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Retinotopically specific visual adaptation reveals the structure of causal events in perception
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Certain events are irresistibly perceived as involving cause and effect. The prototypical example is the 'launching' effect, wherein one object (A) moves toward a stationary second object (B) until they are adjacent, at which point A stops and B starts moving in the same direction. But there are up to a dozen different events that have been studied under the umbrella of 'causal perception'. However, these events have typically been distinguished only using explicit self-report methods, and little work has explored whether these different event labels actually capture natural "joints" in visual processing. Here, we use the psychophysical phenomenon of retinotopically specific visual adaptation to demonstrate that launching events and 'triggering' events (in which B moves much faster than A) involve the same underlying form of 'causality' in visual processing, but launching events and 'entraining' events (in which A and B move together following A's arrival) do not.