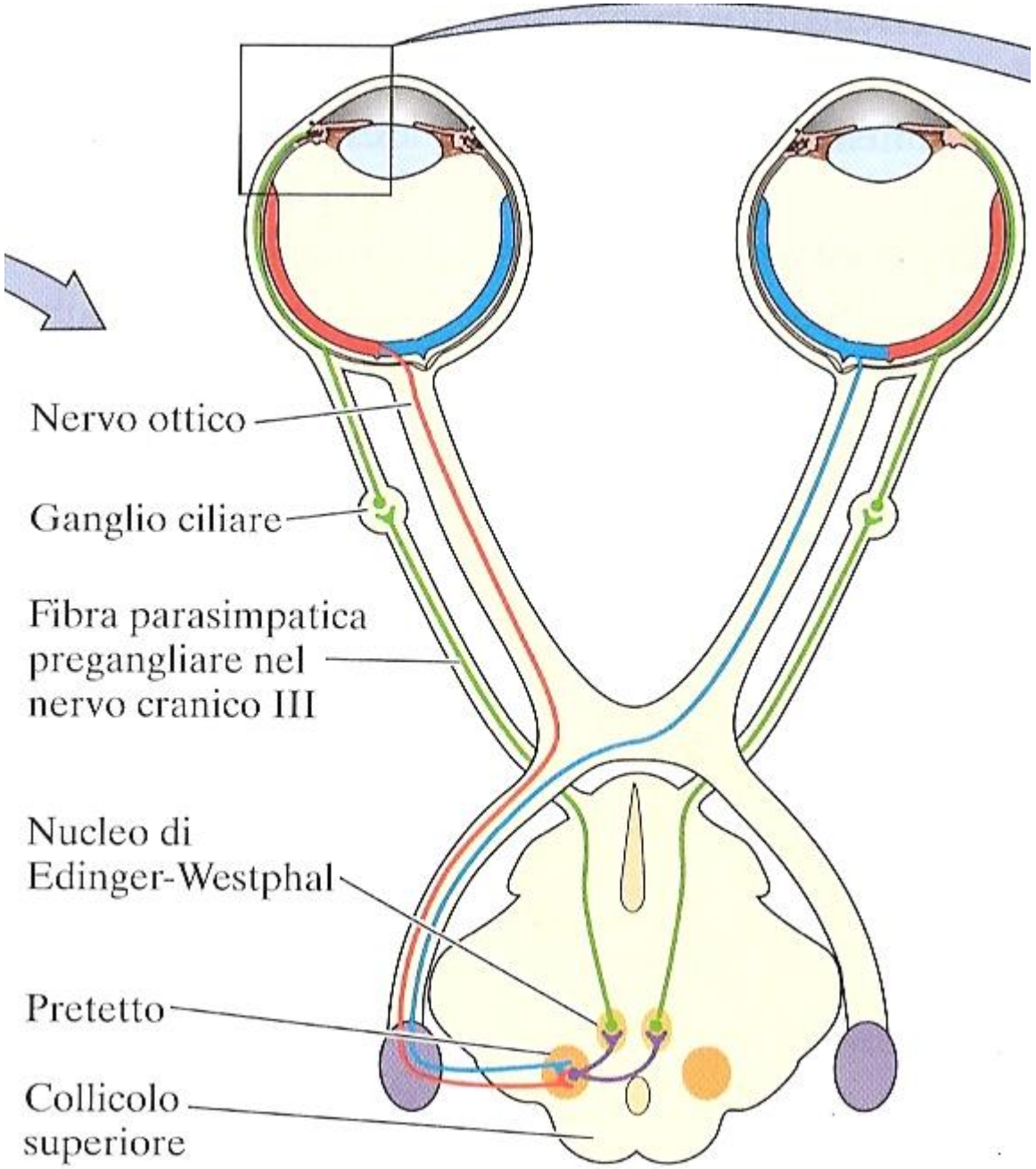
COSCIENZA

Nerviano 3 novembre 2011


Nervo ottico
Ganglio ciliare
Fibra parasimpatica pregangliare nel nervo cranico III
Nucleo di Edinger-Westphal
Pretetto
Collicolo superiore

