Methods
- Stimuli: 384 living things (plants and animals) and nonliving artifacts (tools, weapons, household items, clothing, etc.)
- Each paired with one shared and one distinctive feature
- Filler stimuli were paired with false features
- Participants: native English-speaking, right-handed adults who reported no history of neurological disorder
- Functional magnetic resonance imaging (fMRI): N = 16
- Transcranial magnetic stimulation (TMS) pilot: N = 6
- Imaging: 3T Trio scanner with 32-channel head coil; TR = 2500 ms
- ROI analysis on anatomically-defined AG in each hemisphere using Talairach atlas in AFNI
- TMS: MagStim Rapid Plus
- Offline continuous theta-burst stimulation and sham stimulation: 600 pulses delivered in 50-Hz 3-pulse triplets at 200-ms intervals
- Sites: left AG and right AG, real and sham stimulation to each site (+/− 47, −8, 43)
- Stimulation at 80% of active motor threshold
- Task: participants verified features using a button press (yes/no)

Background
- Patient research has investigated the role of the temporal lobe in processing semantic information
- Category-specific deficits (e.g., living things vs. nonliving things)
- More vs. less specific information (e.g., ‘zebra – has stripes’ vs. ‘zebra – has four legs’)
- Angular gyrus (AG): Involved in integration during semantic processing (Seghier, 2013)
- The left hemisphere is typically considered to be dominant but the right AG is implicated as well
- The left hemisphere may be important to verbal conceptual information while the right is sensitive to low-level feature processing (Gainotti, 2011)
- Possible roles for the right angular gyrus:
  - Plays a similar role in semantic processing to the left AG but less efficient at processing information at the level of the concept
  - Unique role in processing semantic features: crucial for normal semantic processing
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- Plays a similar role in semantic processing to the left AG but less efficient at processing information at the level of the concept.
- Unique role in processing semantic features: crucial for normal semantic processing.

Behavioral lateralization: both hemispheres process shared features faster than distinctive features, but the right hemisphere is particularly slow to process distinctive features (Reilly, Machado & Blumstein, 2015).

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