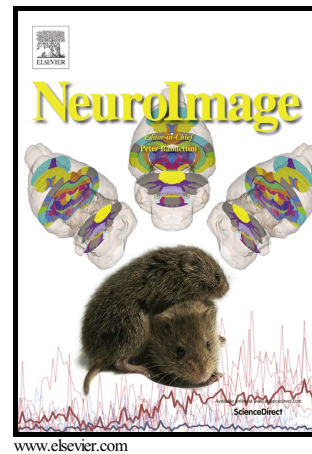


Author's Accepted Manuscript

An emergent functional parcellation of the temporal cortex

Rebecca L. Jackson, Claude J. Bajada, Grace E. Rice, Lauren L. Cloutman, Matthew A. Lambon Ralph



PII: S1053-8119(17)30316-6
DOI: <http://dx.doi.org/10.1016/j.neuroimage.2017.04.024>
Reference: YNIMG13965

To appear in: *NeuroImage*

Received date: 27 October 2016
Revised date: 7 April 2017
Accepted date: 8 April 2017

Cite this article as: Rebecca L. Jackson, Claude J. Bajada, Grace E. Rice, Lauren L. Cloutman and Matthew A. Lambon Ralph, An emergent functional parcellation of the temporal cortex, *NeuroImage* <http://dx.doi.org/10.1016/j.neuroimage.2017.04.024>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and a review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

An emergent functional parcellation of the temporal cortex

Rebecca L. JACKSON^{a1}, Claude J. BAJADA^{a,1}, Grace E. RICE^a, Lauren L.
CLOUTMAN^a & Matthew A. LAMBON RALPH^{a*}

^a Neuroscience and Aphasia Research Unit (NARU), Division of Neuroscience & Experimental Psychology,
School of Biological Sciences (Zochonis Building), University of Manchester, UK, M13 9PL

* Correspondence to: Prof. Matthew A. Lambon Ralph, Neuroscience and Aphasia Research Unit (NARU), Division of Neuroscience & Experimental Psychology, School of Biological Sciences (Zochonis Building), University of Manchester, Brunswick Street, Manchester, M13 9PL, Tel: +44 (0) 161 275 2551, Fax: +44 (0) 161 275 2683. Email: matt.lambon-ralph@manchester.ac.uk

Abstract

The temporal lobe has been associated with various cognitive functions which include memory, auditory cognition and semantics. However, at a higher level of conceptualisation, all of the functions associated with the temporal lobe can be considered as lying along one major axis; from modality-specific to modality-general processing. This paper used a spectral reordering technique on resting-state and task-based functional data to extract the major organisational axis of the temporal lobe in a bottom-up, data-driven fashion. Independent parcellations were performed on resting-state scans from 71 participants and active semantic task scans from 23 participants acquired using

¹ Authors RLJ and CJB contributed equally to this work.

Download English Version:

<https://daneshyari.com/en/article/8687149>

Download Persian Version:

<https://daneshyari.com/article/8687149>

[Daneshyari.com](https://daneshyari.com)