

Interdisciplinaire Consumententheorie

Markt- en consumentenonderzoek

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Coca-Cola

zero sugar
zero calories

zero sugar
Coca-Cola
Can't Beat The Real Thing.

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Interdisciplinaire consumententheorie

- Het theorievak
- Basis in de leerlijn (zie Ba/VP/SP): state-of-the-art kennis van en inzicht in:
 - Consumentengedrag
 - Marketingcommunicatie
 - Corporate communicatie
- Nu: focus op de toekomst:
 - cf. Bernard Ross & Omar Mahmoud (2018) *Change for Good: Using Behavioral Economics for a Better World*. London: The Management Centre.
 - Noot: Ross is directeur van het communicatie and management consultancy bureau *=mc* (werkt voor ethische organisaties en de Britse overheid) / Mahmoud is Chief of Market Knowledge bij de UNICEF-afdeling International Private Fundraising and Partnership

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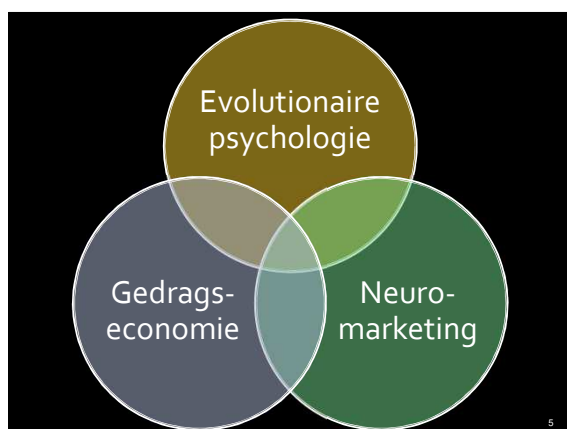
Bernard Ross & Omar Mahmoud

Change for Good

USING BEHAVIOURAL ECONOMICS FOR A BETTER WORLD

"A packed full of powerful cases, insights and tips to turbocharge your work. This is a gem!"
—Neil Girdler, Author of *Insider: The secret behind why we buy*

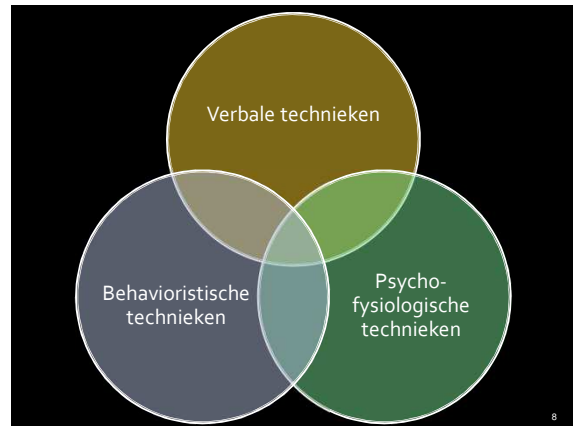
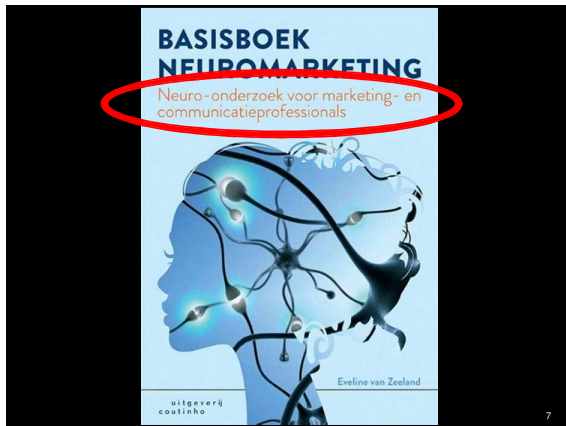
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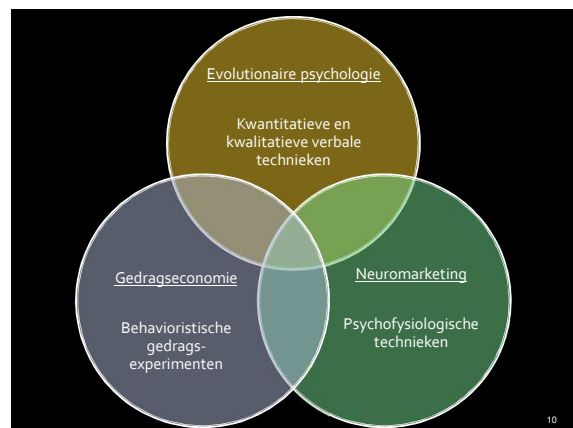
Markt- en consumentenonderzoek

- Het methodologisch (empirisch) vak
- Basis in de leerlijn (zie Ba/VP/SP): state-of-the-art kennis van en inzicht in de klassieke onderzoeksmethoden van de sociale wetenschappen:
 - Methodologie van de sociale wetenschappen / Inleiding tot communicatiewetenschappelijk onderzoek
 - Kwantitatieve technieken
 - Kwalitatieve technieken
- Nu: focus op de toekomst:
 - cf. Eveline van Zeeland (2016). *Basisboek Neuromarketing: Neuro-onderzoek voor Marketing- en Communicatie-professionals*. Bussum: Uitgeverij Coutinho.

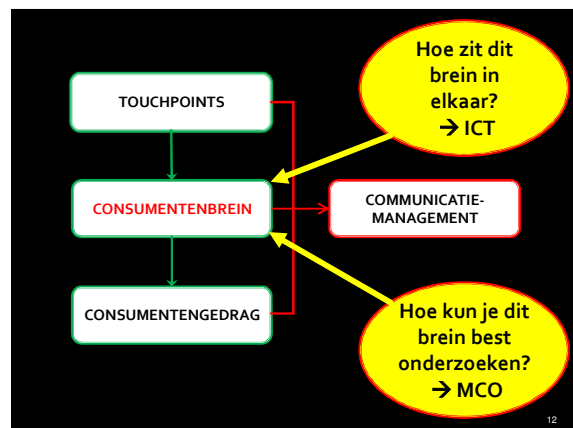
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- ### Beide cursussen horen samen
- Worden **na elkaar gedoceerd**:
 - Lesweek 01 tot en met lesweek 06 : ICT
 - Lesweek 07 tot en met lesweek 12 : MCO
 - Vormen **een twee-eenheid** van theorie en bijhorende onderzoeksmethodologie en lopen daarom constant in elkaar over
 - Eigenlijk zou dit één vak moeten zijn ...



- ### Uiteindelijk doel
- Een grondige kennis van en inzicht in **drie prototypes van communicatiemanagement**:
 - **Means-end-chain management (MEC)**: de klassieke (economische) benadering
 - **Choice architecture management (CA) of nudging**: de gedragseconomische benadering
 - **Emotionally competent stimuli management (ECS)**: de evolutiepsychologische benadering
 - Aangevuld met basiskennis van en inzicht in **psychofysiologisch onderzoek** (ontleend aan neuromarketing of consumer neuroscience).



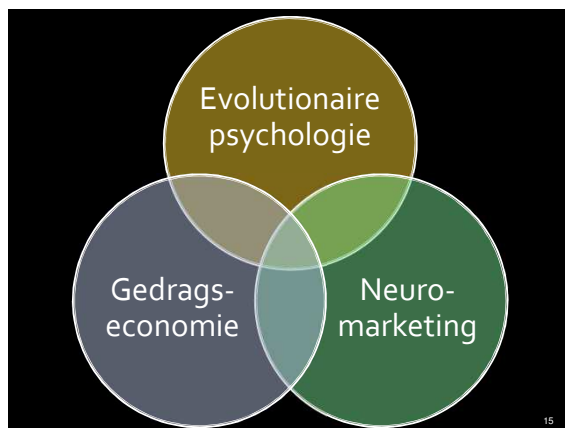
Samengevat

- Drie grote theoretische perspectieven op consumentengedrag en de werking van persuasieve communicatie MC/CC/SM.
- Drie prototypische benaderingen van communicatiemanagement.
- Drie grote groepen van methodologische technieken om deze vormen van communicatiemanagement empirisch te onderbouwen.

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Interdisciplinaire Consumententheorie

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Interdisciplinair ???

- Klassieke benadering = economie
- Gedragseconomie = economie + psychologie
- Evolutionaire psychologie = economie + psychologie + biologie
- Neuromarketing = economie + psychologie + biologie + consumer neuroscience

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STRUCTUUR VAN DE CURSUS

- **LESWEEK 01:** INLEIDING + WETENSCHAP VERSUS NONSENS (mythes en goeroes)
- **LESWEEK 02:** DE RATIONELE CONSUMENT (klassieke economie & MEC-management)
- **LESWEEK 03:** DE AUTOMATISCHE CONSUMENT (evolutionaire psychologie & ECS-management)
- **LESWEEK 04:** BETEKENISMANAGEMENT (consumer neuroscience sensu lato: semiotiek als theoretisch perspectief binnen neuromarketing)
- **LESWEEK 05:** DE INTUITIVE CONSUMENT (gedragseconomie & CA-management)
- **LESWEEK 06:** INHAALWEEK / RESERVEWEEK

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EXAMEN EN CURSUSMATERIAAL

- **Examen:** 40 multiple choice vragen
- **Cursusmateriaal:**
 - Lesslides (zie Ufora)
 - → 35 examenvragen met 4 antwoordmogelijkheden
 - Begeleide zelfstudie
 - doel: attitude van levenslang leren
 - illustratie dat de nieuwe ideeën uit de cursus reeds hun ingang aan het vinden zijn bij (weliswaar de meest vooruitstrevende) praktijkmensen
 - Rory Sutherland (2019). *Alchemy. The Surprising Power of Ideas That Don't Make Sense*. London: WH Allen.
 - → 5 vragen: ja/nee-vragen: komt een bepaald idee uit de cursus in *Alchemy* aan bod of niet?

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THE RATIONAL CONSUMER

CLASSIC ECONOMICS (AND CLASSIC PSYCHOLOGY)

MEC-MANAGEMENT

THE COGNITIVE PARADIGM

- Th. Kuhn: *The Structure of Scientific Revolutions*.
- Turn of the 19th & 20th centuries / first half of 20th century: Freud & Jung: **Depth Psychology**
- 1920s: Watson & Skinner: **Behaviorism**: beliefs, desires and mental processes are not real things: **SR-model**
- 1960s: shift of paradigm: **the Cognitive Revolution**: **mentalist explanations**: **SOR-model**
 - Behaviorism doesn't fit in with our everyday-life experiences in which opinions, emotions, desires, etc. play a significant role
 - Computerization of science and society

POINT OF DEPARTURE: THE SSSM

- Cognitive paradigm: **the mind is an information processor (similar to a computer) → SSSM**
- **Our goal**: put up a model of the information processing underlying the planning and structuring of human behavior in general
- **Our method**: qualitative research: in-depth conversations with ordinary people:
 - Cf. naive psychology: we are all lay psychologists
 - Cf. study of everyday-life explanations
 - Cf. attribution theory
 - Cf. evolutionary psychology: 'theory of mind' module

DESIRES: WANTS AND NEEDS

- Why has George left his wife? **Probably because he wanted to.**
- Why is he drinking so much beer? **Probably because he wants to.**
- Why didn't she come to the party? **Because she didn't want to.**
- Why on earth is she taking courses in psychology? **Probably because she needs to.**
- Etc. (... **wants or needs to ...**)

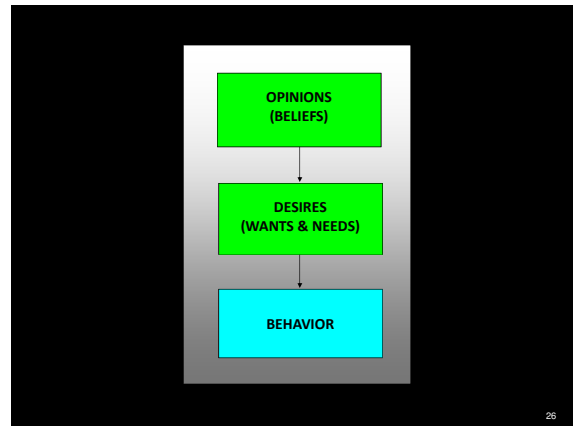
DESIRES

- **Needs & wants**
- Intentions (cf. attitude model, infra)?
- **Desired states of being, having or doing**
- Can be positive (approach) or negative (avoid)

OPINIONS OR BELIEFS

- But why did George **want** to leave his wife? I think, he **wants** to be free to do the things he likes to do. He **believes** everyone – married or not, male or female – should be free to do the things he or she likes to do.
- But why does he **want** to drink so much beer? Perhaps he needs to forget his money problems. He probably **thinks** that getting drunk will take away his misery.

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OPINIONS

- May be right or wrong!
- Brand, product or corporate **image**
- **CM = image-management**
- **Identity and difference**
- Cf. two image models (and corresponding research approaches/methods) to be used as a starting point for marketing and corporate communication

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SEMANTIC DIFFERENTIAL

- **De Saussure**: *dans la langue, il n'y a que des différences* (1916)
- **Osgood, Succi & Tannenbaum**: *The Measurement of Meaning* (1957)
 - **Bipolar axes**
 - Quantitative measurement of meaning, and therefore of product, brand, corporate, ... image
 - **Ist- and Soll-dimension** (or actual brand image and ideal brand image)

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Potatoes ?

Tasty	3	2	1	0	1	2	3	Disgusting
Healthy	3	2	1	0	1	2	3	Unhealthy
Nutritious	3	2	1	0	1	2	3	Unnutritious
Vitamin-rich	3	2	1	0	1	2	3	Vitamin-poor
Fibre-rich	3	2	1	0	1	2	3	Fibre-poor
Etc.								

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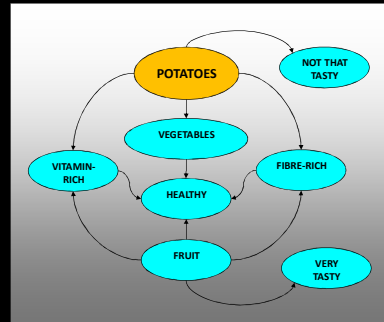
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Ideal daily food for hot meals?

