Supplementary file 1a. Cortical regions showing object-selective activation for whole-brain conjunction analysis (R = right hemisphere, L = left hemisphere; Z > 2.3, *p* = 0.05, cluster corrected)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Cluster** | **Region** | **Number of voxels in region** | **MNI coordinates** | | | **Peak Z value** |
| **x** | **y** | **z** |
| 1 | L Postcentral Gyrus | 1804 | -54 | -26 | 50 | 5.41 |
| L Middle Occipital Gyrus | 1392 |
| L Inferior Parietal Lobule | 1321 |
| L Superior Parietal Lobule | 1284 |
| L Supplementary Motor Area | 851 |
| L Precentral Gyrus | 749 |
| L Inferior Occipital Gyrus | 409 |
| L Middle Temporal Gyrus | 402 |
| L Fusiform Gyrus | 390 |
| L Precuneus | 320 |
| L Inferior Temporal Gyrus | 303 |
| 2 | R Middle Occipital Gyrus | 594 | 28 | -90 | 12 | 4.55 |
| R Middle Temporal Gyrus | 335 |
| R Fusiform Gyrus | 321 |
| R Inferior Temporal Gyrus | 209 |
| R Inferior Occipital Gyrus | 145 |
| 3 | R Postcentral Gyrus | 896 | 30 | -58 | 58 | 3.90 |
| R Precentral Gyrus | 577 |
| R Superior Parietal Lobule | 427 |
| 4 | L Rolandic Operculum | 331 | -50 | 8 | 4 | 3.97 |
| L Inferior Frontal Gyrus, opercular part | 268 |
| 5 | L Middle Frontal Gyrus | 520 | -28 | 46 | 8 | 3.68 |
| L Inferior Frontal Gyrus, triangular part | 245 |

Supplementary file 1b. Cortical regions reaching significance in the contrasts of (A) objects within versus objects beyond and (B) objects beyond versus objects within, whole-brain analysis (R = right hemisphere, L = left hemisphere; Z > 2.3, *p* = 0.05, cluster corrected)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Cluster** | **Region** | **Number of voxels in region** | **MNI coordinates** | | | **Peak Z value** |
| **x** | **y** | **z** |
| Objects within > Objects beyond | | | | | | |
| 1 | L Cuneus | 363 | 10 | -90 | 20 | 4.24 |
| R Cuneus | 309 |
| L Lingual Gyrus | 176 |
| R Lingual Gyrus | 293 |
| Objects beyond > Objects within | | | | | | |
| 1 | L Middle Occipital Gyrus | 1831 | -16 | -92 | -8 | 5.72 |
| L Fusiform Gyrus | 994 |
| L Superior Parietal Lobule | 584 |
| L Lingual Gyrus | 504 |
| L Inferior Occipital Gyrus | 304 |
| L Superior Occipital Gyrus | 211 |
| L Parahippocampal Gyrus | 210 |
| L Precuneus | 205 |
| 2 | R Middle Occipital Gyrus | 1358 | 20 | -86 | -2 | 5.40 |
| R Lingual Gyrus | 340 |
| R Superior Parietal Lobule | 328 |
| R Superior Occipital Gyrus | 320 |
| R Inferior Occipital Gyrus | 276 |
| 3 | R Fusiform Gyrus | 483 | 34 | -38 | -16 | 4.73 |
| R Parahippocampal Gyrus | 316 |

Supplementary file 1c. Cortical regions reaching significance in contrasts of (A) congruent versus incongruent and (B) incongruent versus congruent, whole-brain analysis (R = right hemisphere, L = left hemisphere; Z > 2.3, *p* = 0.05, cluster corrected)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Cluster** | **Region** | **Number of voxels in region** | **MNI coordinates** | | | **Peak Z value** |
| **x** | **y** | **z** |
| Congruent > Incongruent | | | | | | |
| 1 | L Inferior Parietal Lobule | 322 | -44 | -50 | 64 | 3.47 |
| 2 | R Superior Parietal Lobule | 339 | 36 | -66 | 52 | 3.31 |
| R Inferior Parietal Lobule | 165 |
| Incongruent > Congruent | | | | | | |
| - | *No significant cluster* | - | - | - | - | - |

Supplementary file 1d. Cortical regions showing significant interaction between object type and congruency, whole-brain analysis (OW = Objects within, OB = Objects beyond; R = right hemisphere, L = left hemisphere; Z > 2.3, *p* = 0.05, cluster corrected)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Cluster** | **Region** | **Number of voxels in region** | **MNI coordinates** | | | **Peak Z value** |
| **x** | **y** | **z** |
| (OW\_Congruent – OW\_Incongruent ) > (OB\_Congruent – OB\_Incongruent ) | | | | | | |
| 1 | L Middle Occipital Gyrus | 831 | 22 | -94 | 10 | 4.25 |
| R Middle Occipital Gyrus | 187 |
| L Fusiform Gyrus | 113 |
| R Fusiform Gyrus | 376 |
| L Inferior Occipital Gyrus | 293 |
| R Inferior Occipital Gyrus | 276 |
| L Lingual Gyrus | 215 |
| R Lingual Gyrus | 345 |
| L Superior Occipital Gyrus | 123 |
| 2 | R Supplementary Motor Area | 383 | 14 | 14 | 60 | 3.39 |
| 3 | R Superior Parietal Lobule | 191 | 36 | -62 | 56 | 3.18 |
| R Inferior Parietal Lobule | 114 |
| 4 | R Insula | 175 | 32 | 18 | 8 | 3.41 |
| (OB\_Congruent – OB\_Incongruent ) > (OW\_Congruent – OW\_Incongruent ) | | | | | | |
| - | *No significant cluster* | - | - | - | - | - |

Supplementary file 1e. Cortical regions showing significant congruency effect (congruent versus incongruent) for objects within, whole-brain analysis (R = right hemisphere, L = left hemisphere; Z > 2.3, *p* = 0.05, cluster corrected)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Cluster** | **Region** | **Number of voxels in region** | **MNI coordinates** | | | **Peak Z value** |
| **x** | **y** | **z** |
| 1 | L Middle Occipital Gyrus | 820 | -14 | -96 | -2 | 4.29 |
| R Middle Occipital Gyrus | 214 |
| L Inferior Occipital Gyrus | 367 |
| R Inferior Occipital Gyrus | 487 |
| L Lingual Gyrus | 329 |
| R Lingual Gyrus | 484 |
| L Fusiform Gyrus | 341 |
| R Fusiform Gyrus | 463 |
| R Inferior Temporal Gyrus | 280 |
| 2 | R Superior Parietal Lobule | 891 | 32 | -58 | 50 | 3.80 |
| R Inferior Parietal Lobule | 619 |
| R Supramarginal Gyrus | 300 |
| R Precuneus | 294 |
| L Superior Parietal Lobule | 210 |
| 3 | L Inferior Parietal Lobule | 668 | -48 | -46 | 60 | 3.82 |
| 4 | R Superior Frontal Gyrus | 501 | 16 | 12 | 60 | 3.57 |
| R Supplementary Motor Area | 200 |
| 5 | R Middle Frontal Gyrus | 398 | 40 | 42 | 34 | 3.44 |
| 6 | R Inferior Frontal Gyrus, opercular part | 384 | 50 | 14 | 38 | 3.33 |