**Confidence amplifies serial dependence in perceptual decisions.**

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Over a century of psychophysical research has relied on the assumption that perceptual decisions are causally related to only the stimulus presented on the current trial. Recent research, however, has shown that stimuli seen several seconds prior, on a previous trial, can influence decisions about the current stimulus, a phenomenon known as *serial dependence*. Here, we investigated whether this effect was mediated by the observer’s subjective sense of confidence in the decision from the previous trial. We found that orientation decisions on the current trial were more strongly biased towards the previous trial’s orientation when the previous trial was perceived with high confidence. Crucially, a further manipulation that boosted confidence without changing task performance also led to the same effect, indicating that increased confidence, in and of itself, was sufficient for amplifying the impact of the previous trial on the current trial’s decision. In other words, this effect was not merely due to the fact that confidence typically correlates strongly with task performance. Mechanistically, serial dependence may be driven by residual neural activity in attractor networks with slow time constants, suggesting that confidence may mediate the rate of decay of information in such networks. Or, confidence may boost the overall activity in the population representing the previous trial’s stimulus such that this activity takes longer to return to baseline and can more readily influence decision making on the current trial. Because prestimulus oscillations in the alpha-band (8-13 Hz) are known to predict trial-to-trial variation in confidence, the current results suggest that the oscillatory state of spontaneous brain activity on previous trials can have distal effects on the current trial's decision. Regardless of mechanism, these results suggest that subjective confidence functions to enhance the perceived continuity of the visual environment.