Tasty	3	2	1	0	1	2	3	Disgusting
Healthy	3	2	1	0	1	2	3	Unhealthy
Nutritious	3	2	1	0	1	2	3	Unnutritious
Vitamin-rich	3	2	1	0	1	2	3	Vitamin-poor
Fibre-rich	3	2	1	0	1	2	3	Fibre-poor
Etc.								

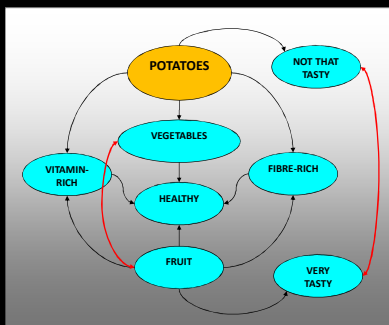
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ASSOCIATIVE NETWORK (ANDERSON & BOWER)

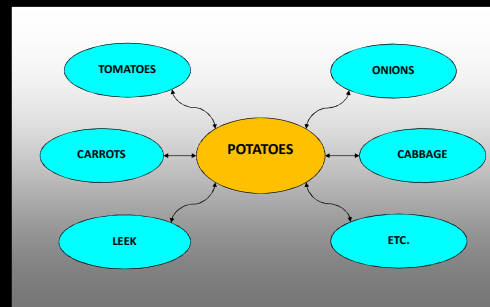


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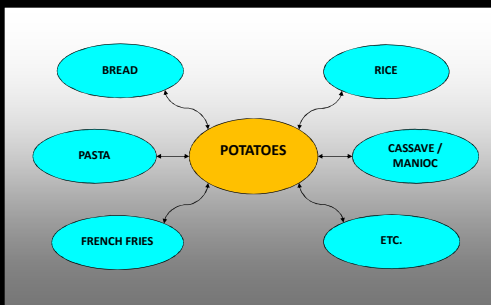
ASSOCIATIONS ... AND DISSOCIATIONS



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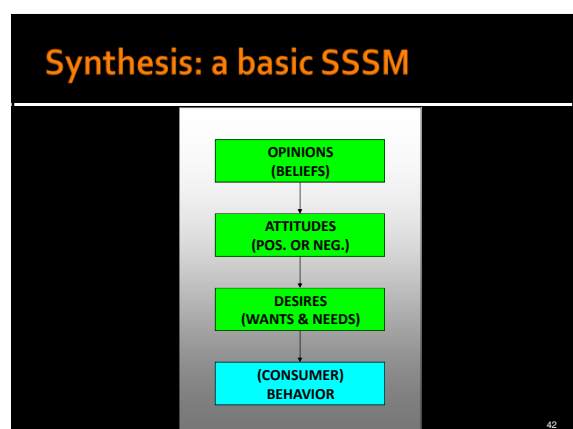
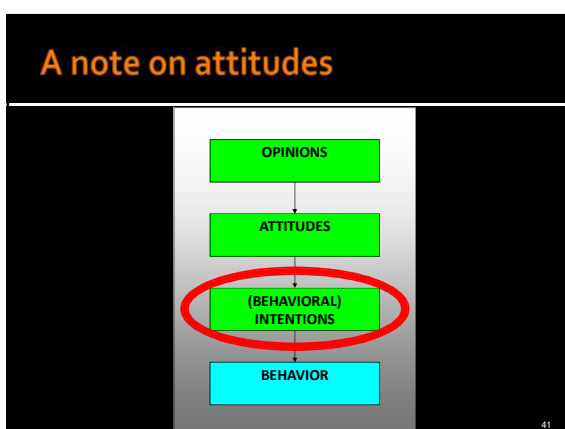
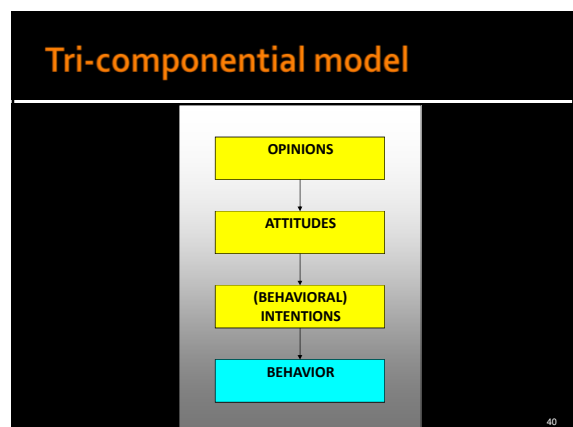
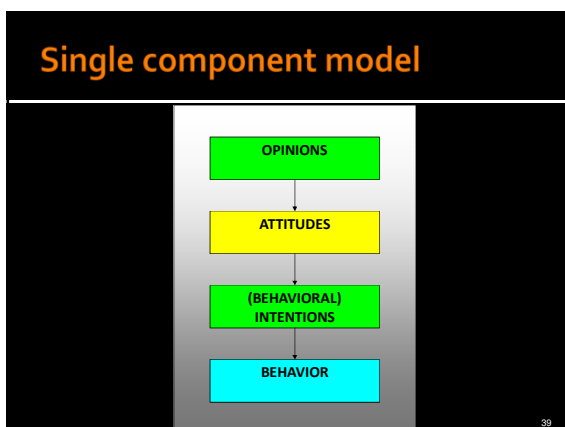
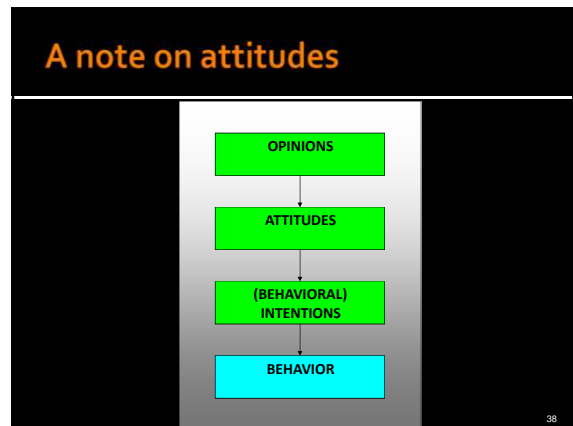
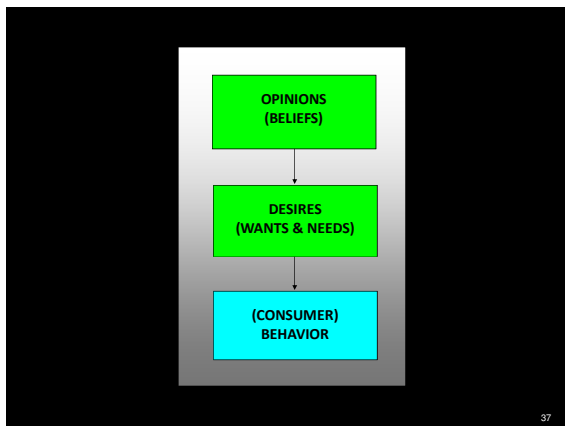


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Both models are compatible

- **Conceptually:** at the centre of both models are (positive) associations and (negative) dissociations
- **Methodologically:** one model leads to highly quantitative research (e.g. surveys, experiments, etc.), the other to highly qualitative research (e.g. free associations within depth interviews, focus groups, etc.) that may however function as input for more quantitatively oriented research

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Cf. (LEARNING) EFFECT GOALS

- Need for product category (old/new products)
- Brand awareness (brand name or logo)
- Brand knowledge (brand image)
- Brand attitude or brand preference
- Brand behavior (non-buying)
- Buying intentions
- Buying behavior/consumption
- Brand loyalty

▪ OPINIONS → ATTITUDES → DESIRES → BEHAVIOR

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Our basic SSSM is incomplete ...

```

    graph TD
      A[OPINIONS (BELIEFS)] --> B[ATTITUDES (POS. OR NEG.)]
      B --> C[DESIRES (WANTS & NEEDS)]
      C --> D["(CONSUMER) BEHAVIOR"]
    
```

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TWO TYPES OF OPINIONS

- Science will eventually lead us to the Truth.
- Doing sports is good for one's health.
- My girl-friend likes finger food.
- My motorbike is in the garage.

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TWO TYPES OF OPINIONS

- Science will eventually lead us to the Truth.
- Doing sports is good for one's health.
- My girl-friend likes finger food.
- My motorbike is in the garage.
- Logically leading to attitudes vs unclear how these could lead to attitudes
- → Means-end-chain opinions

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MEANS-END-CHAINS

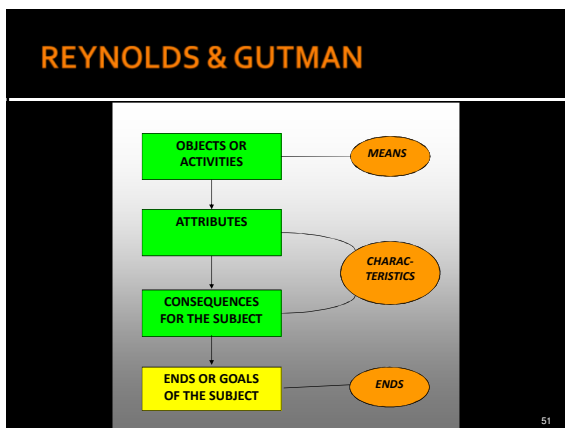
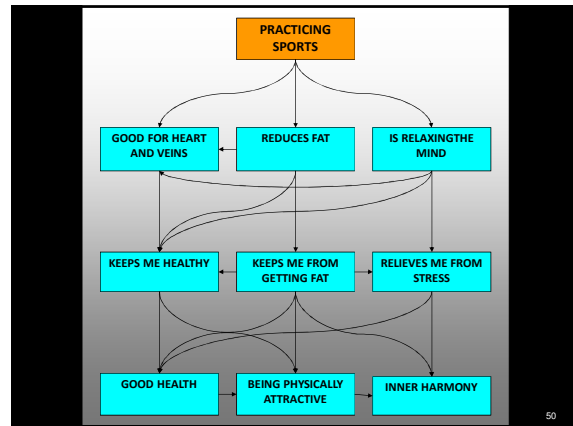
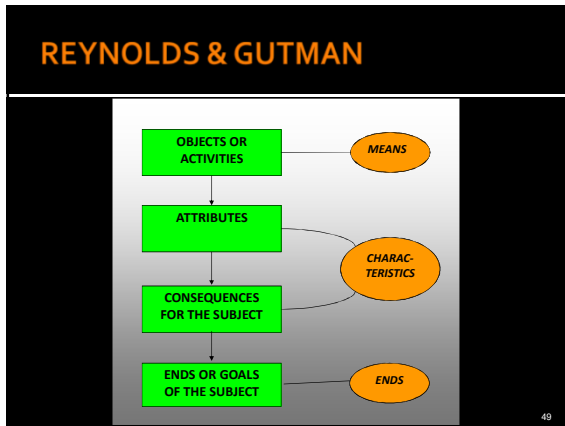
- My girl friend makes me laugh.
- My girl friend takes good care of me.
- My girl friend takes good care of my son.
- My girl friend helps me make a living.
- Etc.

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MEANS-END-CHAINS

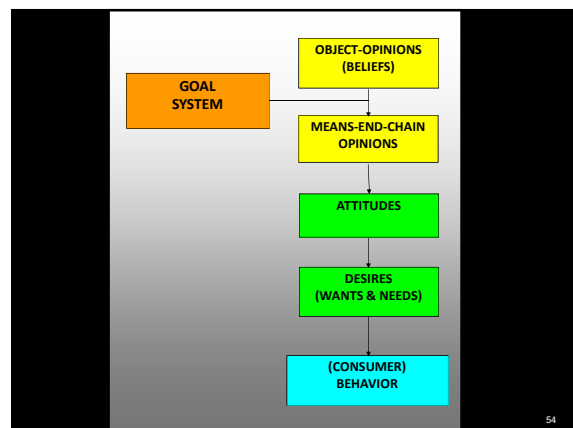
- My motorbike gives me a sense of freedom.
- It also gives me a sense of status (I must admit).
- My motorbike expresses my lifestyle, who I am.
- My motorbike enables a cheap way of spending my holidays.
- Etc.

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- ### GOALS
- He probably finds freedom important.
 - He's a truly adventurous person.
 - She's a person who needs security.
 - Isn't friendship important to all of us?
 - I guess, in the end, everybody wants a baby.
 - Because men find sex more important than women do.
 - Etc.

- ### GOALS
- He probably finds *freedom* important.
 - He's a truly *adventurous* person.
 - She's a person who needs *security*.
 - Isn't *friendship* important to all of us?
 - I guess, in the end, everybody wants *a baby*.
 - Because men find *sex* more important than women do.
 - Etc.



SOCIAL NORMS

- He is very isolated since he cheated on about everyone.
- She told him, because she wanted to be honest with him.
- He left her, because she was unfaithful to him.
- He reacted so aggressive, because what he saw, violated his sense of justice.
- She probably didn't lie because one is supposed to tell the truth in such matters.
- Etc

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What is socially acceptable/appreciated?

- He is very isolated since he **cheated** on about everyone.
- She told him, because she wanted to be **honest** with him.
- He left her, because she was **unfaithful** to him.
- He reacted so aggressive, because what he saw, violated his sense of **justice**.
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- Etc

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ECONOMIC RESOURCES

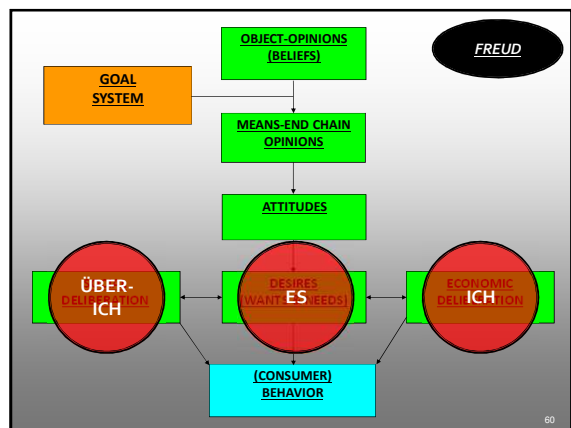
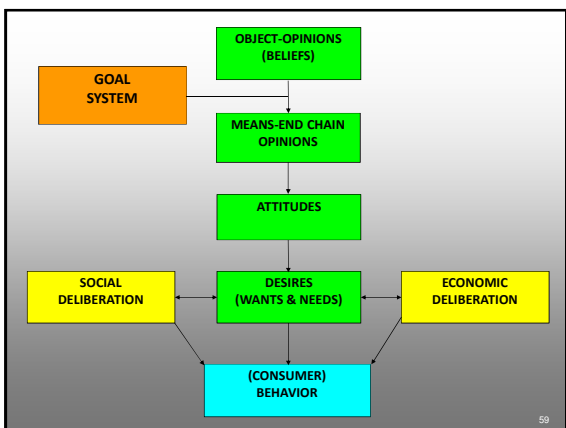
- She can't afford more than that old car.
- He probably doesn't care for money.
- I would paint my house myself, if only I had the time.
- He probably hasn't the energy for the job.
- He may be poor, but he is very intelligent.
- With her looks, she can make it anywhere.

