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# **Lying in public: Revealing the microstructure of real-time false responding through action dynamics**

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## **Abstract**

It is commonly agreed that, in most scenarios, deception involves cognitive demands. Prime amongst these demands is competition between a default true response and an alternative false response. What is less understood are issues surrounding the mechanistic underpinnings of how and when this competition enacts its influence during responding. In previous work (Duran, Dale, & McNamara, 2011), we have used an action dynamics paradigm to capture millisecond-timing information in how people use their mouse movements to respond yes or no to autobiographical information. In the current study, we employed a similar paradigm to collect response data from hundreds of anonymous participants, who freely used an interactive touchscreen exhibit at a public science museum exhibit, aiming to replicate and extend our previous findings. As expected, during false responding, the truth appears to be initially activated and dissipates continuously over the course of the response.