

BOOK REVIEW

Handbook on Alternative Theories of Innovation Benoît Godin, Gérald Gaglio and Dominique Vinck (eds) (2021), x+418pp., £190, Edward Elgar, Cheltenham, ISBN: 978-1-78990-229-7

It is unwise to judge a book by its cover. Even so, the cover of this handbook is instructive. The image on the front of the hardback edition is an impressionistic depiction of spinning wheels that look rather like cogs. The cogs are only loosely connected and there are bits of unattached material floating between the spaces. The publishers have included an explanation of the cover image (p.x): the spinning wheels symbolize the several theories (of innovation) considered in the handbook. Some dominate, but not completely. They cover a lot, but not everything. Everything is unfinished and the whole system does not work together without some friction. There is debris (unattached stuff) floating around.

On the back cover, the publishers have included a promotional statement from Peter Weingart:

The Handbook truly deserves its designation as such. It provides a comprehensive and multi-faceted overview of different conceptual meanings, theories, usages and interpretations of ‘innovation’. Far beyond the most familiar association with technology and industry, the reader is introduced to ‘social’, ‘responsible’, ‘sustainable’, ‘disruptive’ and other variations of innovation, their respective rationales, theoretical underpinnings, philosophical and policy implications. This collection of contributions by well-respected authors is a fascinating and unique attempt to capture the many paths covered by ‘innovation’ as a travelling concept.

Just inside the cover, facing the title page, is a dedication to the co-editor and inspirer of this editorial project, Benoît Godin, who passed away in January 2021. Godin, who was a professor at the Institut National de la Recherche Scientifique in Montréal, made a significant contribution to the field of science and technology studies. He was a historian fascinated by the historical context of innovation. Godin’s shaping influence is reflected throughout the handbook.

Given the breadth of the topic and its centrality to the human condition, the range of issues covered in the handbook suggests that innovation is at once the most ethereal of ideas and at the same time the most commonplace of experiences. The historical and philosophical approach adopted in this handbook suits the subject matter perfectly. Consequently, this handbook’s strength lies in its ability to expose unexamined assumptions associated with innovation.

There are 22 chapters in the handbook, organized into seven parts. The editors establish the scope of the handbook in the Introduction by addressing key questions suggested by the title. What do we mean by ‘theories’; what do we mean by ‘alternative’; and what do we mean by ‘innovation’? It is argued that theories of innovation fall into two groups. The first contains comprehensive theories that address the constitutive concepts of innovation, such as innovation processes and systems. The editors suggest that it is a matter of controversy whether these comprehensive theories exist in the literature. Everett Rogers’s *Diffusion of Innovation* of 1962 is singled out as one work that might fit the bill, but it is the only one mentioned. The second group consists of ‘a voluminous number of conceptual frameworks, approaches, models and empirical surveys, whose contribution to theories is often modest. ... Theories of innovation are, to many extents “restricted” or local rather than comprehensive’ (p.3). Often they are discipline-focused or address a single aspect of innovation.

It is evident that while establishing a working concept for ‘theories’ is important for framing the scope of the book, the editors are at ease with a degree of flexibility. They note that formal

theories are not the whole story. ‘Before (academic) theories, not to mention folk theories, there were theories’ (p.3). Adding the adjective ‘alternative’ to the title is central to the rationale of the handbook, naturally giving rise to its subject matter. The editors refer to these ‘alternative’ theories as frameworks that ‘positioned themselves as a corrective or repair to the mainstream kind of innovation and its study, namely the industrial and technological’. Finally, ‘innovation’ is explained as having two uses. First, there is novelty: new ideas, things, behaviours and practices. Use does not end with novelty. Second, innovation also encompasses the introduction of something new into practice. The editors suggest that it is purpose that distinguishes innovation from change: ‘Innovation is action’. With this series of interpretations around the key words in the handbook’s title, the editors claim that mainstream researchers (those active in the field of innovation studies) ‘are relatively immune to the new discourses and to new theories, to the extent that are off the beaten track’ (p.3).

The editors sought contributors who took as their focus the search for an alternative way of understanding innovation. As a result, many are young and outside the core body of researchers in this area. The majority of the 28 contributors to the handbook are based in European institutions, with exceptions from China, Brazil, India, Canada and the United States. This speaks volumes for the geographical location of scholarship required to bring the handbook into existence. Contributors were set the task of addressing three unexplored aspects of innovation and theories of innovation – the historical, the conceptual and the critical. The result is a consistently high standard of scholarship throughout. The extensive bibliographies provided at the end of each chapter are impressive and are valuable sources of further reading for those who want to deepen their knowledge.

Part I (‘Visions of innovations’) has two chapters. That by Godin himself has the intriguing title of ‘Innovation theology’ and explores the genealogy of innovation, tracing linkages through religion and theology back to the English Reformation. Godin’s work shows how the past influences the conceptualization of innovation in the present. Van Lente’s chapter deals with imaginaries of innovation and explores the realm of symbolism and how images of the future help to guide and sustain innovation. Not surprisingly, the imaginaries (e.g., narratives, graphs, icons and artefacts) play an ambiguous role, often frustrating the search for improvement.