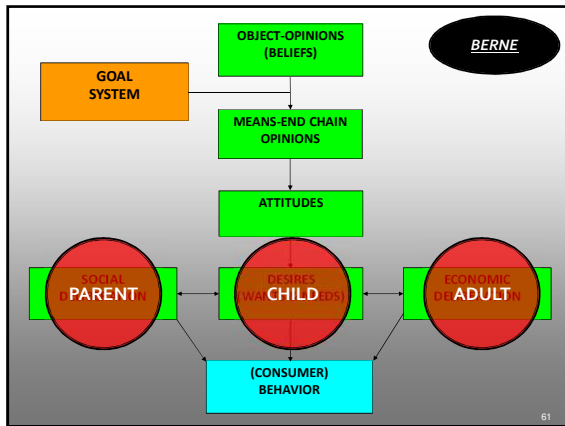
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What can I afford myself, given my (limited) resources?

- She can't **afford** more than that old car.
- He probably doesn't care for **money**.
- I would paint my house myself, if only I had the **time**.
- He probably hasn't the **energy** for the job.
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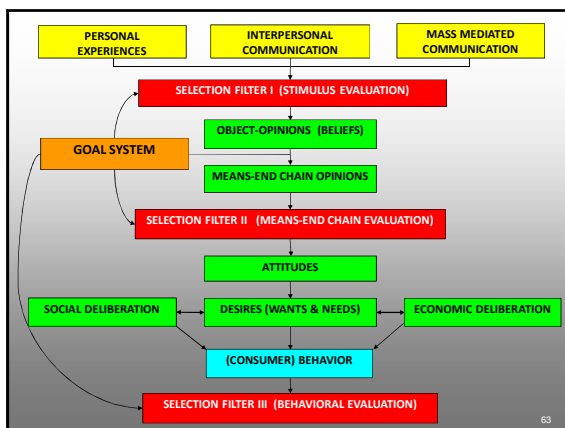
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Synthesis:
 adding the information processing perspective of the cognitive paradigm

A STANDARD SOCIAL SCIENCE MODEL OF CONSUMER BEHAVIOR (SSSM)

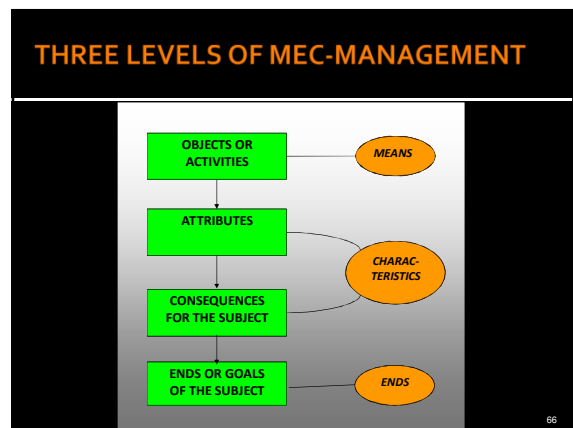


PLANNINGSCYCLUS

- Vooronderzoek
- Doelstellingen, segmenteren, positioneren = de kernstrategie
- Creativity planning: pre- en post-testing
- Mediaplanning
- Budgettering (inclusief honoreringssystemen)
- Effectmeting

A DOUBLE SSSM

- 1 model for both advertising processing and consumer behavioral planning
 - Advertising processing: read the model from top to bottom (advertising = input)
 - Understanding consumer behavior: read the model from bottom to top (consumer behavior = output)
- Vision on the consumer: the consumer is a rational planner
- Vision on communication management: CM is MEC-management





THE SSSM IS A MODEL OF THE RATIONAL CONSUMER

- Cf. Theory of Planned Behavior
- Cf. Theory of Reasoned Action
- Decisions based on:
 - Logical information processing
 - Rational MEC-constructions
 - Rational social and economic deliberations
- But are we really that rational/logical ?

WASON SELECTION TASK

If a card has a D on one side, it has a 3 on the other side

D K 3 7

WASON SELECTION TASK

Is 16 years old Is 25 years old Drinks coke Drinks beer

If a person is drinking alcohol, he or she must be over 18 years old.

Who are you going to check (in terms of age or in terms of whether he or she is drinking alcohol or not)?

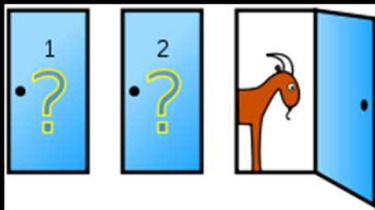
Cfr. COSMIDES & TOOBY

- Cheater detection module
- Logic as a by-product of this module
- Logical thinking is only (easily) activated in a context of cheater detection
- Outside such a context, strict logic often fails

ANOTHER EXAMPLE

- You are the winner of a TV-show
- Your prize is inside one of three boxes
- You pick box 1
- The showmaster reveals that the prize (a car) is not in box 3
- Should you change to 2, stay with 1 or let a flip-coin decide?

THE MONTY HALL PROBLEM



ANOTHER EXAMPLE

"Volgens de WHO daalt het risico op darmkanker met een kleine 20% als mensen hun consumptie van bewerkt vlees minderen met 50 gram per dag."

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ANOTHER EXAMPLE

"Die 20% is geen absoluut risico, wel een relatief. Van elke honderd Vlamingen krijgen er vijf ooit darmkanker, de meesten op hogere leeftijd."

Als iedereen zich aan het WHO-advies houdt, daalt op termijn het aantal Vlamingen dat met darmkanker te maken krijgt van vijf naar vier op honderd."

Anders gezegd, negenennegentig Vlamingen hebben dan voor niets hun boterham met Parijse worst opgegeven - vier hebben ondanks die opoffering toch nog darmkanker gekregen en één niet. Wat maakt het dan eigenlijk uit?"

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THE AUTOMATIC CONSUMER

EVOLUTIONARY PSYCHOLOGY

ECS-MANAGEMENT

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Foundations

- Elaboration Likelihood Model (ELM) & Emotionally Competent Stimuli (ECS)
- Cognitive Dissonance Theory, Balance Theory & Evaluative Conditioning
- Evolutionary Psychology as a framework for understanding ECS

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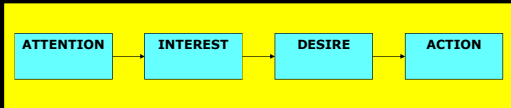
ELABORATION LIKELIHOOD MODEL & EMOTIONALLY COMPETENT STIMULI

FROM ONE-ROUTE TO TWO-ROUTE MODELS OF ADVERTISING PROCESSING

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THE OLDEST MODEL: AIDA

- Strong (1925)
- St. Elmo Lewis: turn of the previous centuries: model for **personal selling**



```

    graph LR
      A[ATTENTION] --> B[INTEREST]
      B --> C[DESIRE]
      C --> D[ACTION]
  
```

- Countless variants ... even an ADIDAS model ☺

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TWO CLASSIC MODELS

- Learning Hierarchy Model (the strong theory)
- Low-Involvement Model (the weak theory)

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LEARNING HIERARCHY MODEL

- Lavidge & Steiner
- Cf. Strong: AIDA (later basis for DAGMAR-report)
- **Learn**
 - Brand awareness
 - Brand knowledge (or image)
- **Like**
 - Brand attitude
 - Brand preference
- **Do**
 - Buying intention
 - Buying behavior

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(LEARNING) EFFECT GOALS (cf. DAGMAR)

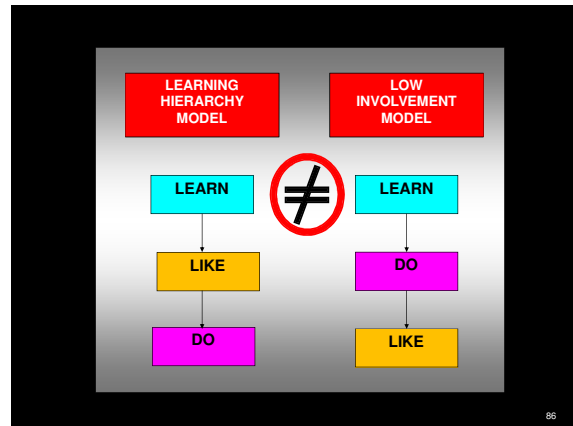
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- Buying intentions
- Buying behavior/consumption
- Brand loyalty
- LEARN → LIKE → DO

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LOW-INVOLVEMENT MODEL

- Krugman
- Involvement: high / low:
 - Media
 - Products
 - Relations consumers & products
 - Relations consumers & ads
 - Relations consumers & communication
- Model:
 - Learn: minimal learning (e.g. only the brand sign)
 - Do (buying behavior)
 - Like (after consumption)

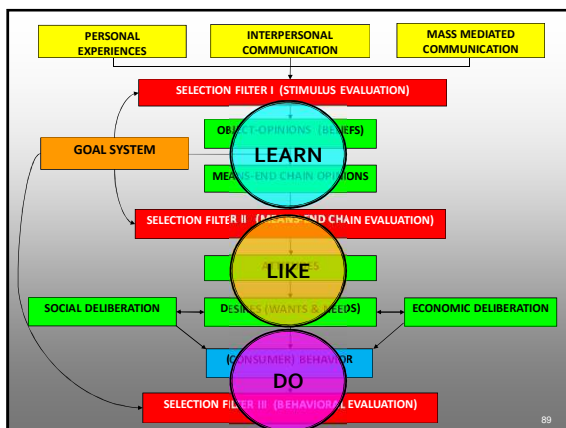
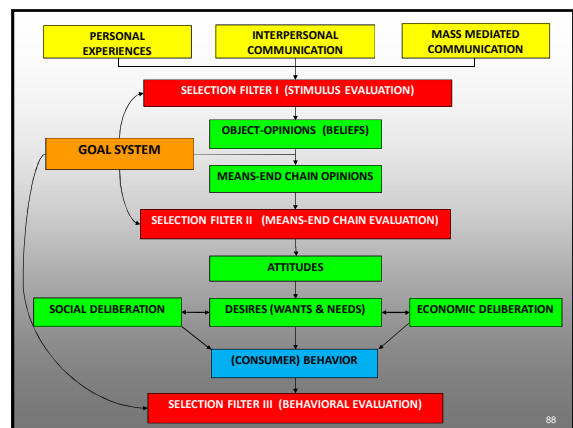
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STRONG AND WEAK THEORIES

- Jones
- Learning hierarchy model = **strong theory** of advertising effectiveness: advertising creates/can create **strong MEC-opinions**
- Low-involvement model = **weak theory** of advertising effectiveness: **minimal brand associations** (logo, name, color, advertising images, etc.)

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CLASSIC MODELS: SYNTHESIS

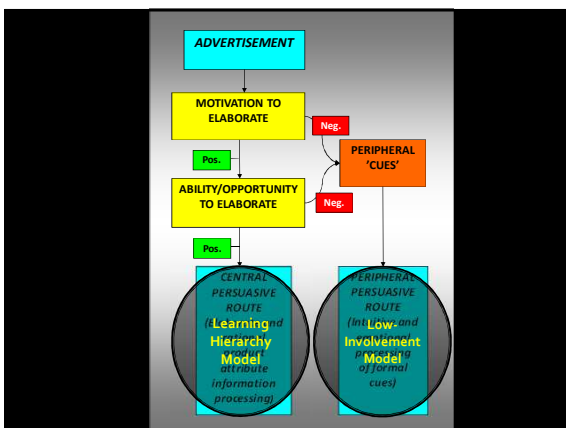
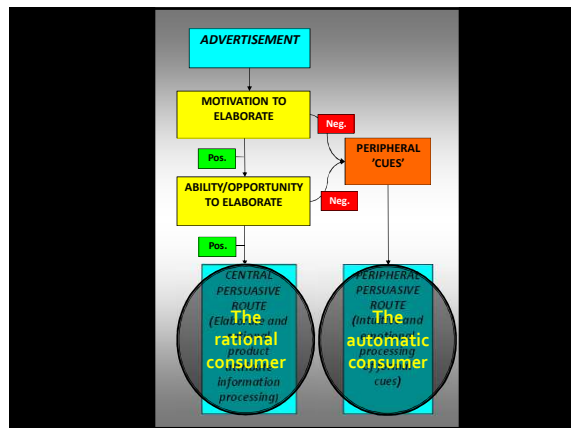
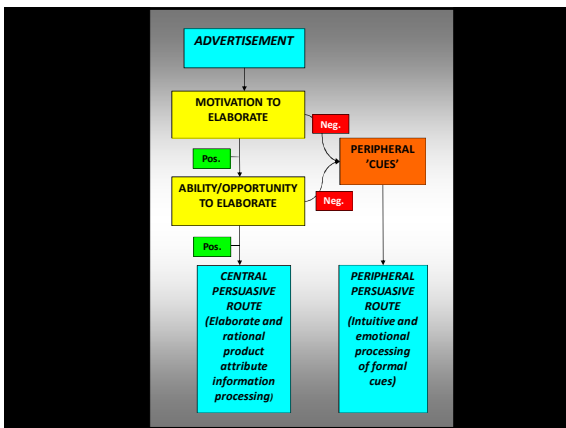
- Learning hierarchy model
 - High involvement
 - Obvious brand differences
- Low involvement model
 - Low involvement
 - Often no clear brand differences
 - Doesn't quite fit in with our SSSM of consumer behavior, that is, with the model of the rational consumer !!!

