leading constructivist theories, which are overly cognitive in orientation. In ch. 7, I relate emotions to other affective constructs, such as motivations and moods. Moods are a special subset of emotions. Motivations are a separate class of mental states, but emotions do have a motivating component. I give an account of that component in my discussion of emotional valence (ch. 8). I reject the view that positive and negative emotions can be distinguished by their conscious feelings. Emotional consciousness is taken up in ch.9. I present a unified theory that can explain emotional consciousness in the same way as other forms of consciousness.

The “phenomenological deficit” of cognitive sciences

- My answer to the ninth question holds all of the other pieces of the account together. I believe that emotion is quite literally a form of perception. This is consistent with the view of James, Lange, Damasio, and others who relate emotions to the body. Like them, I defend a somatic theory. At the same time, I think existing somatic theories tend to leave too many questions unanswered. In particular, somatic theories do not explain why emotions seem so meaningful, intelligible, and rational.

- To rectify this deficit, it is important to show that emotions are not merely perceptions of the body but also perceptions of our relations to the world. This book is an attempt to patch a major hole in somatic theories... to bring body, mind, and world together.

Basic emotions are embodied **appraisals**... All emotions are either positive or negative (**valence**). **Emotional flavoring** comes from **appraisal**. The difference between **basic** and **nonbasic emotions** is that basic emotions are calibrated through files **fostered by natural selection**.



sadness

- ① slanting upper eyelids
- ② lowering brows in eyes
- ③ slight pulling down of lip corners



anger

- ① eyebrows slant and together
- ② eyes glare
- ③ narrowing of the lips



contempt

- ① lip corner heightened and raised on only one side of face



disgust

- ① nose wrinkling
- ② upper lip raised



surprise

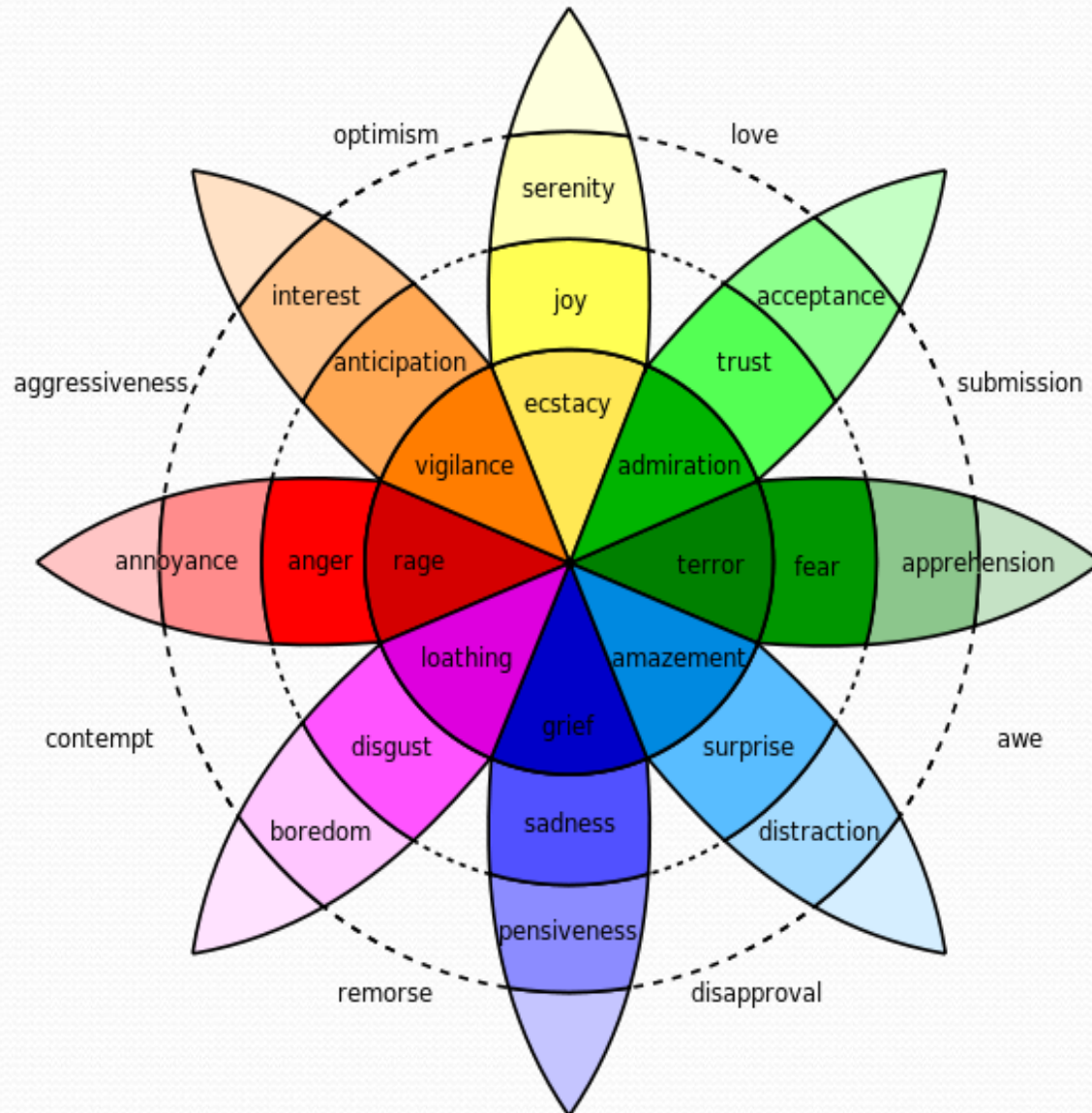
- ① look for only one second
- ② eyebrows raised
- ③ eyes widened
- ④ mouth open



fear

- ① eyebrows raised and pulled together
- ② raised upper eyelids
- ③ lowered lower eyelids
- ④ lips slightly stretched horizontally (back to zero)

