Automaticity in social-cognitive processes

Presentation by Harmanjit Singh

John A. Bargh , Kay L. Schwader , Sarah E. Hailey, Rebecca L. Dyer, and Erica J. Boothby

Background

Bargh , J.A. (1989)	• Some basic social-perceptual processes could have unintentional components
Bargh et al (1997)	• Automatic reactions are learnt form experience
Bargh, J.A. and Morsella, E. (2008)	• Innate processes exert automatic, non conscious influence over higher cognitive processes

Background

Types of Automaticity

Pre-conscious

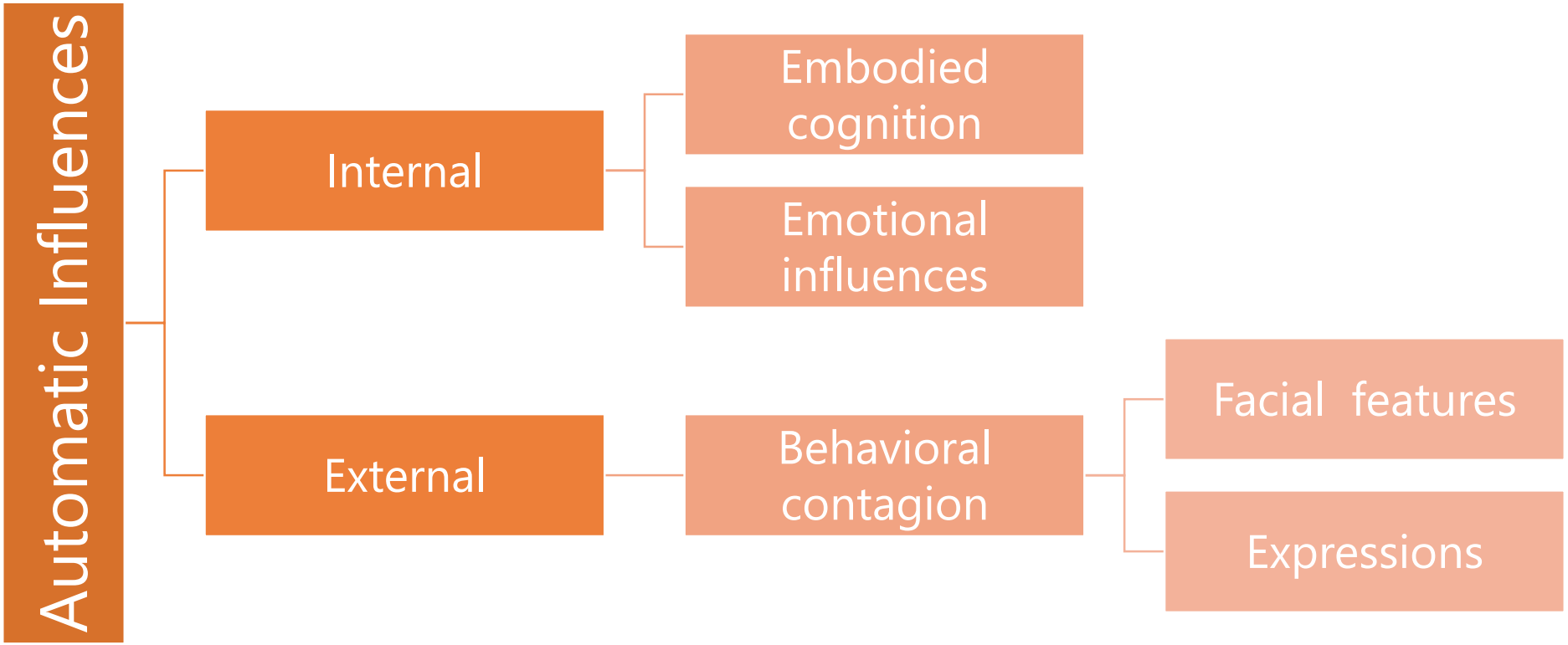
Generated from effortless sensory or perceptual activity to then serve as implicit, unappreciated inputs into conscious and deliberate processes, or directly activate higher mental processes such as goal pursuit and social behavior

Post-conscious

"Goal-dependent automaticity"