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The great step forwards: two-route models

ELABORATION LIKELIHOOD MODEL

- Alfred Politz: content, not form
- The Gorn experiments: form!
- Petty & Cacioppo: ELM: peripheral and central processing
- The ELM brings the two classic models together!



TWO ROUTES

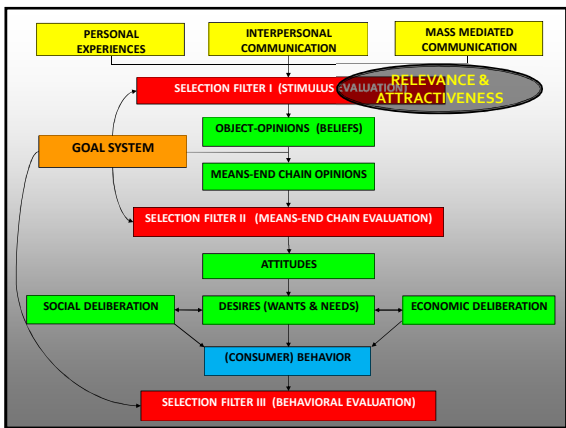
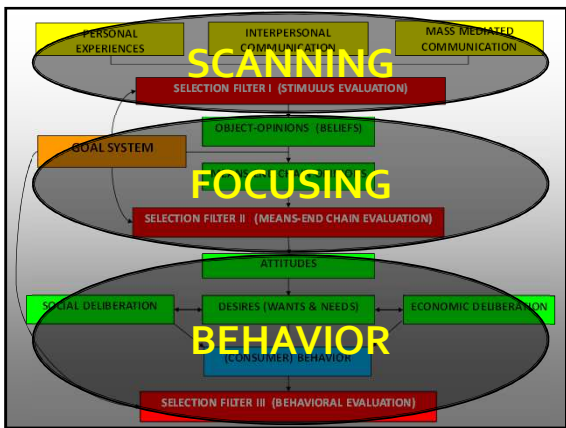
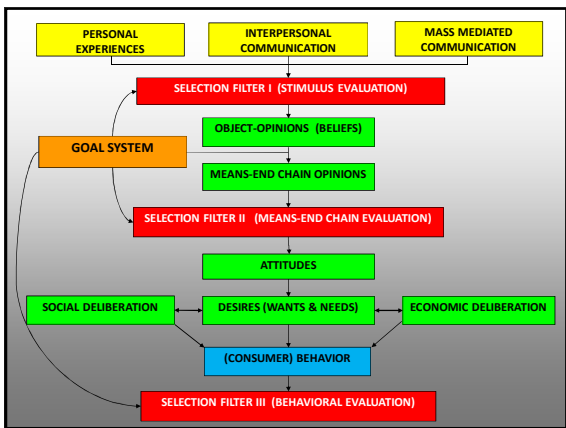
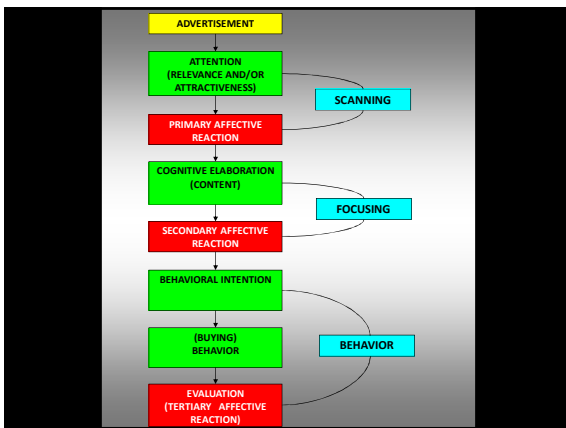
- **Central:** cf. Learning Hierarchy Model (strong theory)
- **Peripheral:** cf. Low-Involvement Model (weak theory)
- **Note:** Chaiken developed a similar model: **HSM:** heuristic and systematic processing model (+ Sufficiency Principle): cf. infra (behavioral economics)

AVERAGE CONSUMER/PRODUCT/MARKET

- Peripheral!
- Lack of motivation
- Lack of capacity (ability + opportunity)
- Is strong theory weak theory, and vice versa ???

SCANNING/FOCUSING MODEL

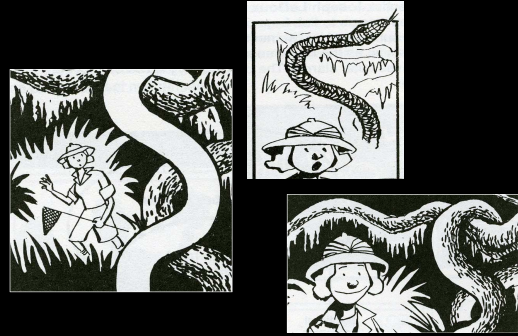
- Zajonc: 'Preferences need no inferences':
 - Mere exposure effect
 - Primary affective reactions: preceding cognitive elaboration
- Fred van Raaij: SFM
 - Scanning: cf. zapping: → primary affective reactions
 - Focusing: cf. central route ELM: → cognitive elaboration leading to secondary affective reactions (only in situations of high-involvement AND positive primary affective reactions !!!)



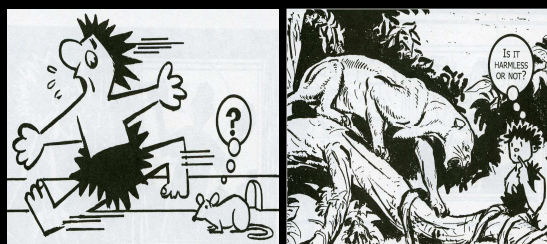
Cf. LEDOUX: THE EMOTIONAL BRAIN

- Two ways of information processing
- The 'low road':
 - Purely emotional
 - Quick, but dirty
- The 'high road':
 - Rational extension, correction, affirmation, ... of the low road
 - Slower, but more accurate

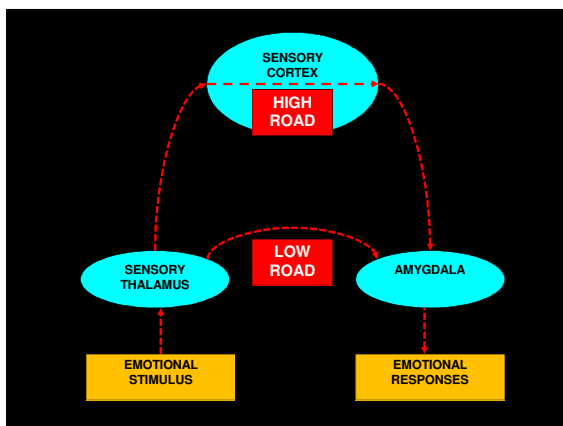
ADAPTIVE = HAVING BOTH



VALUE OF BOTH



EVERYDAY LIFE



SFM = MORE STATE OF THE ART THAN ELM

- **SCANNING**
 - Low road
 - Peripheral route
 - Low-Involvement Model
 - Processing of formal cues (emotionally competent stimuli)
 - Primary affective reactions
- **FOCUSING**
 - High road
 - Central route
 - Learning Hierarchy Model
 - Product/brand relevant MEC-information processing (attributes, consequences, goals)
 - More cognitive → secondary affect

Cf. CLASSIC (SOCIAL) PSYCHOLOGY: TWO ROUTES OF ATTITUDE FORMATION

- High-effort route leading to **explicit** attitudes
- Low-effort route leading to **implicit** attitudes

HIGH EFFORT ROUTE

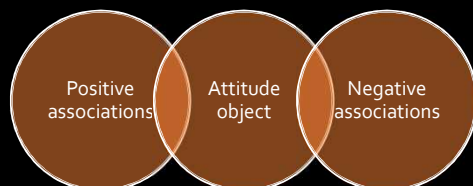
- Cf. classic attitude model:
 - cognitive stage
 - affective stage
 - conative stage
- All stages can be made **explicit**: opinions, attitudes, behavioral intentions
- Likert scales, semantic differentials, open questions, ...
- High effort = MEC-constructing

LOW EFFORT ROUTE

- Cf. Zajonc: mere affect without cognition
- No MEC-constructions, **mere associations between the brand and the peripheral cues** = low effort
- Peripheral cues = **emotionally competent stimuli (ECS – Heath)**:
 - My girl-friend likes finger food → no attitude, because finger food is no ECS for me.
 - My girl-friend likes vintage design → positive attitude, because vintage stuff is indeed an ECS for me.
- Cf. Gorn: implicit, unconscious processes!

Implicit attitudes

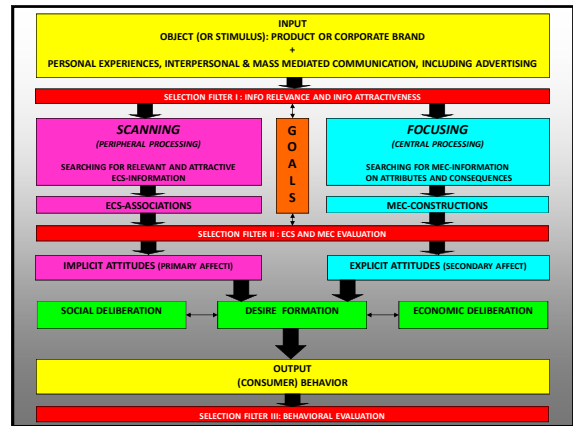
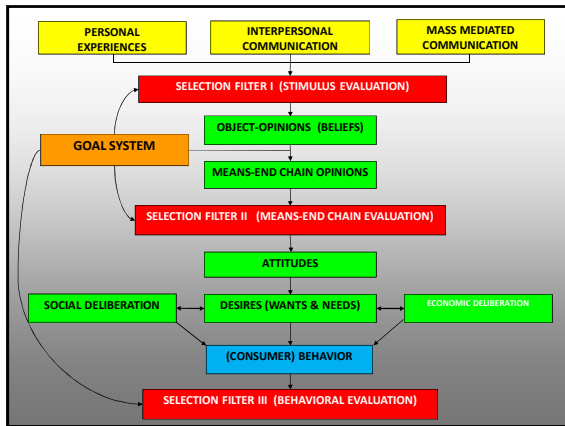
- Greenwald, McGhee and Schwartz (1998)
- IAT: implicit Association Test
- The stronger a link between concepts, the sooner you can judge associations as being correct
- Attitude-objects (two oppositional target concepts: e.g. the young versus the elderly) and positive and negative evaluations (e.g. wonderful, ugly, etc.): how fast can you judge the associations between both?
- <http://implicit.harvard.edu/>



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IAT

- Implicit and explicit attitudes don't correlate exactly, and may even contradict one another!
- E.g. with 'White and pleasant' responses being faster than 'Black and pleasant' responses for White participants who describe themselves as unprejudiced in racial matters.
- Implicit attitude formation processes → revision of our SSSM of CB & AP



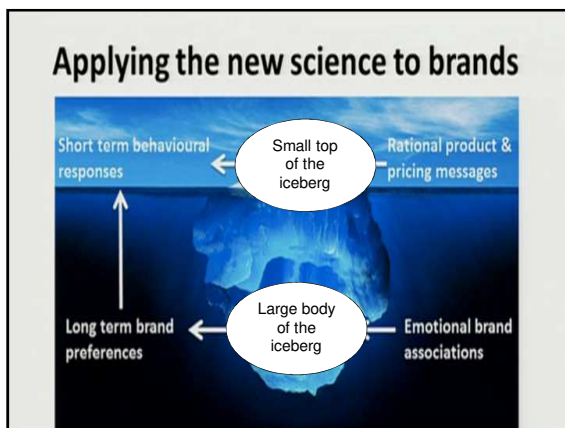
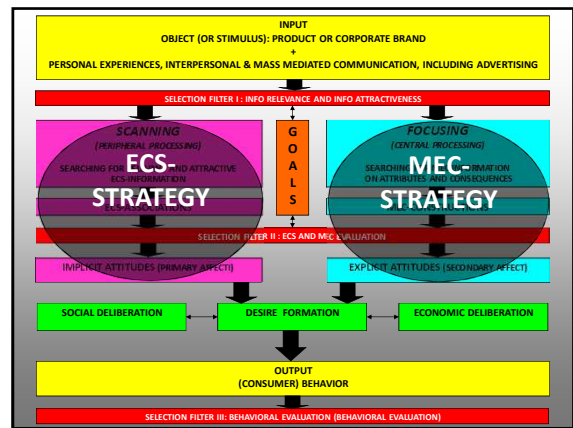
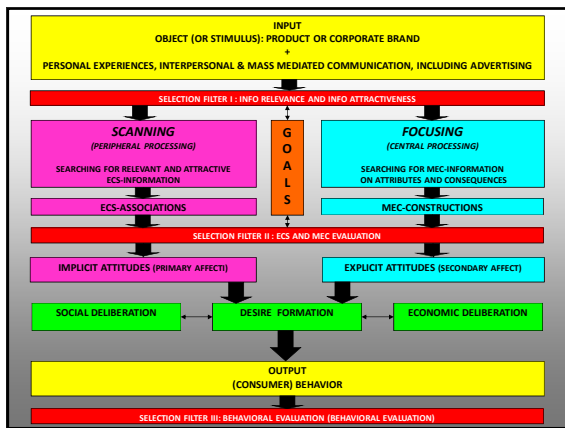
TWO AD STRATEGY PROTOTYPES

TWO AD STRATEGY PROTOTYPES

TWO AD STRATEGY PROTOTYPES



DIMENSION	MEC-BASED ADVERTISING	ECS-BASED ADVERTISING
ATTITUDES/DESIRES	EXPLICIT ATTITUDES (OR DESIRES)	IMPLICIT ATTITUDES (OR DESIRES)
OPINIONS (OR BELIEFS)	MEC-OPINIONS	ASSOCIATIONS OF THE BRAND WITH POWERFUL ECS
AFFECT	SECONDARY AFFECTIVE REACTIONS	PRIMARY AFFECTIVE REACTIONS
ELM	FOCUS ON CENTRAL ROUTE (MEC-INFORMATION)	FOCUS ON PERIPHERAL ROUTE (ECS)
SFM	FOCUS ON FOCUSING STAGE	FOCUS ON SCANNING STAGE
CONSUMER MIND	RATIONAL	EMOTIONAL
HIGH/LOW ROAD	HIGH ROAD	LOW ROAD
CLASSIC ADVERTISING PROCESSING MODELS	CLASSIC LEARNING HIERARCHY	LOW INVOLVEMENT MODEL
EFFECTIVENESS THEORIES	STRONG THEORY	WEAK THEORY
AVERAGE MARKET/CONSUMER	SECONDARY PROCESSING ROUTE	PRIMARY PROCESSING ROUTE
ADVERTISEMENT EXECUTIONS	MORE FOCUS ON COPY (MEC-INFORMATION)	LESS FOCUS ON COPY, MORE FOCUS ON ART (SENSORY ECS)



