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Title:	Models in Knowledge Production: Mayukh Chakrabarty An Interdisciplinary Analysis of Science, Society, and Mathematics
Authors:	<a href="#">Chakrabarty, Mayukh</a>
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Abstract:	The thesis attempts to analyze models as a particular class of representation in natural and social sciences. Their uniqueness arises from a structural correspondence between the model and its target, defined in particular contexts. We attempt to (i) sketch a history of models in knowledge production and (ii) understand how they function. Models are employed to perform descriptive and prescriptive roles; we explore the extremes where description and prescription overwhelm one another, respectively. We use modeling of the atom and that of the economy to elaborate upon our framework. We move into insurance modeling as a central example in our thesis. We focus only on the aspect of risk transfer marked by contractual obligations. In the four-hundred year of its history, we see it evolve from striking a bargain to a mathematically robust enterprise. The evolution happens in conversations between disciplines such as mathematics, astronomy, economics, and sociology under the larger context of statecraft and population management. In conclusion, we identify two directions of research going forward: to develop a comprehensive history of models and to write the story of the formal insurance sector in India.
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