pane

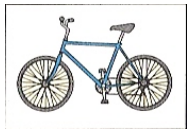
XXXX

Panino

camion

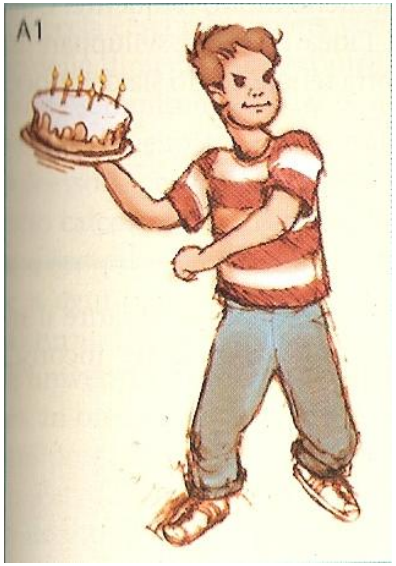
XXXXXX

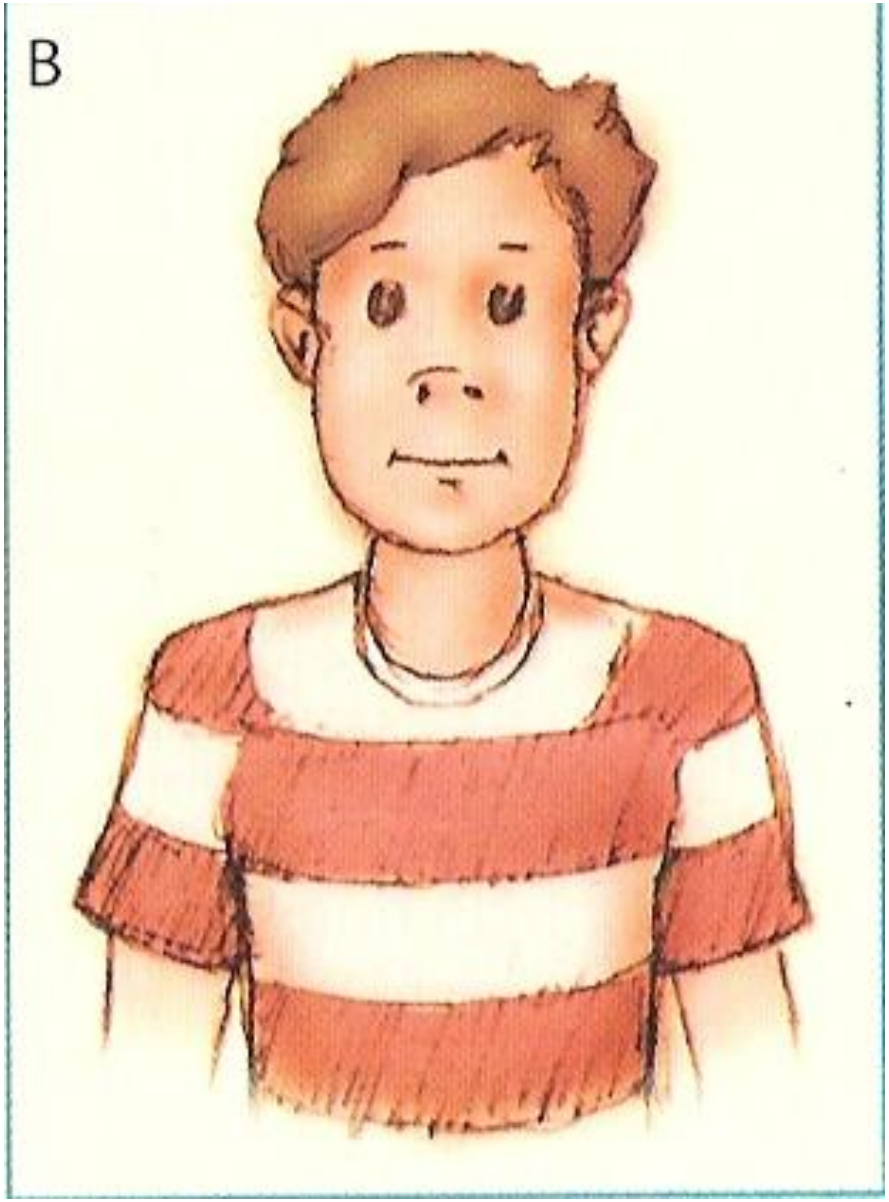
Tavolo



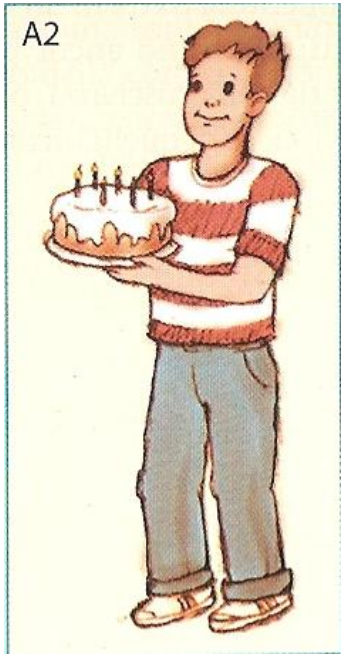
bic

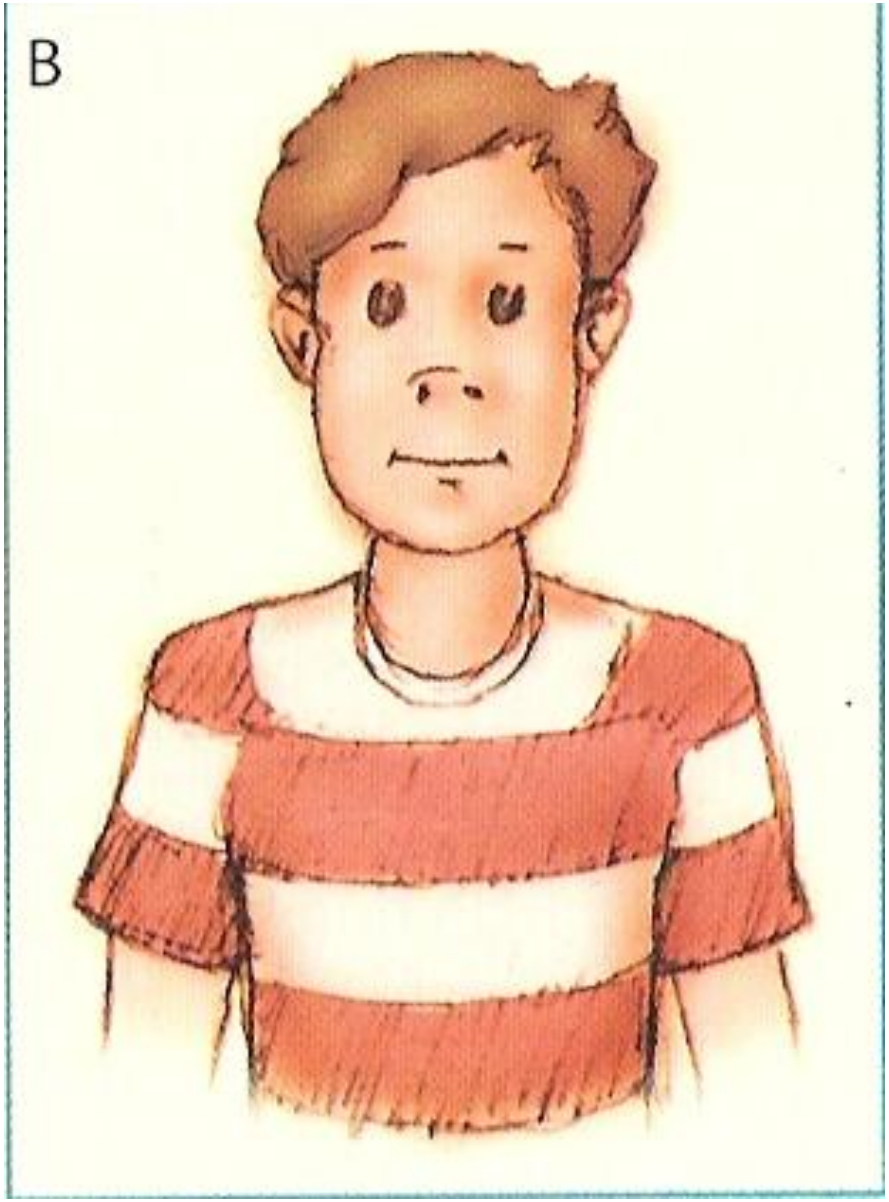
can


A1

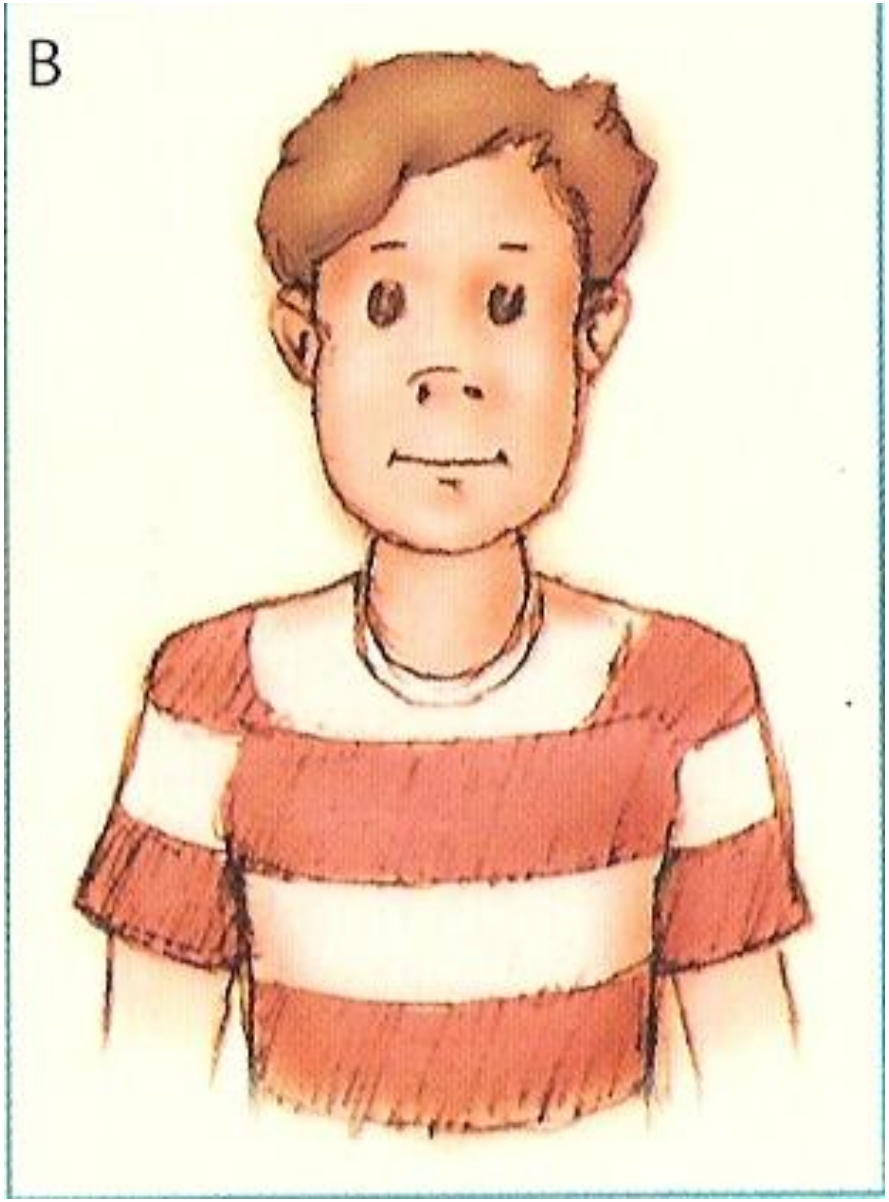

B

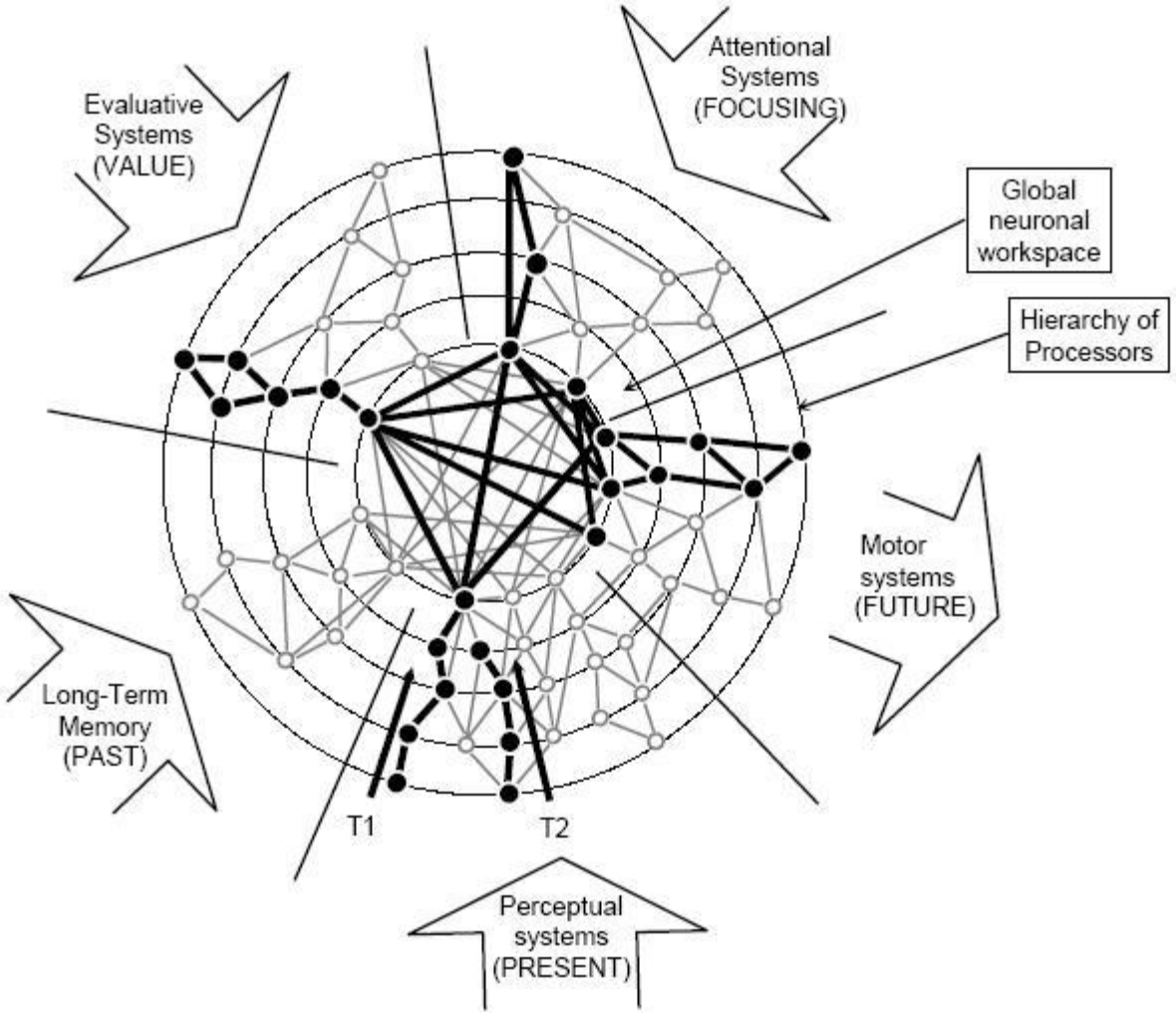
A2

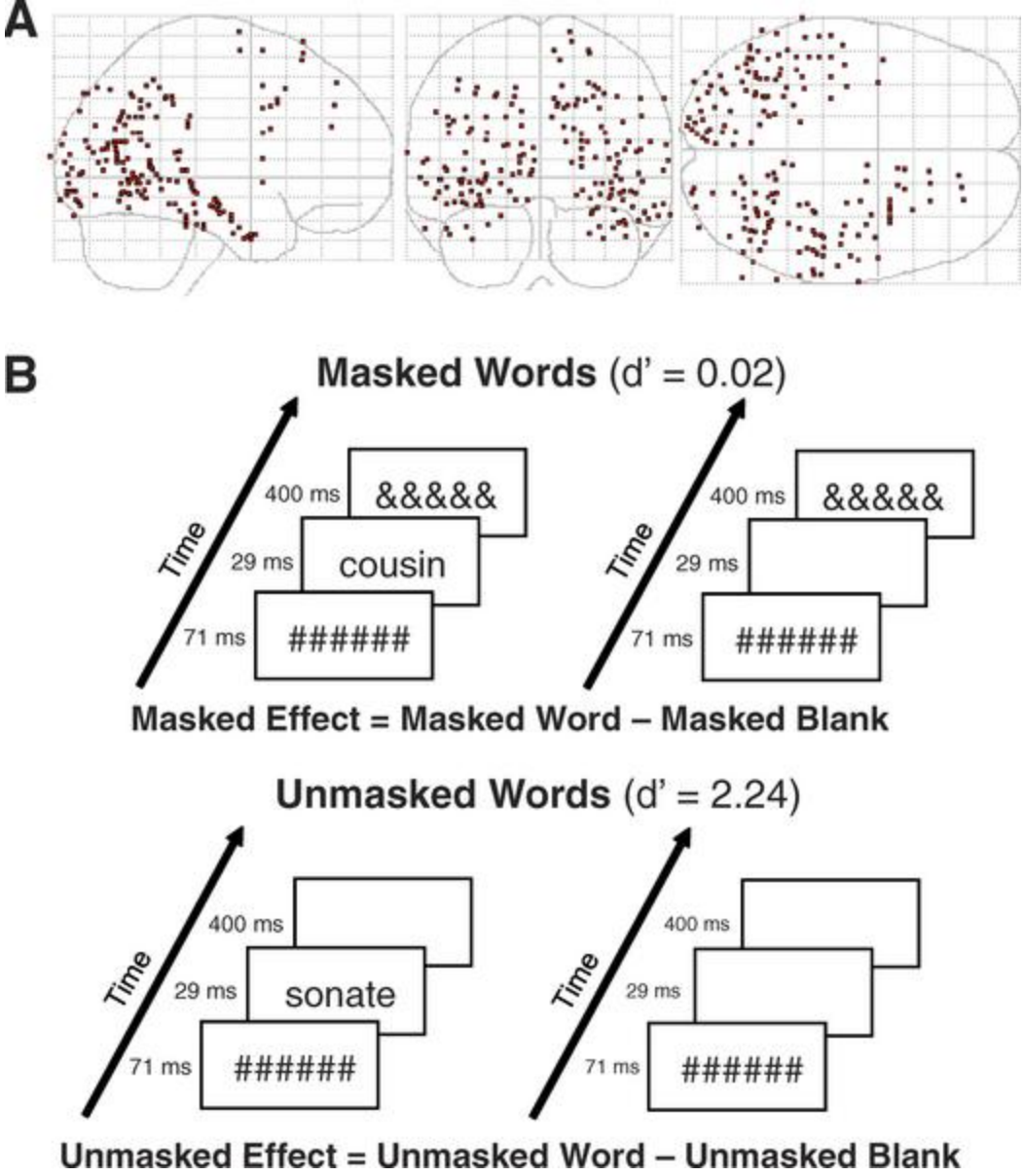



B

Il carattere di questo ragazzo




Attentional
Systems
(FOCUSING)
Evaluative
Systems
(VALUE)
Global
neuronal
workspace
Hierarchy of
Processors
Motor
systems
(FUTURE)
Long-Term
Memory
(PAST)
T1
T2
Perceptual
systems
(PRESENT)



