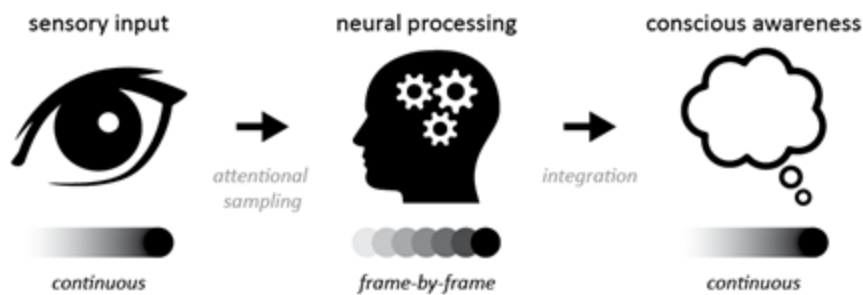


When we open our eyes, we experience a smoothly evolving, continuous visual world. Surprisingly, recent evidence has shown that in processing this incoming stream of visual information, the brain in fact chops up this stream into discrete ‘frames’, not unlike the sequential frames of a video. In this analogy, visual attention plays the role of the shutter, rhythmically drawing samples from the incoming stream of information and sending those on for further processing. Importantly, the notion that attention operates rhythmically, rather than continuously, violates an implicit assumption of continuity that is ubiquitous in many fields of cognitive neuroscience, and reveals that an overarching model of the brain’s temporal architecture is sorely lacking. This proposal will develop a model of the brain’s temporal architecture, relating how perception, attention, action, and awareness operate over time.



with kind regards,

Hinze Hogendoorn