

**When Comprehension is Production:  
A generative probabilistic approach to explaining language in schizophrenia**

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It has been proposed that schizophrenia is characterized by a breakdown of Bayesian prediction and belief updating. Thus far, this theory has mainly been discussed in relation to the emergence of psychotic symptoms (e.g. Fletcher & Frith, 2008). In this talk I will explore the hypothesis that a breakdown of the predictive circuits proposed to underlie typical language comprehension and production can explain multiple manifestations of language dysfunction in schizophrenia. I will argue that this theoretical framework can bridge four different lines of research into language in schizophrenia that have thus far been somewhat disjointed: the phenomenology of thought disorder, high-level language comprehension abnormalities, auditory verbal hallucinations, and low-level sensory and perceptual deficits. I will also discuss how this framework connects with neurobiological evidence that schizophrenia is a disconnection syndrome, characterized by abnormalities in both structural and functional brain connectivity across widespread brain regions.