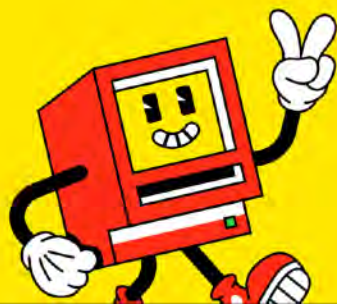




Welkom bij The School of life!



**THE
SCHOOL
OF LIFE**



theschooloflife.com/amsterdam

DE KRACHT VAN VERTROUWEN



VAN
ATOOM TOT PLANEET

VAN MOLECULAIRE INVLOED...

...TOT PLANETAIRE IMPACT

LOWLANDS

ERIK SCHOPPEN

**THE
SCHOOL
OF LIFE**

Social neuroscience is about how we feel, act and react socially to others, our decision making, emotions and trust, and how we build trust relationships.

TRUST RESEARCH

HUMAN TECH (UX)

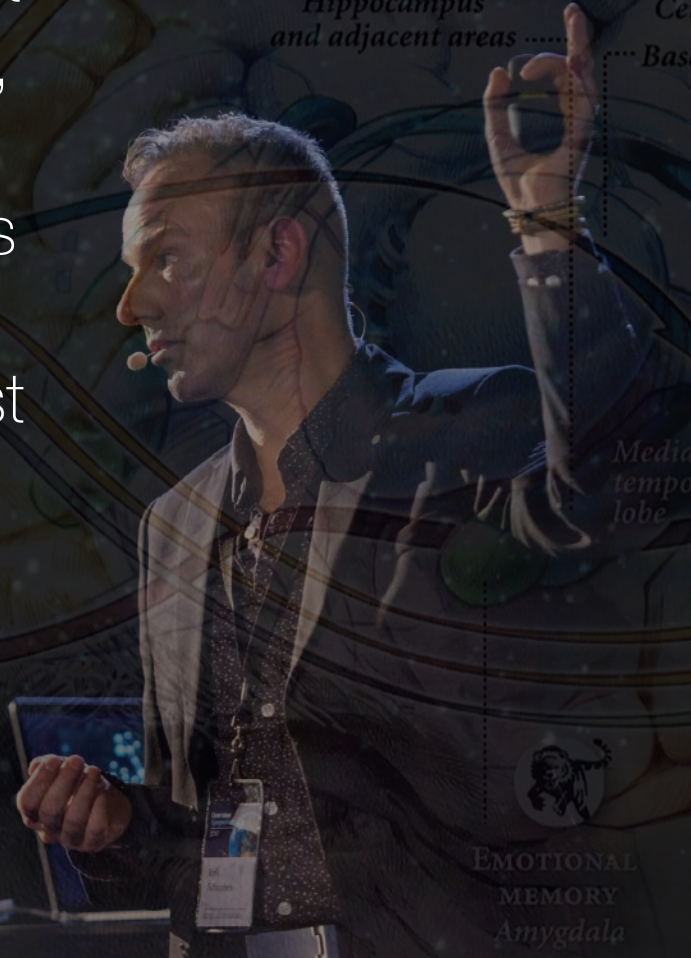
ART, MUSIC & DESIGN

LECTURER

AUTHOR



TRUST & SUSTAINABLE BRAND MANAGEMENT

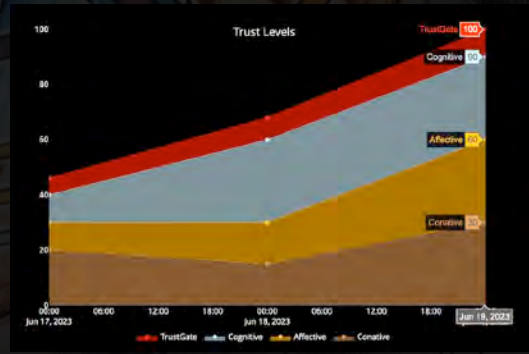


LONG-TERM MEMORY
Hippocampus and adjacent areas
Basal ganglia

HABITS AND SKILLS
Cerebellum

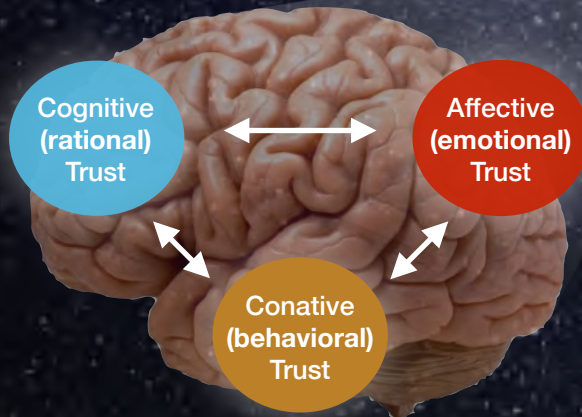
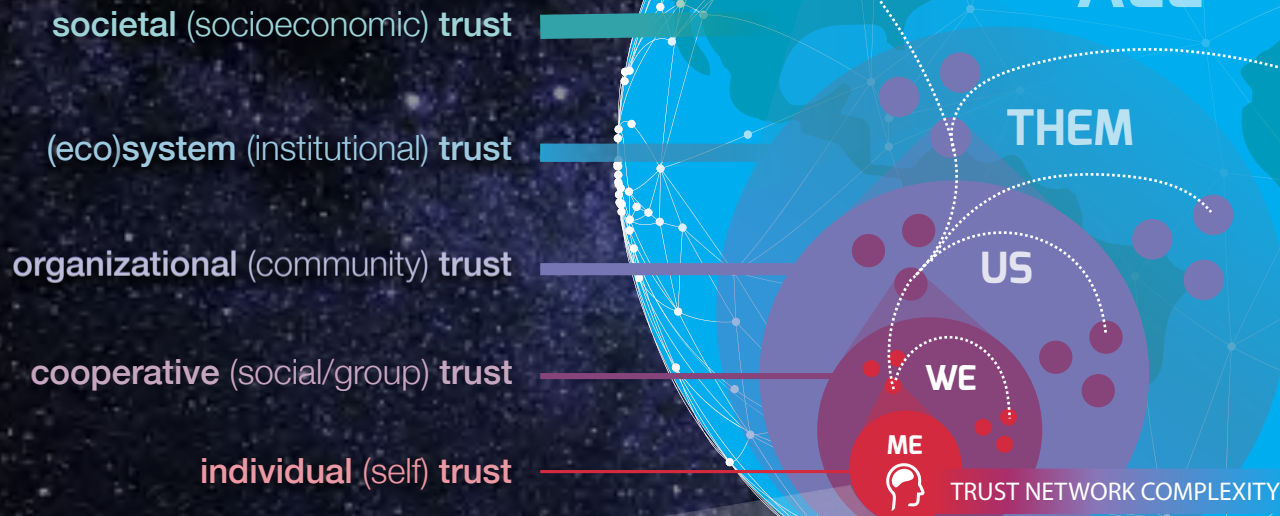
Medial temporal lobe

EMOTIONAL MEMORY
Amygdala



FESTIVALVERTROUWEN.NL

Research into (sustainable) trust attitudes (trust-based decision making)



Hanze University Groningen
University of Applied Sciences

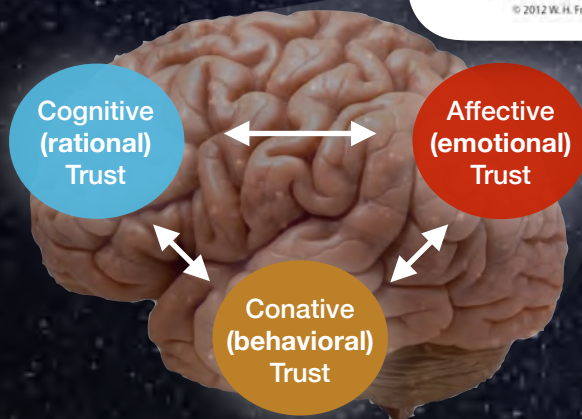
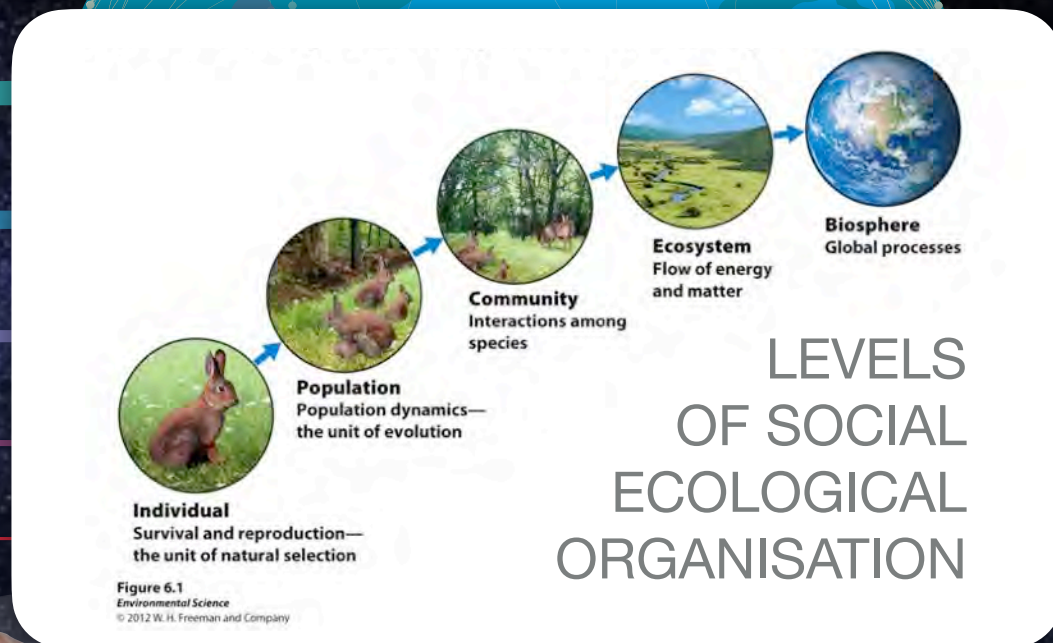


rijksuniversiteit
 groningen

Trusting Sustainability (2015)

Research into (sustainable) trust attitudes (trust-based decision making)

