PNAS
www.pnas.org

Supplementary Information for

Sensory-motor brain dynamics reflect architectural affordances

Zakaria Djebbara* ORCID: 0000-0003-2370-6092
Lars Brorson Fich ORCID: 0000-0002-6760-0540
Laura Petrini ORCID: 0000-0002-5320-1944
Klaus Gramann ORCID: 0000-0003-2673-1832

*Zakaria Djebbara
Email: zadj@create.aau.com

This PDF file includes:

www.pnas.org/cgi/doi/10.1073/pnas.1900648116

Supplementary Information Text

Subhead. Additional event-related potential plots of all electroencephalograph channels to support in-text 3 channel plots. Rain-cloud plots of contrasts for the post-imperative negative variation included.

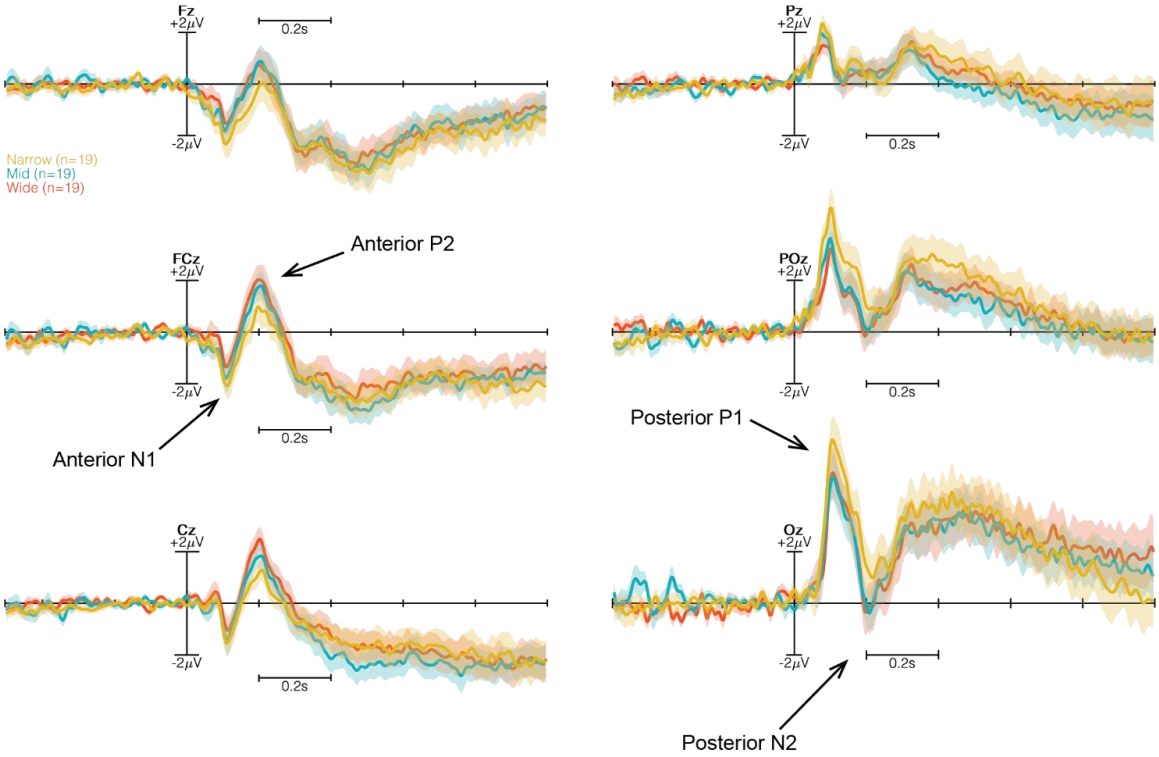

Fig. S1. ERP plots of "Lights On" stimulus for all six channels (*Fz*, *FCz*, *Cz*, *Pz*, *POz*, and *Oz*). *Narrow* condition in yellow, *Mid* condition in blue, and *Wide* condition in red. N1-P1-complex are marked with arrows.

