

It has come to our attention that **the References section** in the Lee et al. (2018) *Nature Communications* paper contains several errors. Because this was discovered quite late after publication and because the number of errors is not insignificant, we decided not to try to publish a corrigendum and instead to simply make available a corrected list of references. The numbers in the text refer to the references below (unless noted otherwise). The changes are highlighted in **bold**.

CORRECTED References section for Lee et al. (2018)

1. Fromkin, V. *Speech Errors as Linguistic Evidence*. (Mouton, The Hague, 1973).
2. Dell, G. S. A spreading-activation theory of retrieval in sentence production. *Psychol. Rev.* 93, 283–321 (1986).
3. Levelt, W. J. *Speaking: From Intention to Articulation* (MIT Press, Cambridge, 1989).
4. Levelt, W. J., Roelofs, A. & Meyer, A. S. A theory of lexical access in speech production. *Behav. Brain Sci.* 22, 1–38 (1999).
5. Goldrick, M. A., Ferreira, V. S. & Miozzo, M. *The Oxford Handbook of Language Production* (Oxford University Press, Oxford, 2014).
6. Bouchard, K. E., Mesgarani, N., Johnson, K. & Chang, E. F. Functional organization of human sensorimotor cortex for speech articulation. *Nature* 495, 327–332 (2013).
7. Indefrey, P. & Levelt, W. J. The spatial and temporal signatures of word production components. *Cognition* 92, 101–144 (2004).
8. Indefrey, P. The spatial and temporal signatures of word production components: a critical update. *Front. Psychol.* 2, 255 (2011).
9. Huth, A. G., de Heer, W. A., Griffiths, T. L., Theunissen, F. E. & Gallant, J. L. Natural speech reveals the semantic maps that tile human cerebral cortex. *Nature* 532, 453–458 (2016).
10. Anderson, A. J. et al. Predicting neural activity patterns associated with sentences using a neurobiologically motivated model of semantic representation. *Cereb. Cortex* 27, 4379–4395 (2017).
11. Menenti, L., Gierhan, S. M., Segaert, K. & Hagoort, P. Shared language: overlap and segregation of the neuronal infrastructure for speaking and listening revealed by functional MRI. *Psychol. Sci.* 22, 1173–1182 (2011).
12. **Levy, R., Bicknell, K., Slattery, T. & Rayner, K. Eye movement evidence that readers maintain and act on uncertainty about past linguistic input. *Proc. Natl***

Acad. Sci. USA 106(50), 21086–21090 (2009).

13. Gibson, E., Bergen, L. & Piantadosi, S. The rational integration of noisy evidence and prior semantic expectations in sentence interpretation. Proc. Natl Acad. Sci. USA 110(20), 8051-8056 (2013).

14. Ferreira, F., Bailey, K. G. D. & Ferraro, V. Good-Enough Representations in Language Comprehension. Curr. Dir. Psych. Sci. 11(1), 11-15 (2002).

15. incorrect reference, does not need to be replaced by another

16. incorrect reference, does not need to be replaced by another

17. incorrect reference, does not need to be replaced by another

18. Fedorenko, E., Nieto-Castanon, A. & Kanwisher, N. Lexical and syntactic representations in the brain: an fMRI investigation with multi-voxel pattern analyses. *Neuropsychologia* 50, 499–513 (2012).

19. Blank, I., Balewski, Z., Mahowald, K. & Fedorenko, E. Syntactic processing is distributed across the language system. *Neuroimage* 127, 307–323 (2016).

20. Bautista, A. & Wilson, S. M. Neural responses to grammatically and lexically degraded speech. *Lang. Cogn. Neurosci.* 31, 567–574 (2016).

21. Alario, F. X., Costa, A. & Caramazza, A. Frequency effects in noun phrase production: Implication for models of lexical access. Lang. Cogn. Proc. 17(3), 299-320 (2002).

22. Goldrick, M. & Rapp, B. Lexical and post-lexical phonological representations in spoken production. *Cognition* 102, 219–260 (2007).

