

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).

Grant, B. F., Hasin, D. S., Stinson, F. S., et al (2006) The epidemiology of DSM-IV panic disorder and agoraphobia in the United States: results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Clinical Psychiatry*, **67**, 363–374.

Klein, D. F. (1980) Anxiety reconceptualized. *Comprehensive Psychiatry*, **21**, 411–427.

Marks, I. M. (1987) Phobic and obsessive-compulsive phenomena: classification, prevalence, and relationship to other problems. In *Fears, Phobias, and Rituals: Panic, Anxiety, and their Disorders*, pp. 290–296. New York: Oxford University Press.

Seligman, M. E. P. (1971) *Phobias and preparedness*. *Behavior Therapy*, **2**, 307–320.

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doi: 10.1192/bjp.189.5.471

One hundred years ago

Remorse in melancholia

REMORSE – that most poignant emotion – has often been depicted for us with a wealth of imagery in words which raise it at once to the chief place in human suffering. It has been described as the biting of teeth which, once fleshed in sin, now tear the heart of the evil-doer, of whom it has been written that “terror “takes hold on him as waters and a tempest stealeth “him away in the night”; as the torment of a galled conscience; as “a still baking oven, another hell”; and as the overwhelming revulsion of feeling loosed by

The print and perfume of old passion,
The wild-beast mark of panther's fangs.

But, wherever described by writers unversed in modern psychology, it will be found that this exquisite moral pain is attributed solely to a realization of the shortcoming of some actual conduct, as compared with ideal

standards of behaviour, founded on logical concepts of good and evil – that is, to an intellectual judgement. This conception, implicit in most religions, is still held by the commonality of people, and is, further, firmly maintained by some important intellectualistic schools of philosophy, for whom such terms as “conscience,” “morality,” and “moral sentiment” connote simply and entirely rational processes or states. Opposed to this Kantian conception of morality are the views of those who maintain that moral reactions are determined, not only by the voice of reason, but by the effective or emotional character; that conscience is not an omnipresent, infallible guide to conduct, identical in all men, but that it varies in different people, and even fluctuates in the individual himself, according to the state of his mental and emotional poise, or what Janet has called the *niveau mental*.

By implication, the pain which accompanies a retrospective view of immoral acts should vary according to effective and physiological conditions. Now it is evident that in introducing here the word “physiological” one assumes a causal nexus between physiological conditions, such as, for example, intravascular tension, heart beat, excretory elimination and neurotrophic functions on the one hand, and the effective elements which contribute to the production of such moral feelings and sentiments as joy, anger, fear, sympathy and hate on the other – an assumption which the intellectualists, who regard the somatic phenomena as consecutive and reflex, would say simply begs the whole question. Notwithstanding, however, the inherent difficulty of analysing the emotions, it may be fairly stated, we think, that probably most psychologists, and certainly the majority of alienists to-day, are supporters of the

James-Lange theory, according to which, to quote the words of the former, “the bodily changes follow directly the perception of the exciting fact, and that our feeling of the same changes as they occur is the emotion.”

Without entering into this controversy, it is obvious that if by altering experimentally – say, by means of drugs – the somatic conditions it be found that the emotional reactions, moral pain, and so on, undergo corresponding variations, a very valuable piece of evidence in support of the somatic theory would be furnished. This task has been essayed by Dr. G. Dumas, who gives in the *Revue Philosophique* for October, 1906, an exceedingly interesting and suggestive account of his observations. These observations and experiments were made upon six patients, five of whom were melancholiacs and the other a psychasthenic, and all enduring the pangs of remorse for the sins, some venial and others grave, of their past.

Dr. Dumas shows most instructively the analogous origin of remorse in the sane and in the insane. In the sane, desire, overpowering all moral restraint, is followed by the satisfaction of possession, which is succeeded in turn by lassitude and attenuation, if not extinction, of the instincts of desire, thus making place for the triumphant return of the moral ideas. In the insane the process is the same, with this difference, that the instincts have become

obliterated not by satisfaction but by disease. “That which causes us in general to be indulgent to our past faults,” he says, “is the persistence of those instincts which made us commit them, and that which makes us severe is the enfeeblement of these same instincts”; or if we may quote Chrysostom, “who ever saw a covetous man troubled in mind when telling of his money, an adulterer mourn with his mistress in his arms? we are then drunk with pleasure and perceive nothing.” But a judgement, however severe, is not remorse, which is the physical and moral remorse accompanying the judgement, and this, according to Dr. Dumas is rooted in the body, not the mind.

To take one of the examples cited by the author. Marie, a passive melancholic, suffering, though not acutely, from remorse for repeated acts of infidelity to her husband, exhibited the following bodily signs of her disorder: A slow pulse, low arterial tension, infrequent respiration, flaccid muscles, and a diminished output of urea; mentally, a marked retardation of thought, and emotionally, a melancholic brooding over her past misdeeds. But after subcutaneous injection of caffeine the depression gave place to excitement, the pulse-rate rose from 54 to 90, the radial arterial tension from 8 cm. to 19 cm., the respirations from 10 to 18; the muscles regained their tone, the skin its warmth, and the elimination of urea was augmented. Equally

marked, however, was her changed attitude towards her *fantaisies extra-conjugales*. Formerly exhortation excited a veritable *crise de remords*; now, after injection, her judgement was devoid of severity, and it became impossible to elicit any expression of regret. In all the other cases, by similar measures, Dr. Dumas was able to relieve the mental pain and to rob remorse of its sting. Formerly, in less sophisticated times, the conscience-driven often sought to drown their sorrows in the bowl: nowadays, in this more scientific age, one has recourse to a *pi-quire* of caffeine! Further, Dr. Dumas was able to establish in his cases that for many years no self-accusation had afflicted them and that a period of tranquil depression had preceded the appearance of the physical enfeeblement which brought in its train the mental pain and remorse. Thus in many of these cases – Dr. Dumas does not say in all – it is not the judgement which evokes the remorse, but it is the physical and moral pain, depending upon an effective and functional depression, which tortures the subject, who, driven to seek its *raison d'être*, fastens upon some act in his past, often absurdly inadequate, as the cause of his distress.

REFERENCE

British Medical Journal, 10 November 1906, 1319–1320.

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doi: 10.1192/bjp.189.5.471a