I would like to elaborate one or two of the points Paul Gilbert made in the July issue. Our general point is that the self construct which we know as self-esteem evolved out of reptilian RHP via (probably anthropoid) SAHP, but instead of replacing RHP and SAHP, selfesteem represents an elaboration of these constructs, which continue to exist in their own rights in their more primitive parts of the brain. When we are engaged in agonistic competition, our brains are calculating RHP and relative RHP. When we are engaged in hedonic competition our brains are calculating SAHP. At other times we may be influenced by an appreciation of ourselves that is not based simply on our competitive ability and then we think in terms of self-esteem. I think it is important to be clear about what changes and what stays the same when we move from the RHP to the SAHP system. I think following things stay the same:

- 1. A global rating of the self is required under both systems. In the RHP system it is needed to calculate relative RHP which is the decision to attack or submit. In the SAHP system it is probably needed to decide between a strategy of self-assertion and one of self-effacement on important social occasions.
- 2. Wide variation in level between individuals promotes social functioning systems. One might say that variation in RHP is needed so that people don't fight all the time, and variation in SAHP is needed so that people don't all speak at the same time.
- 3. SAHP is still connected to the yielding subroutine system. Just as a triggers a further fall in RHP and the other features of the yielding subroutine, so a fall in SAHP triggers a further fall in SAHP, and a generalisation of the fall to the whole self-esteem complex. Thus, for example, a female novelist, who prides herself on her writing as well as on her looks and her capacity for mothering, may be able to cope with a certain amount of catathesis in the form of bad reviews, with only moderate fall in her pride in writing and no fall in her pride in her looks or her mothering; but when faced with overwhelmingly bad criticism she develops a yielding subroutine and not only comes to have an exaggeratedly low view of her writing but also loses confidence in her looks and her mothering.

What has changed?

- 1. The signal of absolute RHP which was one of strength and designed to intimidate has become a display of attractiveness and competence. It is not a signal of SAHP (which would convey the message "see how respected I am") but a display of those qualities that elicit respect (anathetic signals) from others.
- 2. Signals of relative RHP have no equivalent in the SAHP system, because there is no dydadic eyeball-to eyeball confrontation, and therefore no particular rival with whom to compare one's SAHP. Under the RHP system there is an evaluation of one's own RHP with one's estimate of the RHP of a particular rival, leading to a decision of favourable or unfavourable relative RHP; the signal of favourable relative RHP is attack, and because it lowers the recipient's RHP it is by definition a catathetic signal; the signal of unfavourable relative RHP is submission, and because it raises the recipient's RHP it is by definition an anathetic signal. What is the equivalent output variable for SAHP? I suggested self-assertion versus self-effacement. But with what is SAHP compared? There must be a complex evaluation of the whole social situation, including the number of people present and their prestige, and the weightiness of the occasion. Then, as when question time comes after a lecture, one decides either to stand up and speak or remain seated. SAHP also determines the threshold of weightiness (of occasion, setting and company) at which conspicuous participation begins to be inhibited by social anxiety.
- 3. Under the SAHP system anathetic and catathetic signals are given in unison by the audience, and they contain no comparative component. Catathetic signals say "You are no good" rather than the "I am better than you" message of the RHP system. Likewise anathetic signals say "You are good" rather than "You are better than me". Whether these hedonic anathetic and catathetic signals evolved from the agonic ones of the RHP system, or whether they evolved from some other social signals such as those of parenting or courtship, we do not know and probably never will.

The emancipation of anathetic signals from the implication of "You are better than me" allows them to be very widely used between equals and even from leaders to followers. In fact, the boosting of followers' morale with anathetic signals is one of the requirements of good leadership.

- 4. Under the SAHP system there is no possibility of reconciliation to assuage loss of SAHP in the way that reconciliation assuages loss of RHP. Those whom society rejects are very much "out in the cold", even literally banished to Siberia! They may be reinstated after a proper show of humility but there is no ceremony to match the reconciliations described by deWaal in chimpanzees or by Kummer in baboons. There is a temptation to think that the SAHP system is somehow superior to or more humane than the RHP system, but one could argue that asymmetry based on RHP differences plus reconciliation is more user-friendly than asymmetry based on SAHP differences.
- 5. A society using the SAHP system is operating in the hedonic mode, because the members are not oriented towards agonistic behaviour. A society using the RHP system may be in the agonistic mode (in which fighting is occurring) or in the agonic mode (in which the members are oriented towards fighting but no actual fighting is occurring) or in the hedonic mode (in which any status differences which exist are not at issue, e.g. after reconciliation).