

# Whitehead's notion of intuitive recognition

Ronny Desmet

5 June 2015

# The human psyche

- = a temporal stream of occasions of experience
- Each occasion of experience = a creative synthesis of feelings of antecedent somatic and psychic occasions of experience
- Each feeling has an objective content (what is felt) and a subjective form (how it is felt)
- Each conscious occasion of experience can be analyzed in four phases

# The 4 phases of a conscious occasion

- Initial physical phase: physical feelings = initial feelings of antecedent occasions
- Conceptual phase: conceptual feelings result from the recognition of pure potentials
- Propositional phase: propositional feelings (perceptual & imaginative) result from integration of conceptual with physical feelings
- Final intellectual phase: intellectual feelings (conscious perceptions & intuitive judgments) result from integration of propositional with physical feelings

# Conscious perception

- Presentational immediacy = conscious awareness of perceptual component; usually clear
- Causal efficacy = conscious awareness of physical component; usually vague
- Symbolic reference = integration of presentational immediacy with causal efficacy

# Intuitive judgment

- Affirmative if its subjective form includes definite believe in its imaginative proposition = similar to conscious perception
- Negative if its subjective form includes definite unbelief in its imaginative proposition = triumph of consciousness
- Suspended judgment = entertainment of the contrast between what may be and what is = indifferent to truth or falsehood = conscious imagination

# The process of becoming

- Not primarily controlled by consciousness
- A progressive integration of feelings controlled by their subjective forms
- “Consciousness is the crown of experience ... not its necessary base”

# Mathematics

- “The study of pattern in abstraction from the particulars which are patterned”
- Mathematical intuition = pattern recognition
- Intuitive judgments of mathematicians = intuitive recognitions of pattern

# Physics

- “Recognition is the source of all our natural knowledge”
- From: the perceptual recognition of sense-objects & spatial, temporal and causal patterns ( $\Leftrightarrow$  Hume)
- To: the imaginative recognition of the uniform space-time pattern & the contingent causal patterns or laws of physics ( $\Leftrightarrow$  Einstein)

# Recognition

- Unconscious recognitions involving pure potentials  $\Leftrightarrow$  conscious recognitions involving perceptual and imaginative propositions
- Conscious recognition = intellectual act of comparison accompanied with judgment
- Unconscious recognition = that relation of the mind to nature which provides the material for the intellectual activity

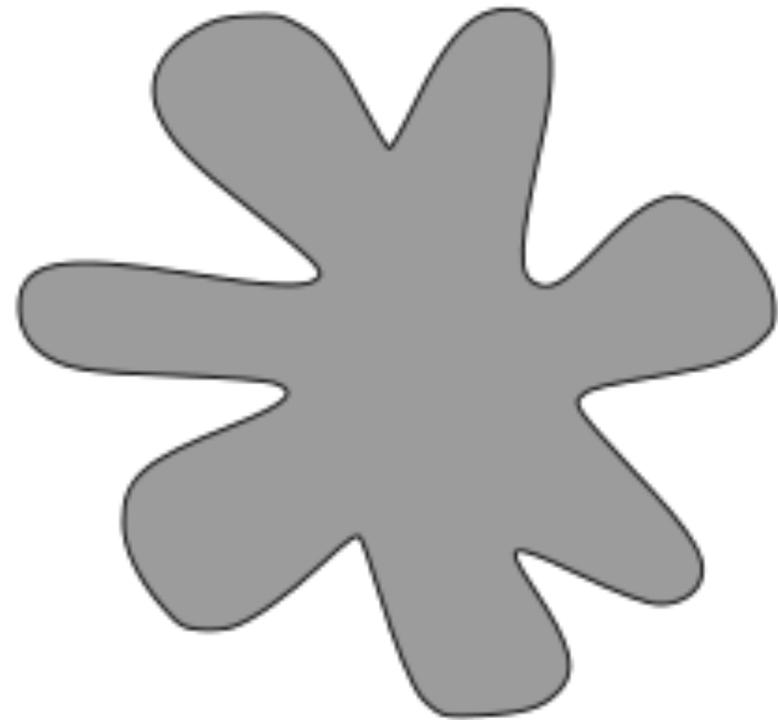
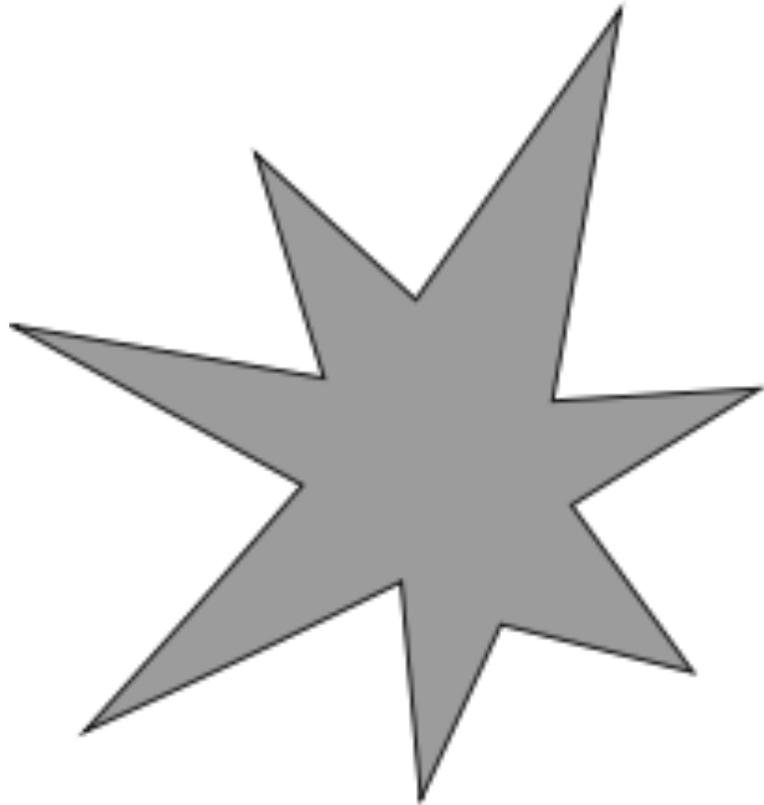
# Examples