(A) Sagittal (left), coronal (middle), and axial (right) normalized glass brain showing all 176 electrodes after normalization in Talairach's anatomical space.
(B) Experimental paradigm used to present masked and unmasked words, with *d′* measures in the forced-choice semantic task.

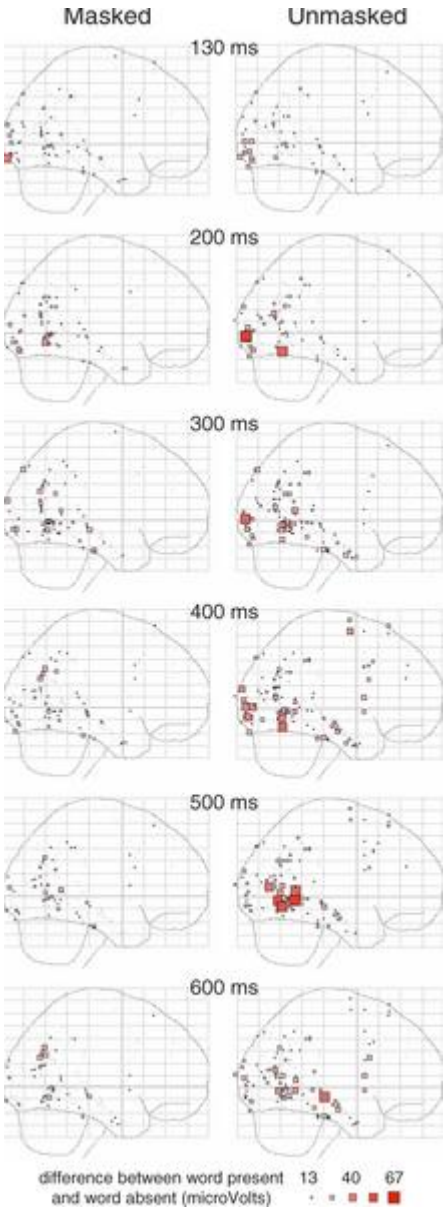


Figure 2. Spatiotemporal Dynamics of iERP Effects

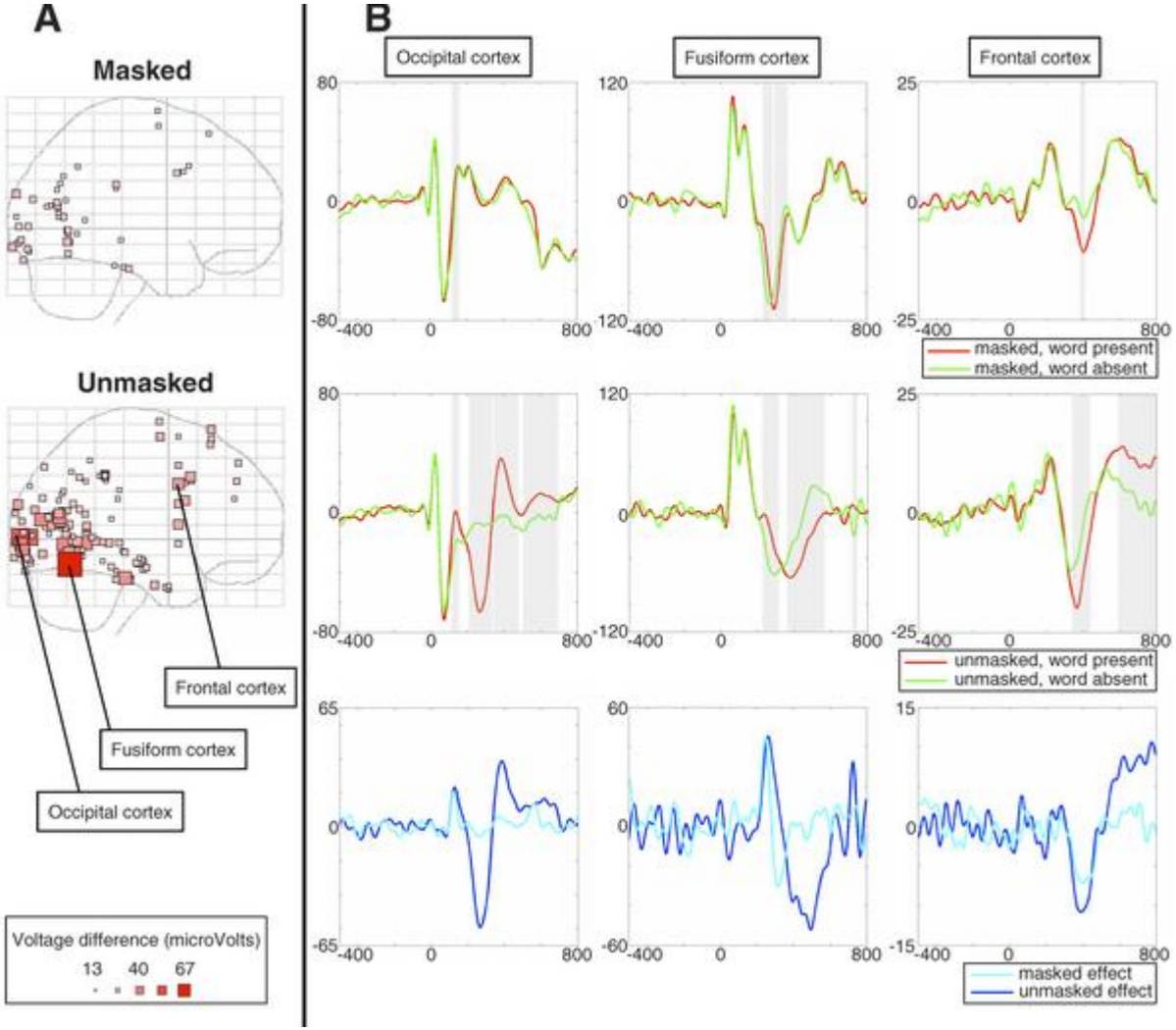


Figure 3. iERP Effects on Three Representative Electrodes

(A) Maximum size of significant masked and unmasked effects across the 0–800-ms time window are displayed as red squares, whose size and color intensity are proportional to peak absolute voltage amplitude.

