Inner Speech & Experience

Ton Haarmans · Wide Open Windows



The Voice No One Hears

Almost everyone talks to themselves.

We plan our day, remember something we almost forgot, evaluate our own actions, or rehearse a conversation that has yet to take place. Inner speech is so familiar that we rarely stop to ask what it actually is.

But what is inner speech?

For a long time, it was regarded as little more than silent speech—a form of language in which the mouth remains still while the words continue inside the mind. In recent years, however, a different view has emerged, inspired by the theory of predictive processing. According to this perspective, the brain is not a passive receiver of information. Instead, it is constantly generating predictions about the world and about itself.

The brain does not simply wait for reality to arrive.

It predicts.

The World as Prediction

When we hear a sound, the brain does not first receive neutral sensory data and only then decide what it means. Instead, it continuously forms hypotheses about what is most likely happening. Only when incoming information differs sufficiently from those expectations are the predictions revised.

Experience, then, is not produced by sensory input alone.

It emerges from the ongoing interaction between prediction and perception.

This idea reflects a broader shift in cognitive science. Seeing, hearing, thinking, speaking, and even the sense of being a self increasingly appear to depend on predictive models that the brain continuously constructs and updates.

Speaking Without Sound

In Auditory Verbal Hallucinations and Inner Speech, philosophers Sam Wilkinson and Charles Fernyhough argue that inner speech is not simply a voice replayed inside the mind.

When you speak silently to yourself, you are not literally hearing a voice. Instead, your brain generates predictions associated with speaking: motor predictions about producing words and auditory predictions about what those words would sound like. Because these predictions remain decoupled from actual movements and actual sounds, they give rise to the experience of inner speech.

You are not really speaking.

You are predicting that you are speaking.

When Predictions Go Astray

This perspective becomes particularly intriguing when applied to auditory hallucinations.

People who hear voices often experience them as coming from someone else. Wilkinson and Fernyhough suggest that this does not necessarily require a completely different cognitive mechanism. Instead, the same system that normally produces inner speech may be involved, except that the brain no longer attributes the experience to itself.

The words themselves are not the mystery.

Their perceived source is.

What is normally experienced as one's own inner speech may instead be experienced as the voice of another.

A Broader Implication

The most significant implication lies elsewhere.

If both perception and inner speech arise from predictive models, then experience is never a direct copy of an objective world. It is always the outcome of an ongoing process in which expectations, memories, context, and sensory input converge into a coherent whole.

The fundamental question therefore changes.

Not:

"How do we perceive the world?"

But:

"How does a world come to appear as self-evident?"

That, perhaps, is the deeper question raised by predictive processing—and one that resonates throughout Wide Open Windows.

If inner speech itself is shaped by prediction, then language is not merely something that describes a world. It may be one of the mechanisms through which a world comes into being.

Source

Wilkinson, S., & Fernyhough, C. Auditory Verbal Hallucinations and Inner Speech: A Predictive Processing Perspective. In Before Consciousness, pp. 285–302.