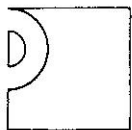


Ivor Catt

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COMPUTER WORSHIP

Ivor Catt 1973



Pitman Publishing

Computer Surrealism

Beyond the Fringe

Attempts to advance the computer art are badly confused by the lunatic fringe on the periphery of the industry. I have worked with five men who proved to be beyond the fringe, and my experience is probably typical. The trouble is that it is not necessary to run into too many of them in order to develop a strange uncertainty about one's bearings, an uncertainty about what is the object of the exercise and why.

Computers can send people barmy if they have no religion and are desperate for one, and also if they are desperate for recognition. The computer is today's philosophers' stone, the supreme object of alchemy. But whereas the philosophers' stone offered only wealth, the computer seems to offer spiritual aid as well. It generates a religious fervour in its adherents, and they show their fervour and faith by muttering their incantations, streams of computer-like terminology, in much the same way as the religious will go through ritual prayer to propitiate their gods.

The non-barmy leaders of the computer art cut a drab figure compared with the lunatic fringe, whom the public and even the financiers seem to prefer, with their broken English and outlandish clothes. These clothes sometimes go far beyond the traditional baggy trousers and thick glasses of the "top scientist", to purple velvet trousers and even hippie uniform.

The semantic confusion in the computer art is so bad that the madcaps make noises which sound much the same as the noises made by anyone else. And of course, the crooks join in on the same wavelength.

The Prodigy

The computer prodigy is another curious expression of computer worship, a focal point on which other computercrats may concentrate their admiration. In his evangelizing, he takes on the role of prophet in the dissemination of the new religion. Ascetic and selfless, he has a burning zeal for his vision of an all-seeing, all-knowing computer of the future, for which he willingly sacrifices his own social life and comforts.

The trouble with Prod was that he had never got himself sorted out. As a boy he had been small and gawky, and had failed to live up to his brother's example

at school. The computer was to redress the balance, to make him into a Somebody. He knew he had it in him. He would combine his brain, courage and vision in the cause. The result, a revolutionary fourth-generation computer, would capture the attention of the world. More than that, his machine would go to the root, the cybernetic mainspring, of society.

After college, Prod joined one of the big computer manufacturers. His first task was to gain control of the organization, so that he could use it to make his machine. His plan went well for a few years, his position and authority augmenting rapidly. However, he finally came up against the grand old men at the top three levels of the organization. They ignored his whizz-kid performances, brushing him off like a bluebottle. He couldn't fathom how they hung together so solidly. Perhaps it was their age, or could it be a fraternal or masonic bond?

Prod decided he would show them. Since they ignored his proposals, he would outflank them by setting up his own company, and make his revolutionary computer there. (Later on, to rub in the point, he might hire and fire some of the old guard who had obstructed him.) He would need help, or at least the financiers would think so. However, if he brought in capable, energetic computercrats at the start, they would be an ever-present threat to his control. So he selected as partners young men who, although they had enough solidity to impress the Wall Street financiers, lacked the expertise and self-confidence which would enable them to engineer a palace revolt. Confidentially, Prod called them his pawns.

This decision, to use shadow men rather than men of substance, was an important step, foreshadowing the way reality and image continued to diverge throughout the company's history.

Using the other three shadow founder members as a façade, Prod tapped some credulous, avaricious sources for financial support. Then they fiddled about with bits of electronics as sensibly as they knew how, in a garage.

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This was a necessary stage to develop the myth of the dedicated stalwarts working day and night in trying circumstances. Years later they admitted that the important thing was not so much to do anything very constructive, but rather to be sure to be there looking busy should a nervous backer drop in.

A computer is rather difficult to define, but very soon they had glossy brochures printed and also boxes full of computer-like hardware assembled. Prod had quite a flair for décor, and when the backers saw these plausible boxes, they were reassured, and continued to pay the costs.

A great deal of effort went into publicity. The press picked up with enthusiasm the idea of backroom boys working to change the world. Again, the idea was all-important, rather than the reality. It seemed a great idea that these young guys should make the State of Missouri a leader in high-technology industry.

