Cybertextuality and Text Analysis

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A cybertext is any oral, written, mental, or machine-generated language act viewed from within cybernetics, the study of communication and control in living organisms and machines, a theory invented by the American mathematician Norbert Wiener (1894-1964). We author cybertexts by steering or governing their making according to the persistent feedback we receive from all those who observe them. Insofar as computing humanists use software to analyze both literary works and machine-made texts like concordances, they may be said to owe something to cybernetics. Our analytic programs simulate part or all of the messaging and feedback process, some acting as creators, others as reader-listeners or noisy channels. The basis for our software is ultimately how language cognition works. Given that we create most of our own oral and written utterances unselfconsciously, we first encounter them as strangers and observers, not as authors; and our observation always begins with modelling the sense data we have received from ourselves. These mental models act as feedback and help shape the next sentences we make. Cybertextual cycles, each an unselfconscious utterance and a partially conscious modelling and response to it, steer our composition even if no one but ourselves is present to reply to what we utter.

I propose that cybertextual cycles, enacted in cognition, partly shape the idiolect or personal style exhibited by the texts we make. We use text-analysis tools today to detect the idiosyncratic patterns of flat, atemporal documents, but all texts, being cybertextual, unfold in time. An author's silent feedback to his own utterings pulses wave-like in the emerging text, but how can these characteristic waves, that is, the cybertextual style, be recovered from flat documents? Usability software offers some tools for this purpose, as do keyloggers, protocol analysis, and word-processing programs. One way to advance text-analysis methodology in a post-concordancer age is to investigate cybertextual style by recording and analyzing the behaviour of living authors as they write. Usability software like *Morae*, because it externalizes working memory, can capture the tic-tocs of cognitive style.

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