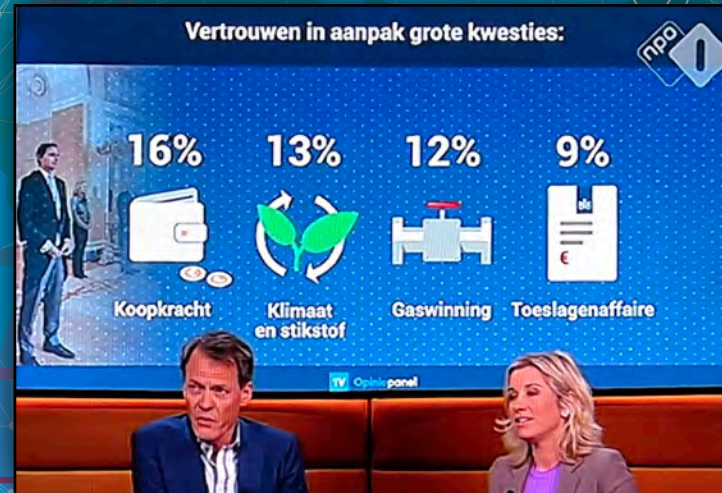
- societal (socioeconomic) trust
- (eco)system (institutional) trust
- organizational (community) trust
- cooperative (social/group) trust
- individual (self) trust



Trusting Sustainability (2015)

Research into (sustainable) trust attitudes (trust-based decision making)

- societal (socioeconomic) trust
- (eco)system (institutional) trust
- organizational (community) trust
- cooperative (social/group) trust
- individual (self) trust



- TRUST CRISIS
- CLIMATE ENERGY
- HOUSING FOOD, WATER
- HEALTHCARE DISEASES
- POLITICS ECONOMY
- WEALTH POVERTY
- HEALTH PEACE

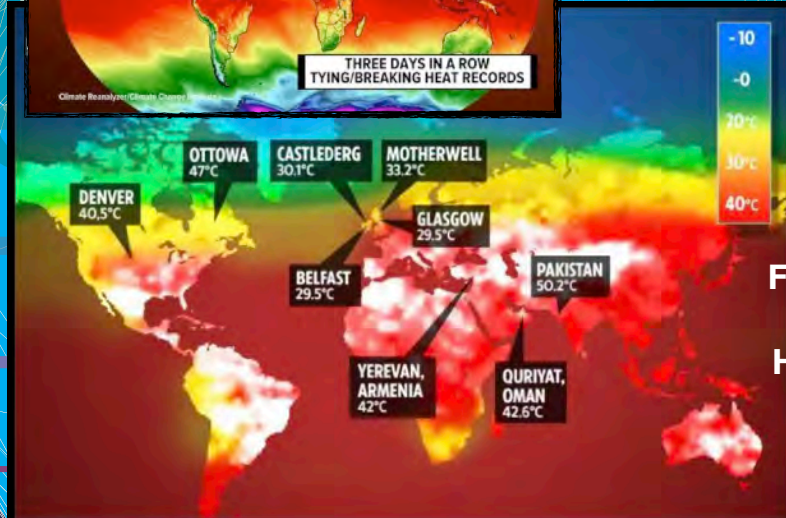
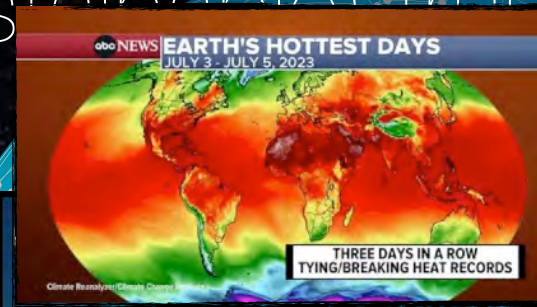


TRUST?

Trusting Sustainability (2015)

Research into (sustainable) trust attitudes (trust-based thinking)

- societal (socioeconomic) trust
- (eco)system (institutional) trust
- organizational (community) trust
- cooperative (social/group) trust
- individual (self) trust



News > World News

SCORCHED EARTH Killer global heatwave sees all-time highs including 47C in CANADA... and it's set to continue, experts warn



TRUST CRISIS

CLIMATE ENERGY

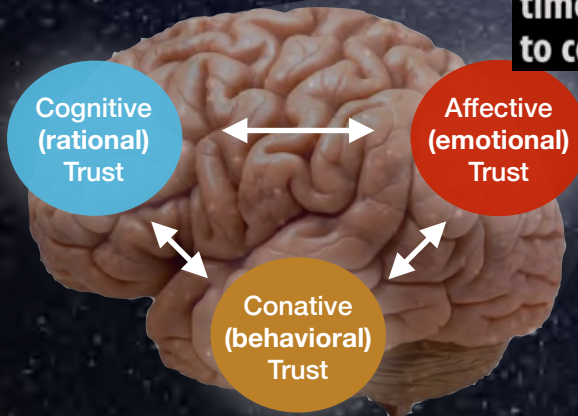
HOUSING FOOD, WATER

HEALTHCARE DISEASES

POLITICS ECONOMY

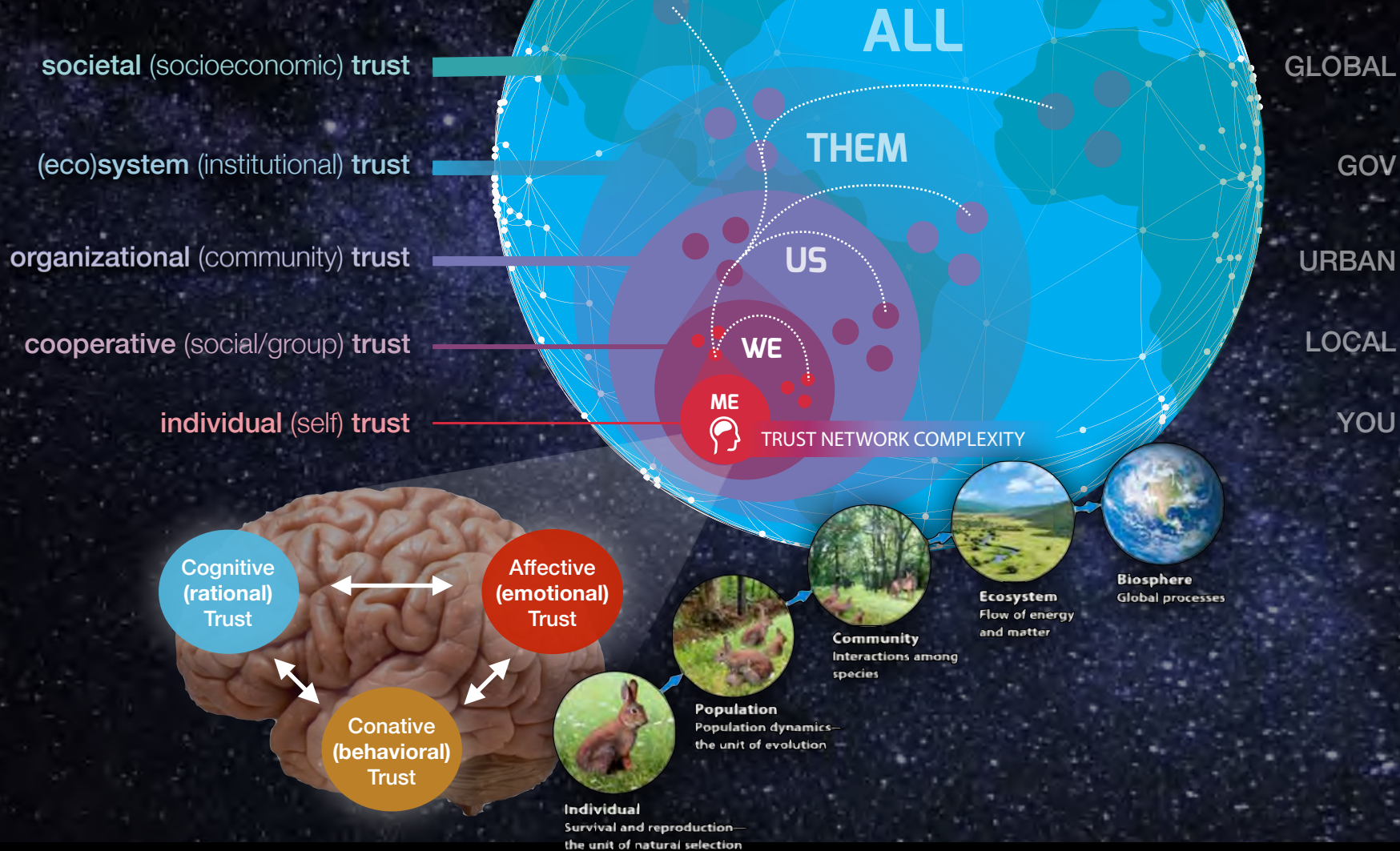
WEALTH POVERTY

HEALTH PEACE



Trusting Sustainability (2015)

Research into (sustainable) trust attitudes (trust-based decision making)



