

1. Record Nr.	UNINA9910137199203321
Autore	Takahiro Kawabe
Titolo	Awareness shaping or shaped by prediction and postdiction [[electronic resource] /] / edited by Yuki Yamada, Takahiro Kawabe and Makoto Miyazaki
Pubbl/distr/stampa	Frontiers Media SA, 2015 Lausanne, Switzerland : , : Frontiers Media SA, , 2015 ©2015
Descrizione fisica	1 online resource (155 pages) : illustrations, charts; digital, PDF file(s)
Collana	Frontiers Research Topics
Disciplina	152.1
Soggetti	Psychology Neuroscience Human Anatomy & Physiology Health & Biological Sciences
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Awareness shaping or shaped by prediction and postdiction: editorial --Apparent motion can impair and enhance target visibility: the role of shape in predicting and postdicting object continuity --Illusory motion and mislocalization of temporally offset target in apparent motion display --Spatial warping by oriented line detector scan counteract neural delays --Prediction, postdiction, and perceptual length contraction: a Bayesian low-speed prior captures the cutaneous rabbit and related illusions --A transient auditory signal shifts the perceived offset position of a moving visual object --Adaptation to implied tilt: extensive spatial extrapolation of orientation gradients --8 The experience of agency: an interplay between prediction and postdiction --Awareness as observational heterarchy --Effects of consciousness and consistency in manual control of visual stimulus on reduction of the flash-lag effect for luminance change --Visuomotor control of human adaptive locomotion: understanding the anticipatory nature --Imposed visual feedback delay of an action changes mass perception based on the sensory prediction error --Neurobiological mechanisms

behind the spatiotemporal illusions of awareness used for advocating prediction or postdiction --Do the flash-lag effect and representational momentum involve similar extrapolations? --Postdiction: its implications on visual awareness, hindsight, and sense of agency.

Sommario/riassunto

We intuitively believe that we are aware of the external world as it is. Unfortunately, this is not entirely true. In fact, the capacity of our sensory system is too small to veridically perceive the world. To overcome this problem, the sensory system has to spatiotemporally integrate neural signals in order to interpret the external world. However, the spatiotemporal integration involves severe neural latencies. How does the sensory system keep up with the ever-changing external world? As later discussed, 'prediction' and 'postdiction' are essential keywords here. For example, the sensory system uses temporally preceding events to predict subsequent events (e.g., Nijhawan, 1994; Kerzel, 2003; Hubbard, 2005) even when the preceding event is subliminally presented (Schmidt, 2000). Moreover, internal prediction modulates the perception of action outcomes (Bays et al., 2005; Cardoso-Leite et al., 2010) and sense of agency (Wenke et al., 2010). Prediction is also an indispensable factor for movement planning and control (Kawato, 1999). On the other hand, the sensory system also makes use of subsequent events to postdictively interpret a preceding event (e.g. Eagleman & Sejnowski, 2000; Enns, 2002; Khoo et al., 2010; Kawabe, 2011, 2012; Miyazaki et al., 2010; Ono & Kitazawa, 2011) and it's much the same even for infancy (Newman et al., 2008). Moreover, it has also been proposed that sense of agency stems not only from predictive processing but also from postdictive inference (Ebert & Wegner, 2011). The existence of postdictive processing is also supported by several neuroscience studies (Kamitani & Shimojo, 1999; Lau et al., 2007). How prediction and postdiction shape awareness of the external world is an intriguing question. Prediction is involved with the encoding of incoming signals, whereas postdiction is related to a re-interpretation of already encoded signals. Given this perspective, prediction and postdiction may exist along a processing stream for a single external event. However, it is unclear whether, and if so how, prediction and postdiction interact with each other to shape awareness of the external world. Awareness of the external world may also shape prediction and/or postdiction. It is plausible that awareness of the external world drives the prediction and postdiction of future and past appearances of the world. However, the literature provides little information about the role of awareness of the external world in prediction and postdiction. This background propelled us to propose this research topic with the aim of offering a space for systematic discussion concerning the relationship between awareness, prediction and postdiction among researchers in broad research areas, such as psychology, psychophysics, neuroscience, cognitive science, philosophy, and so forth. We encouraged papers that address one or more of the following questions: 1) How does prediction shape awareness of the external world? 2) How does postdiction shape awareness of the external world? 3) How do prediction and postdiction interact with each other in shaping awareness of the external world? 4) How does awareness of the external world shape prediction/postdiction?

2. Record Nr.	UNICAMPANIAVAN0051761
Autore	Hardy, Godfrey H.
Titolo	Inequalities / by G. H. Hardy, J. E. Littlewood, G. Polya
Pubbl/distr/stampa	Cambridge, : Cambridge university, 1988
ISBN	05-213-5880-9
Descrizione fisica	XII, 324 p. ; 23 cm
Altri autori (Persone)	Littlewood, J. E. Polya, George <1887-1985>
Soggetti	26Dxx - Inequalities in real analysis [MSC 2020]
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia