

The results of this astonishing team were that Data General developed one of the most famous series of computers to be designed, and in the face of powerful opposition from larger and much more established companies such as IBM and DEC. There can be no doubt that this group was indeed greater than the sum of its individuals. The documentation of how such creative groups work is rather poor. Possibly this is partly a result of the cult of the individual designer, which seems to be a more misleading than helpful image, and effective groups are probably therefore far more common than the literature might suggest. We have already made mention of the Ahrends, Burton and Koralek partnership who also seem to have built a remarkably creative group described by Richard Burton.

Over the years we have developed what might be called 'group territory': that is, a pool of common word associations, experience, ideas, and behaviour. We are agile in such territory.

Norms are often not developed without some pain. It is sometimes said that groups go through phases of 'forming', 'storming' and 'norming' before 'performing'. This is because norms to some extent must grow out of the collection of individuals. As each tries to impose his or her character on the group, conflicts are likely to arise before common perceptions of the group's goals and accepted norms develop. During this phase individuals often begin to acquire roles which appear from the outside as caricatures. It can be a strange experience to talk to a member of a group which also contains a fairly close friend. The group may well collectively see your friend in a very different light to you because of the role that has been established for that person in the group. These roles simultaneously often help to facilitate the business of the group and become part of the folklore which binds the group together. Thus a member may quite unjustifiably acquire a reputation as a heavy drinker, giving the group both a running joke and a ready-made excuse to adjourn, ostensibly on his demand to a place of informality.

'Leaders' are obviously valuable in a group which from time to time needs a direction imposed upon it. The dictatorial leader, who directs without consensus, or a multiplicity of leaders, can equally be quite damaging to the performance of the group. The 'clown', who apparently never takes matters too seriously, can be useful in defusing conflicts which otherwise might escalate into permanent rifts within the group. The 'lawyer' who prefers to study the rule book rather than develop the main creative thrust,

can paradoxically be most useful in design groups. In such groups the behavioural norms are unlikely to encourage great respect for conformity, regulation and bureaucracy. In general therefore the members are unlikely to be particularly interested in procedure or rules within which they must work. Group members who are so minded, therefore, can be useful in keeping a group on the road, although they are likely to be considerably undervalued by their colleagues. Some roles serve to flatter other group members: the 'dunce' for example, who is in reality much brighter than it appears but who makes others feel they contribute good ideas, or have outstanding talents.

Of course not all roles are productive all of the time, and the skill of managing such groups often lies in recognising the roles members are playing. I have used games to illustrate this to design students, who are likely eventually to become group leaders. In these games, mock meetings were held at which each participant was given a secret 'hidden agenda', and a suggested role through which this could be expressed. Another member was then charged with chairing the meeting whilst uncovering these hidden issues, to attempt to bring them out into the open, and at the end of the game to articulate the roles being played.

One of the problems with group norms is that they can become too powerful and too habitual, and as a result serve to suppress deviance and originality which, when combined with their tendency to encourage regression, can cause groups to lose their grip on reality. Richard Burton seems aware of this when he tells us that it is 'essential that the group should not become a small closed community' and warns that 'we see closed communities as seed-beds of fantasy'. Burton suggests two remedies for this can be found by either changing the group membership, or returning to the idea of deliberate role playing discussed earlier in this chapter.

We short-circuit many explanations within the group, and this makes it difficult for us to work with anyone who hasn't some working knowledge of group territory. To rely continually on common assumptions can be dangerous, not least because it can lead to stagnation, and so we welcome intervention, which can be either external or from within the group (in which case one partner acts as 'devil's advocate').

Burton's mature perspective on the way his group works is probably rather unusual, and it is more likely that many creative groups are rather less conscious of their performance and of ways of managing and optimising it. For this reason it seems likely that design teams or groups may have a natural life span. It is not surprising