(B) Mean iERPs of three representative electrodes in occipital, fusiform, and frontal cortex (location shown in [A]). Shadowed areas indicate significant effects (difference between word and blank conditions). The bottom graphs (blue traces) show the time course of the “word minus blank” subtraction separately from the masked and unmasked conditions. All three sites exhibit an initial common peak, followed by a polarity reversal and delayed activity specific to the unmasked condition.

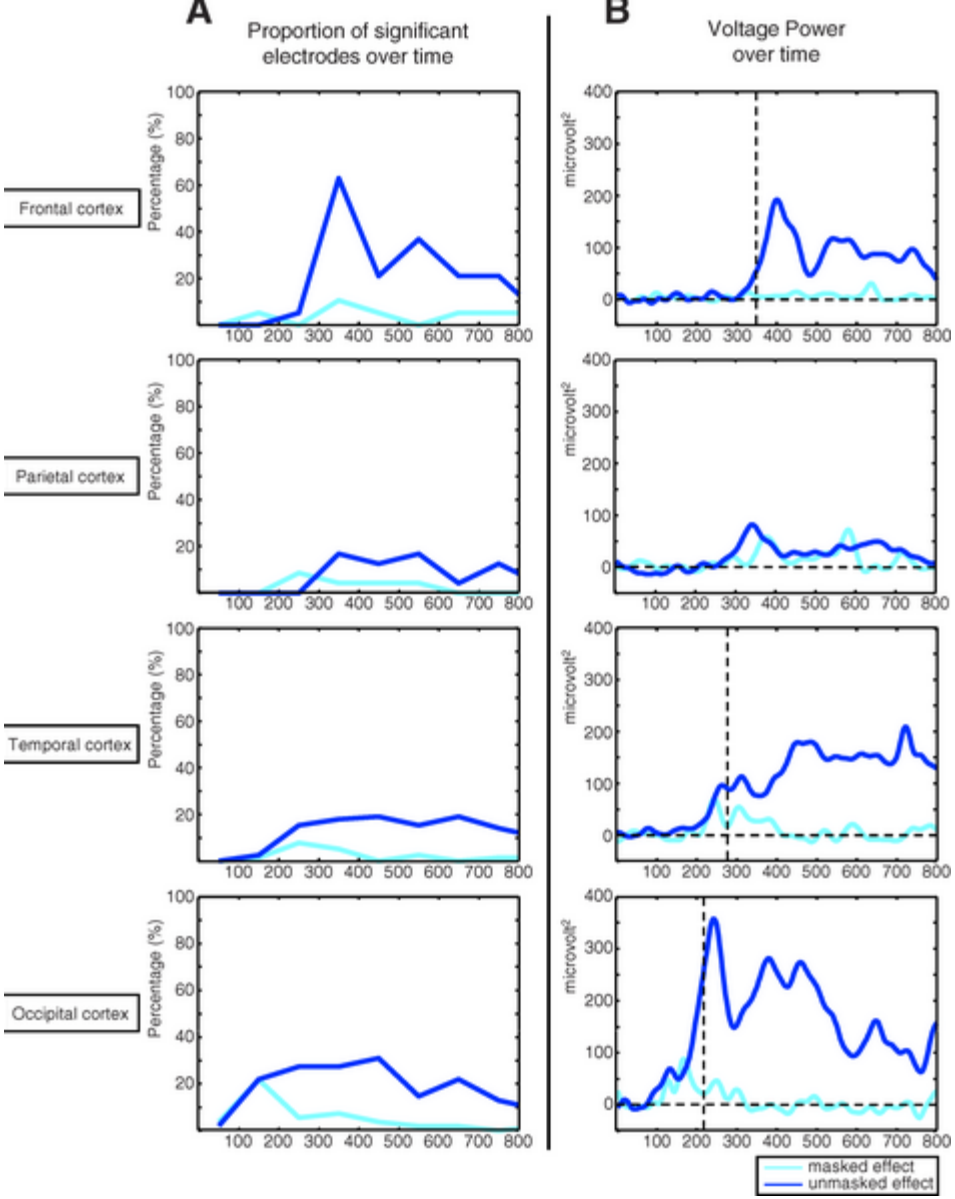
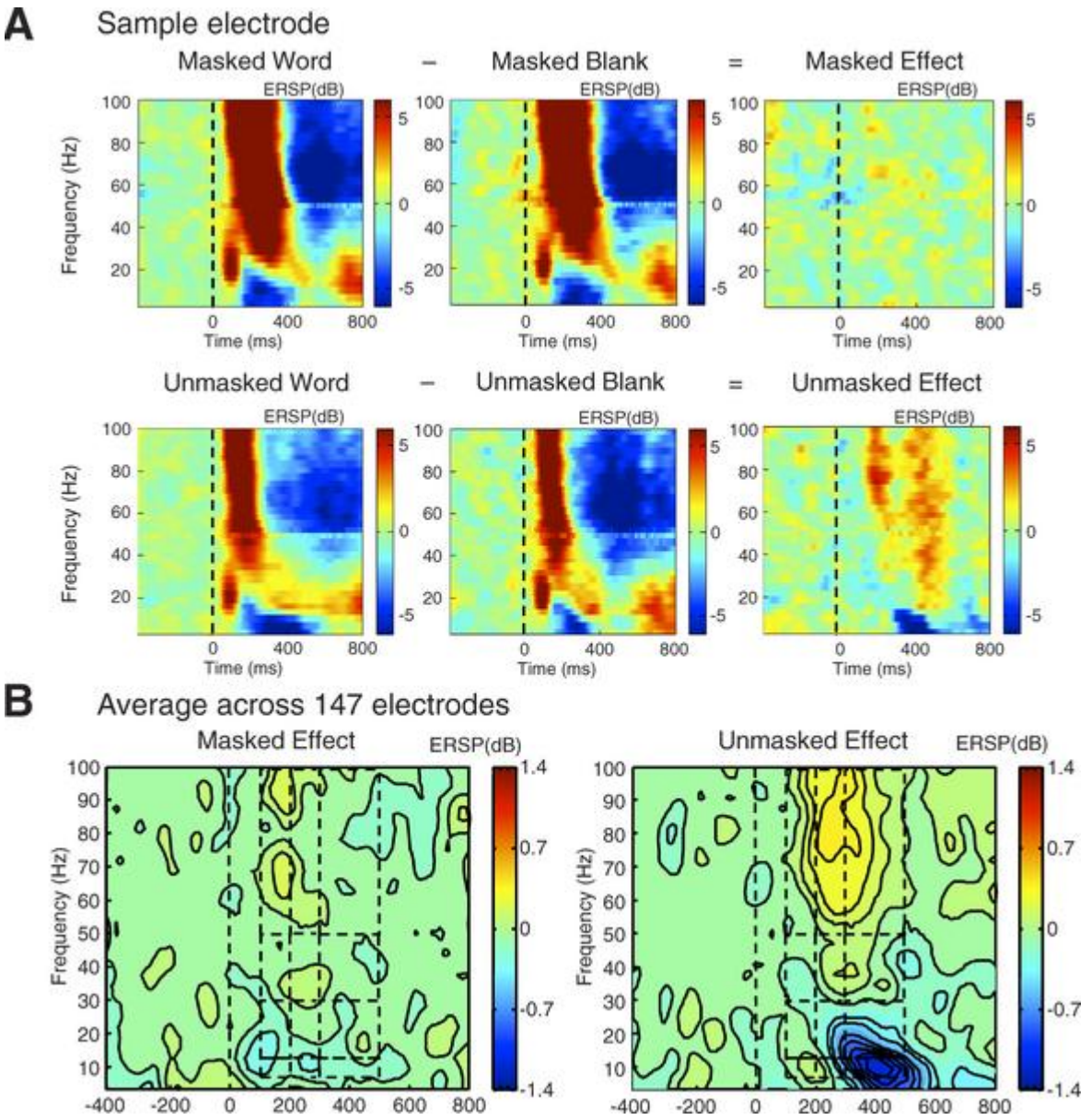


