

April 1996, 9-10

In favour of sociophysiology

I fully endorse your invited editorial for Biological Psychiatry - it sets the problem out very clearly.

A case in point arises from Leon's recent contribution to ASCAP (Dec, 95). He talks about "functional agonistic mechanisms that are flexible and efficient and generally serve to bring agonistic interactions to an end by leading to acceptance and submission". But where do we find the "normal psychology" of this sort of behaviour? Until we know the normal psychology, how can we deal with the abnormal? What Leon is describing can also be labelled "a switch from the agonistic to the hedonic mode". It is a very important process, and covers what is generally meant by reconciliation. I tried to deal with this topic recently (1) and there is very little "psychology" to go on. More has been written about reconciliation in monkeys than in man (2). In order to find discussions of human reconciliation behaviour, you have to read novels. Presumably the reason there is no normal psychology of reconciliation is that to reconcile you have to have a fight, and it is not ethical to get people to fight seriously in the laboratory, although it has been done (3). The same applies to ranking behaviour, and, until recently, to attachment behaviour. So all these normal behaviours whose aberration we think leads to psychopathology have not been described in any technical way.

As you know, I have tried to make a case for studying anathetic signals, defined as those signals which raise self-esteem (RHP or SAHP) in the recipient. These signals probably evolved from agonistic submission signals, but have become enormously elaborated in man, leading to flattery, adulation, praise, approbation and rituals of politeness. They probably have a sociophysiology, in that Michael McGuire's group found that submissive signals raise blood serotonin in vervet monkeys. Why have other labs not leapt on this promising bandwagon? The answer is, I think, because they have no conception of sociophysiology. That is why your promotion of the concept is so important. What is happening to the brain chemicals of Pavarotti when the audience is going hysterical with clapping? Probably much the same as to the alpha baboon when a subordinate presents its rear-end in submission. What progress in the evolution of anathesis!

Recently writing a chapter for Leon's forthcoming book, I made a list of the stages of "functional agonism". There were 14 of them! No wonder it can go wrong. The stages were:

1. Unacceptable situation
2. Conflict
3. Fighting
4. Losing
5. Receipt of unreciprocated blows/insults
6. Mental or physical pain
7. Fall in RHP
8. Involuntary Subordinate Strategy (ISS) triggered
9. Further fall in RHP (and other components of self-esteem)
10. Acceptance of unacceptable situation
12. Decision to yield voluntarily
12. Act of submission
13. Submission accepted by other
14. Reconciliation

If any one of the last five stages fails to occur, reconciliation is blocked, and the ISS continues to operate and then may be recognised as a depressive state. Depression

facilitates stages 10, 11 and 12 because it lowers RHP, resource value and ownership. This alters cognition in such a way that the person feels unworthy (of anything better than the unacceptable situation) and loses interest in whatever was being fought about, and feels they have no right to possess it anyway. Sometimes people are so stubborn and proud that no amount of depression will induce them to yield. A good example is Mr Trevelyan in Anthony Trollope's He Knew He Was Right. An earlier example is Satan in Paradise Lost. The first book of Milton's poem is like a textbook of dysfunctional agonism. Satan has been thoroughly defeated, and he knows that he has been defeated and that he will never win, but he still refuses to yield; and like in a dysfunctional human family he forms what might be called a cross-generational coalition with Eve. Moreover, what would have appealed to Jay Haley, this coalition is not talked about but is symbolised by an apple.

Sometimes third parties block submission. One of my patients had a dominating husband who objected to her going to visit her even more dominating mother. Her mother would not allow her to submit to her husband. So her ISS became extended and intensified and she needed treatment for depression. She only recovered fully when her mother died.

Sometimes the dominant partner demands something that the willing subordinate cannot supply. A husband may demand an enthusiastic sexual response, and his bullying because this is not forthcoming makes the wife depressed and even less sexy. A woman may demand that her husband stop fidgeting when he is unable to exert voluntary control over a tic. One spouse may insist that the other give up smoking.

Sometimes the patient may not know what to do to please the other. Sometimes there is nothing that they can do. If an older sister is bullying her younger brother because he is a boy, there is not much he can do about it. Likewise a wife who is bullied because her husband is bullied at work. The same may happen if a dominant spouse gets depressed for any reason - they become more irritable with the subordinate spouse. Sometimes, like the victim/victimiser interactions mentioned by Leon, it may be difficult to know who is responsible for the block, and then one should take a systemic view. At least one marital therapist, treating a woman with depression, gives the antidepressant to the husband (to take himself, not to dole out to the wife). You could mount a good controlled trial between treating the patient and treating the spouse!

These are all cases of blocked voluntary yielding, or blocked reconciliation, and represent one form of dysfunctional agonism. If I am somewhat repeating myself again, I apologise, but, like you with sociophysiology, I feel that it is a message which needs to get through. It should be respectable for psychologists to study things that are "too heavy" to reproduce in the laboratory. Perhaps this is what clinical psychologists are for. At least Paul Gilbert is making some headway in studying submissive behaviour.

I think that psychopathology can arise in the hedonic mode, both through the various forms of failure in hedonic competition giving rise to shame and guilt and so to depression, and also from dysfunctional attachment behaviour like leaving home problems, non-reciprocation of love and friendship, failure to gain sufficient closeness or distance or nurturing (4) and loss of a partner by death. As a rule of thumb, one could say that in the agonistic mode it is the presence of someone which creates the problem, while in the hedonic mode it is the absence of someone which is the problem. I think it is likely that psychopathology (in the form of depression) evolved in relation to the agonistic mode, in our reptilian stage when there was no hedonic mode, and that the occurrence of depression due to hedonic mechanisms is a secondary development, a sort of tinkering with what was available - and the features of depression can only be understood in the context of its evolution at the reptilian stage (e.g., the global loss of self-esteem).

Finally, I think agonistic and hedonic competition are separate things. In agonistic competition you are trying to intimidate a rival. In hedonic competition you are trying to make yourself attractive to an audience. It is only very rarely that you make yourself attractive by intimidating a rival. This does not, of course, apply to warfare. Prestige rightly goes to the brave soldier. But the agonistic behaviour we are talking about occurs between members of the same group and it is ritualised. You are more likely to gain prestige by losing gracefully than by winning - see, for instance, the fight at the beginning of Vanity Fair - one of the combatants gains self-esteem (RHP) from winning and the other gains prestige (SAHP) from losing well. Agonistic and hedonic competition are occurring in the same interaction, but at different logical levels.

These things are all grist to the mill of sociophysiology, and the fact that they are not receiving the attention they deserve is an argument to support your case for a new discipline.

1. Price, J.S. (1992) The agonistic and hedonic modes: definition, usage, and the promotion of mental health. World Futures, 35, 87-115.
2. de Waal, F. (1989) Peacemaking Among Primates. Cambridge: Harvard University Press.
3. Raush, H.L., Barry, W.A., Hertel, R.K., Swain, M.A. (1974) Communication, Conflict and Marriage. San Francisco: Jossey-Bass.
4. Birtchnell, J. (1993) How Humans Relate: A New Interpersonal Theory. Westport, CT: Praeger.