- Recognition of **mathematical patterns**
- Recognition of the relations of extension and cogredience at the basis of Whitehead's uniform **space-time geometry**
- Recognition of the gravitation-electromagnetism analogy at the basis of Whitehead's alternative **physics** of gravitation and electromagnetism

# Example from *Gestalt* psychology

- Berlin *Gestalt* psychology: inspired by anti-associationism + radical empiricism & electromagnetism
- The whole field of human experience is more than the sum (the mere association) of isolated sense data
- The whole field of electromagnetism is more than the sum (the mere distribution) of simply located charges

= example from Köhler /  
Ramachandran

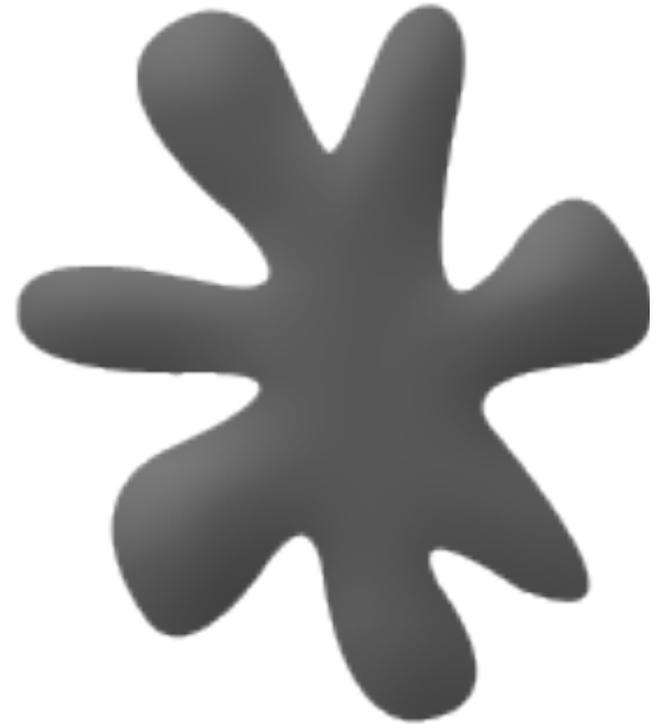


= the bouba-kiki effect

KIKI



BOUBA



# “The experience of recognition of similarity ...

... arises because the separate prehensions of the two composite facts have been integrated so that the two objects stand in the unity of a contrast to each other. There is an intuition of a limited identity of pattern involved in the contrast of diverse essences. In virtue of this identity there is a transference of subjective form from the feeling of one object to that of the other. What is appropriate to one is appropriate to the other. The intuitive recognition of ‘that is so’ is the subjective form including in itself justification of its own transference ...”

# Intuition and its guides

- Intuition can lead astray → it needs to be guided by logic, arithmetic, measurement
- BUT: these cannot replace intuition
- They all require and reveal the intuition they have to guide
- For example, mathematical logic presupposes the intuitive recognition of pattern

# Conclusion

Science is rooted in intuitive judgments. That is the *datum* from which it starts, and to which it must recur. You may polish up intuition, you may contradict it in detail, you may surprise it. But ultimately your whole task is to satisfy it.