This volume by Saskia Kerschbaum, based on the author's PhD thesis at the Ludwig-Maximilians-Universität in Munich, is a substantial contribution to our knowledge about why and by whom aqueducts were constructed in Asia Minor. In general, the work is based on epigraphic evidence and to a lesser degree literary and archaeological sources. Picking up the book it is immediately obvious that it is an extensive study; it is 511 pages long, out of which the main text is almost 400 pages supported by 3,000 notes and a massive bibliography listing approximately 1,000 works.

The book is composed of nine primary chapters and four other headings including an excursion on the role of the Roman army, the bibliography, an appendix, indices and concordances. There are no maps, plates or figures. This being said, in practice the book can be divided into three main parts. The first consists of Chapters 1–4 (1–196), dealing with preliminary matters. Chapter 5 (197–329) forms the second part, presenting the main argument of the volume. Following this Chapters 6–10 (331–398) are set apart by being considerably shorter and more narrowly focused.

Throughout, a number of important basic notions and assumptions affect the author's interpretation of the material. Firstly, aqueducts are viewed, largely implicitly, as the basic water supply (“Grundversorgung”) for cities, seemingly in contrast to e.g. wells and cisterns (e.g. 322, 328, 390, but see also 93, 129). Secondly, there is little notion of water being lost for basic needs through use in monumen-
tal structures such as nymphaea and baths; rather, the author seems to imply that most, if not all, water ended up used for various basic needs. Thirdly, K. holds that aqueducts were used for irrigation on the countryside, an unusual stance, as most scholars believe that the Greeks and Romans relied primarily on dry framing, i.e. precipitation. Finally, it is notable that while the volume is focused on Asia Minor, in practice the author allocates considerable space to material outside of this region, giving the study a wider scope than the title suggests.

The first chapter (1. Einleitung und Methodik, 1–56) immediately dives into the theoretical framework focusing on the spread of innovations. Following a discussion of the views of various authors, K. postulates how she will use the insights provided based on five phases: invention, transition, diffusion, transformation and inhibition. Within this process she views the emperor, governors, the cities and their magistrates, and euergetai as the potential main actors for the spread of aqueducts in Asia Minor. Following this, an overview of the chapters is given as well as the six ambitious aims of the study.

The first aim asks why aqueducts were so successful as a building type. Secondly, was the diffusion process centrally controlled or decentralized? Thirdly, which agents were responsible for the construction of aqueducts, including associated structures, and why did they invest in these? Fourth, from which elements were the cultural code connected to aqueducts formed? And how was this code used to place aqueducts in the cross-section between Roman imperialism and urban culture? Fifth, what effects did the introduction of previously not accessible volumes and quality of water have on cities and their inhabitants. Here it is assumed that aqueduct water would automatically be perceived as superior to that from other sources, something which is not self-evident. Sixth, and finally, can the spread and use of aqueducts be viewed as innovative within the study’s theoretical framework?

Following this, the chapter continues with a long overview of the sources, including sections on literary texts, legal works, depictions on coins, archaeological finds and epigraphic material. This is mostly rather basic, e.g. the treatment of Vitruvius’ and Frontinus’ works, and largely focused on the city of Rome. In general, an advanced work should not need such introductions. Similarly, the subsequent overview of previous research produces few surprises.

The next chapter (2. Die Fernwasserleitung: Terminologische, technische und klimatische Grundlagen, 57–106) introduces background information, largely concerned with ancient (primarily Greek) terminology and the components of an aqueduct such as the sources, tunnels, siphons, conduits and building materials. In the middle of this chapter, a central question is postulated: did aqueducts serve as a basic supply system or were they only used for large decorative monuments as a luxury? However, the question is never clearly answered, beyond that it was possible to create a hierarchical distribution system for aqueduct water (96). The
last part of the chapter briefly discusses the cost of an aqueduct (100–103) as well as the geological and climactic conditions of Asia Minor (104–106). While these components are important for our understanding of the construction and use of aqueducts, generalizing the geology and climate of such a large area in just over two pages is not particularly helpful.

The third chapter (3. Tyrannen und Wasserleitungen: Verschiedene Strategien der Wasserversorgung von der Archaik bis zum Hellenismus, 107–130) gives an overview of the water supply in Greek areas before Roman times. Here a large section deals with cities outside of the focus area, although the greater part focuses on Asia Minor during the Hellenistic period.

In Chapter 4 (Die Transitionsphase: Austauschprozesse zwischen Rom und Kleinasien, 131–196), the aim of the book is approached. However, in practice, this chapter, through its long discussion of Greek and Roman water law and officials, provides more of a background than direct content for the primary aims.

Overall, the first four chapters (1–196) deal with preliminary topics, laying the foundation for the study. While this is useful, and Chapter 4 in particular presents a large material, it also makes it difficult to get to the core of the volume. Furthermore, it is hard to not get the impression that these chapters are closely connected to a requirement for the PhD thesis to show a wide grasp of the field. It may thus have been beneficial for the present study to remove or rework these parts to allow a greater focus on the aims.

The core of the book is reached in Chapter 5 (Kaiser, Euergeten und Poleis: Die Akteursgruppen und ihre Rolle im Innovationsprozess, 197–329), which, after 20 pages of introduction to the cultural code connected to aqueducts, deals with the potential agents behind their construction. First the emperor and his governors are discussed (214–251), then euergetai (251–284) and finally, the cities themselves (284–329). Through this massive chapter, the epigraphic evidence for the construction of aqueducts in Asia Minor is meticulously discussed in order to elucidate who built these structures and why. Owing to the relatively small material, the discussion sometimes feels repetitive as the author discusses different aspects of the same inscription in several places. In the end, K. concludes that cities were the primary agents behind the construction of aqueducts. The emperors, on the other hand, played a marginal role, in particular in terms of finances, although a discussion about exactly what imperial financing entails would have been useful. Local benefactors were also of limited importance, as they preferred to sponsor other types of (water) structures, in particular nymphaea and baths. However, the evidence is far from clear and the author readily admits that “Das epigraphische Material schien zunächst nur auf eine begrenzte Rolle der Städte hinzuweisen, doch hat sich gezeigt, dass die Poleis als einziger Akteur in der Lage waren, die Wasserinfrastruktur zu organisieren und zu steuern” (389). While she argues well for her position, it
is based on a lack of evidence for other agents being involved and interpretations concerning the motivations for the construction of aqueducts, rather than sources showing that cities took the lead.