COGNITIVE DISSONANCE THEORY, BALANCE THEORY & EVALUATIVE CONDITIONING

THE LOGIC BEHIND THE ECS-STRATEGY

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Logic behind the ECS-strategy

- **Associative Network Model** (cf. supra): *what fires together, wires together* → the brand is – through repeated and simultaneous exposures – connected in the brain of the consumer with ECS that evoke positive emotions → communication management is – in this respect – something physical !!!
- **Evaluative conditioning** (versus classic and operant conditioning) (cf. affect transfer model)
- **Cognitive dissonance theory / balance theory**

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Three types of conditioning processes

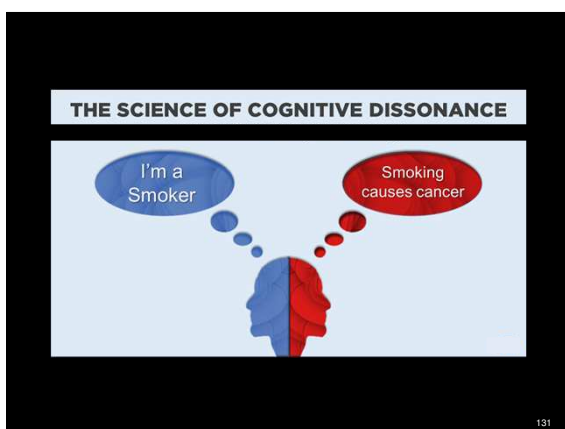
- **Classical conditioning** (or *Pavlovian or respondent conditioning*) is a learning process in which a (biologically) potent stimulus (e.g. food) is paired with a previously neutral stimulus (e.g. a bell), through which the neutral stimulus comes to elicit a response (e.g. salivation) that is normally elicited by the (biologically) potent stimulus.
- **Operant conditioning** (or *instrumental conditioning*) is a learning process through which the strength of a behavior is modified by reinforcement or punishment.
- **Evaluative conditioning** (or *affective conditioning*, is often regarded as a form of classical conditioning) is defined as a change in the valence of (or attitude towards) a stimulus that is due to the pairing of that stimulus with another positive or negative stimulus. Evaluative conditioning thus refers to attitude formation or change toward an object due to that object's mere co-occurrence with another object.

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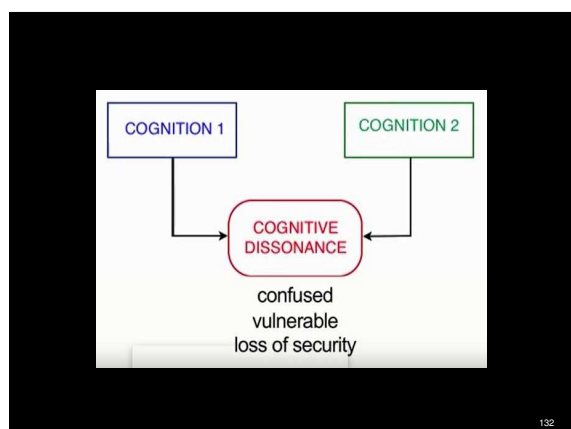
Cognitive Dissonance Theory / Balance Theory

- **Festinger, L.** (1957). *A Theory of Cognitive Dissonance*. Stanford, CA: Stanford University Press
- **Heider, F.** (1958). *The Psychology of Interpersonal Relations*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- A dissonant worldview causes negative feelings
→ we hate and therefore tend to avoid negative feelings
→ we keep 'what is wired together' (our worldview) in balance
- **Consequence:** the positive feeling, emotion, affect, attitude, ... towards the ECS is translated into a positive feeling, emotion, affect, attitude, ... towards the (product or corporate) brand

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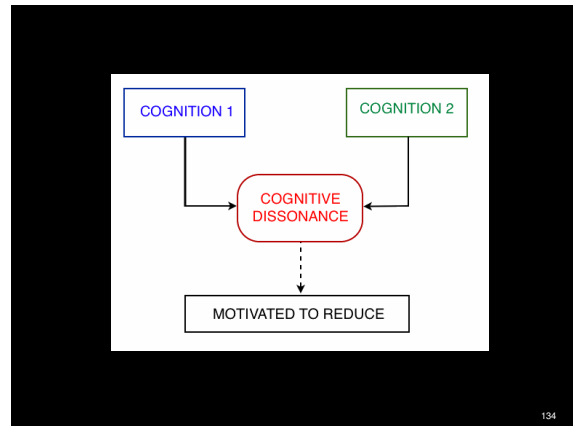
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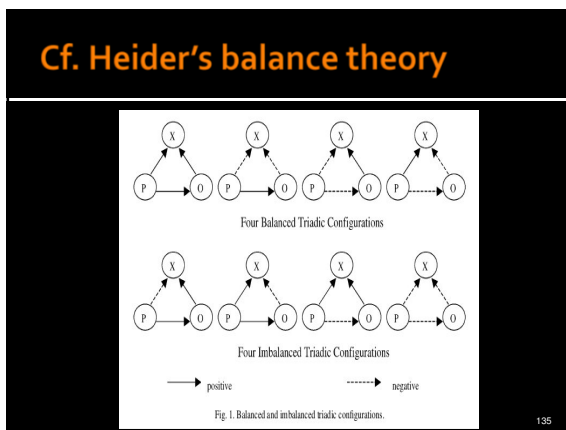
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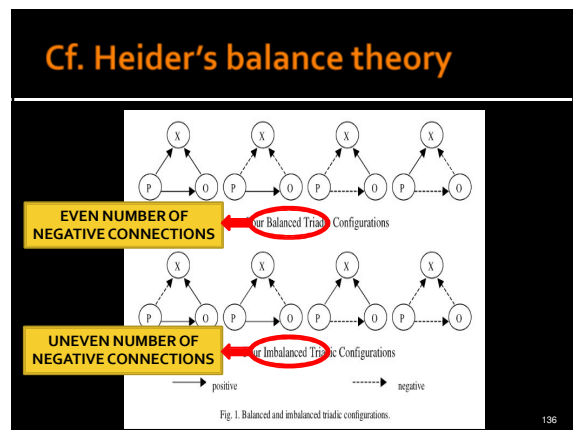
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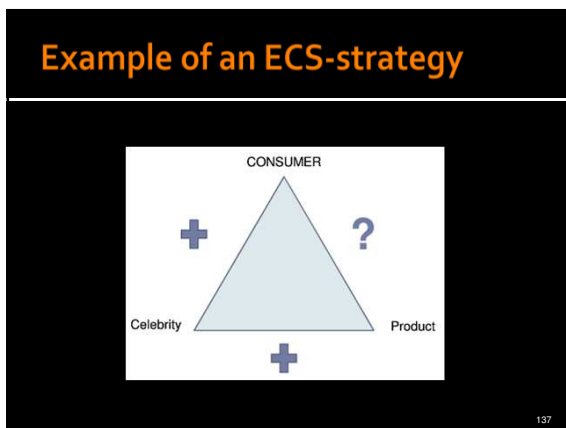
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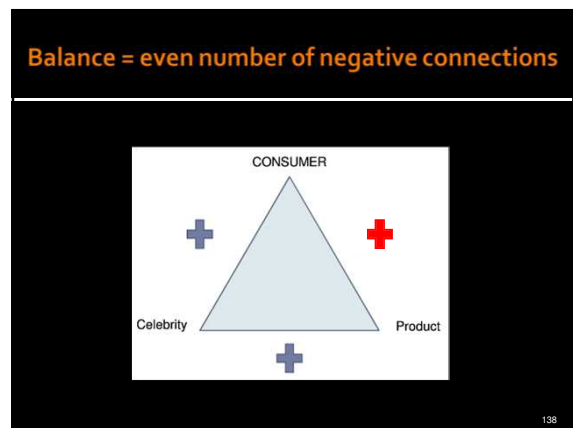
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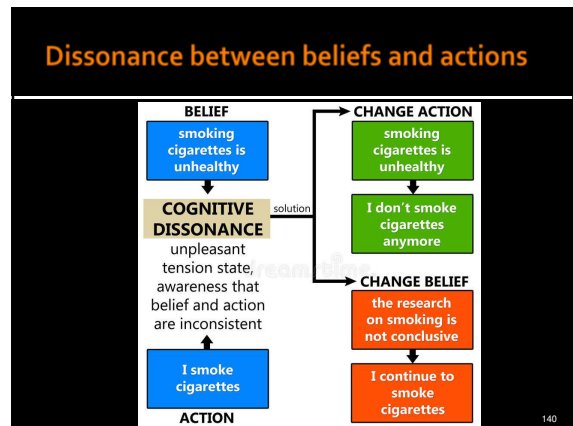
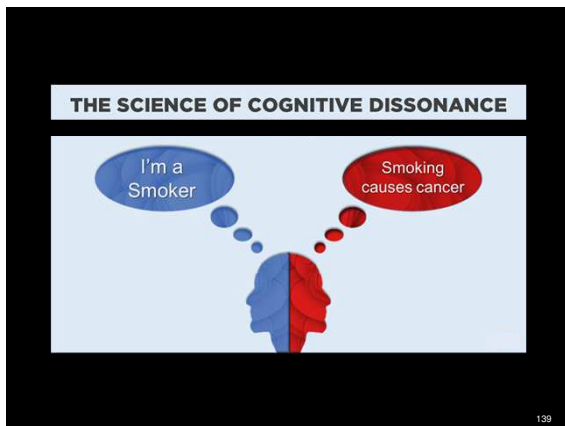
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- ### Summary: the ECS-strategy
- Underlying model is that of the automatic consumer
 - Works via the peripheral route of the ELM
 - Works via primary affective reactions (cf. SFM)
 - Through repeated and simultaneous exposures of the brand and some specific ECS, both are coupled in the brain: what fires together, wires together.
 - Via processes of evaluative conditioning (cf. the theory of cognitive dissonance and the balance theory) the valence of / attitude towards the ECS, leads to the consumer building up the same valence of / attitude towards the (product or corporate) brand.
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EVOLUTIONARY PSYCHOLOGY

A FRAMEWORK FOR UNDERSTANDING (THE RELEVANCE AND ATTRACTIVENESS OF) ECS

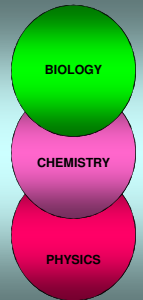
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- ### EVOLUTIONARY PSYCHOLOGY
- The 'new science of the mind' (Buss)
 - Psychology based on Darwinian thinking
 - A new paradigm?
 - The Adapted Mind* (1992) – Jerome Barkow, Leda Cosmides and John Tooby
 - Darwin, Sex, and Status* (1989) – Jerome Barkow
 - 'Vertical' (later on he used the term 'conceptual') integration of (the) science(s)

- ### THE RATIONALE BEHIND EP
- Beta-sciences versus alpha-sciences
 - Gap between them
 - Lack of integration is also typical for the alpha-sciences (in sharp contrast with the highly integrated beta-sciences)

BETA SCIENCES

- Internal integration
- Vertical integration

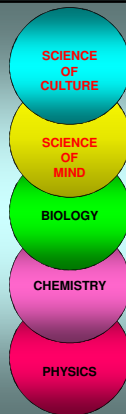


ALPHA-SCIENCES LACK INTEGRATION

- No integration with the beta-sciences
- No internal integration: a 'postmodern' science
 - Baudrillard: reality (truth) has disappeared !
 - Lyotard: no more meta-narratives !
- Science's meta-narratives: prosperity and well-being of mankind; closer to the Truth; ...

BARKOW

- A new science of mind
- A new science of culture



NOT MANY ENTHUSIASTS !

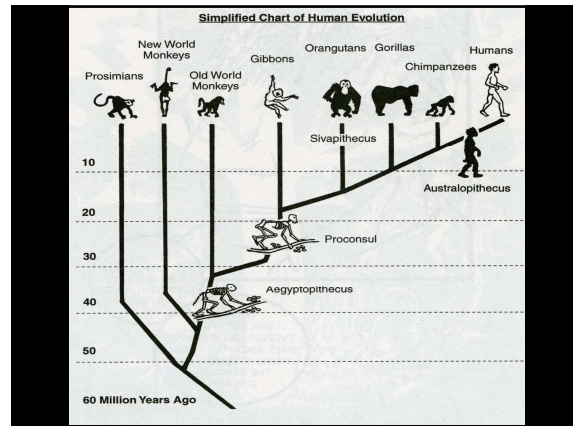
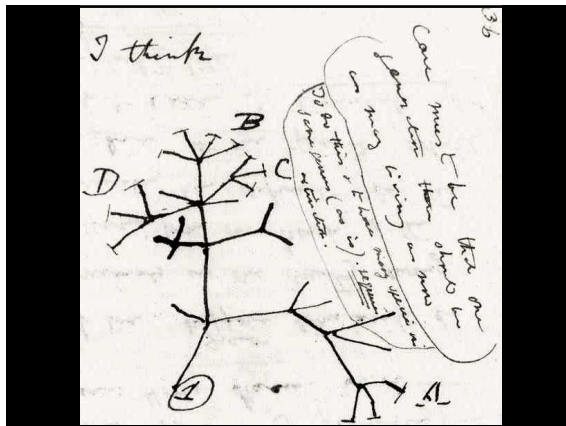
- Interdisciplinarity versus the safe boundaries of the academic bureaucracy !!!
- Political abuse of Darwin in the past: social darwinism \leftrightarrow Barkow: the psychic unity of mankind (very leftish idea !!!): cf. Gray's Anatomy

EVOLUTIONARY PSYCHOLOGY

- Psychology based on theory of natural selection (Darwin)
- Our body is the product of evolution by natural selection
- EP: so is our mind!

