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ABSTRACT

This paper sets out the first outline of a research into the relations between *signal*, *control* and *spatio-temporality* — the concrete entanglement of abstract space-time and social reality and of abstract machines and social bodies. More specifically, it seeks to explicate how signal processing technologies and respective abstract models and logic are incorporated into spatial practice, into the production of global networks of so-called 'smart' cities in particular. Although the implications of electronic media are widely discussed in the current discourses on space, the actual problem of control and the social realities produced by it seem to remain just partially addressed. First, the increasing dependency on signal processing machines and transmission networks, coupled with the decrease in clarity of their inner workings, which is in part inherent in their expanding complexity, may create yet unknown types of normalization and exclusion. Second, signal processing technology significantly modifies our sense of space-time. It allows for seemingly unconfined communication, navigation and localization (which in turn changes habit, perception and lived space-time) but simultaneously enables spatially diffuse or ubiquitous forms of centralized control. Last, the discrepancies between different theoretical and philosophical angles (in broad terms: new materialism and dialectics) seem to distract attention away from the problem of control and its implications. This trans-disciplinary research is situated at the intersection of architecture and sonology. The methodology is to conduct a theoretical study intertwined with research *through* sono-spatial practice, which primarily focuses on sonic space and the agency of signal. Practice-driven research allows for the concretization of abstract models into spatio-temporal configurations and sonic manifestations (i.e. making them audible by means of sound installations, compositions and spatial designs), interaction with listeners and context as well as thorough engagement with the machine. The theoretical research focuses on two distinct and seemingly incompatible angles that correspond to the aforementioned discrepancies. On the one hand, it explores the *technicity* of signal processing. For example, how these technologies operate, convolute and develop over time. On the other hand, it critically analyzes how these technologies and techniques are incorporated into the *production* of space, into politico-economic practices and architectures of control.