The following chapters are considerably shorter with more narrow foci. Chapter 6 (Akkulturationsphase: Zwischen Romanisierung und städtischem Selbstverständnis, 331–345) is focused on the diffusion of aqueducts through the concept of romanisation. Here the author is clearly aware of the many and serious issues of this concept (332–334), but still uses it for the analysis. Overall, it may have been better to find alternative ways to frame this discussion (similarly, the notion of “civilizing level”, e.g. 328, 350, should probably have been avoided). In the end, K. argues that aqueducts were not primarily symbols of romanisation, as often argued in the past, but for the communal good and part of the urban identity.

Chapter 7 (Transformationsphase: Urbanisierung und Verschönerung des öffentlichen Raums, 347–371) builds on chapter 6 by moving from diffusion to transformation. As such, the author primarily focuses on three points: beautification and life quality (monumental structures), private luxury (e.g. domestic fountains) and how aqueducts affected the countryside. Here the focus is clearly on aqueduct water as used for ornamental means, rooted in the author’s interpretation of urba-nitas. It is also argued that cities moved down from their acropoleis’ in order to use aqueduct water (362–366).

The last analytic chapter (8. Die Grenzen der Verbreitung von Fernwasserleitungen, 373–381) deals with where aqueducts were not spread, primarily through the example of Petra in Jordania (377–380). The overview given of the city’s water system is interesting, but it is questionable if this was a necessary addition to an already substantial book, as the situation of Petra is difficult to compare to that of cities in Asia Minor.

Finally, the book is summarized in Chapter 9 (Kleinasiatische Wasserkultur: Ein spezieller Innovationsprozess?, 383–394). Here the author returns to the diffusion process, highlighting the conclusions from the previous chapters. A welcome aspect is that the text reconnects to the discussion of Wittfogel’s theory, presented in Chapter 1, that the constitution of a society played an important role in the development of the water supply (1–2, 392–393). Overall, this is a very useful chapter, helping the reader to grasp the most important results from the previous, sometimes long, chapters by putting the conclusions in the centre.

After the summary, a brief chapter (10. Exkurs: Die Rolle der Armee, 395–398) deals with the role of the Roman army in the construction of aqueducts in general and in Asia Minor. This is an interesting and important theme that could have been incorporated earlier in the book (perhaps with the analysis of the role of the emperor), especially considering that it is only four pages long. The little available evidence does not seem to be more problematic for this than for other themes in
the study. Following this, the book is finished by an extensive bibliography, an appendix with seven inscriptions in the original and translation, as well as useful and well organised indices and concordances.

This book has many strengths, but also several weaknesses. Overall, the study retains a flavour of a PhD thesis with the long introduction(s) and the application of theory. It could also have been shortened by stricter editing; the main text could have used a close examination concerning what is central for the aims. Several sections could also have been cut, such as the one about Palmyra. Similarly, chapter 5.4 is introduced by a full page quoting and discussing a satirical German novel from the 18th century (284). Some parts of the text also feel repetitive as (somewhat) different aspects of the same evidence are discussed at various sections.

The lack of maps, plans, figures, and tables is the most serious deficit of the book. This is simply essential in a study mentioning so many cities and sites, discussing where in the city-scape water related monuments were located, and specific relationships between structures. Tables, or an appendix, listing relevant inscriptions would also have contributed to a considerably easier read. Additionally, the uses of some analytic concepts are confusing. For example, under heading 5.4.3 (305–309) “Conspicuous consumption” seems to be viewed as identical to the concept of the “Consumer city”. For me, these are two very different concepts. Moreover, within the framework of this, the author focuses on the use of water for production and in workshops, which can hardly be interpreted as conspicuous consumption.

The book also ends up prompting some important questions beyond the expressed aims. What was aqueduct water actually used for? Monumental fountains and baths, as well as private water displays, are frequently mentioned, but there is almost no discussion concerning water access for mundane tasks such as drinking, cooking and cleaning. How much of the water flowing through nymphaeas ended up only for display purposes and how much was drawn by the population for their needs? This leads to a second, critical question: what was the basic water supply system in cities in Imperial Asia Minor? What water sources would the inhabitant of a city like Ephesos, Miletos or Perge have access to and use on a daily basis? Framing the use of aqueducts within the greater context of water usage would have benefitted the study greatly.

The strength of the book is to be found in the detailed discussion of the epigraphic material, the extensive notes and bibliography. Especially because of the former, future studies on the use of aqueducts in Asia Minor cannot avoid using this book. The introductory chapters can also be used, either individually or in combination, as a convenient introduction to various aspects of Roman water management for students and entry level researchers. Here the notes and bibliography also help the reader to expand beyond the text.
In the end this volume is a useful contribution to the study of the ancient water supply. It deals with the main question of who constructed aqueducts in Asia Minor in admirable detail and clearly shows how complicated the issue is. This is particularly important as there is a tendency to implicitly view aqueducts as connected to specific emperors and as instruments of romanisation. As such, this book provides important perspectives for future studies in relation to the construction of aqueducts, both in Asia Minor and beyond.