DARWIN'S FIRST THEORY: NATURAL SELECTION (1859)

- Variation, inheritance, selection
 - Random variations within a species
 - Some variations are inheritable
 - If a particular inheritable variation is beneficial for the individual (that is, it enhances its chances of survival) it will spread through the population: nature 'selects' those variations, so that they become part of the genetic make-up of the species or may lead to a new species





DARWIN'S SECOND THEORY: SEXUAL SELECTION

- *'The beauty of the peacock's tail makes me sick'*
- This is not survival of the fittest !!!
- → Theory of sexual selection

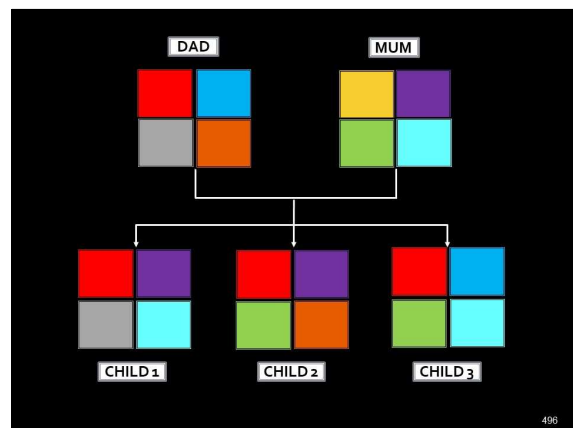
Two kinds of selection

- **Natural selection:** traits evolve for enhancing the chances of survival
- **Sexual selection:** traits evolve for either *intrasexual combats* or *intersexual wooing* thus enhancing our chances of reproduction

SELECTION LEVEL ??? NEO-DARWINISM: GENES !

- Darwin: survival and reproduction of the **individual**
- **Groups ???**
- Mendel: **genes!**
 - **Neo-Darwinism:** life is about the replication of genes in the next generation(s)
 - Living organisms are **gene-replication machines** (Dawkins: 'selfish' genes ... and memes!)
- **Note:** the fittest is not (necessary) the strongest!



WILLIAM HAMILTON: NEO-NEO-DARWINISM

- Genes can replicate themselves in a **direct** way through reproduction (your offspring has (exact copies of) half of your genes)
- But your brother, sister, ... has also (exact copies of) half of your genes
→ **Indirect** replication of (copies of your) genes is possible through investing in your kin

INCLUSIVE FITNESS: NEO-NEO-DARWINISM





- Inclusive fitness**: defines 'reproductive success' in terms of not only the number of offspring produced by the individual but also produced by his or her kin.
- $C < r.B$: solving the altruism puzzle (cf. presents from grandmother on mother's side vs grandfather on father's side ☺)

THREE LEVELS OF SELECTION

- Natural selection**: traits that help us *survive*
- Sexual selection**: traits that help us *reproduce*
- Kin selection**: traits that make us *care for our kin* so that their chances of survival and reproduction increase

AXELROD TIT-FOR-TAT

- There is also much **non-kin altruism**: how could that have evolved?
- Trivers**: one must be able to make a difference between co-operators and cheats (*reputations*, but these only come into play after several contacts!)
- Axelrod**: tournament: repeated games of Prisoner's Dilemma → **Rapoport: Tit-for-tat**: two rules only:
 - on the first move co-operate.
 - on each succeeding move do what your opponent did the previous move.

		Henry	
		Not Guilty	Guilty
Dave	Not Guilty	 2 Years	 5 Years 1 Yr.
	Guilty	 5 Years 1 Yr.	 3 Years

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FOUR LEVELS OF SELECTION

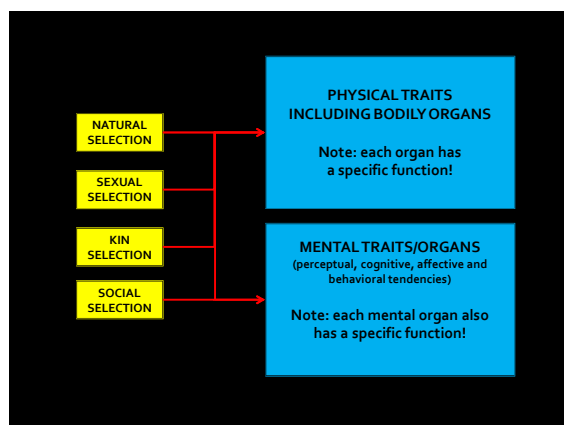
- Natural selection**: nature 'selects' those inheritable traits of an organism that increase its chances of *survival*
- Sexual selection**: nature 'selects' those inheritable traits of an organism that increase its chances of successful *reproduction*.
- Kin selection**: nature 'selects' those inheritable traits of an organism that increase its chances of successfully *investing in kin*
- Social selection**: nature 'selects' those inheritable traits of an organism that increase successful *social interactions* (e.g. tit-for-tat reasoning capacities)

TRAITS

- Darwin:
 - morphological traits within a given species
 - also behavioral dispositions
- EP: also mental organs: modules in the brain!

MENTAL ORGANS

- Cf. body: composite of bodily organs, each with specific functions to solve specific problems → brain is a composite of mental organs, that is, domain-specific modules that evolved as adaptive solutions to recurrent problems in our prehistory (e.g. finding a mate, bringing up children, finding food, finding shelter, making coalitions, avoiding diseases, going to war against other tribes, finding good places to stay, etc.)
- Cf. Gigerenzer: bounded rationality



FOUR LEVELS OF SELECTION

- **Natural selection:** mental organs that help us survive
- **Sexual selection:** mental organs that help us reproduce
- **Kin selection:** mental organs that make us care for our kin so that their chances of survival and reproduction increase
- **Social selection:** mental organs that help us in our social interactions

MENTAL ORGANS

- Cf. Gray's Anatomy
- EP: the psychic unity of mankind
- Focus is on what we have in common, since we shared many problems in our prehistory
- Male/female differences: sexual selection problems were quite different for males and females

BUSS ON MENTAL ORGANS

- 'An evolved psychological mechanism exists in the form that it does because it solved a specific problem of survival or reproduction (or kin care or social interaction) recurrently over evolutionary history. (...)

BUSS ON MENTAL ORGANS

- An evolved psychological mechanism is designed to take in **only a narrow slice of information**.
- The input of an evolved psychological mechanism tells an organism the particular adaptive problem it is facing.
- The input of an evolved psychological mechanism is transformed through decision rules into output.

BUSS ON MENTAL ORGANS

- The output of an evolved psychological mechanism can be physiological activity, information to other psychological mechanisms, or manifest behavior.
- The output of an evolved psychological mechanism is directed toward the solution to a specific adaptive problem.

EVOLUTIONARY PSYCHOLOGY

- **Barkow, Cosmides and Tooby: *The Adapted Mind* (1992)**: those mental organs that are common to our species as Homo Sapiens Sapiens, are irrespective of race, religion, ethnicity, etc. !!!
- Already **Darwin (1859)**: *'Psychology will be based on a new foundation'*
- **Cosmides**: *'In the end, it will not be called evolutionary psychology, but just 'psychology'.'*

E.E.A.

- **Environment of Evolutionary Adaptedness**
- **100.000- 2.000.000 years ago** (Pleistocene era – the Stone Age)
 - **Physical environment**: East-African savannahs
 - **Social environment**: small social groups, mainly of relatives (Dunbar's number: 150)
- **Problems**: gathering food, avoiding predators, finding and retaining mates, protecting and investing in kin, building coalitions, maintaining friendship relations, social networks, etc.

ADAPTED

- Adapted to **the Stone Age** (Homo Sapiens): problems = problems faced recurrently by our ancestors in the evolutionary relevant past → Buss: **'Humans are living fossils'**
- **Mean genes** and maladaptations: e.g. preference for sugar, fat and salt !
- Adaptations are species specific, and therefore **universal**, but not everything is an adaptation !
- **No conscious goal** of maximizing the replication of our genes relative to others (emotions !)

SSSM

- Human brain is a tabula rasa - culture fills this blank slate
- The brain is a general computer - able to solve all kinds of problems
- Learning is a general learning process, which implies that we can learn everything just as easily
- Differences between males and females are learned

EP DIFFERENCES WITH SSSM

- **Ultimate** origins of behavior versus **proximate** origins of behavior
- Human mind is **not a domain-general problem solver** based on general learning mechanisms, but a collection of domain-specific problem-solvers often operating through **prepared learning** (the brain is not a tabula rasa)

PROXIMATE VERSUS ULTIMATE

- **Proximate questions** address **HOW** mechanisms operate and **WHAT** factors influence the workings of such mechanisms
- **Ultimate questions** seek to identify **WHY** a particular behavior, cognition, emotion, morphological trait has evolved to its current form (in an adaptive sense)

PARTNER CHOICE

- **Proximate:** 'I find him to be kind, intelligent, ... and rich!'
- **Ultimate:** why are women attracted to such partner traits like kindness, intelligence, ... and wealth? Do they differ in this respect from males?

WHY DO YOU DRINK FANTA ?

- **Proximate:** Because it tastes so sweet and it looks so natural.
- **Ultimate:** Why do we prefer sweetness? Why are we attracted to things that look natural (and what is regarded as 'natural')?

DOMAIN-SPECIFIC VERSUS GENERAL

- There is no general adaptive problem, so how could a general problem solver have evolved?
- Domain-specific, context-dependent modules have evolved to solve **precise** problems.
- How **modular** is the brain? Cf. **Fodor versus Tooby & Cosmides** (Cf. <https://www.youtube.com/watch?v=UHDfvfYCYoU>)

CULTURAL LEARNING ?

- Yes, but it is **prepared learning**: cf. Chomsky: language acquisition device; cf. fear inducing stimuli (spiders and snakes, monsters in the closet or under the bed, ...)
- EP provides ultimate explanations for the specific contents of cultural learning as well as the evolutionary constraints on learning processes: '**culture is on a leash**'
- **Culture is part of human nature!** → Cultural selection as a fifth level of selection???

SYNTHESIS: EVOLUTIONARY PSYCHOLOGY ...

- Is the study of evolved mental organs
- Focuses on one special subclass of the adaptations that comprise human nature – psychological adaptations
- Cf. Gray's Anatomy: charting the psychic unity of mankind
- A swiss army knife (Cosmides and Tooby), or just a few domain-specific organs (Fodor) ... ???

KEEP IN MIND: E.E.A.

- Environment of evolutionary adaptedness
- 2.000.000 – 100.000 years ago
- East-African savannahs
- Small social groups
- Many adaptations are maladaptations due to a rapidly changed environment (cf. sweet and fat) !!!

Addendum

Some common misunderstandings about evolutionary psychology

Human behavior is genetically determined

- Genetic determinism:
 - Explains much resistance towards applying Darwinian theory to human behavior
 - Cf. Wilson's sociobiology
 - No place in modern EP !!!
 - Genes always interact with an environment
 - Adaptations afford organisms to develop tools to grapple with the problems posed by a specific environment

If it is evolutionary, we cannot change it

- Modern EP: knowledge of our evolved social psychological mechanisms along with the social inputs that activate them, gives us the power to alter social behavior
- Moreover, most evolved mechanisms permit organisms to alter their behavior adaptively in response to environmental change

EP requires improbable computational abilities of organisms

- Cf. Hamilton's rule or a spider's web: mathematics is only an aid to describe these adaptations. It does not mean that the spider or the human has to be a sophisticated mathematician to execute those adaptations
- Most of the time, nature has done the calculations for us and translated them into feelings. All we have to do is follow those feelings.

Current mechanisms are optimally designed

- **First constraint:** evolutionary time lags: organisms are designed for *previous* environments of which they are the product
- **Second constraint:** it suffices that benefits outweigh costs relative to other designs, that is, most designs are far from optimal, only *sufficient*
- **This is exactly an argument against intelligent design !!!**

EP implies a motivation to maximize gene reproduction

- Humans don't strive for maximum gene-reproductive success, neither consciously nor unconsciously
- The causal process = differential gene replication caused by differences in adaptive design
- This process leads to the fundamental human motivations and their corresponding mental organs (cf. infra)

Every aspect of human life has to be interpreted as an adaptation

- Evolution leads to **three products**:
 - **Adaptations:** e.g. the umbilical cord
 - **Byproducts** of adaptation: e.g. belly button
 - **Random effects** (noise) produced by chance mutations, chance effects during development, etc.: e.g. the particular shape of a person's belly button
- E.g. is homosexuality or alcoholism (both have a strong genetic base!) an adaptation?

The reliably developing feature of adaptations does not mean that the adaptation must appear at birth

- Many adaptations develop long after birth: e.g. language, walking, teeth, facial hair, breasts, etc.

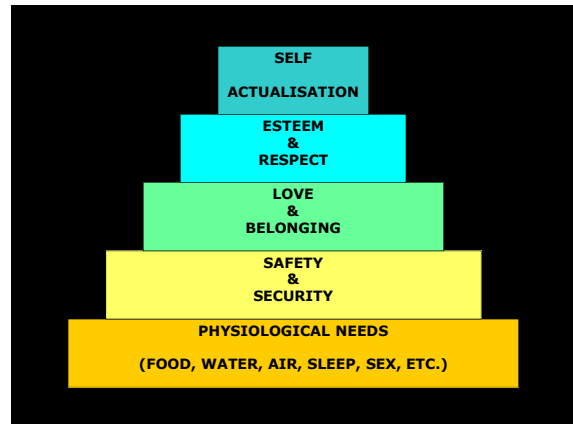


Finding the gene for ...

- E.g. *gene for aggression, gene for alcoholism, gene for homosexuality, etc.*: nuance this!
- **For no mental organ, the complete genetic basis has already been identified !!!**
 - Focus on malfunctions of the human body (e.g. mucoviscidosis)
 - Polygenes i.s.o. genes
 - Pleiotropy: genes sometimes have two or more different effects

EP and CONSUMER GOALS

AUTHOR	NUMBER	LABEL
S. Freud	2	drives, instincts
C. Alderfer	3	needs
A. Maslow	5	motivations
L.R. Kahle	9	values
S. Schwartz & W. Bilsky	10	values
S. Reiss	16	basic desires
M. Rokeach	18	terminal values
H. Murray	28	psychogenic needs
D. Starch	44	appeals



Maslow (motivations)

- Biopsychological universal goals
- Weaknesses:
 - Hierarchy?
 - Alderfer: ERG
 - Exhaustive inventory?
 - Empirical basis:
 - Clinical therapy & pilot studies
 - Ideas of other psychologists
 - Biographies
 - Theoretical basis?

