

SCHOLL & TREMOULET (2000) TICS

6 JAN 2021

Automatic, irresistible, stimulus-driven rich interpretations

- ↳ rapid, automatic inferences about causality & ~~agency~~ animacy NOT inference
- similar idea to, e.g., visually extracting structure from motion via a crucial but simplistic & automatic assumption of object rigidity

Landmark work in this domain by Michotte $\rightarrow \square \square \rightarrow$ launching effect (in adults)

yielding a strong illusion of causality BUT small stimulus changes break the effect

(illusion is also not categorical across steps & sensitive to context/training)

- ↳ extended many times now (also w/ adults & some extensions to kids ^{0.10+} & chimps)

- ↳ motion kinematics seem particularly important > featural properties of objects

- ↳ e.g. trajectory of motion ^{e.g. "directness"}, temporal relations, response to obstruction, speed (changes)

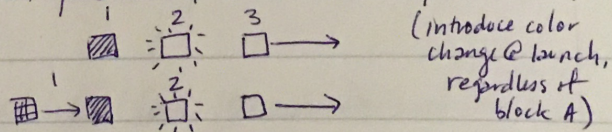
- ↳ elicited w/ minimal context successfully but also sensitive to context

Innate? Inconclusive, but possibly.Modular? Possibly, noting that modules can be innate, learned, or a mix. Certainly seems to have automatic effect (though mediated by attention, e.g. via distractors) < 250 ms

- ↳ problem w/ automaticity claim? not everyone experiences the illusions

- ↳ Schlottman & Shanks contrast perceived w/ inferred causality w/ a third,

better correlated event:



causality of A's movement easily perceived while some pteps report inferred cause to be the color change

? Pitched here as a visual phenom. but what about tactile or auditory? If replicable @ the low level in other modalities, what would we infer?