Robert Plutchik's Wheel of Emotions



- **Emotions** can even enter awareness before we have **consciously** accessed the subtle cues that triggered them. This is why we describe emotions as **gut reactions**. They are like **bodily radar detectors** that alert us to concerns. When we listen to our emotions, we are not being swayed by meaningless feelings. Nor are we hearing the cold dictates of complex judgments. We are **using our bodies to perceive our position in the world**(p. 240)

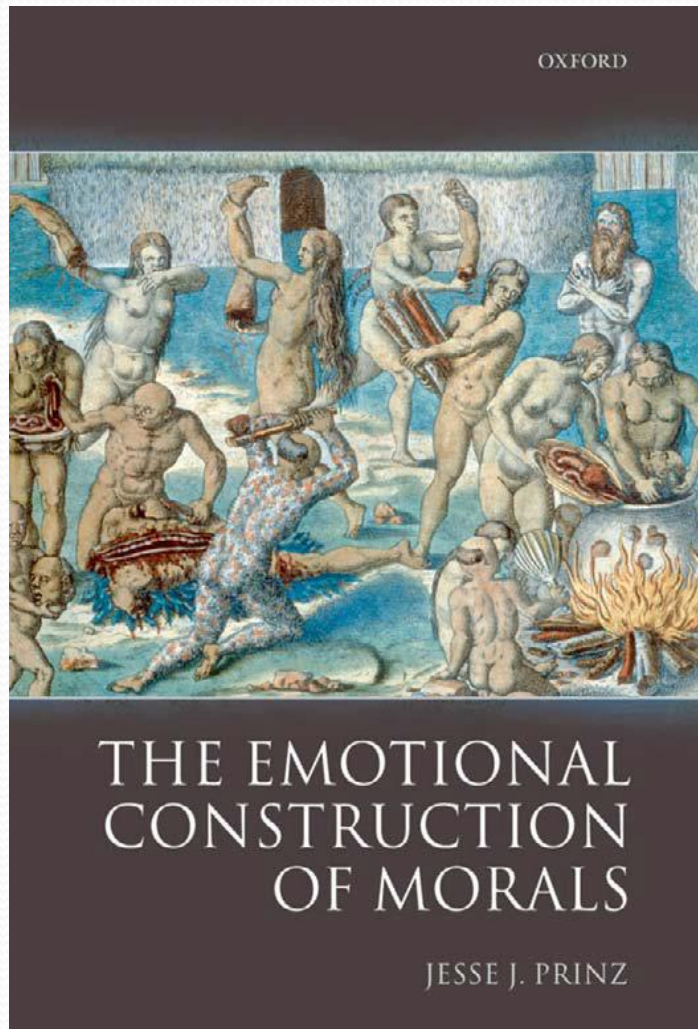


Sociality:Lebensform:Lebenswelt



- The form that sociability takes in individuals of a species depends on their niche and on how they make their living. Sociability is not all-or-nothing, but comes in degrees. Cougars tend to be minimally social, humans tend to be intensely social, and ravens are somewhere in between. Sociability can also depend greatly on food resources (p. 61)

Prinz's Moral Relativism: The Emotional-Cultural Construction



- “Morality is a **normative domain**. It concerns **how the world ought to be**, not how it is. The investigation of morality seems to require a methodology that differs from the methods used in the sciences. At least, that seems to be the case if the investigator has normative ambitions. If the investigator wants to proscribe, it is not enough to describe.”
- Non-naturalism : moral nihilism / supernatural
- Naturalism : subjectivism, relativism, and arationalism -- But that does not mean we ought to give it up

Does morality *originate* in the human conscience ?