Likewise, Part II (‘Theorizing innovation in the twentieth century’) has two chapters. A further chapter from Godin deals with a more recent period (the past 100 years) than the last, pointing out that notions of innovation have not always been closely aligned to the industrial and technological versions that dominate the academic literature. Feller’s chapter addresses economic approaches to industrial innovation. It is here that the core of the dominant, or rather that which is not alternative, is examined. Students of the economics of innovation will be familiar with the terrain covered: sources of invention; the diffusion of innovations; economic growth; and income inequality. Feller concludes that it remains an open question whether alternatives substitute for, rather than complement, economic approaches (p.72). Even within economics, there are many different alternatives to innovation.

Part III (‘Alternative approaches to innovation’) comprises four chapters. Edwards-Schachter covers the period 1950–2019, developing a semantic map of around one hundred innovation types (e.g. cultural, environmental, open, etc.). Three prominent types – social, sustainable and responsible – are examined in more detail by Schubert (chapter 6), Boons and Batista-Navarro (chapter 7) and Schomberg (chapter 8) respectively. Each of these chapters examines how innovation has had to accommodate developing societal themes and trends.

Part IV (‘Alternative types of innovation’) consists of six chapters. What distinguishes an ‘approach’ from a ‘type’ appears to be its level of specificity. Like the alternatives discussed in the previous part, the types discussed in this section are also alternative contenders. Included here are chapters on: user-centred innovation (chapter 9, Tanver); open innovation (chapter 10, Brandão); disruptive innovation (chapter 11, Cressman); common innovation (chapter 12, Swann); grassroots innovation (chapter 13, Sheikh and Kumar); and frugal innovation (chapter 14, Cholez and Trompette). Teasingly, Swann notes that ‘the practice of adding an adjective before the word innovation has become quite common in recent years’ (p.203), the ‘X-innovation’ that Godin had noted

in 2017 (p.203). Swann sees this demarcation process as similar to a taxonomy that distinguishes one species from another, pointing to both similarities and differences. Standing out from all the others in this section is ‘common innovation’, that which is carried out by the common man for his own benefit (p.197). Swann claims this is the oldest sort, providing for the needs that are neglected by industrial innovation in a modern society. Information, knowledge and learning pervade all of the various approaches and types of innovation covered in Parts III and IV.

There are three chapters in Part V (‘Supporting innovation: reframing the instruments’). The theme is essentially innovation policy and related policy instruments. Bagattolli (chapter 15) explores narratives of X-innovation in international organizations, such as the OECD. She finds that there is a plethora of X-innovation terms in reports from international organizations in recent years. However, their meaning is vague and does not really stray far from the dominant logic that connects innovation with industry and economic development. Transformative innovation policy is the theme explored by Grillitsch, Hansen and Madsen in chapter 16. They point out that what appears to be a new term is not necessarily so. Transformative innovation has deep historical roots. Finally, Perani (chapter 17) looks at innovation from the perspective of statistics. The chapter focuses on the efforts of the OECD and the European Union to define an international standard for business innovation statistics.

Part VI (‘Immune disciplines and forgotten theorizations’), consisting of three chapters, explores how the concept of innovation has infiltrated domains that are nominally outside the realm of innovation studies. Rähme (chapter 18) looks at how innovation has been interpreted in religious studies. Ufer and Hausstein (chapter 19) explore the concept of innovation within the discipline of anthropology, and Blok (chapter 20) provides philosophical reflections on the concept. The first two chapters in this part provide interesting historical perspectives on how the innovation concept influences disciplines that are, at first glance, very different. Blok’s chapter challenges the techno-economic paradigm widely associated with innovation. One of his findings is that established theories of innovation in economics and business administration often focus on innovation outcomes while they omit reflections on the nature of the innovation process (p.364).

Part VII (‘Theorizing the theories’) contains but two chapters. Laurent (chapter 21) wishes to open up spaces for debate and reflection about innovation, proposing three ‘styles of critique’ that are associated with theories of innovation. One of these critiques relates to the ideology of innovation which confronts myths with established facts, which in turn provide a basis for reform. Finally, Gaglio and Vinck (chapter 22) look at collateral innovation. Collaterality is ‘a series of occurrences and ramifications arising from but different from an initial innovation process and which thereby multiply it’ (p.388). This chapter develops the concept of collaterality, arguing that case studies can make a valuable contribution to theory building.

The *Handbook on Alternative Theories of Innovation* makes a valuable contribution to the broader historical understanding of innovation. Unfortunately, as the editors admit, the ‘alternative’ concept is too broad to encompass the full array of theories, concepts and disciplines that could have been included. For instance, knowledge and information processes underpin nearly all the innovation concepts and theories addressed and more could have been done to make these themes prominent, if not explicit. Neither knowledge nor information manages to make its way into the index. The inclusion of a chapter dealing specifically with knowledge, information and technology would have been entirely justified. Nevertheless, what has been included is sufficient to raise questions about what is often taken for granted in innovation studies. The *Handbook on Alternative Theories of Innovation* should be essential reading for all students and scholars of innovation.

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