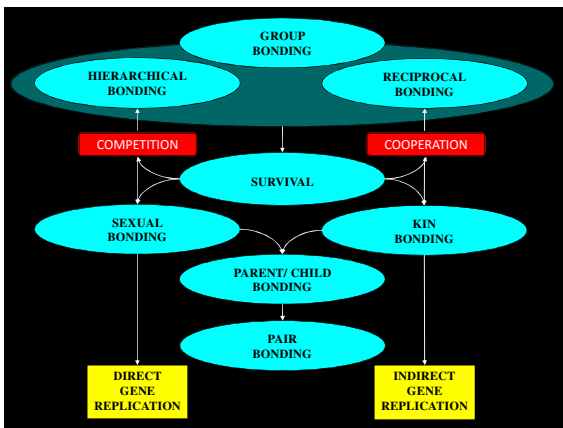
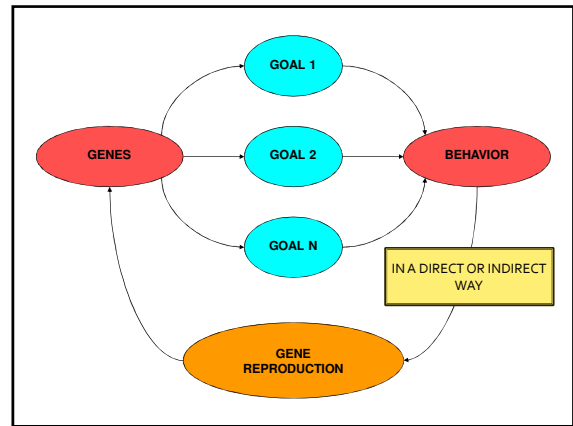
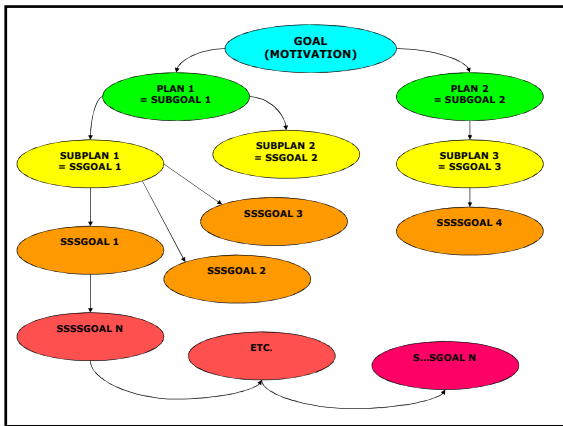
TERMINAL VALUES	INSTRUMENTAL VALUES
A COMFORTABLE LIFE	AMBITIOUS
AN EXCITING LIFE	BROADMINDED
A SENSE OF ACCOMPLISHMENT	CAPABLE
A WORLD AT PEACE	CLEAN
A WORLD OF BEAUTY	COURAGEOUS
EQUALITY	FORGIVING
FAMILY SECURITY	HELPFUL
FREEDOM	HONEST
HAPPINESS	IMAGINATIVE
INNER HARMONY	INDEPENDENT
MATURE LOVE	INTELLECTUAL
NATIONAL SECURITY	LOGICAL
PLEASURE	OBEDIENT
SALVATION	POLITE
SELF-RESPECT	POLITE
SOCIAL RECOGNITION	RESPONSIBLE
TRUE FRIENDSHIP	SELF-CONTROLLED
WISDOM	

Rokeach on goals (values)

- Sociocultural perspective, yet universal
- Weaknesses:
 - Universality?
 - Exhaustive inventories?
 - Empirical basis:
 - 30 students
 - 100 adults Michigan
 - Anderson's personality inventory
 - Theoretical basis?

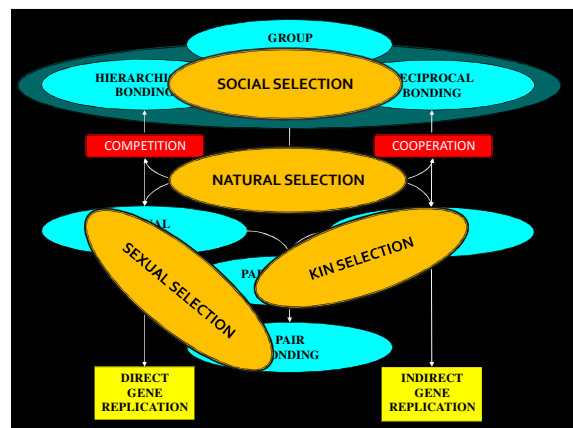
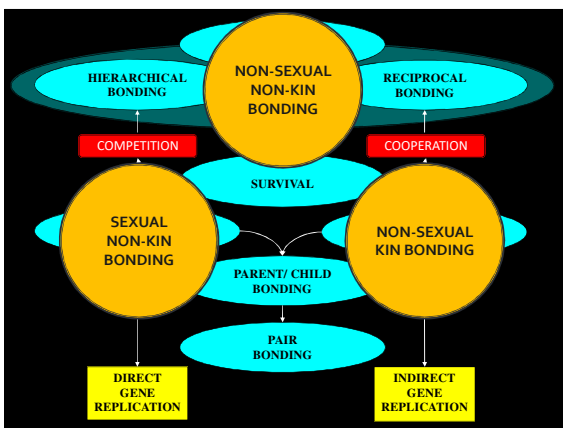
Nature or nurture?

- Useless discussion
- Maslow: nature → universal
- Rokeach: also nurture → variable
- But nature has been neglected !!! Cf. SSSM versus EP



Bonding

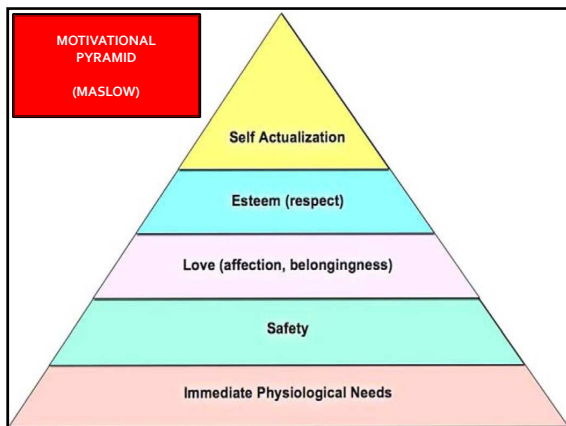
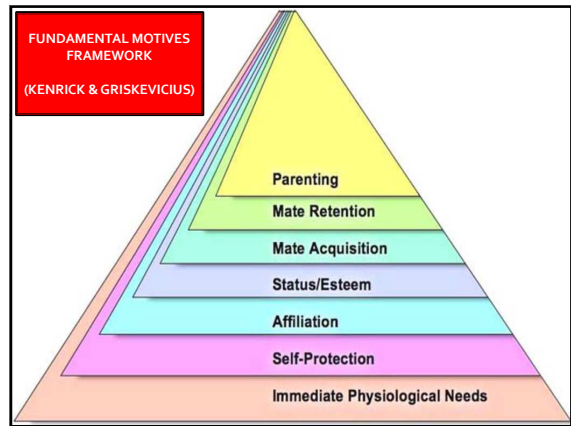
- Emphasizes our **social nature**
- Emphasizes the **emotional** aspect of consumer / human goals
- Natural, sexual, kin and social selection can also easily be added to our model



Future developments

- Goals as nested hierarchies

- Life History Theory



Future developments

- Consumer subselves corresponding with each goal
- Cf. Kenrick et.al.:
 - The team player (group bonding)
 - The go-getter (hierarchical bonding)
 - The night watchman (survival - protection)
 - The compulsive (survival - disease)
 - The swinging single (sexual bonding)
 - The good spouse (pair bonding)
 - The parent (parent/child bonding)

Universal Goal Model

- Is a model of our fitness promoting goals
 - Helps to define fitness affordances/fitness disaffordances (cf. infra)
 - Helps to think about emotions (cf. infra)
 - And therefore it helps to think about ECS strategies
 - Also helps to think about MEC strategies

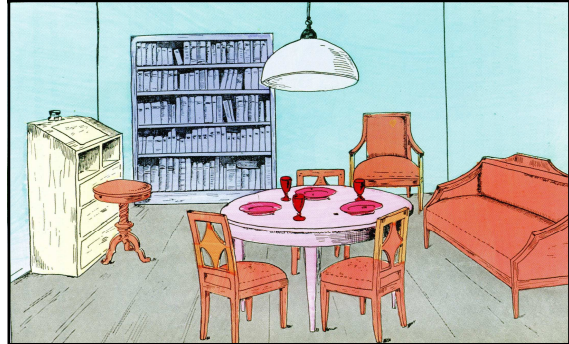
EP and CONSUMER PERCEPTION

Affordances

PERCEPTION of AFFORDANCES

- J.J. Gibson: ecological psychology.
- Central concept: **affordances**: things in the environment that 'afford' various behavioral interactions because they offer actionable opportunities concerning potential costs and benefits to the organism: e.g. fruits afford eating, trees afford climbing, snakes afford danger, ...
- Gibson: *perception is for doing!*

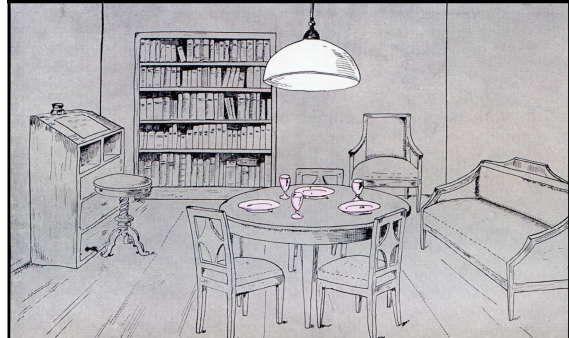
Human



Dog



Fly



THE MIND IS A FITNESS AFFORDANCE MANAGEMENT SYSTEM !!!



THE MIND IS A FAMS

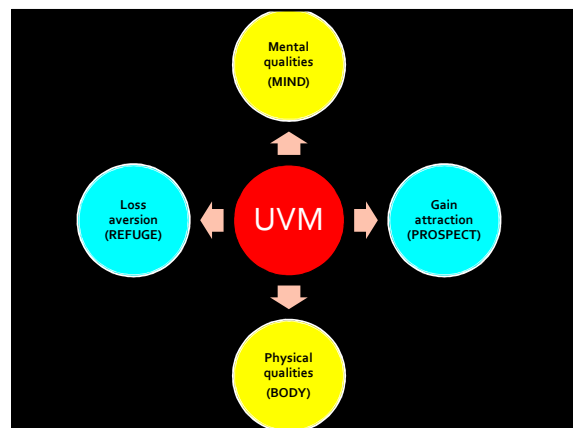
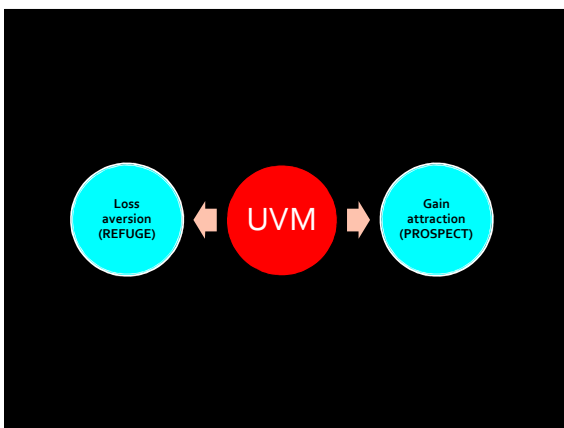
- Affordances are **fitness (promoting) affordances** ; disaffordances are **fitness (threatening) disaffordances**
- Our **goal system** defines if something is fitness promoting or fitness threatening
 - → Our goal system defines **the relevance** of affordances
 - → We must communicate **our brand as an affordance** to the consumer's goal system (via MEC) or **link our brand to more general affordance stimuli** (ECS) that automatically attract the consumer's attention and elicit affective reactions
- **Perception** is guided by our goal system as it evolved in the E.E.A. !!!

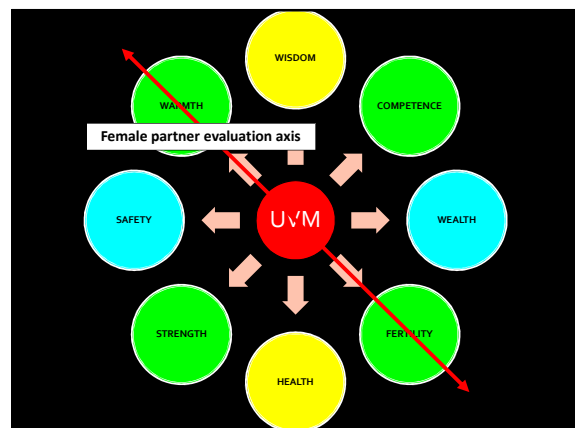
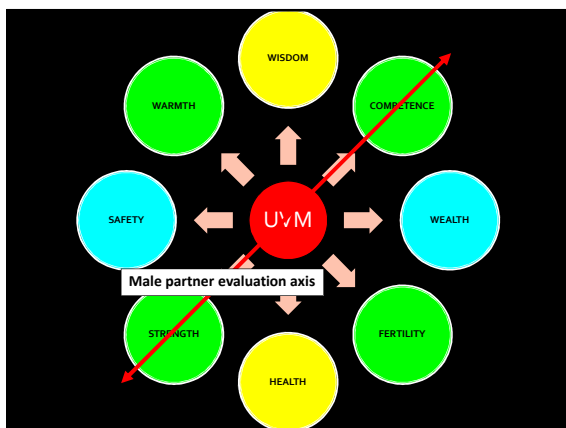
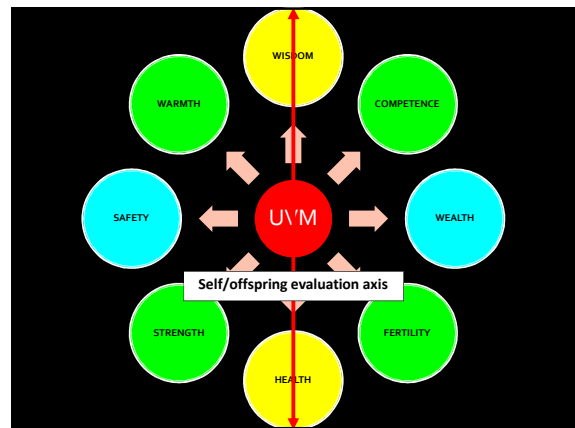
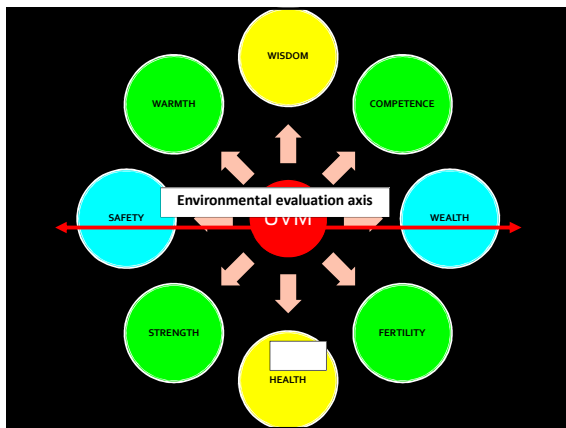
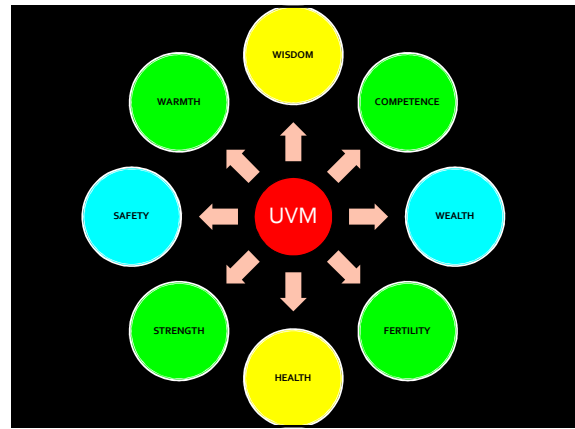
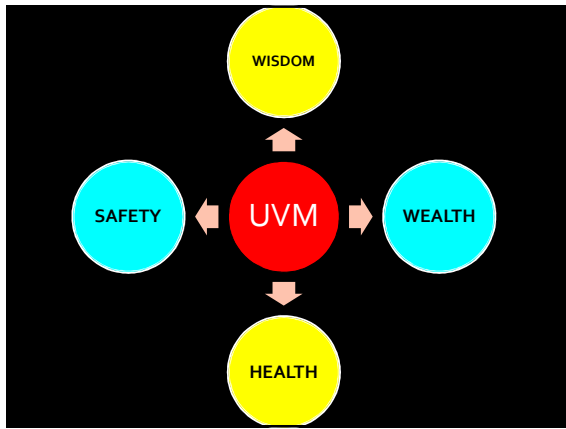
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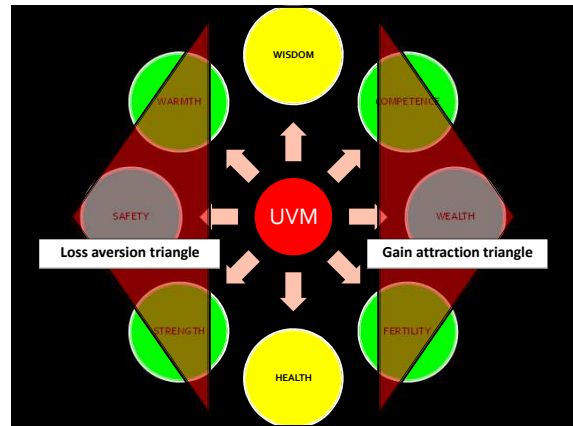
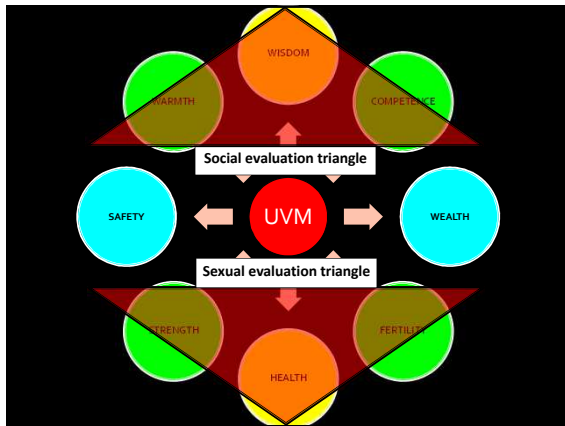


CONSUMER VALUES

- From fitness affordances to **optimal** fitness affordances
- Cf. the **Savanna hypothesis** (Orians and Heerwagen)
- More generally: the **Prospect/Refuge theory** (Appleton)

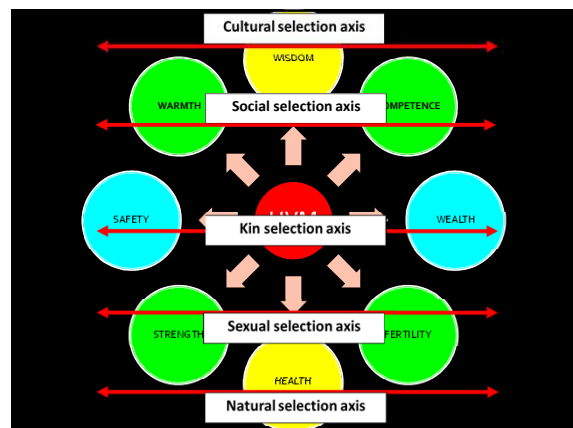






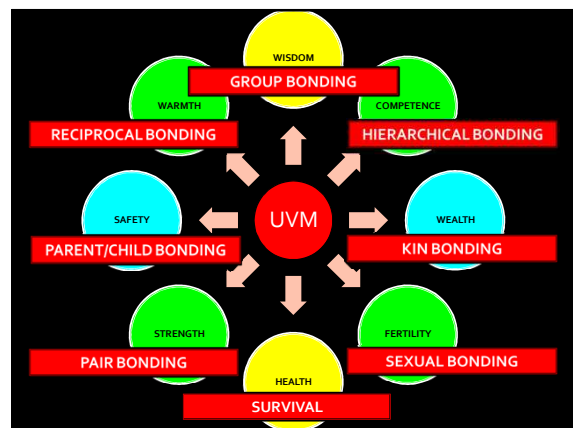
RECENT IDEAS

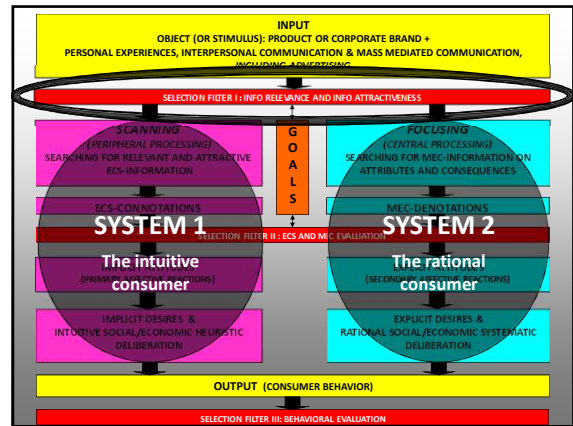
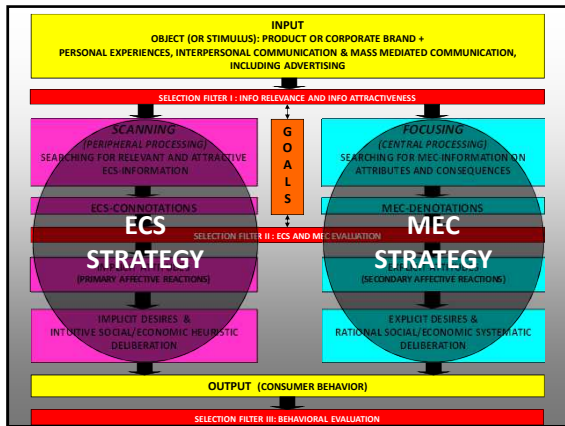
- Integration of five selection levels: natural, sexual, kin, social ... and even cultural
- Linking of Universal Goal Model and Universal Value Model
- Speculative at this moment !!!



FIVE GROUPS/TYPES OF MENTAL ORGANS

- Natural selection:** mental organs that help us *survive*
- Sexual selection:** mental organs that help us *reproduce*
- Kin selection:** mental organs that make us *care for our kin* so that their chances of survival and reproduction increase
- Social selection:** mental organs that help us in our *social interactions* with non-sexual and non-kin interactants
- Cultural selection:** mental organs that help us in *dealing with our cultural environment* (e.g. language, story and music 'instincts')





SUMMARY

- **Universal Goal Model:** defines **relevance** of stimuli: are they affordances / disaffordances ?
- **Universal Value Model:** defines **attractiveness** of stimuli: are they **powerfull (or optimal)** affordances / disaffordances or **weak** ones?
- Cf. scanning/focusing model: first filter !!!
- Both the UGM and the UVM function as **internal compasses** for our (consumer) brain as a **FAMS** !!!

EP and CONSUMER EMOTIONS

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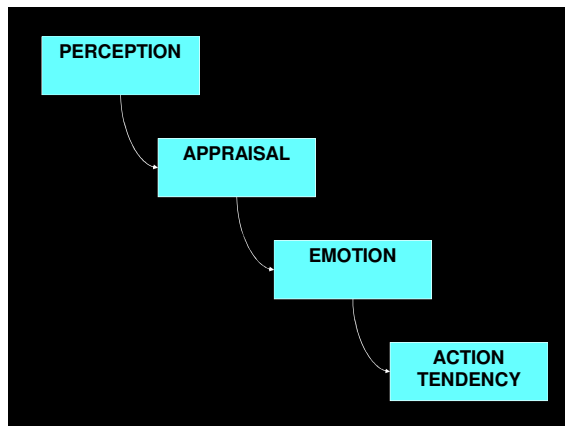
CONSUMER EMOTIONS

- **The universality of basic human emotions**
 - Paul Ekman
 - Charles Darwin

→ indication of heredity and thus of adaptive function (at least in the E.E.A.)
- **Nico Frijda:** the functional approach to emotions

FUNCTIONAL APPROACH

- Cf. **Nico Frijda:** emotions are not evoked without a purpose. Emotions have a clear **function**.
 - Events are **appraised** as emotionally relevant when they seem to **advance or harm** the individual's **goals** ('concerns') → positive or negative emotions, corresponding with (fitness) affordances or disaffordances
 - They prepare the individual to undertake action towards the object that is **relevant** to their goals: they set out action tendencies or **plans**.



THE EMOTIONAL CONSUMER

- EP: most mental organs function – as part of our FAMS – on a subconscious/unconscious level and are ruled not by conscious rational reasoning, but by implicit emotional processes.

KLEINGINNA & KLEINGINNA

Emotion is a complex set of interactions among subjective and objective factors, mediated by neural/hormonal systems, which can :

- (a) give rise to affective **feelings** of arousal, pleasure/displeasure, dominance or submission;
- (b) generate **cognitive processes** such as emotionally relevant perceptual effects, appraisals, labeling processes;
- (c) activate widespread **physiological adjustments** to the arousing conditions; and
- (d) lead to **behavior** that is often, but not always, expressive of the underlying emotions (cf. Ekman), goal-directed, and adaptive.

EMOTIONS AS REGULATORY SYSTEMS

- Cf. Cosmides and Tooby
- Emotions serve as **superordinate coordination programs** that direct the activities and interactions of the different domain-specific mental programs within our FAMS

Cosmides & Tooby: e.g. fear

- **Perception and attention is shifted** (e.g., your hearing gets focused on noises like creaks or rustling)
- **Goals and motivational priorities change** (e.g., you are not hungry or sleepy anymore)
- **Information-gathering programs are redirected** (e.g., you worry about the safety of your relatives)
- **Conceptual frames shift** (e.g., you immediately recognize safe places to hide)
- **Memory processes are directed to new retrieval tasks** (e.g., you remember a baseball bat you once bought)
- **Communication processes change** (e.g., your facial expression changes, your voice pitch is modified)
- **Specialized interference systems are activated** (e.g., you make interferences about the burglar: e.g. you remember a newspaper article pointing out that people get mostly killed by people who are relatives, so the burglar probably won't be life threatening)

- *Specialized learning systems are activated* (e.g., you store all information in memory for future threatening events)
- *Physiology changes* (e.g., adrenalin increases, heart rate changes, there are muscular changes)
- *Behavioral decision rules are activated* (e.g., depending on the kind of threat you exhibit fight reactions like self defence or flight reactions like hiding away)

This example illustrates that fear induces a lot of adaptive reactions to a threatening situation, thereby functioning as an overall regulator.

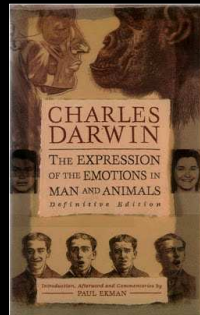
CONCLUSION

- Emotions are **adaptive systems**
- Help us make the 'right' decisions, that is, decisions that on average increased our chances of survival, reproduction, choosing the right sexual partner, choosing the right friends, ... **in the EEA !!**
- Emotions are **clearly goal related** (cf. functional approach to emotions), that is, they can be understood in terms of (dis)affordances as defined by our **UGM** and **UVM**

EMOTIONS

Charles Darwin: *The Expression of the Emotions in Man and Animals* (1899)

- Emotions are universal
- Emotions have adaptive value



CONCLUSION: EP SHEDS NEW LIGHT ON ...

- Consumer **goals** (cf. UGM)
- Consumer **values** (cf. UVM)
- Consumer **emotions** (regulators)
- Consumer **perception** (affordances)
- ...
- Consumer **meaning and decision making** (cf. infra: the next chapters: semiotics and behavioral economics)
- = the central themes of any book on consumer behavior
- **General idea: the consumer brain = an evolved FAMS**