ORGANISATION OF TRUST

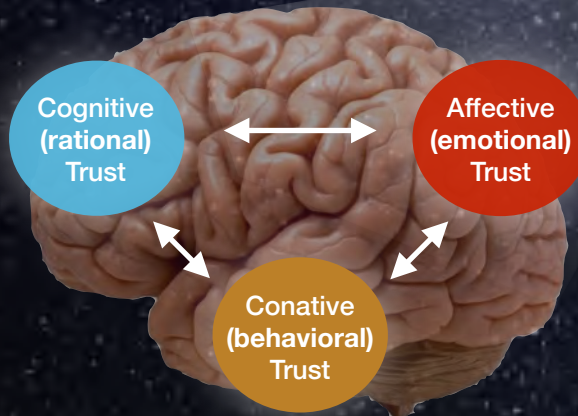


individual (self) trust

ME



YOU



THREE STAGES OF BRAIN DEVELOPMENT

HUMAN BRAINS EVOLVED TO BE MORE RESPONSIVE TO ENVIRONMENTAL INFLUENCES

5.000
20.000
250.000
250.000.000
500.000.000

written language
CULTURE & TRADITIONS

spoken language

HUMAN
REASON & PLANNING

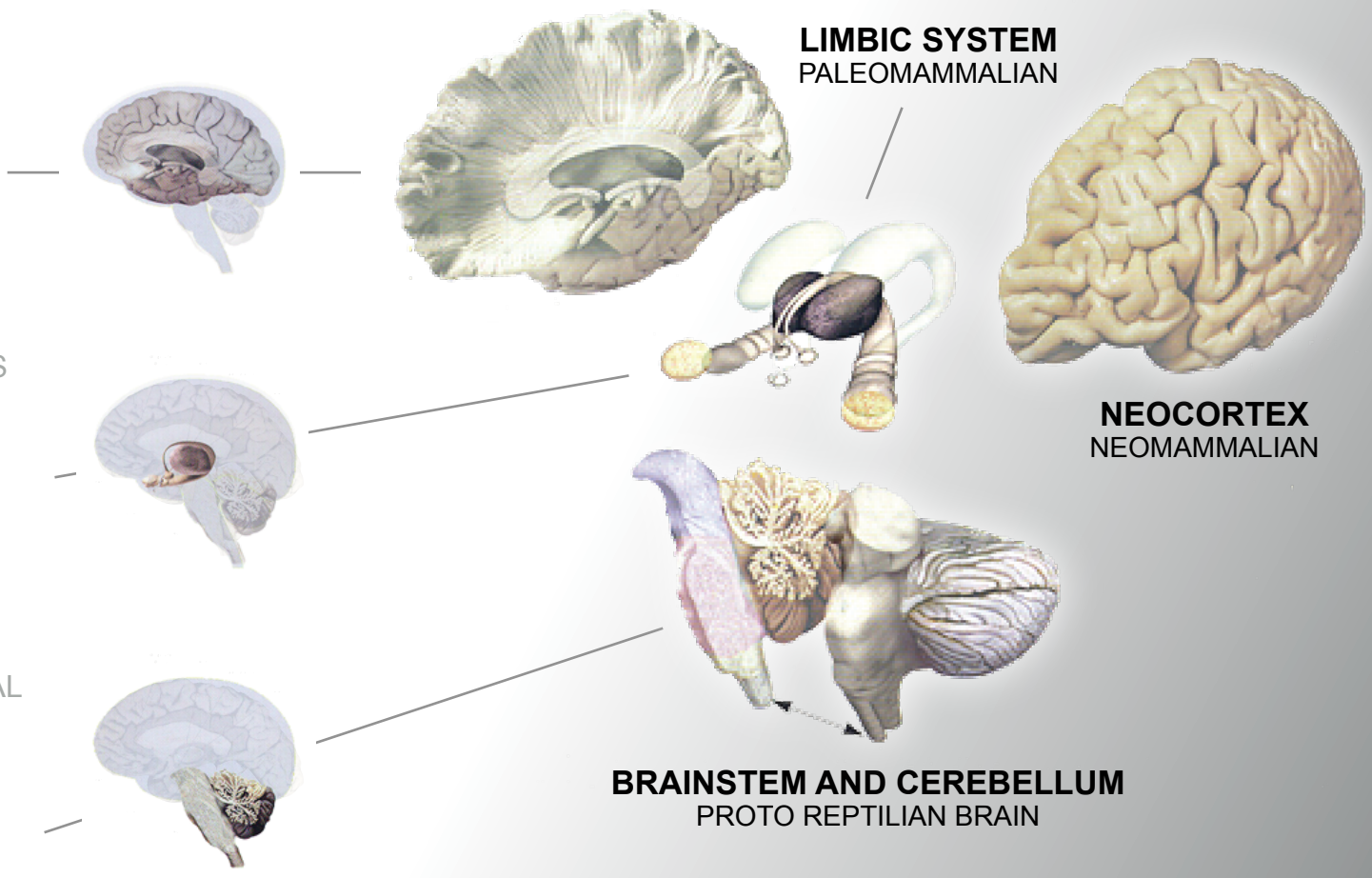
cortex
RATIO HUMAN

FEELINGS & EXPRESSIONS

limbic
EMOTIONS MAMMAL

PRIMARILY PHYSIOLOGICAL NEEDS

stam
INSTINCTS REPTILE



PRIMING

CONDITIONING

PERCEPTION (AWARENESS)

COGNITION (MEMORY)

BEHAVIOR (DECISION-MAKING)

THREE STAGES OF BRAIN DEVELOPMENT

HUMAN BRAINS EVOLVED TO BE MORE RESPONSIVE TO ENVIRONMENTAL INFLUENCES

5.000
20.000
250.000
250.000.000
500.000.000

written language
CULTURE & TRADITIONS

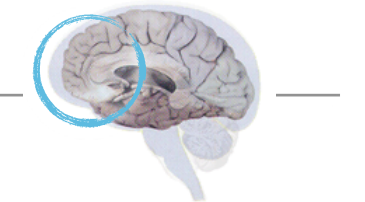
spoken language
REASON & PLANNING

cortex
RATIO HUMAN

limbic
FEELINGS & EXPRESSIONS
EMOTIONS MAMMAL

stam
PRIMARILY PHYSIOLOGICAL NEEDS
INSTINCTS REPTILE

Cognitive (rational) Trust
EXPLICIT SEMANTIC



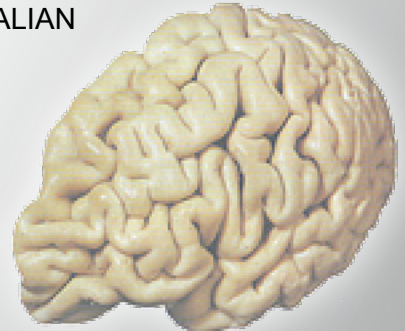
Affective (emotional) Trust
INTUITIVE EPISODICAL

Conative (behavioral) Trust
IMPLICIT PROCEDURAL

PRIMING



LIMBIC SYSTEM
PALEOMAMMALIAN



NEOCORTEX
NEOMAMMALIAN



BRAINSTEM AND CEREBELLUM
PROTO REPTILIAN BRAIN

CONDITIONING

PERCEPTION (AWARENESS)

COGNITION (MEMORY)

BEHAVIOR (DECISION-MAKING)



food



sex



safety



food



sex

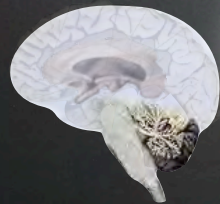


safety

TEST

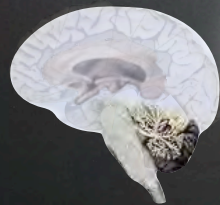






Conative
(behavioral)
Trust





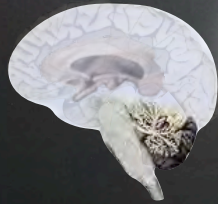
Conative
(behavioral)
Trust



Affective
(emotional)
Trust



Conative
(behavioral)
Trust



BRAIN HAS FOCUS ON FACES & FEELINGS



1



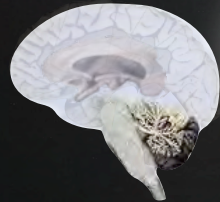
2

50-200
milliseconds

Affective
(emotional)
Trust



Conative
(behavioral)
Trust



BRAIN HAS FOCUS ON FACES & FEELINGS

power / dominance



1

valence / trustworthiness



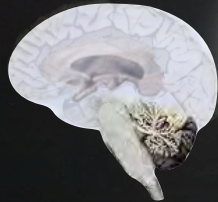
2

50-200
milliseconds

Affective
(emotional)
Trust



Conative
(behavioral)
Trust



BRAIN HAS FOCUS ON FACES & FEELINGS

power / dominance

valence / trustworthiness

Cognitive
(rational)
Trust



1

dependency



2

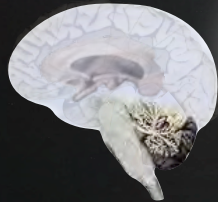
reciprocity

50-200
milliseconds

Affective
(emotional)
Trust

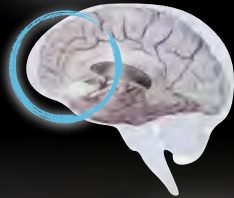


Conative
(behavioral)
Trust



BRAIN NEEDS INFORMATION TO PREDICT TRUSTWORTHINESS

Cognitive
(rational)
Trust



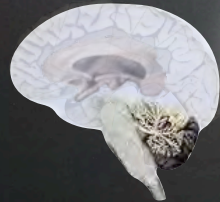
Affective
(emotional)
Trust



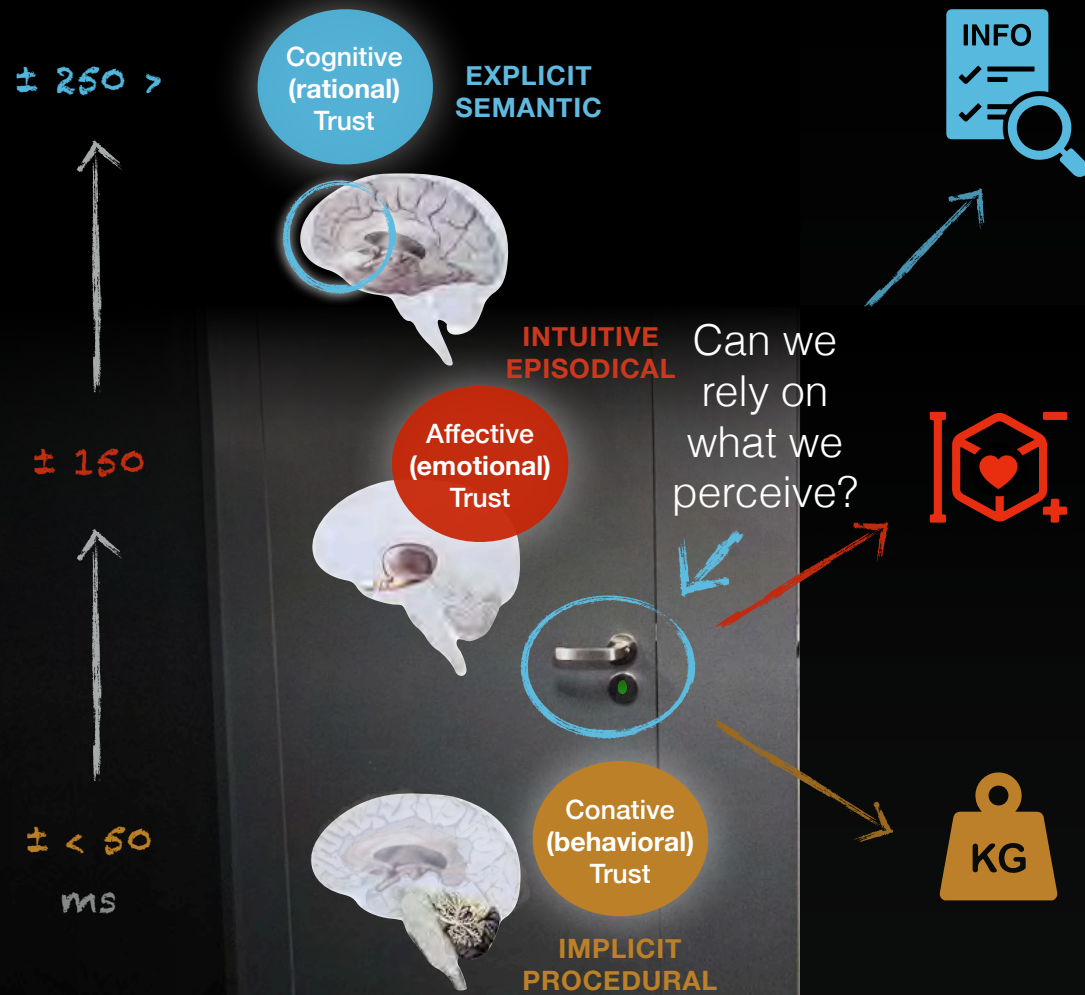
Can we
rely on
what we
perceive?



