Chapter 5
Knowing and Living as Data Assembly

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ABSTRACT

The environment of information affluence and media convergence characteristic of our time is constructing a comprehensive living and knowing habitat that induces the framing of life issues in terms of data availability and the concomitant data permutations this encourages. It also promotes the understanding of knowledge as data assembled into meaningful categories and structures by algorithmic reasoning and statistical techniques. Placed in a wider historical purview, these trends attest to the prominence which cognition qua computation is acquiring and the concomitant retraction of perception as an axial principle of everyday conduct tied to palpable reality and situated encounters.

PERCEPTION, COGNITION, COMPUTATION

Human living and knowing are bound to waver between what is experienced through the senses (the sensible) and what is or can be thought (the intelligible), including counting and calculation, without immediate reference to palpable reality. Perception is a vital and inseparable component of living and, though shaped by culture, it is firmly anchored into the human sensorium. Yet, living and knowing always transcend the givens of perception and entail cognitive operations of an abstract nature that may lack ostensive reference (Cassirer, 1955; Flusser, 2000; Foucault, 1970).

Integral as it is to all human knowing, however, the perception/cognition pendulum exhibits cultural and historical diversity while the trade-offs it entails are differently refracted across the variety of practices that make up human societies (Jay, 1994; Kallinikos, 2011). And yet, a case could be made for the fact that the diffusion of formal methods...
of knowing in modern times has, in one way or another, systematically favoured abstract reasoning at the expense of the primordial dependence of living on information provided by perception and situated involvement (Borgmann, 1999; Jay, 1994; Cassirer, 1955). These observations acquire particular importance these days, as the result of the diffusion of computational models of cognition that inevitably accompany the growing involvement of information and information artefacts in domestic and institutional life.

In what follows I put forth the claim that the relatively recent developments that coincide with the pervasiveness of information and data tokens in most walks of living further perturb the balance between the sensible and the intelligible and accentuate the preponderance of cognition over perception. Essential strips of reality are increasingly mediated and acted upon by means of information and data tokens, produced and disseminated by technological means. In thus according data-driven correlations and pattern recognition resulting from bottom-up processes of data manipulation a central place in living and knowing, computation drives cognition away from the associative gestalts of perception, sensation and intuition, and the experiential knowledge built on observation, trial-and-error and world acquaintance (Ayres, 2007).

While recounting some of the earlier worries concerning the impact of computing on human practices (Dreyfus & Dreyfus, 1986; Winograd & Flores, 1986), the claim I put forward is not precisely concerned with the ill-fated prospects of experientially-based knowledge and skills that have commonly been subsumed under the label of tacit knowledge. The problem I seek to pinpoint is of a rather different nature, even though it may have far reaching implications for expert knowledge and the ways it is acquired and exercised (Ayres, 2007; Shirky, 2008). The environment of information affluence and media convergence that characterizes our time is constructing a comprehensive living and knowing habitat that stretches far beyond the work and professional settings in which information technology has commonly been studied (Kallinikos, 2011; Zuboff, 1988). This environment differs too from the early internet (Dreyfus, 2001; Turkle, 1995), most notably by its remarkable ability to deeply penetrate the social fabric and increasingly induce the framing of life issues in terms of data availability, and sense making based on data, assembled into meaningful categories and structures by machines.

In the rest of this paper, I try to provide reasons in support of this claim. Next section describes the importance, which data capture and data analysis assume in contemporary life, and the shifts in the practices of knowledge development and sense making these trends bring about. Following it, I endeavour to show how the proliferation of data tokens combines with the diffusion of computer-based devices across the social fabric to construct new forms of experience, in which a wide spectrum of life issues from trivial (e.g. shopping on the internet) to non-trivial ones (e.g. profiling and identity making) is increasingly framed in cognitive terms. In the last section, I revisit the double bind of the sensible and the intelligible and the intricate relation of cognition to perception, discussing some of the problems and paradoxes that are caused by the developments I refer to.

**THE ANALYTIC REDUCTIONISM OF COMPUTATION**

Data availability is the distinctive mark of our age and its holy grail (Ayres, 2007; Kallinikos, 2006). If only available, data is assumed to be able to tell us of so many things: for instance, who we are, what exactly is the nature of our preferences beyond our delusions or how our body feels even if our awareness fails to register it; how our society and organizations work; what friends to choose and what communities to join; what travels, mortgage, or insurance to undertake this year; what flights may be cheaper today; what stocks