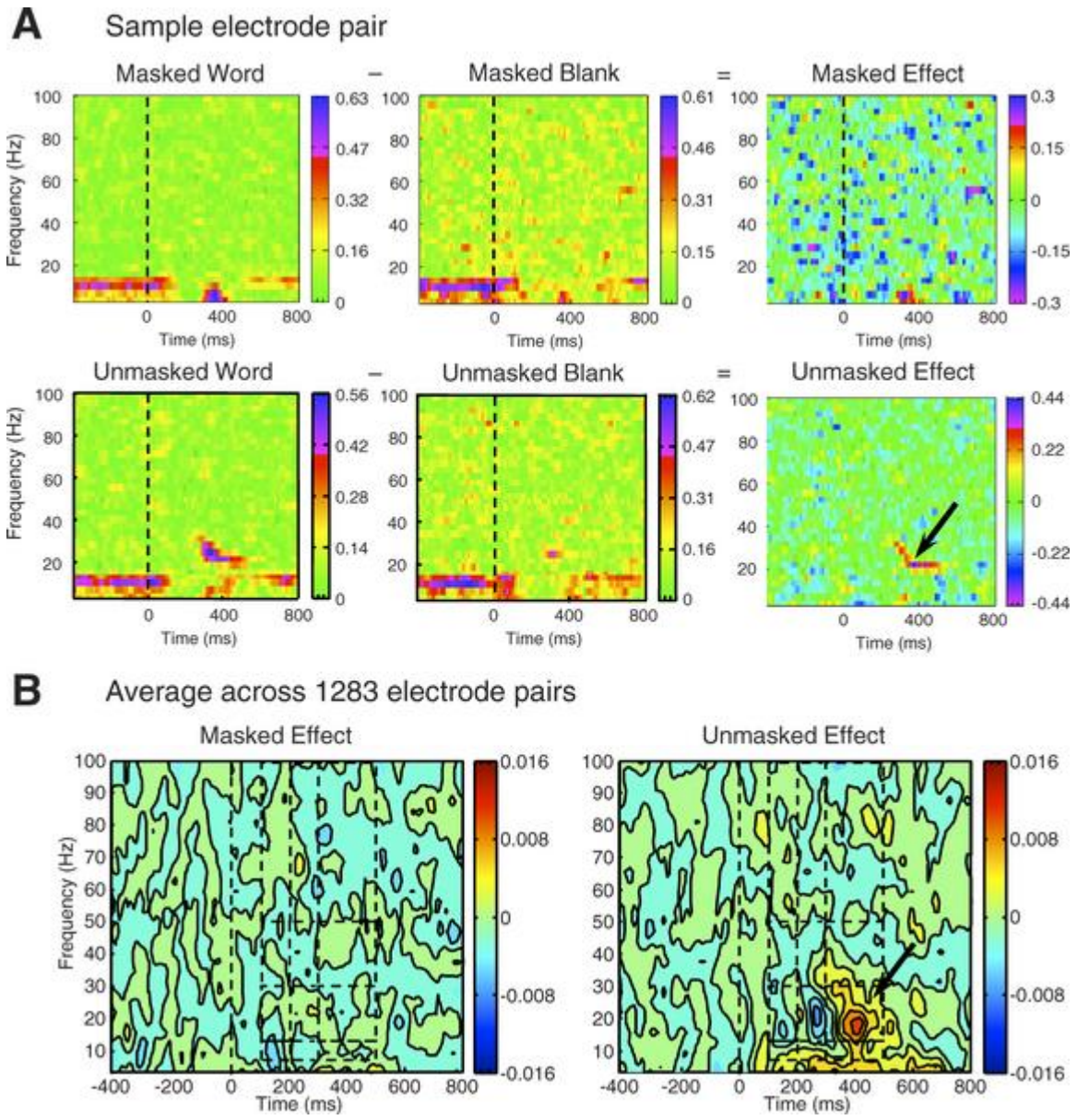
Figure 4. Lobar Analysis of iERPs
(A) For each lobe, proportions of electrodes showing a significant effect over time for masked (cyan) and unmasked (blue) conditions, respectively.
(B) Voltage power, averaged across electrodes showing at least one significant effect, for masked (cyan) and unmasked (blue) conditions, respectively. Black dashed lines indicate latencies of the first significant differences ($p < 0.05$) between conditions.

Figure 5. ERSP Effects



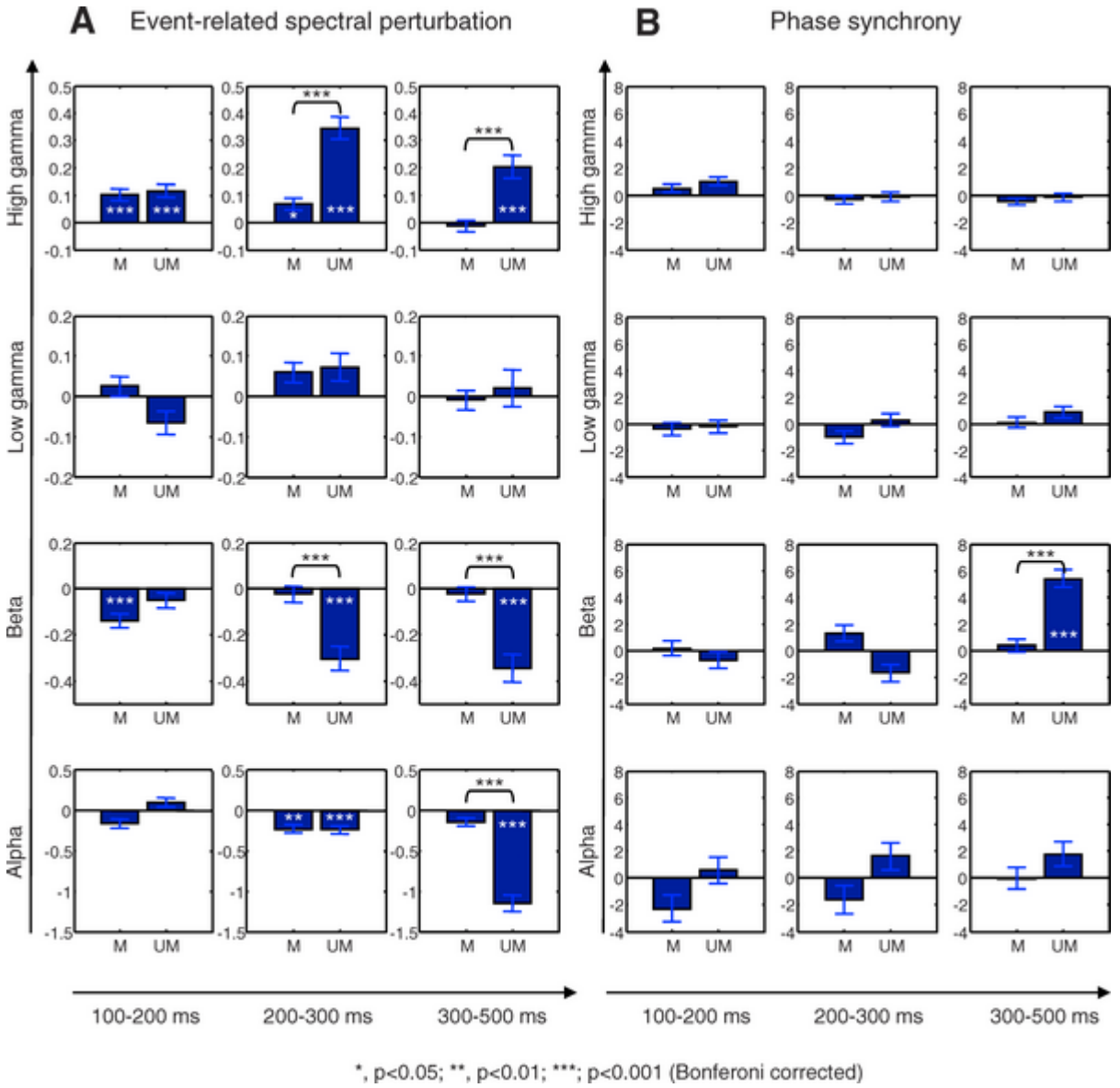
(A) Time-frequency diagrams showing the ERSPs of a representative electrode (Talairach −19,5, −90, −20). Color indicates the log power increase or decrease in power relative to baseline (same scale in all graphics). Top row, masked words, masked blanks, and their subtraction. Bottom row, same analysis for the unmasked conditions.
(B) Time-frequency diagrams of mean ERSPs averaged across 147 electrodes for masked (left) and unmasked (right) effects. Dashed lines delimit the time-frequency windows used for the statistical analyses that appear in Figure 7.

Figure 6. Phase Synchrony Effects



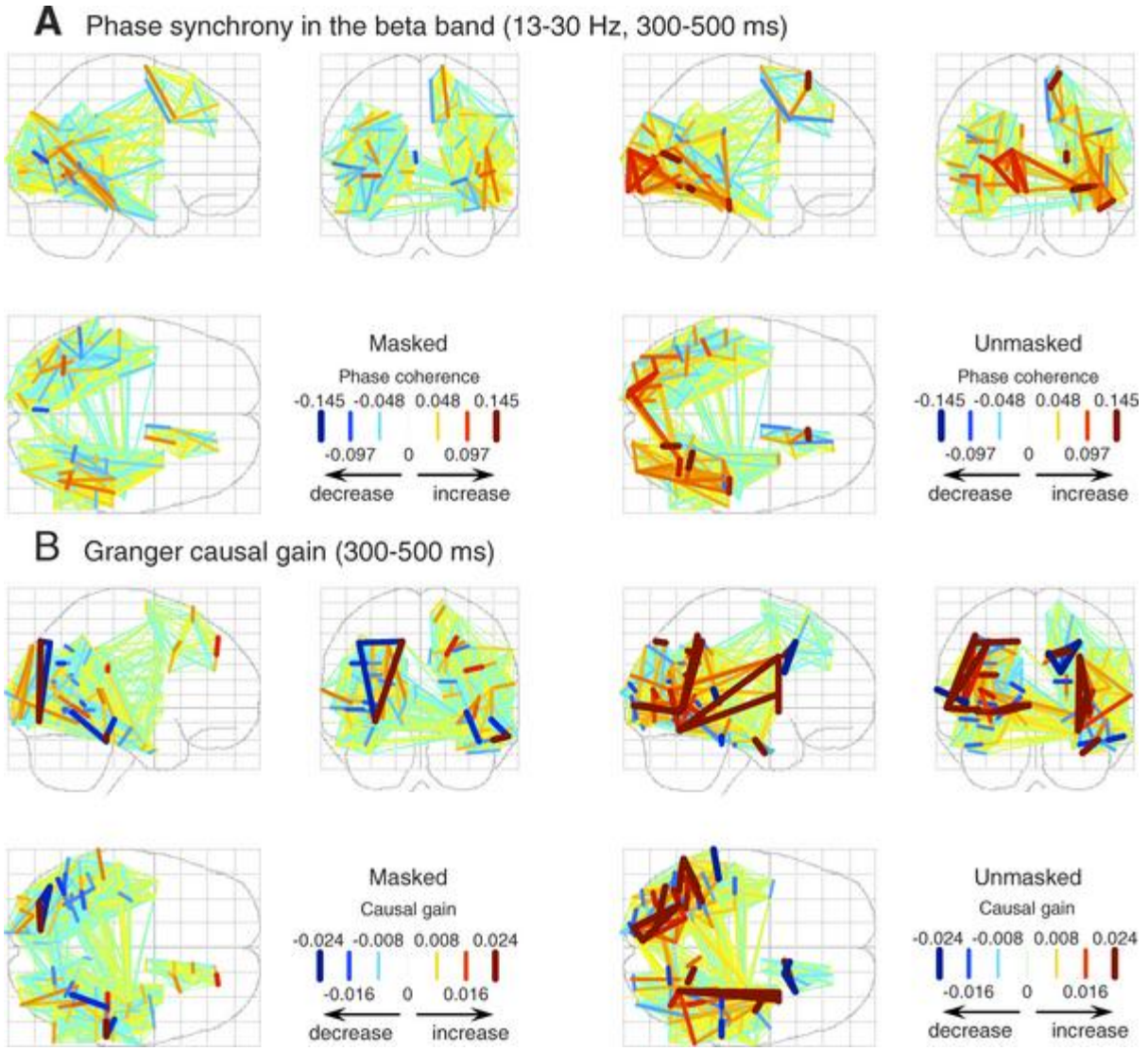
(A) Phase synchrony analyses of a representative pair of electrodes (Talairach −12, −97, −12 and −28.5, −77.5, 6). Top row, masked condition; bottom row, unmasked condition. Each picture shows a time-frequency diagram of intertrial phase coherence across the two electrodes (ranging from 0 to 1) for the word condition, the blank condition, and their subtraction (different scale, including negative values).
(B) Time-frequency diagrams of ITC averaged across all 1,283 electrode pairs, separately for masked (left) and unmasked (right) effects. Dashed lines delimit the time-frequency windows used for the analyses that appear in Figure 7.