Conative
(behavioral)
Trust



BRAIN NEEDS INFORMATION TO PREDICT TRUSTWORTHINESS



TEST





2

ORGANISATION OF TRUST

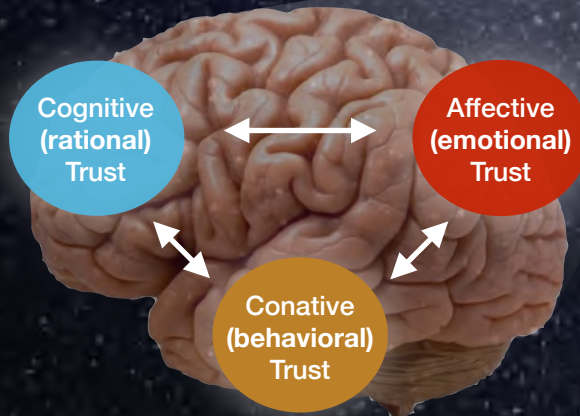


individual (self) trust

ME



YOU



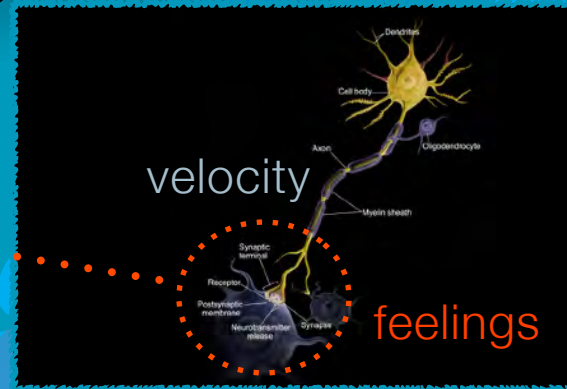
ORGANISATION OF TRUST

Neurotransmitter & hormone molecules



cooperative (social/group) trust

individual (self) trust



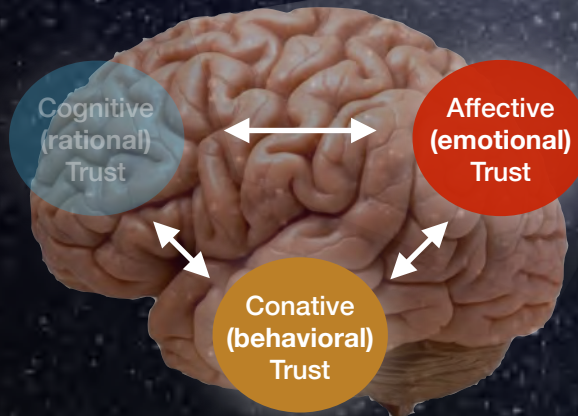
Loose groups of both sexes
(trust on instinct & emotions)

WE

ME

LOCAL

YOU



± 50,000,000 BC
Ancestors of monkeys
and apes split off

NEURAL COMMUNICATION

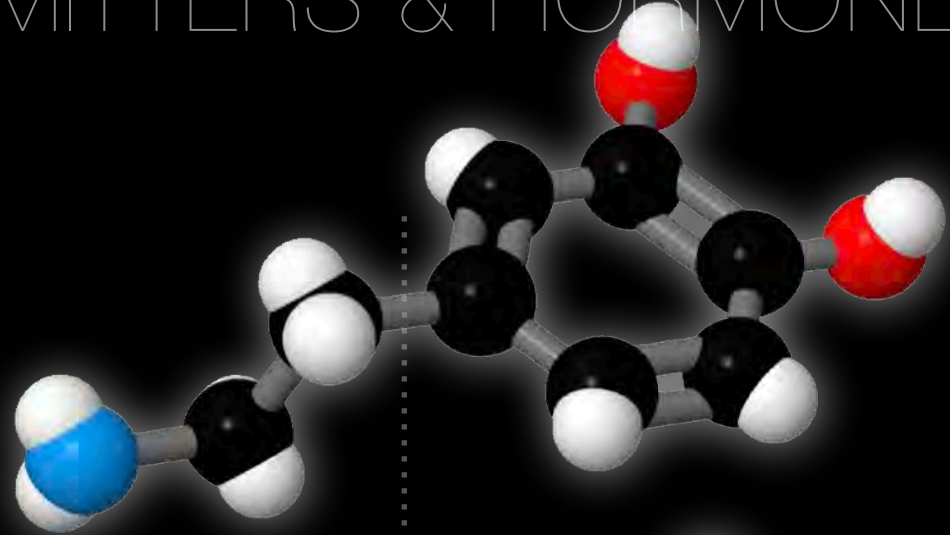


NEURONS COMMUNICATE THROUGH SYNAPTIC CLEFTS
BY NEUROTRANSMITTERS BETWEEN THE NEURONS

NEUROTRANSMITTERS & HORMONES

DOPAMINE

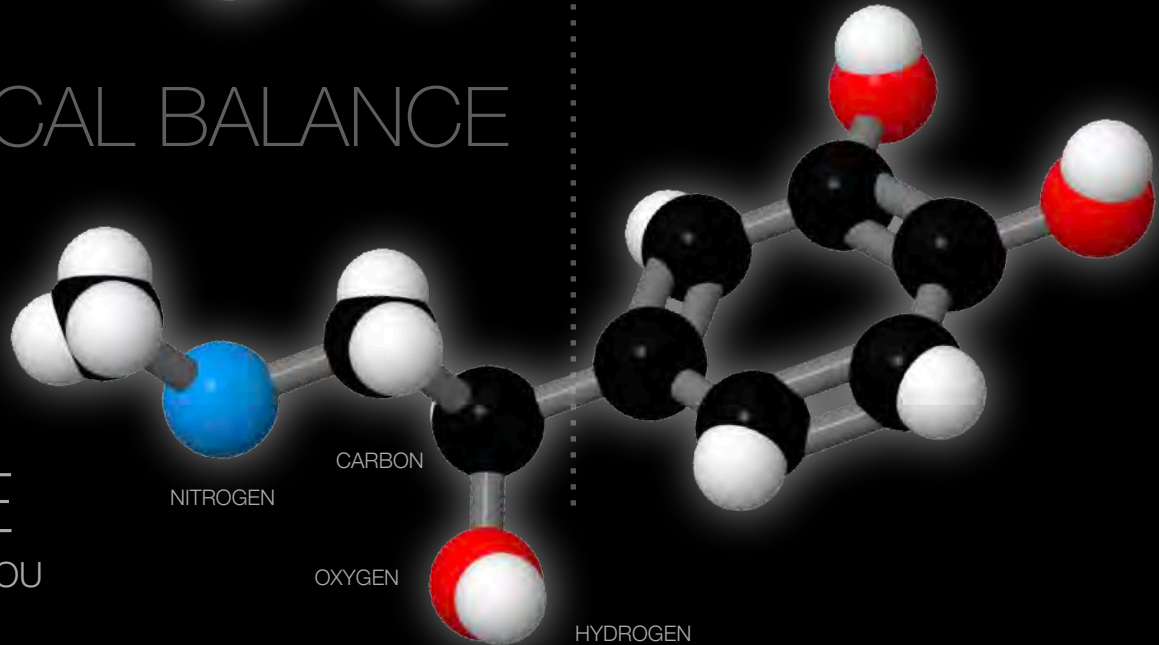
THE 'GAIN-NOVELTY-SEEKER' IN YOU
APPROACH, IMPULS
(RISK, FEED, F*CK)



NEURO CHEMICAL BALANCE

ADRENALINE

THE 'PAIN-SAVE-KEEPER' IN YOU
AVOIDANCE, PROTECT
(FIGHT, FLIGHT, FREEZE)



ORGANISATION OF TRUST

TRUST RECIPROCITY
FOR MUTUAL BENEFIT
(hunting, risk taking)



cooperative (social/group) trust

individual (self) trust



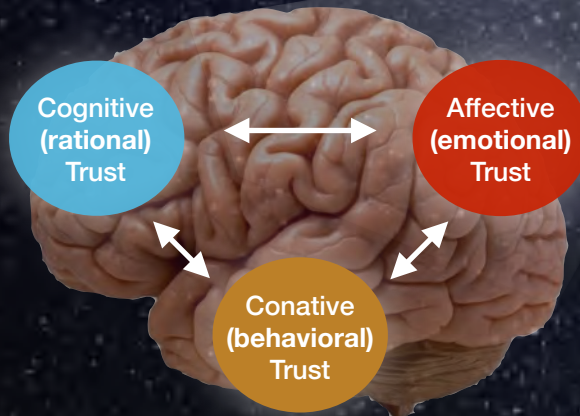
Tendency to live in groups
(cognitive revolution)

