expectations for theory acceptance (213), and that Reichenbach who allegedly denied any logic of discovery in fact developed a normative logic of discovery himself (22). None of these passages contain a footnote to the respective works; neither Avicenna nor Reichenbach are listed at all in the bibliography.

I recommend *The Laws of Scientific Change* – due to its accessibility – to undergraduates, graduates, and – due to its original and ambitious content – to researches as well. This does not only include philosophers of science but also, I emphasize, historians of science who will find numerous suggestions for research questions and projects throughout the book. The only minor lacuna for advanced scholars who are used to dense argumentations will be that one or the other summary of rather simple points will appear somewhat too redundant. Nonetheless, this book provides an insightful theoretical and historical look on scientific change and the history of science more generally.

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Cappelen, H. 2018. *Fixing Language. An Essay in Conceptual Engineering*. Oxford: Oxford University Press. 224 pp. ISBN: 978-0-198-81471-9.

Fixing Language is a book about an activity nowadays known as 'conceptual engineering'. In Cappelen's own words, conceptual engineering is the "process of assessing and improving representational devices" (3). Herman Cappelen is not the first author to theorize about this process, but his monograph is the first book-length contribution to this young and quickly growing field of research. It offers a comprehensive means to engage with the literature about conceptual engineering – a literature which is not always referred to as 'conceptual engineering', but sometimes also goes under the labels of 'Carnapian Explication' (Carnap 1950), 'Ameliorative Analysis' (Haslanger 2006), 'Metalinguistic Negotiation' (Plunkett & Sundell 2013, Plunkett 2015), or 'Conceptual Re-engineering' (Brun 2016). It is one goal of *Fixing Language* to show that these different theories are theories of a common phenomenon, whose proper recognition has major consequences for philosophical methodology. Another goal of this book is to present and defend a particular view about conceptual engineering. The details will be discussed below, but here are (some of) Cappelen's main theses: (i) Perhaps despite appearances to the contrary, meaning change is a process which is for the most part inscrutable and beyond control; (ii) contrary to Peter Strawson's famous critique of revisionary projects in philosophy, it is possible to preserve a topic through semantic revision; (iii) conceptual engineering does not actually involve concepts in any philosophically or psychologically significant sense, but only the extensions and intensions of words (and, to some extent, also the objects that

those words refer to). All of these claims are controversial, but Cappelen develops and defends them in a clear and rigorous manner, which makes *Fixing Language* an engaging and thought-provoking read.

Let me begin this review with a brief summary of *Fixing Language.* The book is structured in five parts, each of which contains numerous chapters circulating around a particular subtopic of conceptual engineering. Part I offers an extensive introduction to conceptual engineering, which contains both many examples from inside and outside philosophy, as well as general arguments for the importance of conceptual engineering, its implications for philosophical methodology, and the need to have a general theory about it. Part II–IV contain Cappelen's own view of conceptual engineering, a view that he refers to as the *Austerity Framework*. More specifically, part II aims to provide a metasemantic foundation for conceptual engineering which does justice to traditional externalist insights. Cappelen models conceptual engineering on typical cases of reference change. The author argues that there is not and cannot be a general theory of reference change, because reference change is inscrutable and not within the voluntary control of language users. As a corollary, the actual implementation of a conceptual engineering proposal is also inscrutable and not within the control of language users. Part III engages extensively with Peter Strawson's famous objection to Rudolf Carnap's proposed method of explication, which is arguably a form of conceptual engineering. According to Strawson, it is not possible to improve our concept of, say, knowledge, because any attempt to do so merely changes the topic from knowledge to something else. Cappelen offers two strategies in response to this challenge: firstly, he argues, *pace* Strawson, that topic preservation through semantic revision is possible, since not all semantic differences result in people saying different things. Secondly, Cappelen argues that conceptual engineers may appeal to what he calls 'lexical effects' to justify using an old word with a new meaning despite changes of topic. Although Cappelen ultimately rejects this strategy, he does believe that lexical effects, i.e., the psychological and sociological effects of using certain letters or sounds, mark an important and underappreciated category in philosophy of language. In part IV, Cappelen argues that despite his claim that conceptual engineering is about the intensions and extensions of words, this process can also be described as being about the object level. Cappelen calls this the 'worldliness' of conceptual engineering. According to Cappelen, each utterance expresses not just one, but a very large number of different propositions, such that the proposition semantically expressed is just one of them. And while it is true that conceptual engineering will never result in true propositions semantically expressed by sentences like "What families are has changed", such sentences may nevertheless express other true propositions. Furthermore, part IV gives a taxonomy of the varieties of conceptual engineering and defends the *Austerity Framework* against various objections. Finally, part V compares the framework with three extant theories about conceptual engineering: metalinguistic negotiation (Ludlow 2014, Plunkett & Sundell 2013, Plunkett 2015), the appeal to a concept's function or purpose (Haslanger 2000, Brigandt 2010, Thomasson forthcoming), and the Subscript Gambit (Chalmers 2011) – arguing that it fares better than all of these.

In what follows, I will focus on the essential theses and arguments from parts I–IV of *Fixing Language* and assess them in more detail (I will leave out Cappelen's critique of extant theories of conceptual engineering). In part I, Cappelen advances what he calls the *Anti-Descriptive Argument*. This argument is supposed to show that "at the core of