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Sommario/riassunto	To what level are invisible stimuli processed by the brain in the absence of conscious awareness? It is widely accepted that simple visual properties of invisible stimuli are processed; however, the existence of higher-level unconscious processing (e.g., involving semantic or executive functions) remains a matter of debate. Three major factors may underlie the discrepancies found in the literature: 1) different levels of conservativeness in the definition of "unconscious;" 2) different dependent measures of unconscious processing; and 3) inherent differences in the amount of information let through by different suppression techniques. In this research topic we are particularly interested in the third factor. Researchers using visual masking and researchers using interocular suppression disagree on the extent of unconscious processing as measured by priming effects. On the one hand, the community of researchers using visual masking seems to have reached the consensus that "subliminal priming has now been convincingly demonstrated at visual, semantic, and motor levels" (Dehaene and Changeux). On the other hand, in an influential review, Blake and Logothetis claimed that for high-level cognitive processes, "[interocular] suppression renders normally effective priming stimuli

impotent". Stein and Sterzer came to similar conclusions in a more recent contribution. However, these claims are challenged by empirical evidence for unconscious processing under interocular suppression using other dependent variables, e.g., conditioning and perceptual learning. Hence, the picture is not as clear cut as priming studies may suggest. Neuroimaging studies (e.g., functional MRI) offer another window on the extent of unconscious processing. Kouider et al. found that faces masked with a combination of forward and backward pattern masks elicited a BOLD response in the Fusiform Face Area (FFA). Jiang and He also reported that the fusiform face area (FFA) was active in response to faces rendered invisible by continuous flash suppression. Though Sterzer, Haynes and Rees did not replicate this finding with univariate analyses, they could discriminate invisible faces from invisible houses in the fusiform face area using multivariate pattern analysis. Thus it appears that there is unconscious processing of invisible faces in the FFA whether visual masking or interocular suppression is used; the amount of processing may differ between the two techniques, as suggested by the necessity of performing decoding when interocular suppression is used. In the same conditions of well-controlled, conservatively established subjective invisibility, can we show that some of the techniques in the "psychophysical magic" arsenal (e.g., masking, but also visual crowding, attentional blink, etc.) reliably lead to higher-level unconscious processing than others (e.g., interocular suppression)? Some authors have started investigating this question, using multiple techniques in similar settings. We argue that this approach should be extended. Indeed, in order to delineate the frontiers of the unconscious mind using a contrastive method, one has to disentangle the limits attributable to unawareness itself, and those attributable to the technique inducing unawareness. The scope of this research topic is to provide a platform for scientists to contribute insights and further experiments addressing this fundamental question.
