The gesture-first theory

Sir – Mirror neurons indeed imply that language and gesture should be closely linked (“Behind the mind’s mirror”, Alun Anderson, The World in 2006). The brain’s lighting up its speech areas while it views gestures confirms it. However, the connection to gesture is not as obvious as Mr. Anderson suggests. Coincidence is not sequence, and the theory that the first form of language was gesture is not in any way strengthened by the mirror neurons discovery or the linked brain imaging findings. A more plausible alternative is that speech and gesture co-evolved as a unit, and were jointly selected. Gestures would then have played a part in the origin of language as a partner, not as a forerunner to be supplanted. Co-evolution equally explains the brain imaging results and has several other advantages, most basically that it accounts for the gestures that actually occur with speech. The gesture-first theory envisions a language of pantomime or a sign language, but merely adding speech to pantomime or sign language would more likely lead to alternations of speech and gesture in time, not the synchrony of speech and gesture that we see in ourselves. In short, the gesture first theory does not explain what evolved and predicts what did not evolve. The challenge is to understand how mirror neurons figured in the origin of actual joint language-gesture production, not the fancy of a gesture-only language.

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