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# Data Work Management and the Procedural Rationality of AI

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## Abstract

This proposal focuses on the relationship between collective knowledge and data work. The analysis will be conducted through the examination of the guidelines embedded in tasks designed for AI training and fine-tuning, as well as through direct observation of the algorithms' production pipeline, carried out by working firsthand on different data work platforms. The process of knowledge encoding within AI through data work is always mediated by detailed and prescriptive guidelines, which ensure consistency between the output of human labor and the so-called "ground truth" of the model – a concept that reflects the epistemic perspective of practitioners embedded into the algorithm.

Drawing from contemporary debates on algorithmic control over workers, I first seek to highlight that the production of algorithms itself entails a peculiar arrangement and command of living labor. In data work, the disciplinary mechanism is primarily based on the control exerted over workers through the evaluation of their accuracy rate, assessed based on their compliance with guidelines. Data workers are considered essential to align AI with human knowledge but not entirely reliable in executing strictly codified tasks: thus, guidelines function as a form of pseudo-code designed to render workers as "rational" as machines. This interpretation suggests that the organization of data work is linked to a specific view of procedural rationality that dominates the field of AI, in which human information-processing activities are regarded as codifiable and scalable.

The broader aim of the proposal is to show that encoding collective knowledge in AI models requires aligning human labor with the epistemic perspectives embedded in machines – a goal actively pursued in data work management through disciplinary methods. Furthermore, I argue that the concept of algorithmic control is best understood in relation to the idea of procedural rationality, which shapes the development of AI and is reflected in the organization of data work. The construction of algorithms that reproduce human knowledge within a supposed machinic rationality entails the need to reduce collective knowledge to a codifiable set of assumptions and plans through the rationalization of labor. This suggests, in turn, that data work should not be considered a residual externality of AI but rather a structural replication of its principles applied to labor management. Thus, I will suggest that challenges to the AI production pipeline should engage simultaneously on both the material and epistemic levels, which this analysis seeks to prove as deeply intertwined.

**Keywords:** Data Work, Artificial Intelligence, Procedural Rationality, Collective Knowledge

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