THE RISE OF CYBERNEWSPEAK

Slava Gerovitch, *From Newspeak to Cyberspeak: A History of Soviet Cybernetics.* Cambridge, Mass: MIT Press, 2002. Pp. xiv + 369. £25.95, US$37.95 HB.

By Andrew Pickering

The growing interest in the history of cybernetics has so far largely focused on its early days in the US, the 1940s and 1950s: Norbert Wiener, Claude Shannon, Warren McCulloch, the Macy conferences. That cybernetics enjoyed more success institutionally on the other side of the Iron Curtain is well known, but Slava Gerovitch's book is the first to tell us at any length about how that occurred, covering the decades from the 1950s to the 1970s. It is a valuable addition to the literature.

Gerovitch distinguishes three phases in the history of Soviet cybernetics. In the early 1950s, towards the end of the Stalinist era, cybernetics was trashed as "An American Pseudo-Science" and "cyberneticians were branded 'semanticist-cannibals' " (p. 94 – what a splendid insult!). This despite the fact that a plausible ancestry for cybernetics could readily be constructed from the work of Soviet scientists and mathematicians, and that almost nothing about cybernetics was then known in the Soviet Union. Gerovitch argues that this was not the result of any centrally organised campaign, but rather the upshot of an almost randomly generated ritual of ideological denunciation of a type that was ubiquitous in the period. All sorts of sciences were liable to be condemned for their inconsistency with the official philosophy of dialectical materialism, condemnations always articulated in the formulaic terms that Gerovitch calls Newspeak – 'mechanist', 'idealist', 'formalist', etc. Cybernetics just happened to end up on the wrong side of the ideological gun.

The second phase began in the second half of the 1950s, with Kruschev's 'thaw' in the Cold War. Having been denounced in the language of Newspeak, cybernetics was now seen as the antidote to it, providing a cool, clear, scientific – non-ideological – language free of the politically charged, slippery valencies of its predecessor. The digital electronic computer was the material icon of cybernetics, and the computer could not lie. The new jargon of Cyberspeak thus took the place of Newspeak,

a jargon in which ideological correctness became irrelevant and, instead, words like 'feedback', 'information' and 'control' served as switch-yards between the sciences of the human, the animal and the machine – 'legitimacy exchanges' as Geof Bowker once put it.

In the early 1960s, cybernetics "was written into a new Party Program and hailed as a 'science in the service of communism'" (p. 4) but, as Gerovitch tells it, this moment of ascendancy was also the beginning of cybernetics' decline. Its post-Stalinist reforming impulse was blunted as it made its way into the institutional landscape. Ambitious plans for cybernetic control of the Soviet economy, for example, were eviscerated by the existing institutions and evacuated of their distinctive content. In the process, Cyberspeak became the *doppelganger* of its nemesis, an empty vocabulary for praise and blame that Gerovitch, perhaps getting carried away, calls 'CyberNewspeak'.

As should be clear, following the lead of Geof Bowker and more recently N. Katherine Hayles, Gerovitch is committed to reading the history of Soviet cybernetics through the 'prism' (or sometimes the 'lens') of language, as a history of a universalising discourse, though it should be noted that he couples this interestingly with an institutional history of cybernetics and computing, tracing the footholds that cybernetics gained on the Soviet map, most notably the Council of Cybernetics directed by Aksel' Berg, which functioned as an umbrella organisation for all sorts of cybernetic initiatives.

One unfortunate side effect of this genre of discursive and institutional history is, of course, that the content of the science tends to disappear in favour of a weary cynicism. In the fog of the floating signifier, *plus ça change plus c'est la même chose*. I do not want to exaggerate this point – Chapters 5 and 6 of Gerovitch's book do begin to sketch in the substance of the Soviet cybernetic approaches to biology, physiology, linguistics and economics. Nevertheless, I am reminded of a quotation from one of the leading lights of Soviet cybernetics, Aleksei Liapunov, who urged his readers to "pay attention not to the 'formal definitions' but to the 'concrete content' of research" (p. 250). Much of the historical interest of cybernetics lies precisely in that 'concrete content' – the strikingly unusual machines that cyberneticians built, for example, or the distinctiveness of their approaches to understanding the mind or economics. After this first magisterial survey, I hope Gerovitch's next book will tell us more of the details.

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