Figure 7. ERSP and Phase Synchrony across Three Time Windows



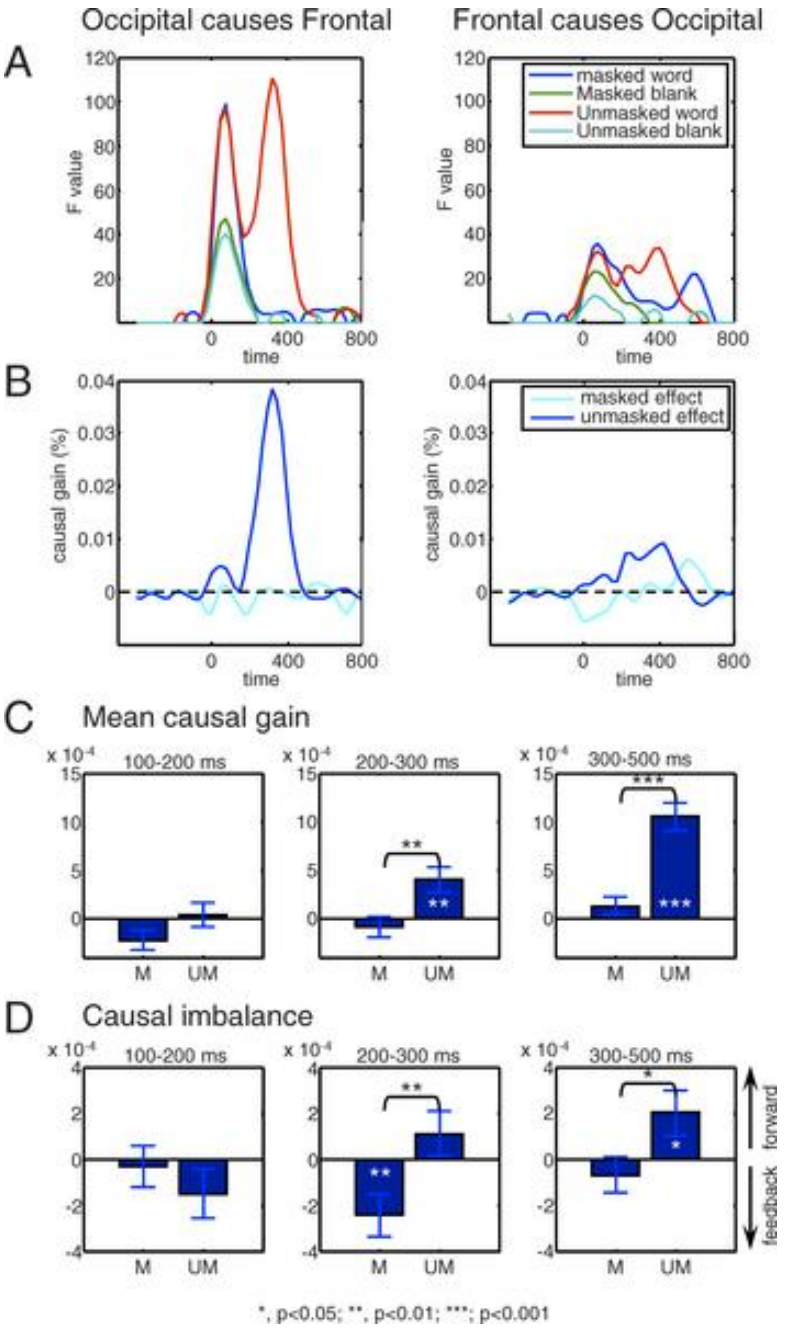
Twelve time-frequency regions of interest were defined on ERSP and phase synchrony–averaged analyses (see Figures 5B and 6B). For each region, mean ERSPs (A) and mean ITC (B) are plotted for three different time windows (abscissa axis: 100–200, 200–300, and 300–500 ms) and for four frequency bands (ordinate axis: alpha = 8–13 Hz; beta = 13–30 Hz; low gamma = 30–50 Hz; and high gamma = 50–100 Hz), separately for the masked (M) and for the unmasked (UM) conditions. Bars represent one standard error of the mean.

Figure 8. Phase Synchrony and Granger Causal Gain between 300 and 500 ms after Word Onset

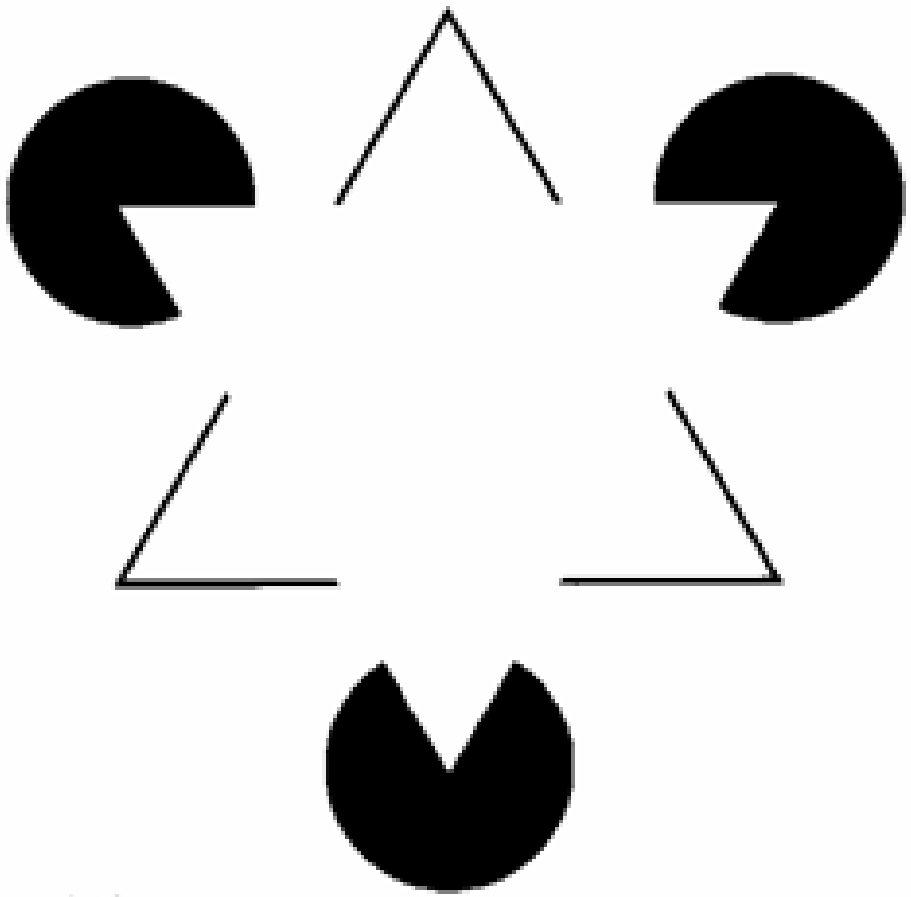


Each figure depicts three orthogonal views of a transparent “glass brain,” with segments linking, for each patient, all pairs of electrodes. Segments are colored and sized according to the intensity of the increase or decrease in phase coherence in the beta frequency band (A), and in Granger causal gain (B) during the 300–500-ms time window. Superimposed lines are plotted in increasing order of the absolute value of the depicted parameter, so that larger values override smaller ones. Left two columns, masked effects; right two columns, unmasked effects.

