Preface

This book contains papers that were presented at the fifth in a series of biennial conferences that brings together scholars working on technical change from different disciplinary perspectives. The theme of the conference was *Demand, Markets, Users and Innovation: Sociological and Economic Approaches*.

Over the last thirty years, the economics of technological change has discussed the relative importance of ‘demand-pull’ and ‘discovery-push’ as prime-movers of innovation; historians of science have modified internalist accounts of the development of scientific theories to bring in external social, economic and political influences; and in the sociology of science, technology and innovation, theories of social shaping or social construction have challenged technological determinism.

More recently, various approaches have proposed ‘hybrid’ theories that allow demand-pull and discovery-push, or social, economic, political and technical forces, to interact, or, in the case of actor-network theory, have attempted to cut across the debate by following human and non-human actors and privileging neither.

If an innovation is something that is both technologically novel and has neither been the object of a commercial transaction or in some other way has become incorporated into the social fabric, then (by definition) it will not be successful if there is no demand for it – if users do not want it. Understanding user needs is now seen as one of the important factors in the success of innovation and it is one of the *raisons d’être* of market research. But while we know how important demand, or understanding user needs, are in innovation, that does not tell us much about how they are actually detected or ‘constructed’ by innovators, if indeed this is a precursor to their being incorporated into innovations.

Some firms find out what users want (or do not want) only when their innovation fails. Some innovations are commercialized by entrepreneurs who ‘just know’ what the market needs, or make assumptions about what customers want (often on the basis that the market is made up of people like themselves). Sometimes they are astonishingly successful – sometimes they get it completely wrong. In some cases elaborate exercises in market research and/or user trials are put in place. Where innovations are radical, firms

probably will not be able to forecast the likely demand for them with any accuracy, and users may not know in advance that they have needs which the innovation might satisfy. In such cases an iterative process involving lead users and early adopters may take place, in which technology and markets are simultaneously constructed, in interaction with each other.

The papers selected explore these themes and present some original research in these areas. The editors are grateful both to those who presented papers, and to those who have revised them in light of the discussions and comments made.

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