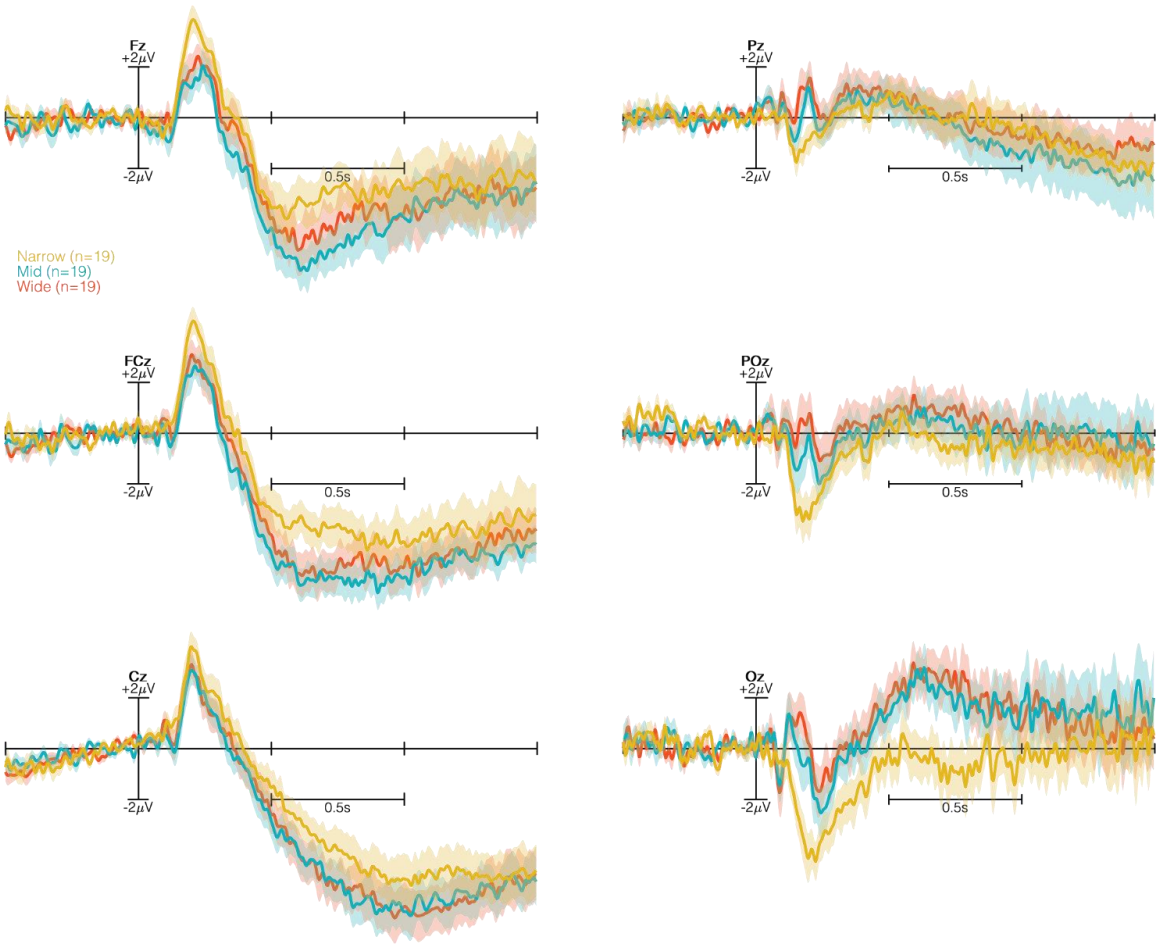

Fig. S2. ERP plots of the total six channels only for Go trials. ANOVA with repeated measures of time-locked ERP, where the increasing darkness behind the plots indicates the increasing level of significance. The repeated measures ANOVA revealed *Fz* ($F_{2,36} = 4.546, p = 0.0174$), *FCz* ($F_{2,36} = 7.116, p = 0.0025$), *Cz* ($F_{2,36} = 4.116, p = 0.0236$), *Pz* ($F_{2,36} = 0.089, p = 0.915$), *POz* ($F_{2,36} = 1.708, p = 0.196$), and *Oz* ($F_{2,36} = 14.39, p < 0.0001$). We observed no difference for NoGo—however, we observed a difference within fronto-central and occipital sites for Go trials.