Dependent on prior or concurrent conscious and intentional thought

Preconscious automatic phenomena



Automatic processes observed in Infancy

Domain	Observations
Object	Solidity, rigidity, cohesive
Number	One core *system* for small quantities; one approximate *system* for numerical values
Space	Sensitive to distance, angles, and direction, Egocentic and allocentric frame of reference for navigation
Agent	Organize the actions of agents in terms of those agents' goals
Social evaluations	Prefer prosocial to antisocial agents
False beliefs	Infants demonstrate false-belief understanding
Priming	Priming can induce social behavior
Implicit attitudes	Distinguish faces by gender and race

Mimicry

Being mimicked by another person typically creates feelings of bonding (Chartrand, T.L. and Bargh, J.A. (1999), Study 2) and social warmth (as well as physical warmth; embodiment)

Being mimicked by an out-group member has the opposite effect and actually 'leaves one cold' (Leander, N.P. et al. (2012))

Self-concept and **positive feelings towards the target** are necessary ingredients for mimicry and behavior contagion effects

Remnant-Mimicry

Observation: People were more likely to behave in unscrupulous ways, such as littering, stealing, or disobeying posted signs, in contexts where there was evidence of past disorder (e.g., graffiti, litter).

Conclusion: Behavior priming thus has real social consequences and can occur even in the absence of the original actors and the actual behavior being mimicked – when only vestiges of the relevant behavior remain.

– Keizer, K. et al. (2008)

Facial perception

Brief presentations of faces leading to spontaneous inferences about the trust-worthiness and competence of the target person

– Todorov, A. et al. (2009)

People are able to automatically infer the preferences of others from spontaneous facial expressions

– Todorov, A. et al. (2005)

People tend to rely too much on appearance when making these trait and other judgments, assigning facial appearance too much weight in subsequent decisions about the person than is merited

– Olivola, C.Y. and Todorov, A. (2010)

Embodiment

Strong associations between metaphorically related physical and psychological concepts [1]

- physical sensations of surface hardness prime more abstract notions of difficulty [2]
- physical heaviness activates notions of seriousness [2]
- briefly holding a warm cup of coffee produces feelings of social warmth [3]
- prefer to wash their hands more after remembering a past guilty behavior, as though they were 'washing away their sins'[4]

[1] Barsalou, L.W. (2008) ; [2] Ackerman, J.M. et al. (2010) ; [3] Williams, L.E. and Bargh, J.A. (2008) ; [4] Bargh, J.A. and Shalev, I. (2012)

Embodiment: Power Posing

Power posing produces psychological and behavior changes such as increased feelings of power and risk tolerance, but it also produces neuro-endocrine changes by increasing testosterone (the dominance hormone) and decreasing cortisol (the stress hormone)

– Carney, D.R. et al. (2010)

Accordingly, high-power posers show increased confidence in decision making, as well as a preference for decision-consistent information

– Fischer, J. et al. (2011)

Power Posing: Incidental adoption of open and expansive bodily positioning

Physical Link of Abstract Social Process

The more pan-cultural mechanisms, such as physical and social warmth and coldness, may be **hard-wired** [1]

For example, experiences of social exclusion (social coldness) literally reduce bodily temperature (physical coldness) [2]

Employ Principle of ***neural re-use*** [3]

Social pain and distress caused by rejection experiences activates the same brain regions involved in the experience of physical pain[4]

1 Kang, Y. et al. (2011); 2 IJzerman, H. et al. (2012);
3 Anderson, M.L. et al. (2012); 4 *Eisenberger, N.I. et al. (2003)*

Tarriance

Occasionally the sensory or perceptual experiences can be carry-over reactions from one context to the next, (as in embodiment or moral judgment research, in which emotional disgust or guilt reactions influence subsequent information processing and behavioral responses)

Goal Driven Experiments

Priming: Mating goal

Topic A: less interesting

Topic B: more interesting

Unconscious Thought Theory

Proposed by Dijksterhuis and Nordgren

Claim: Decisions made unconsciously are superior in quality to those made consciously