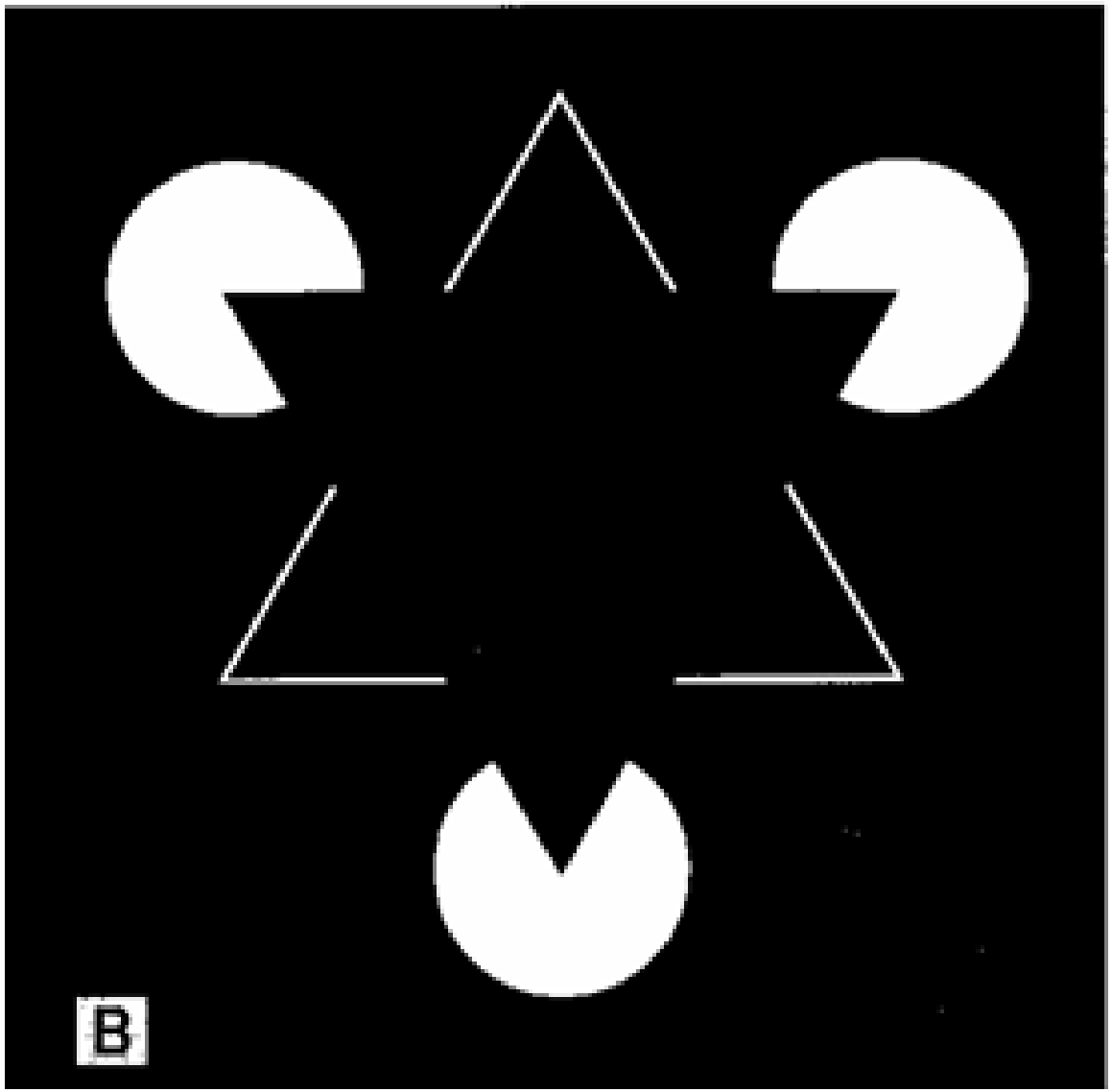
Figure 9. Granger Causality Analysis



(A and B) Illustration of Granger causality analysis for a representative pair of electrodes located respectively in the frontal and occipital lobes. For each of the four experimental conditions, an *F*-test evaluates, over a sliding timing window, the causal influence of occipital activity on frontal electrode activity and vice versa (A). Note that this F-test is not directly comparable across conditions (because of smaller number of trials in the blank control conditions), nor can it be taken directly as a test of significance (because of inflation due to auto-correlation [63]). Furthermore, masks alone obviously induce increases in causality. To evaluate how words and their conscious perception affect Granger causality, causal gain was then computed as the difference in the percentage of word-absent (blank) condition (B). Here, an obvious imbalance is seen, with a massive increase in causality only in the occipital-to-frontal direction and in the unmasked condition. For statistical analysis, we distinguished the mean causal gain (averaged across the two directions of causality) and the causal imbalance (difference in causal gain over the two directions of causality). (C and D) show the mean results, averaged over all electrode pairs (bars indicate one standard error of the mean). Mean causal gain and mean causal imbalance were calculated separately across three time windows (100–200 ms, 200–300 ms, and 300–500 ms) are plotted separately for the masked (M) and for the unmasked (UM) conditions.



A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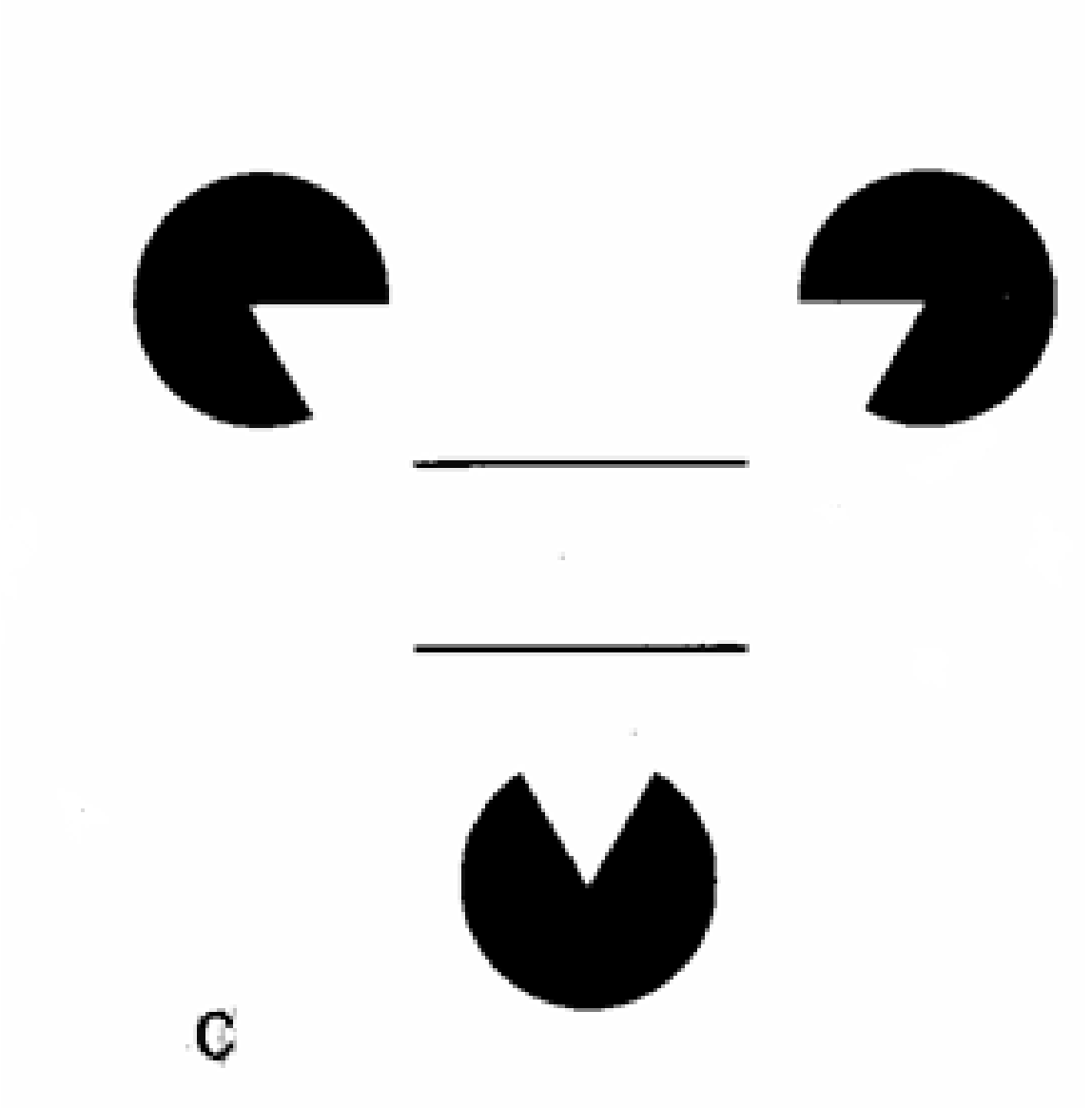
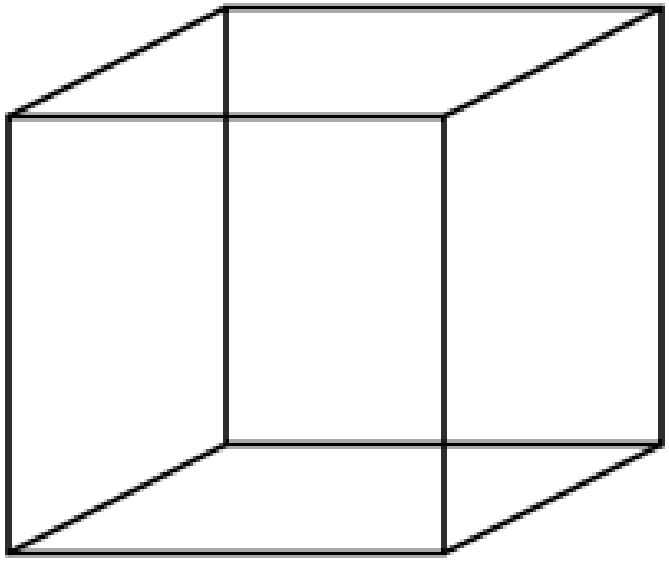
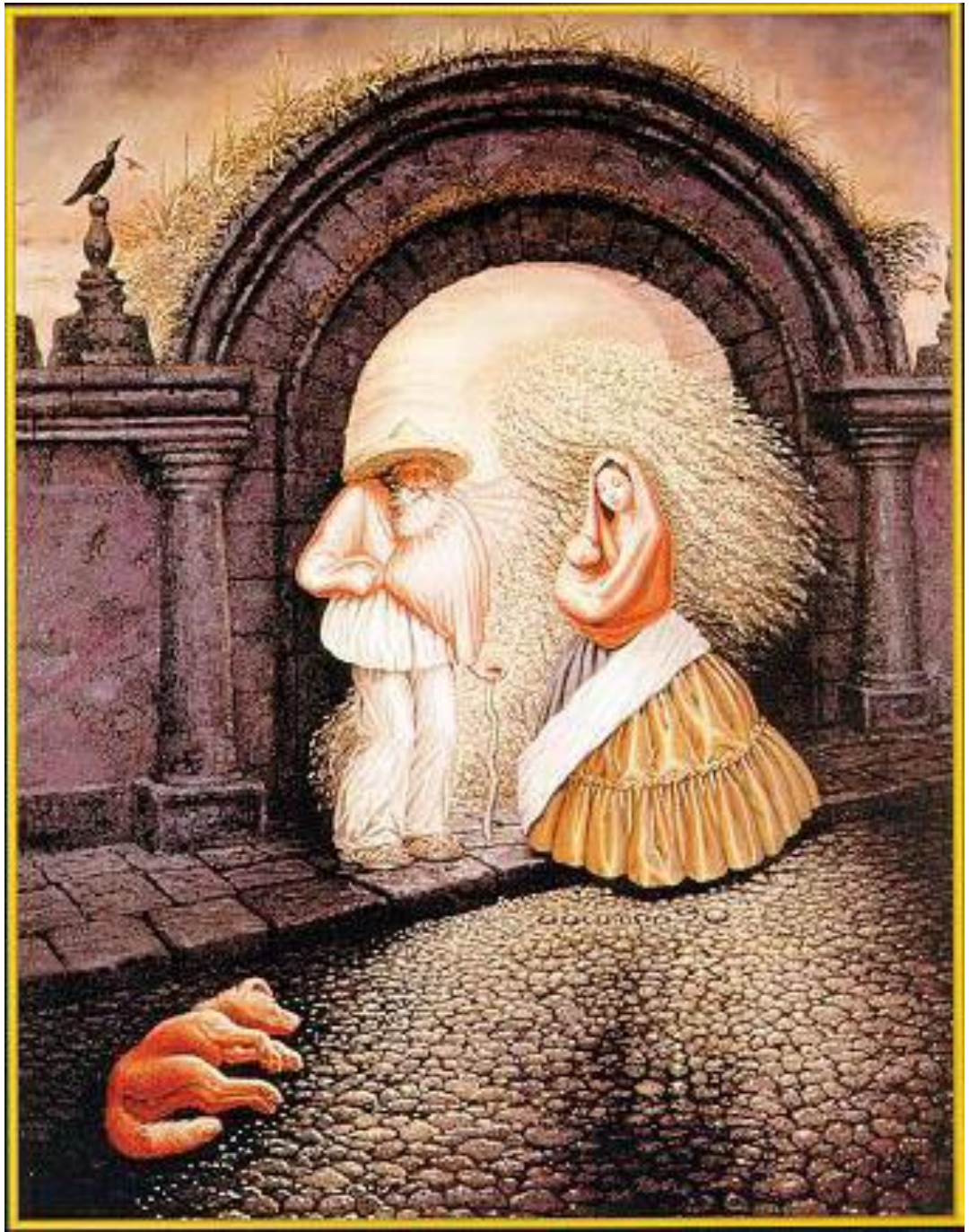