Very early on, one of the founders, Trad, began to give trouble. He obviously didn't understand the business of image-building, and concentrated instead on designing a machine which was really workable. This upset Prod for two reasons, first because the machine was supposed to be the product of his genius alone, and secondly because, if they really came to grips with their serious design problems and limitations, their financial sources would find out and evaporate.

It was never quite clear whether Prod thought the computer could work without major redesign. Probably he never faced the question, which was hopelessly confused in his mind with other questions — whether the company image was right so that they could flush out more backers and customers, whether a palace revolt was in the offing, whether his own image was developing as it should, and so on. Lacking conventional religion, he also possibly believed that, if he willed it enough, his boxes of wires would miraculously turn into a very advanced, working computer. He was suffering from a sort of mixture of computer worship and self-worship.

Certainly he knew that the machine *had* to work, or at least the financial backers must never hear of a major setback. Many of them did not want to hear bad news anyway, since they regarded the exercise as one of building up a company to a size sufficient to threaten the I.B.M.'s of the business, who in self-defence would pay heavily to take it over. For this purpose, the image of a viable organization was quite as useful as the reality, and probably much cheaper.

The only thing to do with Trad was to kick him out. Now if the other two spineless founders had had more imagination, this could never have happened. During the battle, however, they took cover, fondly hoping that with one man out of the way they would each take a third of the profits instead of only a quarter, little realizing that their turn would come later.

With Trad out of the way, things settled down quite comfortably. They hired lots of staff, who assembled more and more boxes full of wires. To be fair, these boxes were more than pretence, and were very similar to the type of computer which had been in vogue ten or fifteen years before, but with the old methods and techniques dressed up in new names. However, the publicity was so good that most people thought it really was a fourth-generation computer rather than merely a throwback to the first generation. In any case, if anyone tried to point out its similarity with archaic methods, he was quickly dismissed as ignorant or jealous. Clearly, a new company would not have been started up with the help of leading Wall Street financiers, to exploit archaic techniques.

The pattern so far described is still continuing. Many able computercrats have been hired, ostensibly to improve the product but really to improve the image, only to be fired and discredited, ostensibly for doing nothing but really for insisting on correcting the product's weaknesses. During the last three years the company has hired, discredited and fired five marketing managers, three chief engineers, four servicing

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managers, and its voracious appetite continues unabated.

The Wheeler-Dealer

Woolley is another of the fringe characters I have come across, whose story is not uncommon. Although he had worked for a number of years in the radio and television business, reaching quite a high position, his wife, relatives and social acquaintances remained unimpressed. He was not taken seriously in the culture stakes by the literary and musical groups that he tried to attend, neither was he held in esteem in the scientific community, among university lecturers, heart-transplanters and nuclear physicists. This seemed to him unjust, in view of the great efforts he had put into grasping his difficult speciality, electromagnetic theory and practice.

Woolley felt that he needed some edge, something which would enable him to claim attention and approval. The computer beckoned; it seemed to have all the elements needed to support his ego and complement his electronic background, even though it was risky at such a late stage in his career. He felt well pleased when he managed to persuade his company to take over a computer manufacturer and was put in charge of it.

It was unfortunate that he lacked the deep understanding of the computer art of those now below him. However, he thought that perhaps his ignorance would be an advantage, enabling him to see beyond the narrow mental restraints resulting from too long, too close association with computers. His conversation was noticeable for its freedom and imaginativeness, indicating either deep knowledge or else great ignorance of practical limitations.

For Woolley, the computer scene had to be successful, or his career and image might collapse in ruins, and his wife take up with someone more impressive. If he could gain the coveted title "Mr Cybernation" or "The Father of Automation", all would be well, and he would take his

place in history. After all, what had Von Neumann, "The Father of the Computer", really achieved?

When his company got cold feet about the continued losses of its computer division, Woolley knew where his interests lay. He concocted a rare brew of figures prognosticating that a market boom was near, and their product would meet the demand. All they had to do was to stiffen their resolve for a little longer.

This minor piece of subterfuge proved to be Woolley's first step down the slippery slope to disaster, because, as the situation worsened, the latest computer developing serious teething troubles in production and the market continuing to sag, he felt forced to continue to paint a rosy picture for fear that an investigation might reveal the bias in his first reassuring report. But it could not last for ever. Finally the division was closed down and Woolley was laid off, with the rest.