WE

ME

LOCAL

YOU



± 250,000 - 20,000 BC
More complex behaviours
& social interactions

ORGANISATION OF TRUST

TRUST RECIPROCITY
FOR MUTUAL BENEFIT
(hunting, risk taking)



cooperative (social/group) trust

individual (self) trust

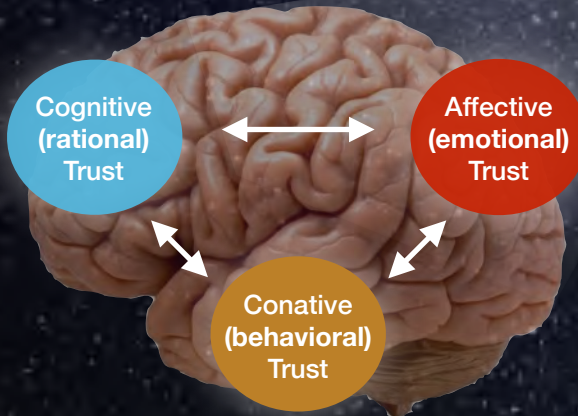


WE

ME

LOCAL

YOU



± 250,000 - 20,000 BC
More complex behaviours
& social interactions

ORGANISATION OF TRUST



TRUST IN THE FUTURE
FOR GROWING & BUILDING
(farming, herding, constructing)



Planning (Time), Specialisation
(Agricultural revolution)

organizational (community) trust

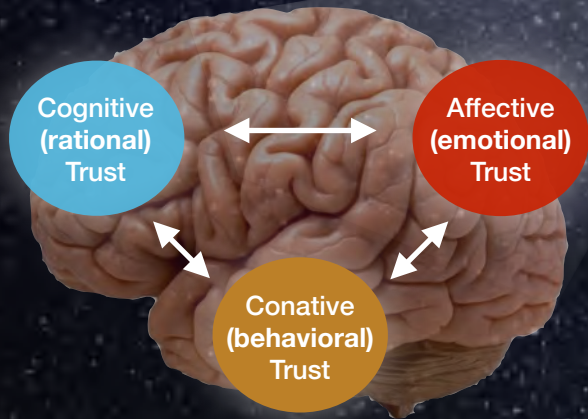
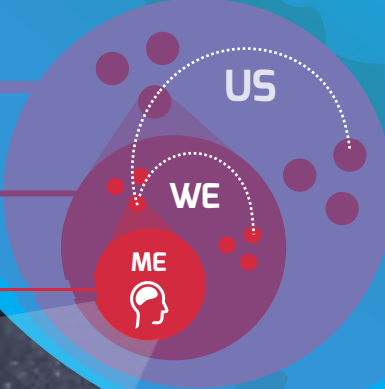
URBAN

cooperative (social/group) trust

LOCAL

individual (self) trust

YOU



± 12,000 - 8,000 BC
Forming permanent settlements
and more complex societies

ORGANISATION OF TRUST



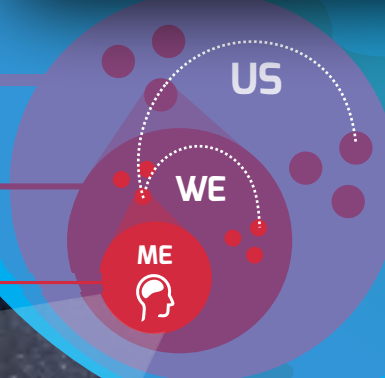
TRUST IN THE FUTURE
FOR GROWING & BUILDING
(farming, herding, constructing)



organizational (community) trust

cooperative (social/group) trust

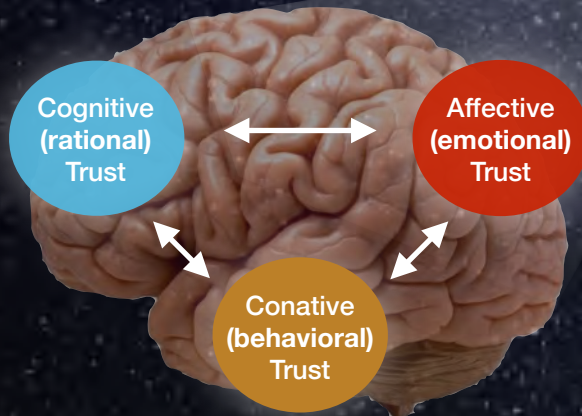
individual (self) trust



URBAN

LOCAL

YOU



± 12,000 - 8,000 BC
Forming permanent settlements
and more complex societies

ORGANISATION OF TRUST



TRUST IN
RULES, TRADE
& SYSTEMS
(possessions)

Social Recognition
(integrative connectivity)

THEM

US

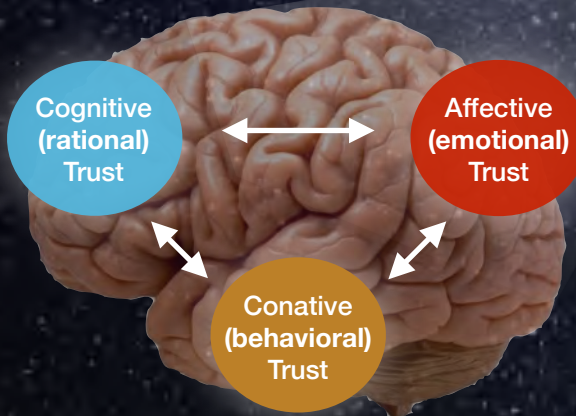
WE

ME

TRUST NETWORK COMPLEXITY

- (eco)system (institutional) trust
- organizational (community) trust
- cooperative (social/group) trust
- individual (self) trust

- GOV
- URBAN
- LOCAL
- YOU



± 5,000 BC - 1500 AC
Emergence of empires & writing
Coordination of large groups

ORGANISATION OF TRUST



social communities
connected society



TRUST IN
RULES, NORMS,
SYSTEMS
(possessions)

Social Recognition
(integrative connectivity)