C




Torre 1
Torre 2
Torre 3


KS
DRINKS

http://www.patriziobassi.it/piazzadelpopolo/wp-content/uploads/2007/10/20070729_c75640787c0ef2eacc36usppto8fbki9.gif

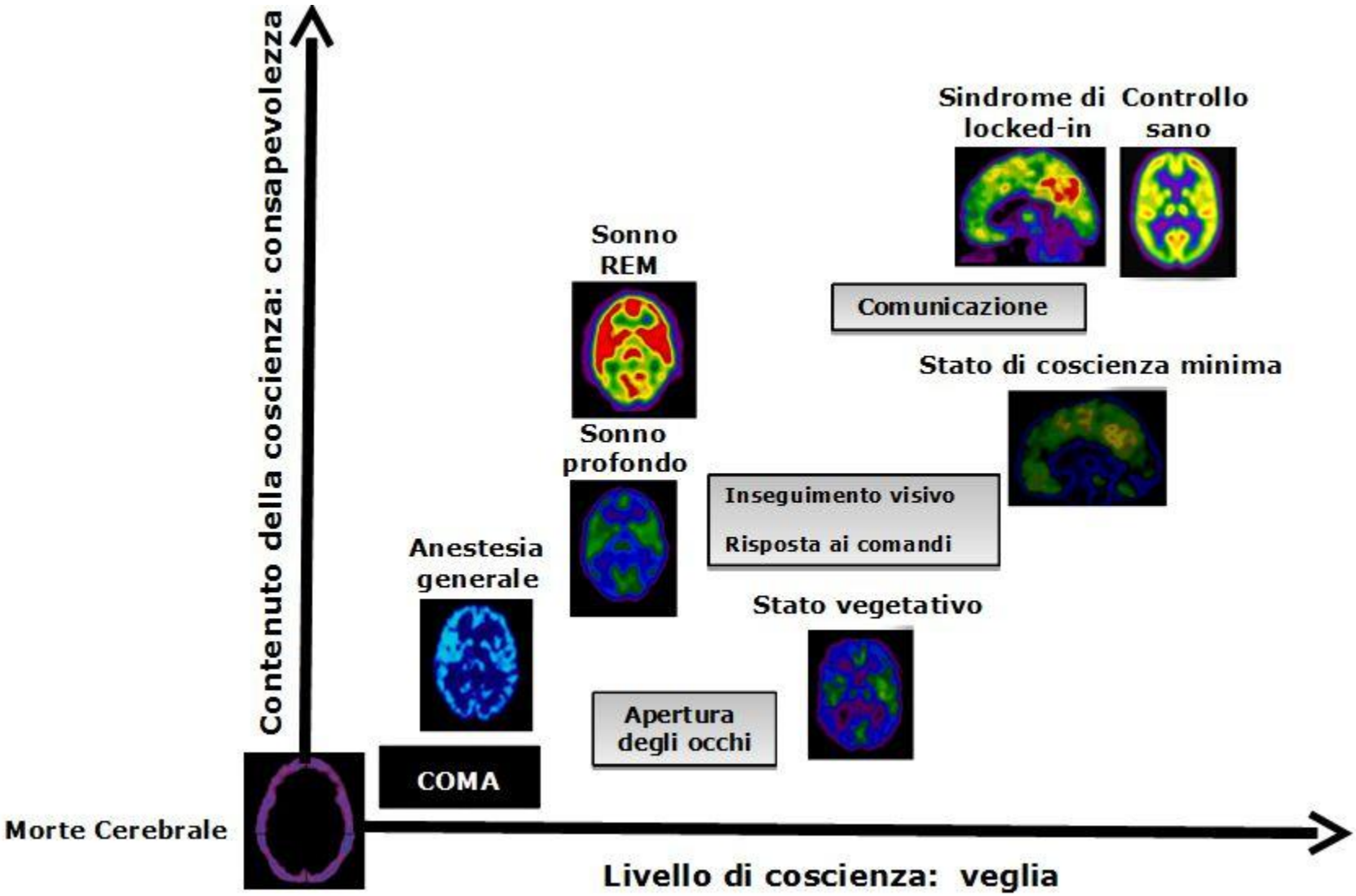


In quale colore sono stampate queste parole?

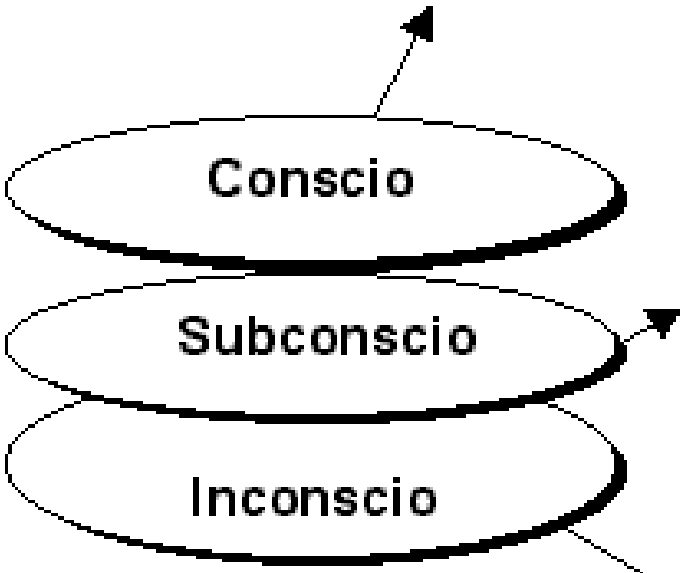
NOMINATE IL PIU' RAPIDAMENTE POSSIBILE IL COLORE

DELL'INCHIOSTRO CON CUI ESSE SONO SCRITTE

In quale colore sono stampate queste parole?


Contenuto della coscienza: consapevolezza
Sindrome di locked-in
Controllo sano
Sonno REM
Comunicazione
Stato di coscienza minima
Sonno profondo
Inseguimento visivo
Risposta ai comandi
Anestesia generale
Stato vegetativo
Apertura degli occhi
COMA
Morte Cerebrale
Livello di coscienza: veglia

- Razionale
- Basato sull'algebra mentale (calcoli matematici di opportunità, comparazioni e valutazioni razionali)
- Chiari modelli di valutazione - ogni variabile influente è nota
- La persona sa esattamente cosa sta facendo, perché agisce così
- Nessuna dimensione nascosta



- Subisce pressioni culturali, apprese durante la crescita ed interazione con gli input familiari, scolastici-educativi, amici, mass media, società.
- Agiscono ad un livello più profondo
- Le persone non sono sempre consapevoli delle forze culturali che agiscono su di loro
- Dimensioni nascoste, come l'appropriatezza culturale, la religione, la pressione dei gruppi, agiscono sulle scelte dell'individuo ad un livello debolmente consapevole, poco razionalizzato

- Forze genetiche agenti sull'individuo partono dai livelli più profondi della psiche
- Possiedono elementi comportamentali comuni al regno animale
- Includono pulsioni sessuali, comportamenti di difesa-attacco, possesso, paura
- Il comportamento di consumo, le scelte e le valutazioni dei prodotti, vengono influenzate inconsciamente
- Dimensioni molto nascoste all'individuo stesso
- Prevalentemente inconsapevoli