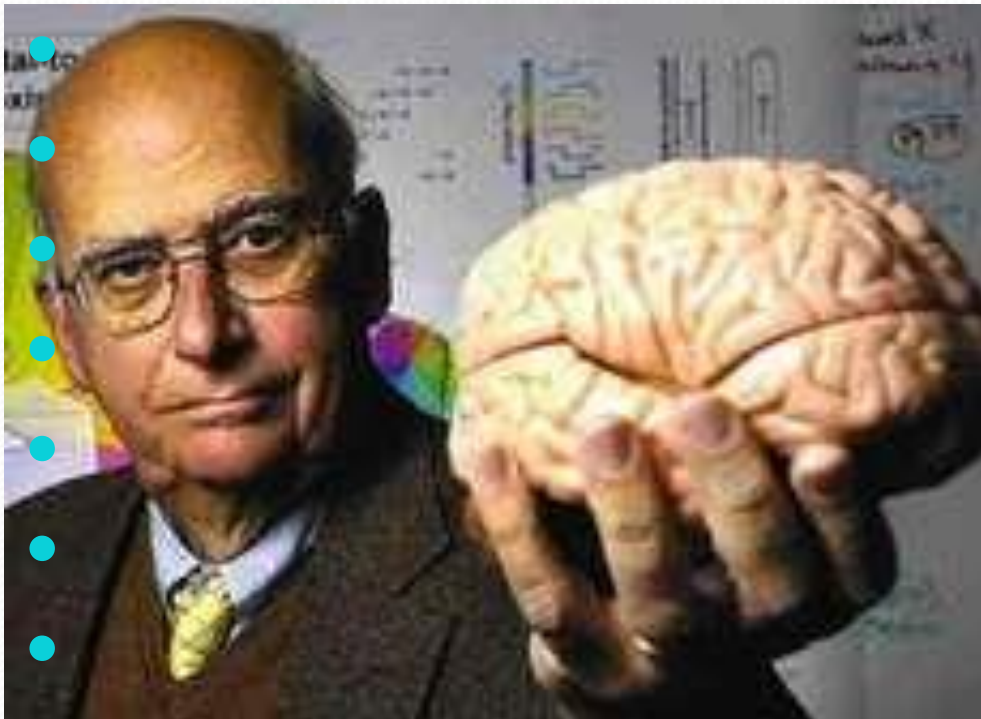
Jiminy Cricket (The Talking Cricket, *Il Grillo Parlante*) and **Pinocchio** (Carlo Collodi, 1883; Walt Disney, 1940)



Socrates: *inner voices* do not always advise the same way

Michael Gazzaniga, *The social brain*. New York: Basic, 1985

- “The data suggest that our mental lives amount to a **reconstruction** of the independent activities of the many brain systems we all possess. A confederation of mental systems resides within us. Metaphorically we humans are **more** of a **sociological entity** than a **single unified, psychological entity**. We have a **social brain**.”



Vladimir Safatle (F. Lordon), Le circuit des affects: Corps politiques, dérégulation et la fin de l'individu



Society is more than an organized system of laws and rules. It involves a **dynamics** of circulation of affects in charge of operating **social transformations**. Politics qua **theory of power** should thematize not only the circuit of goods and wealth, but first of all and above all, the circuit of affects, emotions, feelings and desires, not just one of the fields of forces at play, viz. of **institutions**, but also the field of **instincts**, which unveils the most basic sociality of human beings

Damasio: “the failure of past social engineering experiments is due...”

- “... to the sheer *folly of the plans or the corruption of their execution*. But the **failure** also may have been due to the misconceptions of the **human mind** that informed the attempts... the **misconceptions** resulted in a demand for human sacrifices that most humans find difficult or impossible to achieve; in an ignorant disregard for the aspects of **biological** regulation that are now becoming scientifically transparent and that **Spinoza** intuited in the *conatus*; and in a blindness to the dark side of **social emotions** that finds expression in tribalism, racism, tyranny, and religious fanaticism.”

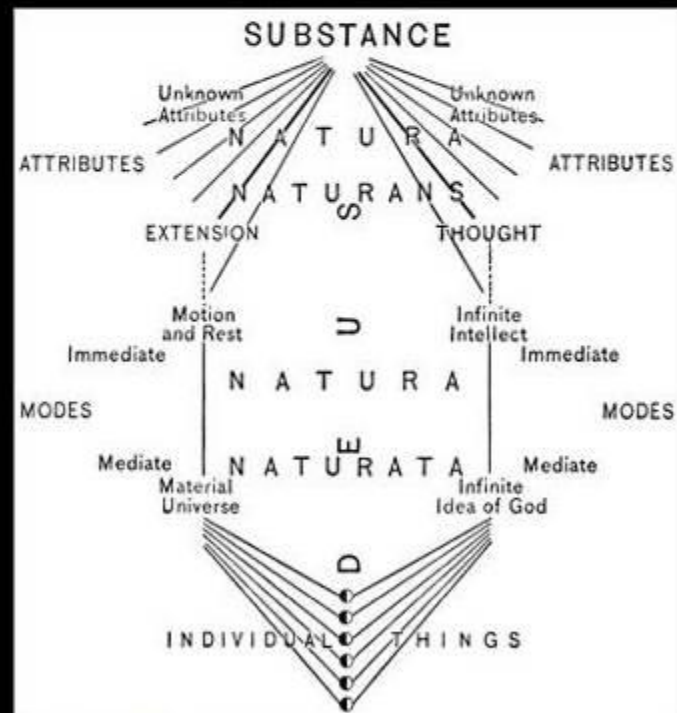
A. Damasio, Looking for Spinoza (2003) : “Knowing about emotion, feeling, and their workings does matter to how we live”

Baruch de Espinosa
(1632-1677)



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Renati Des Cartes Principiorum Philosophiæ
More Geometrico & Cogitata Metaphysica
(1663)



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