THEM

US

(eco)system (institutional) trust

GOV

organizational (community) trust

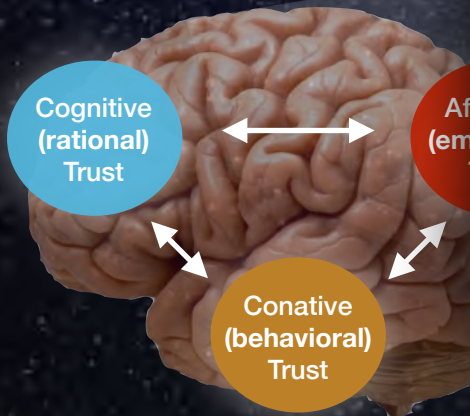
URBAN

cooperative (social/group) trust

LOCAL

individual (self) trust

YOU

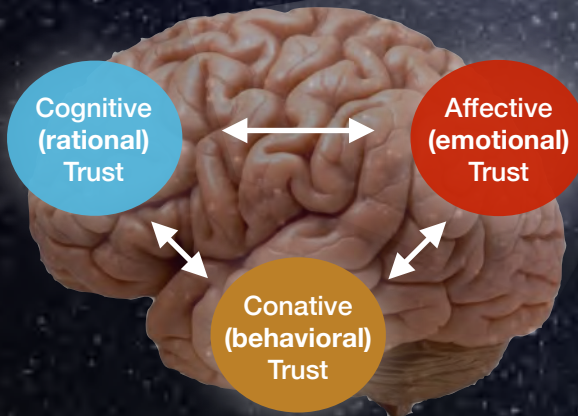


TRUSTING CURRENCY

THE UNITED STATES OF AMERICA
IN GOD WE TRUST

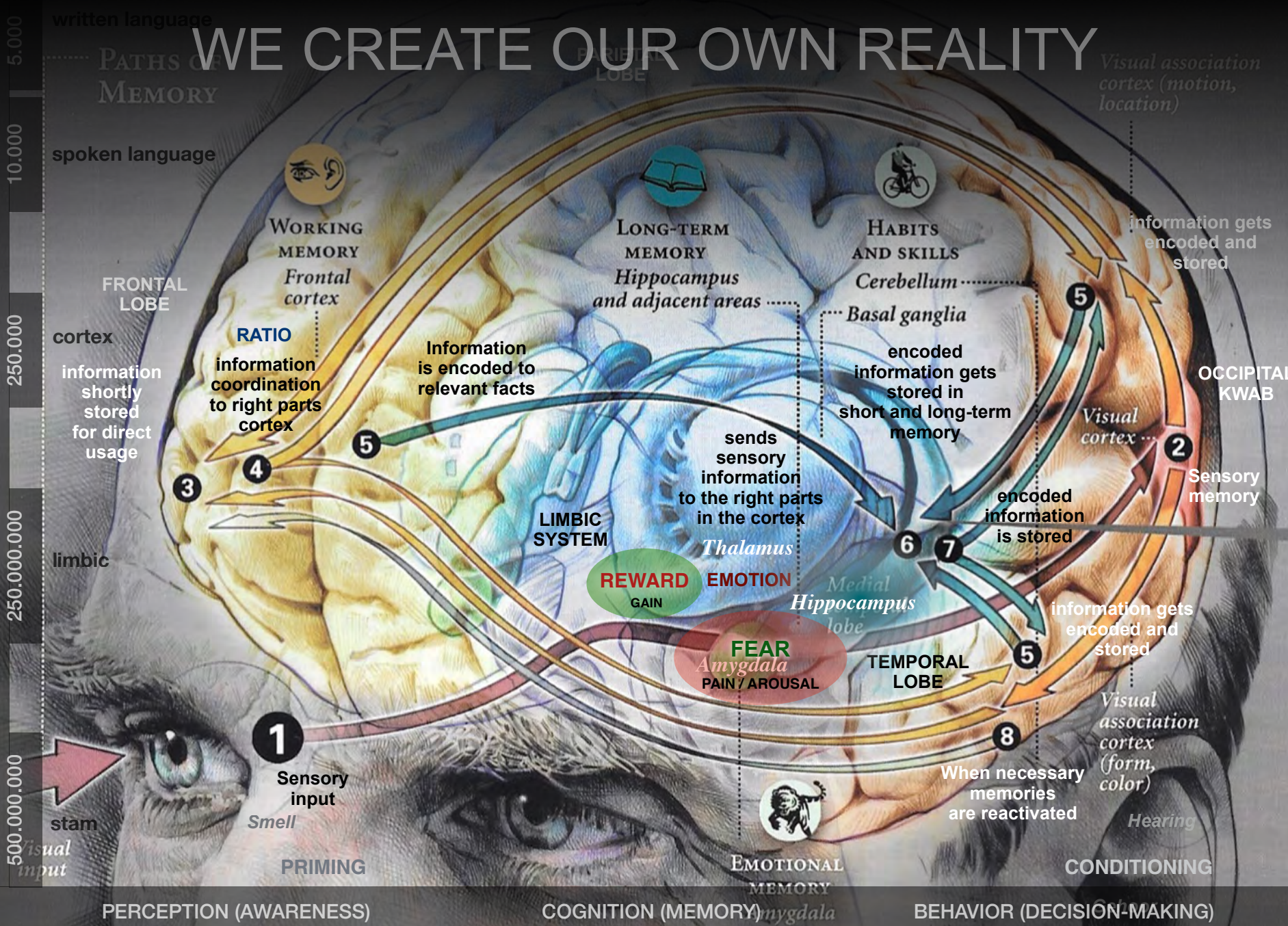
writing
groups

ORGANISATION OF TRUST



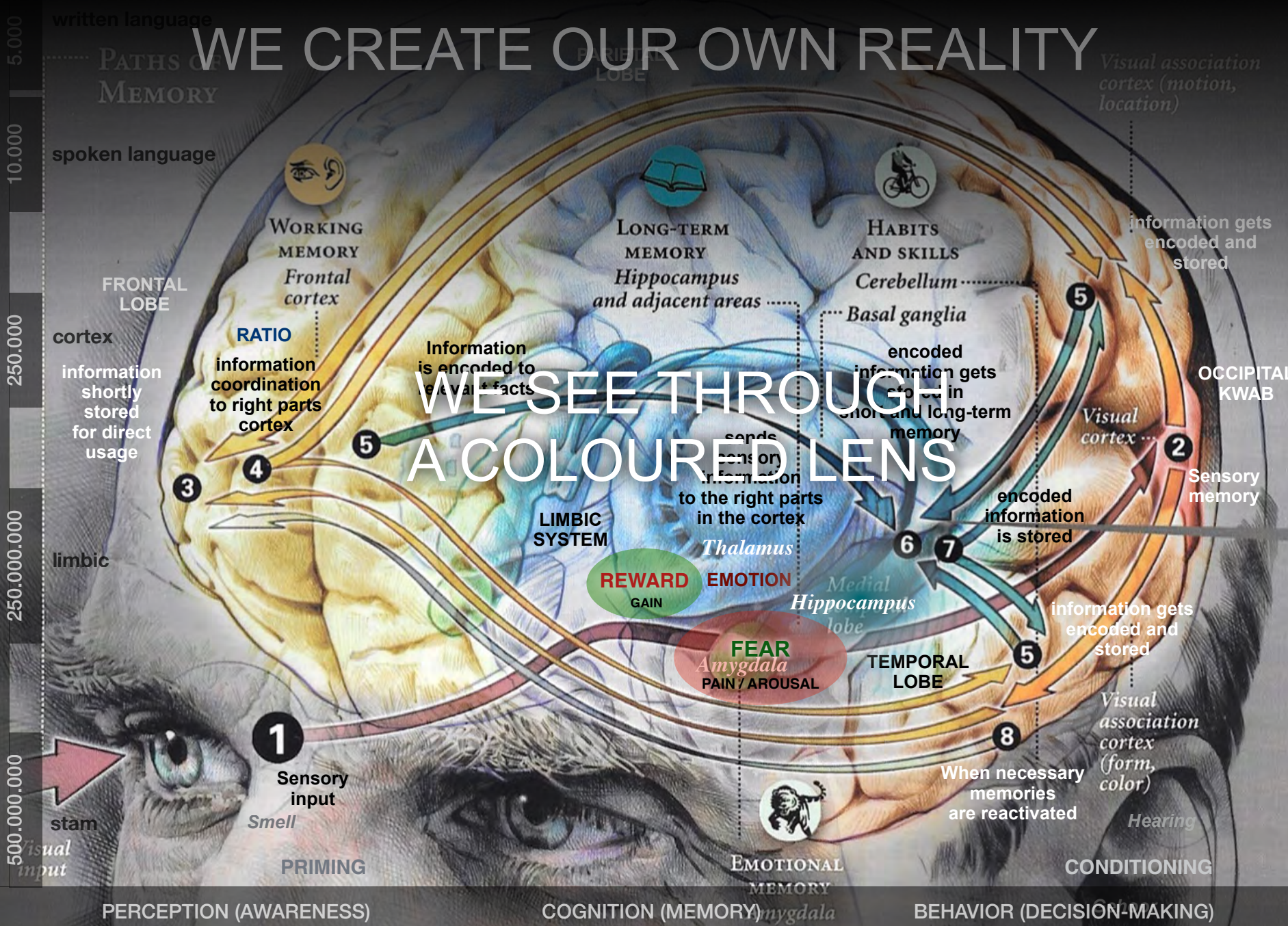
± 5,000 BC - 1500 AC
Emergence of empires & writing
Coordination of large groups

WE CREATE OUR OWN REALITY



WE CREATE OUR OWN REALITY

WE SEE THROUGH A COLOURED LENS



5,000 written language

10,000 spoken language

250,000 cortex

250,000,000 limbic

500,000,000 stam

visual input

Smell

PRIMING

PERCEPTION (AWARENESS)

FRONTAL LOBE

WORKING MEMORY
Frontal cortex

RATIO
information coordination to right parts cortex

LONG-TERM MEMORY
Hippocampus and adjacent areas

Information is encoded to evaluate facts

FRONTAL LOBE

PARIETAL LOBE

HABITS AND SKILLS
Cerebellum

Basal ganglia

encoded information gets stored in short and long-term memory

Information is encoded to evaluate facts

Information is sent to the right parts in the cortex

LIMBIC SYSTEM

REWARD GAIN

EMOTION

FEAR PAIN / AROUSAL

AMYGDALA

TEMPORAL LOBE

When necessary memories are reactivated

EMOTIONAL MEMORY
amygdala

COGNITION (MEMORY)

Visual association cortex (motion, location)

information gets encoded and stored

OCCIPITAL KWAB

Sensory memory

Visual cortex

encoded information is stored

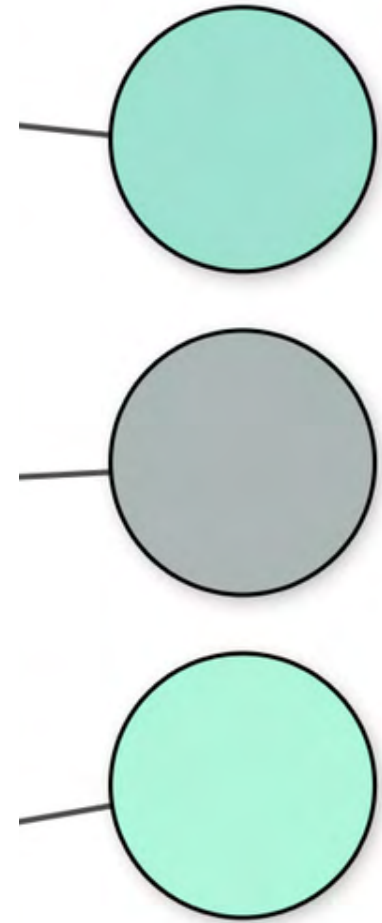
information gets encoded and stored

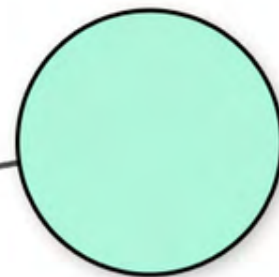
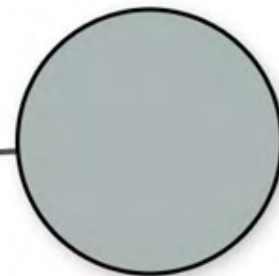
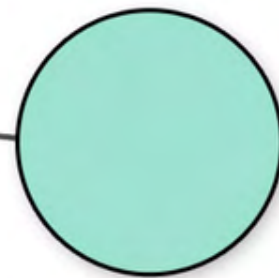
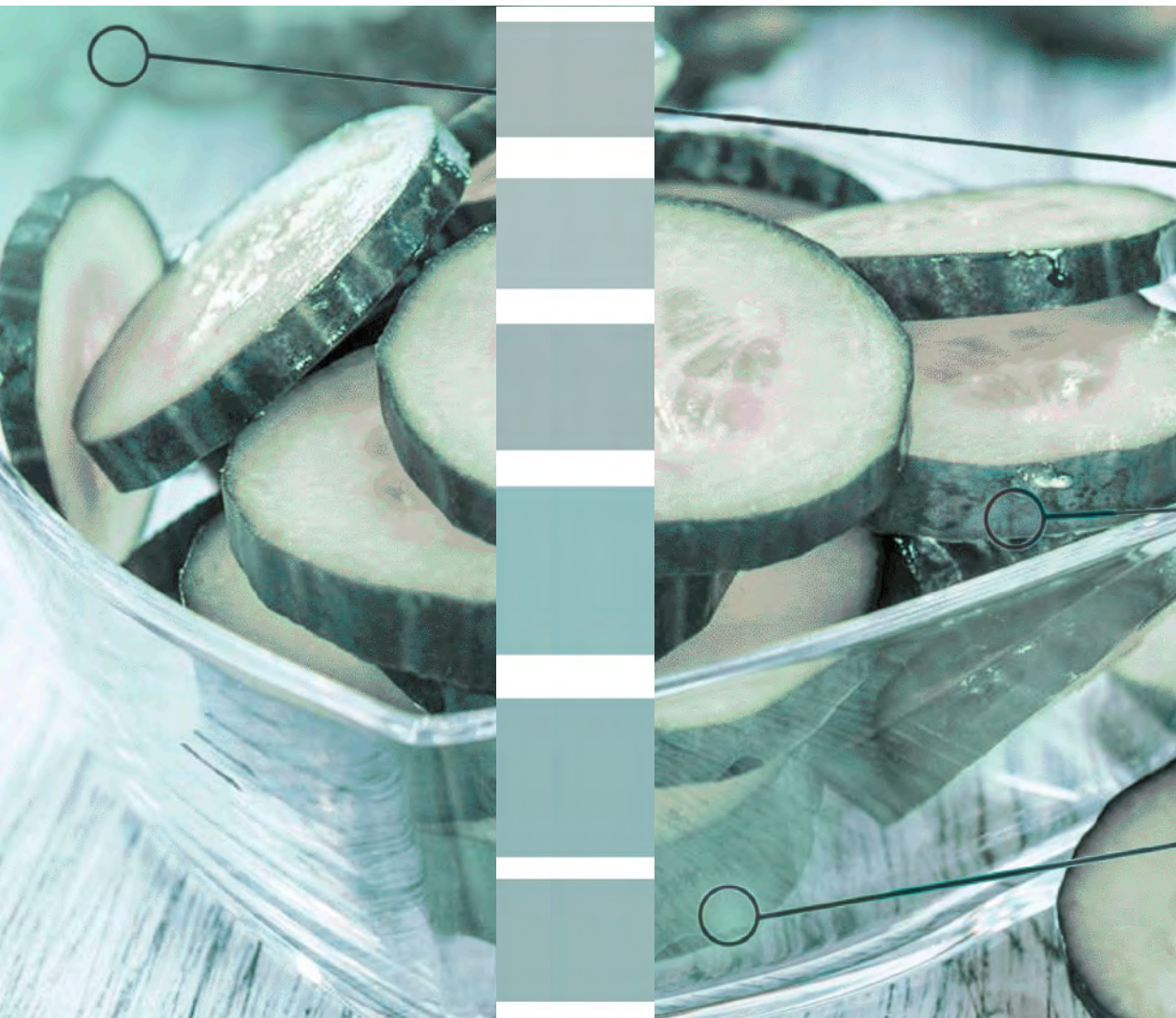
Visual association cortex (form, color)

