Chapter V
Conversation and Design*

Ranulph Glanville
Professor of Architecture and Cybernetics, The Bartlett, UCL, London, UK

ABSTRACT

This chapter explores the relationship between the activity of design and conversation—particularly as developed in Gordon Pask's Conversation Theory. Design and conversation are seen as analogous, so that design can be understood as a conversation held, generally, with the self (via paper and pencil). I argue that design has been a conversational activity since long before we started exploring conversation, and that design education is, itself, also conversational. This being so, conversational approaches are already the norm in design education. The benefit of considering design and conversation together in an educational setting is not so much to improve one or the other, but to understand each better through the mirror the other provides. Other aspects of design (such as the social working in the studio) are also related to this conversational understanding. It is argued that design is a powerful, alternative and fundamental way of working and being in the world, not poor science, and that Pask's conversation theory helps us better understand both its power and its validity.

INTRODUCTION

Unlike the other chapters in this book, this chapter is not primarily concerned with the application of conversational understandings, in particular Gordon Pask's conversation theory, within a specific educational field (design). Rather, this chapter sets out to demonstrate how design, as an activity and in its teaching, has always been conversational—in Pask's sense. We should look, therefore, not so much for applications as for parallels. These parallels give added credence to each—to the activity of design and the value of the conversational theoretical approach.

The chapter therefore summarises both critical features of conversation theory (in so doing it may act as an introduction to other chapters) and many facets of the central activity of design[1], which turns out to be (and always have been) conversational in Pask's sense; demonstrating the parallels and introducing some particular examples, together with one or two possible extensions brought from conversation theory to design.

It is not argued that a conversation theoretical approach is only applicable to design, but that it has always been practised and been validated in this field—long before Pask invented it!

INTERACTION

In an earlier paper (Glanville, 1996), I argued that there are two themes to be found running throughout the work of Gordon Pask. The first is interaction; the second, drama. Paul Pangaro (1993) has written about Pask and the drama. I will here write about Pask and interaction, although the two are interdependent. I will not, however, extend into Pask's late work on what he called the "Interaction of Actors Theory". It is beyond the scope of this book which is concerned with the earlier "conversation theory": and, further, in spite of the claims of some, it is not at all clear what Pask was getting at, and how literally he was speaking, in this later work, which remained, I believe, incomplete and lacking proper articulation at his death.

Andrew Pickering (forthcoming) has been developing a thesis that the quartet of early British cyberneticians, W. Grey Walter, W. Ross Ashby, Stafford Beer, and Gordon Pask were involved in an ontological investigation: that their cybernetics grew from and was based in the actual construction of physical machines that provided the ontological foundation, and model, for both their world views and their cybernetics.

Pask is a particularly interesting example, because his machines were, I believe, different in basic conception and aspiration from the machines of the others. In particular, we can consider two such machines (or families), both of which were built in several versions, both of which worked and were used, both of which are still light years ahead of the competition, not because of their engineering or their computing power, but because of the sophistication of the conceptual frameworks within which they were conceived, particularly the understanding of interaction.

SAKI

Although SAKI (Self Adaptive Keyboard Instructor) was created after Musicolour, it is much more familiar. Anyone who has used a typing training programme such as Mavis Beacon Teaches Typing will be familiar with SAKI, even if it remains unacknowledged. The SAKI legacy is not in the entertainment aspect or the faux rewards; it lies hidden in the exercises.[2]

In its first versions, SAKI was a trainer for those who prepared the punch cards (Hollerith cards) by which computers were instructed and given their data, in early days. It was vital that these cards were accurately typed: one error and the whole stack of cards that formed the programme and its data had to be minutely examined to find the bug (there was no online programming and debugging in those days).

The cleverness of SAKI lies in the way the exercises are set in the training of the punch card operators, and, later, typists. Rather than continue with set exercises (as in, for instance, the Pitman method, familiar until recent times in secretarial colleges), SAKI measured various parameters and recalculated the exercises to compensate for weaknesses in the trainee's performance as revealed by these parameters. SAKI measured not only the accuracy of typing on individual "target" keys, but also accuracy in sequence and of sequences, themselves. It measured not only in terms of actual key depression, but the rhythm of typing: where there were stutters, gaps, rushes; and the pressure on the keys. Using all these, it would compute exercises that would set the trainee sequences of keys to depress that took into account far more than the individual keys depressions: a sort of gestalt of typing.

This was a quite radical way of looking at the training of keyboard operators, and the process of generating individual sequences of keys that served