

From Where I Sit: Predictive Processing and the Buddha's Mind

Perception, proliferation, and the constructed self

Contemporary cognitive science increasingly describes the brain not as a passive receiver of sense data but as a prediction engine — a system that generates a running model of what it expects to encounter and continually updates that model in response to incoming sensory information, especially when the two do not match. This is “predictive processing” (PP): perception is not simply registration; it is inference. What we experience as “seeing” or “hearing” is already shaped by the brain's current expectations about what is causing the incoming sensory signals, continually tested and revised against those signals. It sounds like the kind of claim that should be foreign to a twenty-five-hundred-year-old contemplative tradition. It isn't. The early texts describe something functionally similar, without the vocabulary of neuroscience, using the vocabulary of contact, conceiving, and proliferation.

The All Is Already Conditioned

The Sabba Sutta (SN 35.23) defines “the All” — the entire knowable universe, so far as this teaching is concerned — as nothing more than the six sense bases and their objects: eye and forms, ear and sounds, and so on through mind and mental objects. There is no experience prior to or outside this pairing. Crucially, the texts consistently describe perception as arising from contact (*phassa*) — the meeting of sense organ, sense object, and consciousness — not as a direct transmission of an object “as it really is” into an observing mind.

This already undermines a simple picture of perception as the direct transmission of an object into a passive observing mind. What arrives at awareness is a product of a meeting, not a copy of a thing. Predictive processing gives this a similar shape from a different angle: what arrives at awareness is a product of a model corrected against a signal, not a copy of a thing.

Saññā: Perception Is Already Recognition

The Madhupiṇḍika Sutta (MN 18) fills in the step between contact and story: with contact comes feeling; what is felt is perceived, or recognized (*saññā*); what is perceived is thought about; and what is thought about can develop into *papañca*. *Saññā* is usually translated as perception, but that English word can mislead — it suggests simply receiving what's already there, the way light strikes the eye and the mind records it. *Saññā* is more active than that: recognizing, distinguishing, identifying. We don't encounter an unidentified collection of colors and shapes and then reason our way to “coffee cup” — we simply see a coffee cup. Recognition happens so fast that we usually experience the interpretation and the raw sensory event as if they were the same thing.

Walking through a dim room, something long and curved on the floor briefly reads as a snake. The light goes on — it's a rope. The interpretation no longer fits the evidence, and perception reorganizes. This is close to what predictive processing calls updating a prior, though the two vocabularies aren't the same thing: a prior is a technical concept in a scientific model, and *saññā* is part of the Buddha's analysis of experience. Placed side by side, though, they point at the same fact — what we perceive already depends on conditions present before the sensory event arrives.

Conversation makes the same process easy to catch. While someone is still speaking, we're often already anticipating how the sentence will end and assembling our reply — before they've actually finished. Most

people recognize this the moment it's named: the experience of realizing partway through someone's sentence that we stopped listening to what they were actually saying and started listening to our prediction of what they would say. The response was already under construction before their actual words were complete.

Proliferation as Runaway Inference

The Buddha's account of *papañca* — usually translated as conceptual proliferation — describes how an initial contact rapidly generates layers of associative elaboration beyond the recognition stage: what is thought about is woven into a story about who is experiencing it and what it means. The *Mūlapariyāya Sutta* (MN 1) catalogs the compulsion to conceive (*maññati*) — to mentally posit a self in, behind, or in relation to whatever is encountered — as a root pattern underlying ordinary experience for the untrained mind.

Read alongside predictive processing, *papañca* can be usefully compared with runaway inference: the model does not simply correct itself against the signal; it keeps generating further interpretations, elaborating a narrative that increasingly serves the model's own coherence rather than the sensory event that started it. A startled reaction to a shadow is one thing. The two minutes of narrative about danger, blame, or self-image that follow it are proliferation — the mind's prior-driven momentum running well past what the actual signal required.

Cognitive Closure

Prediction, recognition, and elaboration cannot stay open indefinitely. At some point the process closes — settles on an interpretation stable enough to think with or act on. For present purposes, I'll call this cognitive closure. This closing happens automatically; it isn't something chosen moment to moment, any more than *saññā* is chosen when it recognizes a shape as a coffee cup. Closure is what makes the process usable at all. A body crossing a street cannot stay in open inference about whether that shape is a car — it has to close on an answer and move. *Papañca* can be understood, in part, as closure that closes too quickly, or that gets recruited to defend, inflate, or protect a self-narrative — and is then treated as settled rather than provisional.

Closure isn't a single event — it happens moment to moment, one recognition after another, each shaped in part by what just came before it. Noticing that a closure has occurred is itself a new event in that same stream, not a comment made from outside it. That noticing becomes one of the conditions present for whatever closes next, which is how the softening actually happens. Sometimes closure lands at full strength, unnoticed, exactly as it always does — and it's awareness of that which loosens the grip and changes the conditions going into what follows. Other times, when that awareness is already active as contact occurs, the next closure forms more provisionally from the start, less mistaken for simply what is. Either way, the loosening isn't an operation performed on closure from outside it — it's closure conditioning itself, differently, one moment into the next.

The Self as High-Level Inference

The *Bāhiya Sutta* (Ud 1.10) offers what may be the most compact instruction in the entire Canon: in the seen, let there be just the seen; in the heard, just the heard; in the sensed, just the sensed. The Buddha tells *Bāhiya* that when experience rests there, without constructing a further “you” in relation to it, there is no “there” for a self to stand in.

This need not be read as a metaphysical claim that a self does not exist somewhere. It can be read as an observation about how a self is built, moment to moment, as an additional layer of construction on top of contact.

This has an interesting parallel in some predictive-processing accounts of selfhood: the sense of being a persisting self behind experience may itself be a high-level prediction — a model generated because it is useful for organizing perception and behavior, not because it corresponds to a separately discoverable entity. Selfing, in other words, may be understood as the predictive system doing what it already does — modeling a stable cause behind changing effects — applied recursively to itself.

Practice as Recalibration

If closure happens on its own, and mindfulness loosens it rather than preventing it, practice doesn't work by keeping the mind from settling on an interpretation — it works by loosening the grip on whatever closure has already occurred, so there's room to notice that an interpretation was reached rather than simply given.

Sustained, non-reactive attention can make the movement from sensation to recognition, reaction, and story easier to observe. The point is not to discover a completely unconstructed “pure experience” beneath all models. It is to see more clearly how quickly prior expectations, habitual interpretations, and self-related narratives shape what follows.

A bodily sensation becomes “my pain.” A facial expression becomes “disapproval.” A few words become “she doesn't respect me.” The interpretation may be accurate. The practice is not to distrust perception, but to see that perception, interpretation, and story are events in a conditioned process rather than simply “what reality is.”

This gives meditation a different frame: not “meditation empties the mind,” but “meditation can change how automatically the mind follows its familiar predictions and stories.”

One way to put the distinction is this: papañca begins when the mind has enough information to respond appropriately but keeps going — elaborating beyond what the situation requires into story, self, blame, threat, or identity.

For Discussion

- Where in your own experience can you catch the movement from contact to interpretation to story — the shadow versus the two minutes of narrative about the shadow?
- Does thinking of the self as a running model rather than a discovered fact change how urgently it needs defending?
- Predictive processing treats prior-driven inference as generally adaptive. Buddhism also depends upon useful perception and thought. At what point does useful interpretation become papañca — proliferation that generates unnecessary dukkha?