Judgment relevant information acquired

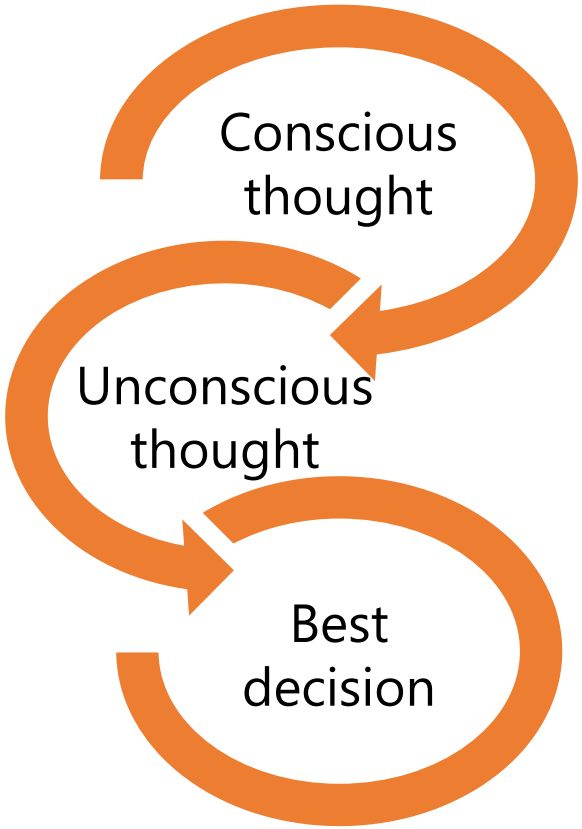
Conscious intention is formed to make the best decision

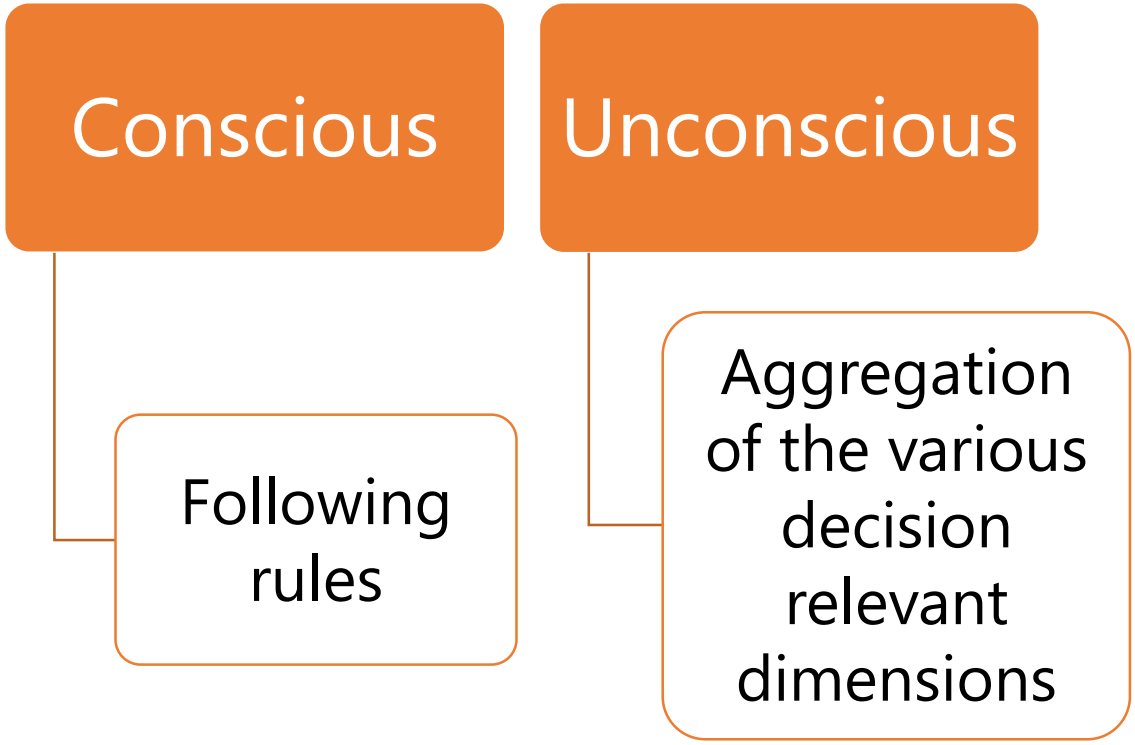
A period of deliberation using unconscious thought (while conscious thought is directed elsewhere) produces better quality judgments than does an equally long period of conscious deliberation

Compromise Proposition

A combination of both conscious and unconscious thought processes would solve complex problems better than either type by itself.

– Nordgren, L.F. et al. (2011)





Conclusion

Skill acquisition is not the only route to Automaticity

Any process of sufficient complexity to be of interest to social psychologists involves a complex interplay between both controlled (conscious) and automatic processes.

Even before their first birthday, infants possess the cognitive machinery necessary to begin making sense of the physical and social world around them

Conscious processes play an important causal role, capable of changing and redirecting the unconscious behavioral or judgmental impulse

Thank You

References are provided immediately when the respective work has been cited.