## Primary agoraphobia as a specific phobia

The elegant study of 1920 participants from the Baltimore Epidemiologic Catchment Area programme concluded that 'the implied one-way causal relationship between spontaneous panic attacks and agoraphobia in DSM-IV appears incorrect' (Bienvenu et al, 2006). Bienvenu et al echo the arguments of many researchers, beginning with Marks (1987), that agoraphobia without panic attacks (primary agoraphobia) should be reinstated in DSM-V as a stand-alone diagnosis as in ICD-10.

It has been argued that evolutionary biological reasoning predicts the existence of a 'hard-wired' primary stand-alone agoraphobia, which should be classified with other specific phobias (Bracha, 2006). Specific phobias have been considered as conserved traits that enhanced survival during the human era of evolutionary adaptedness (Nesse, 1999; Bracha, 2006). Primary agoraphobia may similarly be traced back to the fact that humans relied on arboreality as a major escape response long after they diverged from chimpanzees. Homo sapiens expanded beyond its densely forested East-African indigenous niche into sparsely wooded habitats (savannahs and water-front dunes) only about 70 000 years ago. In sparsely wooded habitats, anxiety in wide-open spaces was arguably a survivalenhancing trait since opportunities for arboreal escape from large predators were limited (Bracha, 2006). These arguments may be relevant to psychiatric classification and contribute to the 'neuroscience research agenda to guide development of a pathophysiologically based classification system' emphasised in the research agenda for DSM–V (Kupfer et al, 2002).

If, as one of us (Bracha, 2006) has argued, the two types of agoraphobia have different modes of acquisition, there might be some clinical implications. Primary agoraphobia might, like other specific phobias, be especially amenable to virtual reality exposure treatment. In contrast, agoraphobia secondary to panic attacks can be classified in DSM–V and treated along with post-traumatic stress disorder (and other fear–memory–overconsolidation disorders, which are misclassified as specific phobias in DSM–IV–TR, e.g. hospital phobia, dentist phobia, dog phobia, bird phobia, and bat phobia).

Finally, contrary to myth, predictions based on brain evolution are eminently testable/falsifiable (Nesse, 1999). Some 30 such predictions are elaborated elsewhere (Bracha, 2006).

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Authors' reply We are grateful to Bracha et al for their interesting comments regarding primary agoraphobia as a potential evolutionary adaptation. First, we should clarify that we did not propose an additional diagnostic category; rather, we proposed that agoraphobia itself should be a stand-alone diagnosis in DSM-V (as in ICD-10), like other phobias. Subdividing what has historically been called agoraphobia may be useful, but we are concerned that clinicians and researchers are adopting Klein's narrower conceptualisation of agoraphobia as simply fear of panic in typical agoraphobic situations (Klein, 1980), without considering the possibility that a broader conceptualisation may be useful. Epidemiologists are increasingly adopting the definition of agoraphobia as 'fear of fear' (e.g. Grant et al, 2006), rather than the broader fear of difficulty in escaping, etc., in characteristic situations. As noted in our article, what has historically been called agoraphobia is strongly but not exclusively associated with panic, and, when the association exists, agoraphobia is not always preceded by panic.

The concept of an evolutionary basis for the development of phobias is not new (Seligman, 1971; Marks, 1987). Nevertheless, the reasons why people with agoraphobia develop fear and avoidance of particular situations remain important. Bracha et al suggest that fear of open spaces is an evolutionary remnant of primates' use of trees to escape from predators. However, although some people with agoraphobia are fearful of open spaces, the list of typical agoraphobic situations is broad (Marks, 1987). Thus, hypotheses with an evolutionary basis to explain agoraphobia will be expected to cover reasons why persons fear and avoid a variety of situations. Although it is difficult to 'prove' such hypotheses, we agree with Bracha et al that researchers can make falsifiable predictions that can continue to illuminate the field.

We agree that cognitive-behavioural techniques may be particularly important for persons whose agoraphobia is primary. However, many people with agoraphobia can benefit from such treatment, whether the syndrome is primary or secondary (Klein, 1980).

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