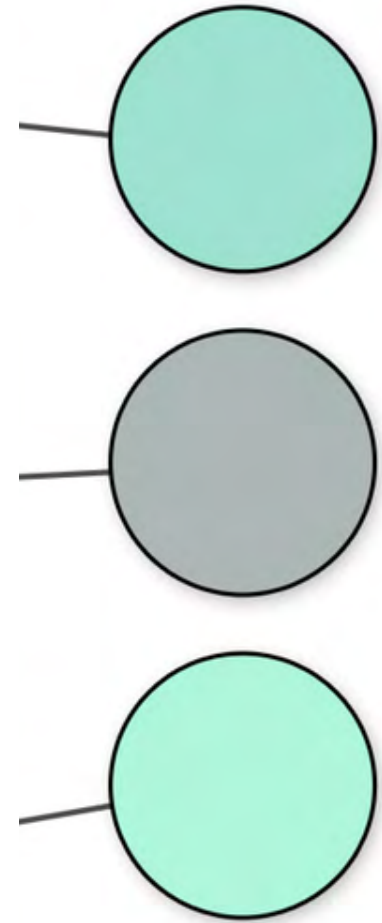
Hearing

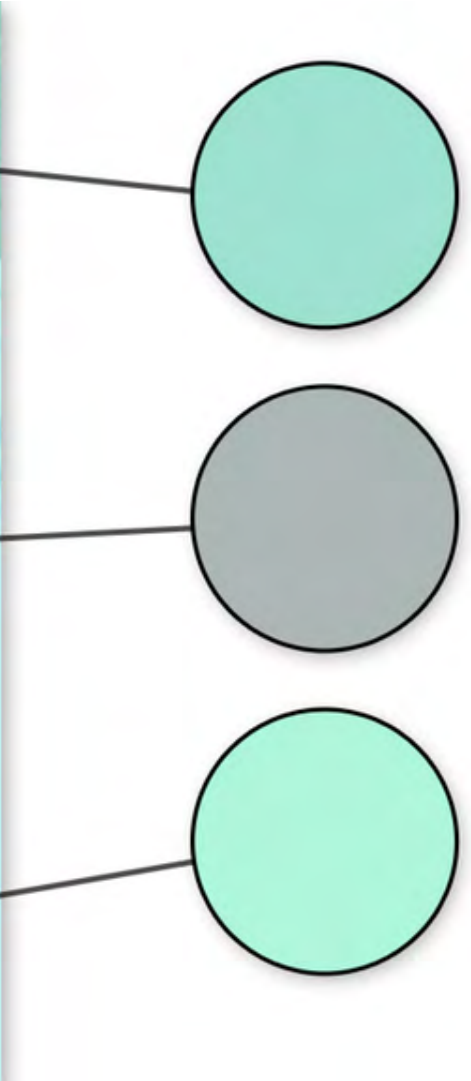
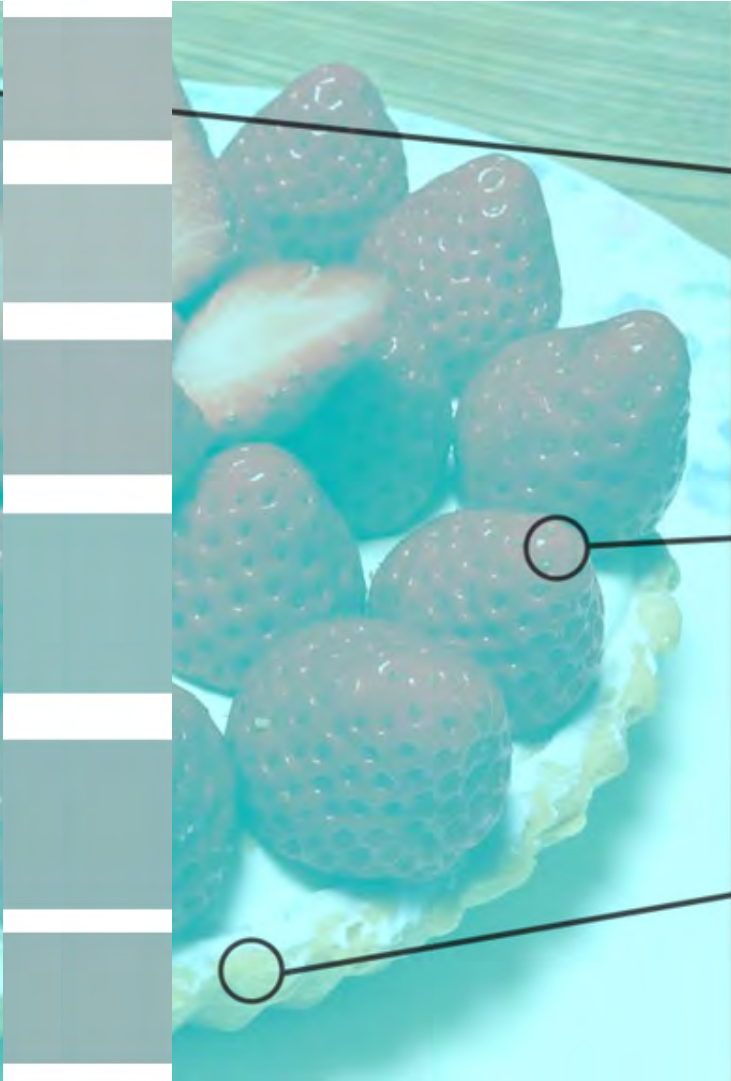
CONDITIONING

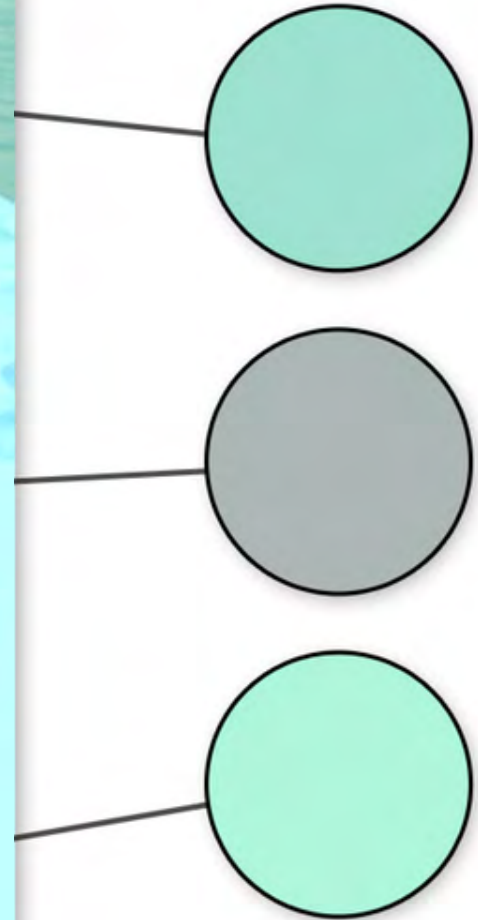
BEHAVIOR (DECISION-MAKING)

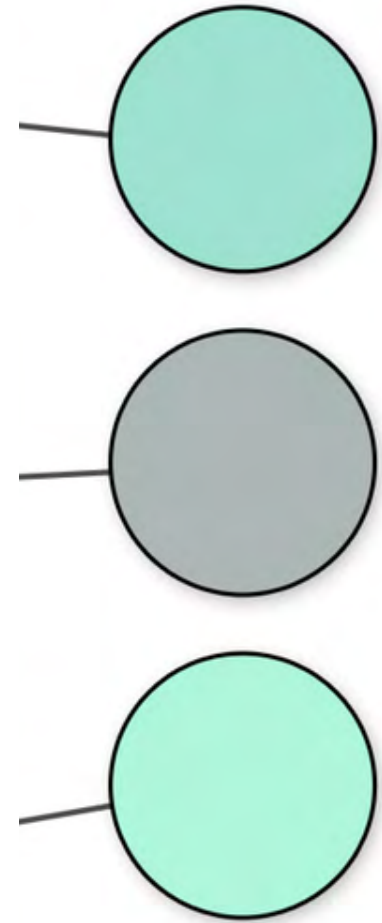


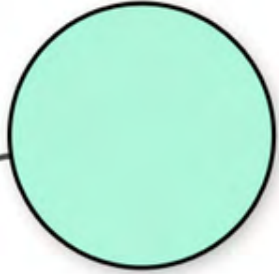
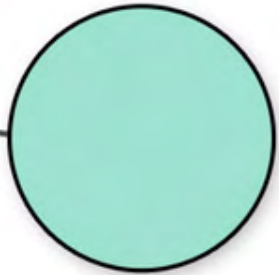
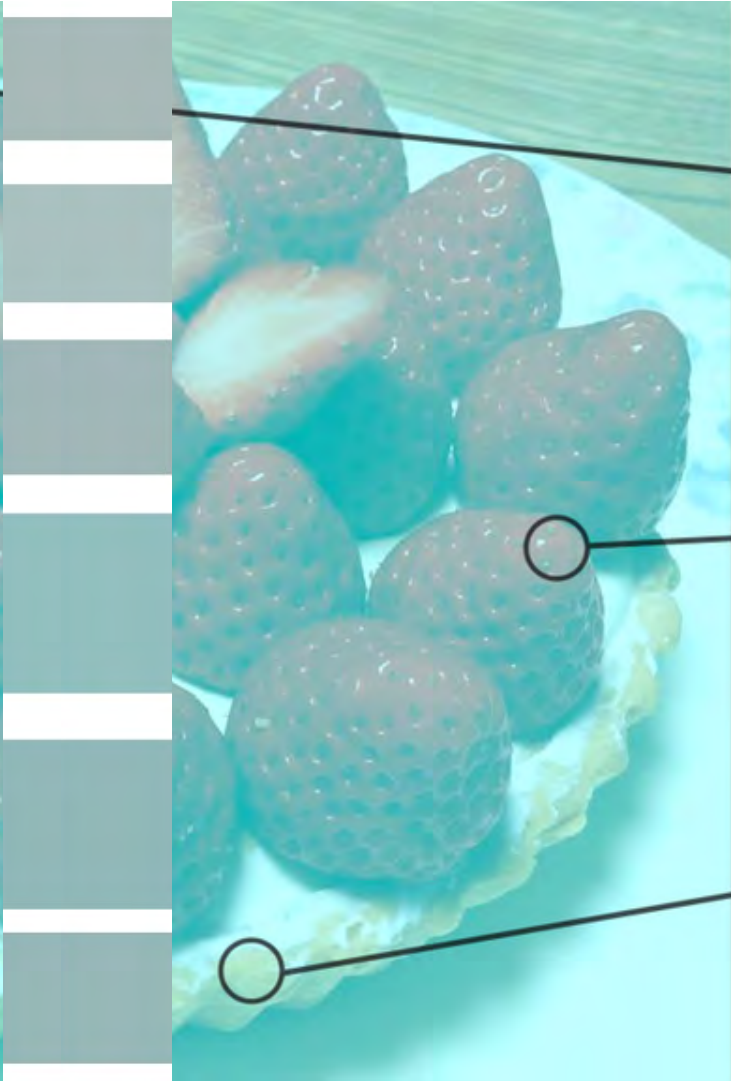












I
trust
on
Green



observation
=
blue-green-
gray-like



however



interpretation
=
red, because
strawberries
are red

NO!

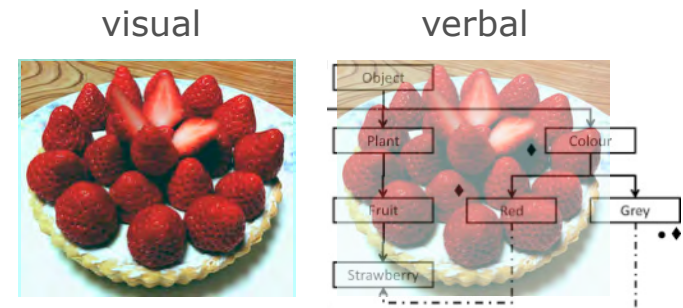


assumption
stronger
then reality

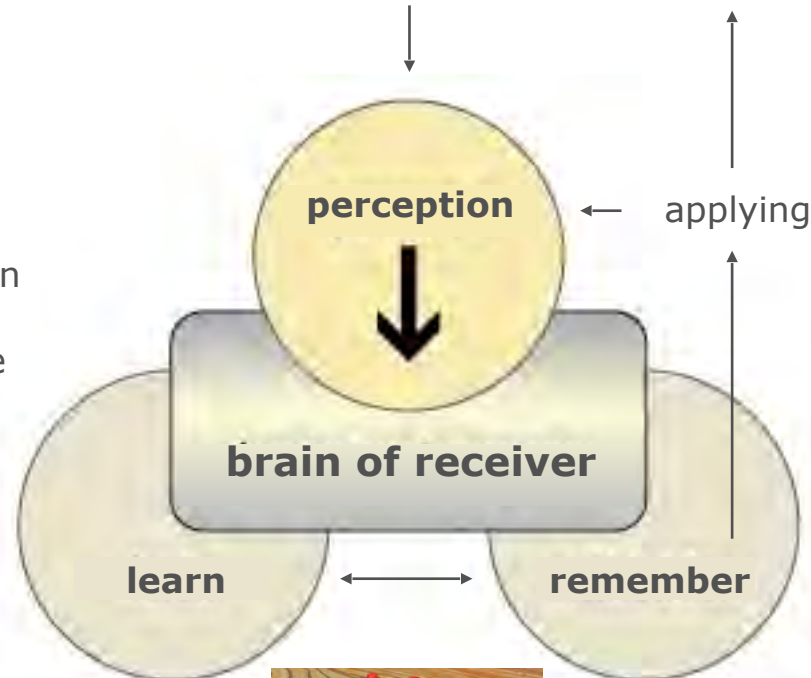
I
trust
on
Red



observation
is subjective
construction
from memory




information ← communication




memory

INGROUPS LEAD TO POLARISATION

Asiel, vaccinatie, klimaat | Verlies elkaar niet als polarisatie ...

YouTube 

 YouTube · SIREcampagnes · Jan 9, 2023



het *zijn* gewoon

GELUK

ZOEKERS

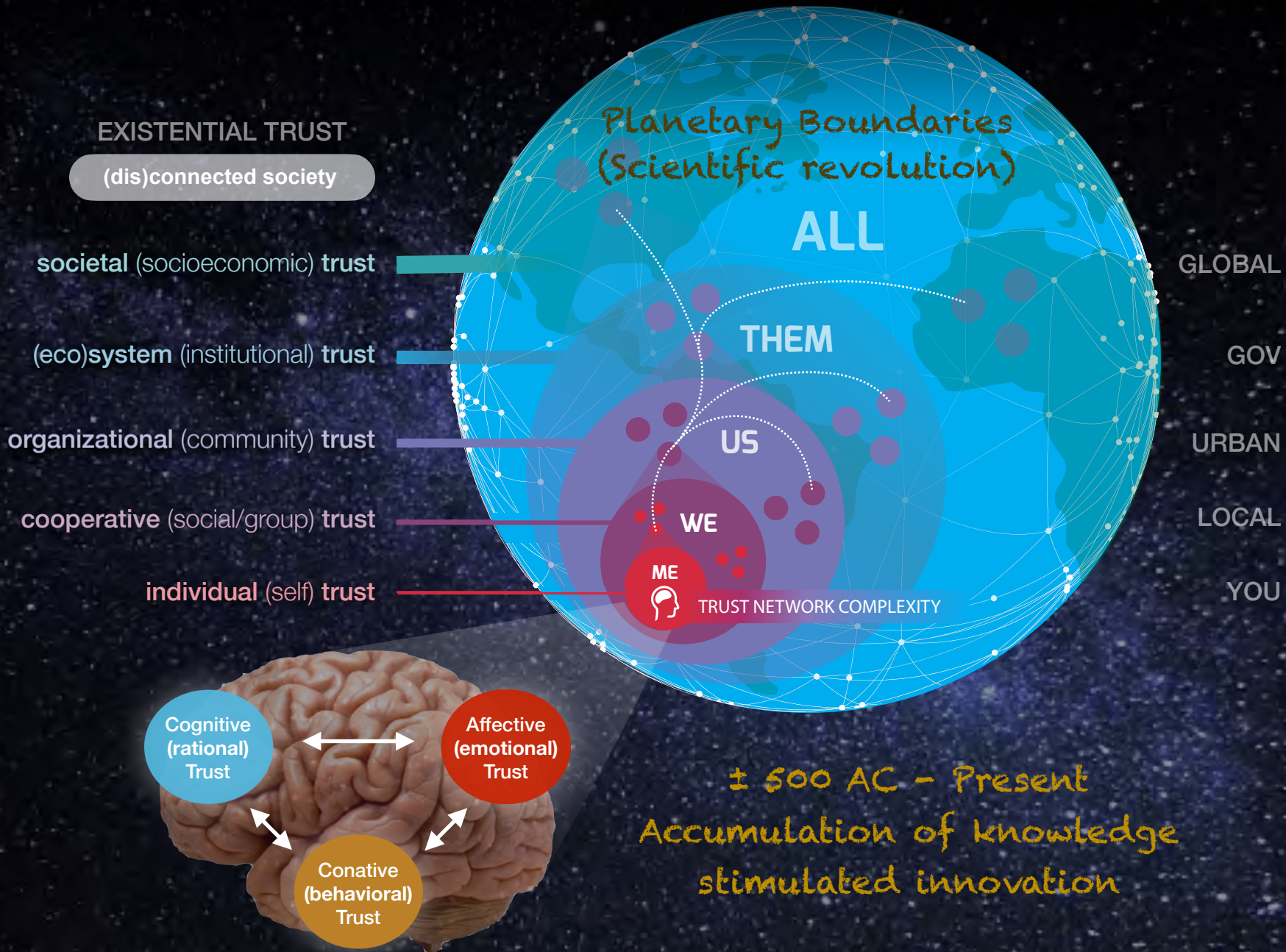
EIKE!

pap wat ben
JE TOCH EEN

verlies elkaar niet
als *polarisatie* dichtbij komt

SIRE
DE MAATSCHAPPIJ
DAT DEZ'.

SIRE



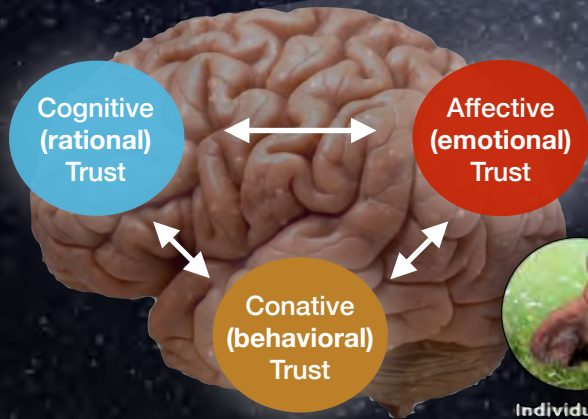
TRUST IN A SUSTAINABLE FUTURE

EXISTENTIAL TRUST
STARTS WITH ACCEPTING
WE ARE ALL ONE

- societal (socioeconomic) trust
- (eco)system (institutional) trust
- organizational (community) trust
- cooperative (social/group) trust
- individual (self) trust



- GLOBAL
- GOV
- URBAN
- LOCAL
- YOU

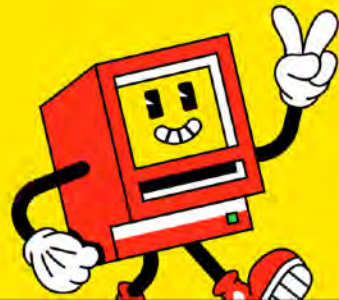




Hartelijk dank en tot ziens!

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