take a fraction of a second to process stimuli, but there are sometimes circumstances in which that gap can be the difference between life and death. As a result, our minds have evolved to cover that gap by using available clues to project expectations onto our perceptions (Bubic, von Cramon, and Schubotz 2010). This evolutionary adaptation can be exploited for entertainment purposes:

A
BIRD
IN THE
THE BUSH

If you read "A BIRD IN THE BUSH," your mind skipped the second occurrence of "THE" on the fourth line. Not everyone will be tripped up by this illustration, but expectations can trip us up enough that it's one of the main reasons it's good to have others proofread our writing.

A theoretical model known as "predictive coding" describes the human brain as "a statistical organ that constantly tests its own hypotheses about the world through an ongoing process of error minimization" (Anderson 2019, 71).[27] Predictive coding suggests the mind's experiences in the past inform expectations (or predictions) regarding the sensory input most likely to come from its environment.[28] These expectations inform those projections that cover gaps in processing time and in the reliability of sensory input. When that reliability is low, such as in darkness, expectations drawn from prior experience can dominate perception (and imagination), while the sensory input will usually dominate when it is more reliable and precise.[29] The mind's model of its own body and its environment, seen and unseen, and expectations going forward, are revised and corrected in accordance with the input received. This feature of our cognition will have particular significance in the next chapter's discussion of our sensitivity to the presence of agents in the world around us.

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[27] On this model, see further Hohwy, 2013; Clark et al., 2013; van Elk and Aleman 2017; Van Eyghen 2018; Anderson et al. 2019.

[28] See Uffe Schjødt's description (2019, 364): "Predictive coding elegantly explains how the brain uses Bayesian inference to minimize the energy spent on perception and cognition. Mental representations consist of top-down models based on prior experience which are constantly compared with bottom-up information from the senses. If prediction errors are detected, the brain corrects and updates its models in order to minimize prediction error in the future."

[29] This theory's prioritization of domain-general cognitive processes instead of domain-specific (or "modular") processes offers a helpful corrective to the salience of modularity within CSR. Cognitive linguistics developed out of opposition to the modular theories of generative grammar (Lakoff 1987a, 582–85).