23. Hickok, G. & Poeppel, D. Dorsal and ventral streams: a framework for understanding aspects of the functional anatomy of language. *Cognition* 92, 67–99 (2004).

24. Saur, D. et al. Ventral and dorsal pathways for language. *Proc. Natl Acad. Sci. USA* 105, 18035–18040 (2008).

25. Fridriksson, J. et al. Revealing the dual streams of speech processing. *Proc. Natl Acad. Sci. USA* 113, 15108–15113 (2016).

26. Bohland, J. W. & Guenther, F. H. An fMRI investigation of syllable sequence production. *Neuroimage* 32, 821–841 (2006).

27. Flinker, A. et al. Redefining the role of Broca's area in speech. *Proc. Natl Acad. Sci. USA* 112, 2871–2875 (2015).

28. Long, M. A. et al. Functional segregation of cortical regions underlying speech timing and articulation. *Neuron* 89, 1187–1193 (2016).
29. Basilakos, A., Smith, K. G., Fillmore, P., Fridriksson, J. & Fedorenko, E. Functional characterization of the human speech articulation network. *Cereb. Cortex* 28, 1816–1830 (2018).
30. Tremblay, P. & Dick, A. S. Broca and Wernicke are dead, or moving past the classic model of language neurobiology. *Brain Lang.* 162, 60–71 (2016).
31. Geschwind, N. The organization of language and the brain. *Science* 170, 940–944 (1970).
32. Caramazza, A. & Zurif, E. B. Dissociation of algorithmic and heuristic processes in language comprehension: evidence from aphasia. *Brain Lang.* 3, 572–582 (1976).
33. Mirman, D. et al. Neural organization of spoken language revealed by lesion-symptom mapping. *Nat. Commun.* 6, 6762 (2015).
34. Bonner, M. F., Peelle, J. E., Cook, P. A. & Grossman, M. Heteromodal conceptual processing in the angular gyrus. *Neuroimage* 71, 175–186 (2013).
35. Mesulam, M. M., Thompson, C. K., Weintraub, S. & Rogalski, E. J. The Wernicke conundrum and the anatomy of language comprehension in primary progressive aphasia. *Brain* 138, 2423–2437 (2015).
36. Martin, R. C. & Blossom-Stach, C. Evidence of syntactic deficits in a fluent aphasic. *Brain Lang.* 28, 196–234 (1986).
37. Butterworth, B. & Howard, D. Paragrammatisms. *Cognition* 26, 1–37 (1987).
- 38. Bastiaanse, R., Edwards, S. & Kiss, K. Fluent aphasia in three languages: aspects of spontaneous speech. *Aphasiol.* 10, 561-575 (1996).**
39. Edwards, S. Profiling fluent aphasic spontaneous speech: a comparison of two methodologies. *Eur. J. Disord. Commun.* 30, 333–345 (1995).
40. Bastiaanse, R. & Edwards, S. Word order and finiteness in Dutch and English Broca's and Wernicke's aphasia. *Brain Lang.* 89, 91–107 (2004).
41. Sahin, N. T., Pinker, S., Cash, S. S., Schomer, D. & Halgren, E. Sequential processing of lexical, grammatical, and phonological information within Broca's area. *Science* 326, 445–449 (2009).
42. Pinker, S. Rules of language. *Science* 253, 530–535 (1991).

43. Faroqi-Shah, Y. Are regular and irregular verbs dissociated in non-fluent aphasia? A meta-analysis. *Brain Res. Bull.* 74, 1–13 (2007).

44. Heim, S., Opitz, B. & Friederici, A. D. Broca's area in the human brain is involved in the selection of grammatical gender for language production: evidence from event-related functional magnetic resonance imaging. *Neurosci. Lett.* 328, 101–104 (2002).

45. Indefrey, P. et al. A neural correlate of syntactic encoding during speech production. *Proc. Natl Acad. Sci. USA* 98, 5933–5936 (2001).