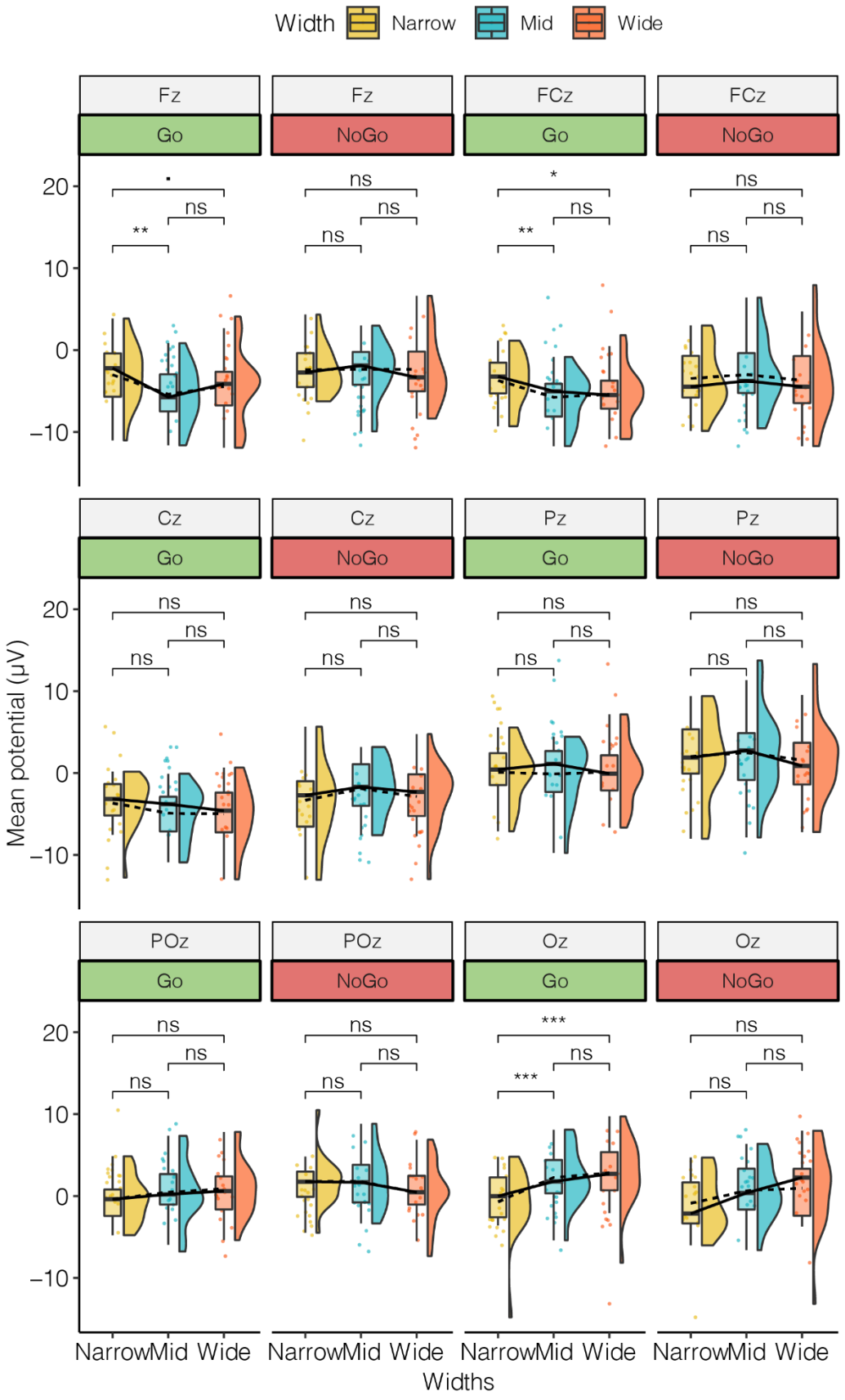
Width
Narrow
Mid
Wide
Fz
Go
Fz
NoGo
FCz
Go
FCz
NoGo
Cz
Go
Cz
NoGo
Pz
Go
Pz
NoGo
POz
Go
POz
NoGo
Oz
Go
Oz
NoGo
Mean potential (μV)
20
10
0
−10
ns
*
**
***
Narrow
Mid
Wide
Widths

Fig. S3. Rain-cloud plot of the mean amplitude of selected six channels between 600 and 800 ms post-imperative stimulus – PINV component. Means are indicated by dashed line, while medians are a solid line. We compared (Tukey HSD) the *Width* within Go and NoGo conditions, and observed only significant differences for the Go condition. We observed differences within fronto-central and occipital sites.