46 Main text. Ben-Shachar, M., Hendler, T., Kahn, I., Ben-Bashat, D. & Grodzinsky, Y. The neural reality of syntactic transformations evidence from functional magnetic resonance imaging. *Psychol. Sci.* 14 (5), 433–440 (2003).

47 Main text. Peelle, J. E., Troiani, V., Wingfield, A. & Grossman, M. Neural processing during older adults' comprehension of spoken sentences: age differences in resource allocation and connectivity. *Cereb. Cortex* 20, 773–782 (2010).

48 Main text. Friederici, A.D. The brain basis of language processing: from structure to function. *Physiol. Rev.* 91 (4), 1357–1392 (2011).

46 Methods. Simon, M. V. *A Comprehensive Guide to Monitoring and Mapping* (Demos Medical, New York, 2009).

47 Methods. Ojemann, G., Ojemann, J., Lettich, E. & Berger, M. Cortical language localization in left, dominant hemisphere. An electrical stimulation mapping investigation in 117 patients. *J. Neurosurg.* 71, 316–326 (1989).

48 Methods. Wang, S. G. et al. The variability of stimulus thresholds in electrophysiologic cortical language mapping. *J. Clin. Neurophysiol.* 28, 210–216 (2011).

49. Basilakos, A. et al. Activity associated with speech articulation measured through direct cortical recordings. *Brain Lang.* 169, 1–7 (2017).

50. Roelofs, A. A dorsal-pathway account of aphasic language production: the WEAVER++/ARC model. *Cortex* 59, 33–48 (2014).

51. Wilson, S. M. et al. Syntactic processing depends on dorsal language tracts. *Neuron* 72, 397–403 (2011).

52. Rodd, J. M., Vitello, S., Woollams, A. M. & Adank, P. Localising semantic and syntactic processing in spoken and written language comprehension: an activation likelihood estimation meta-analysis. *Brain Lang.* 141, 89–102 (2015).

53. Fedorenko, E. et al. Neural correlate of the construction of sentence meaning.

Proc. Natl Acad. Sci. USA 113(41), E256-E262 (2016).

54. Mian, M. K. et al. Encoding of rules by neurons in the human dorsolateral prefrontal cortex. *Cereb. Cortex* 24, 807–816 (2014).

55. Mesgarani, N. & Chang, E. F. Selective cortical representation of attended speaker in multi-talker speech perception. *Nature* 485, 233–236 (2012).

56. Mesgarani, N., Cheung, C., Johnson, K. & Chang, E. F. Phonetic feature encoding in human superior temporal gyrus. *Science* 343, 1006–1010 (2014).

57. Szelenyi, A. et al. Intraoperative electrical stimulation in awake craniotomy: methodological aspects of current practice. *Neurosurg. Focus.* 28, E7 (2010).

58. Sheth, S. A. et al. Human dorsal anterior cingulate cortex neurons mediate ongoing behavioural adaptation. *Nature* 488, 218–221 (2012).

59. Williams, Z. M., Bush, G., Rauch, S. L., Cosgrove, G. R. & Eskandar, E. N. Human anterior cingulate neurons and the integration of monetary reward with motor responses. *Nat. Neurosci.* 7, 1370–1375 (2004).

60. Patel, S. R. et al. Studying task-related activity of individual neurons in the human brain. *Nat. Protoc.* 8, 949–957 (2013).

61. Flinker, A., Chang, E. F., Barbaro, N. M., Berger, M. S. & Knight, R. T. Subcentimeter language organization in the human temporal lobe. *Brain Lang.* 117, 103–109 (2011).

62. Canolty, R. T. et al. Spatiotemporal dynamics of word processing in the human brain. *Front. Neurosci.* 1, 185–196 (2007).

63. Wasserman, L. *All of Statistics: A Concise Course in Statistical Inference* (Springer Texts, New York, NY, 2005).

64. Bishop, C. M. *Neural Networks for Pattern Recognition* (Clarendon Press, New York, 1996).