

sums up the key points, recommending that in certain circumstances prostheses be viewed less as functional items and more as dress, connected with how a person presented themselves to the world.

In the lengthy Introduction, D. reviews prosthesis forms, use and the experiences of their users in the early twenty-first century, asking questions about how far the function of prostheses extends to expressions of personal identity. Here D. successfully highlights the tensions involved in examining items which straddle multiple categories: functional and aesthetic; practical and impractical; object and person. She also presents a modern definition of a prosthesis that she extends broadly to antiquity: 'a device that replaces a missing body part, usually (but, crucially, as we shall see, not always) designed and assembled according to the individual's appearance and functional needs, and usually (but, again, crucially, not always) as unobtrusive and as useful as possible so as to maximise the chances of their acceptance of it' (10). This definition leans heavily on medical models that frame disability as a problem to be fixed and is reinforced by D.'s subsequent analysis of the reasons behind the 'loss' of limbs or facial features, and responses to those losses through the adoption of prostheses 'as a true substitute or replacement for the individual's missing body part' (72, 101, 123). D. explains how wearing a prosthesis was not in and of itself socially disabling, and in many cases nor were the impairments that led to their use. However, the emphasis on loss in those sections that explore how a person might come to 'require' a prosthesis runs the risk of presenting prostheses and their users via a deficit model of disability in which individuals are characterised as deviating from an unstated sense of somatic 'normality' or completeness. The book is not framed explicitly as a contribution to disability studies, but this is certainly one context in which it will be read, and some readers will find this perspective problematic.

The book's Introduction also presents in table form the data D. has collected, including prosthesis types, frequency within mythological or historical accounts, user's gender and materials used, as well as quantifying the archaeological and bioarchaeological evidence. These tables provide an immensely valuable repository of source material that will prompt further investigations. Simultaneously, they reveal how restricted the evidence is. Although D. notes 107 literary references, their effectiveness for addressing her key questions is betrayed by regular repetition of the same examples within and across chapters (often word for word). Although this means each chapter can be read in isolation — particularly beneficial for use in teaching — the cover-to-cover reader absorbing the overall argument may find themselves questioning the depth of the evidence underpinning the project. Nevertheless, D. maximises her dataset to expose for the first time the complexities of ancient prostheses and their users, while stimulating valuable new questions about body/object relations.

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SURESHKUMAR MUTHUKUMARAN, *THE TROPICAL TURN: AGRICULTURAL INNOVATION IN THE ANCIENT MIDDLE EAST AND THE MEDITERRANEAN*. Oakland, CA: University of California Press, 2023. Pp. xix + 294, illus., maps. ISBN 9780520390836 (hbk) £80.00; 9780520390843 (pbk) £30.00; 9780520390850 e-book.

Sureshkumar Muthukumar's study represents a considerable undertaking. M.'s aims are two-fold: first, to provide 'an ecological reading of long-distance connectivity' (6) between South Asia and the Mediterranean between c. 3500 B.C.E. and 100 C.E.; second, to respond to earlier studies, which analysed the westward movement of crops from India based on agency, chronology and trade routes.

The first chapter provides a historical context and suggests that there were important, lasting, and discernible links between the Mediterranean and South Asia as early as c. 4000 B.C.E. Considering not only trade routes, but also various methods of land and water transportation (18–31), M. proposes that competing networks, based on such variables as political stability and economic opportunism (e.g. the Lapis Lazuli roads), were fundamental to the connections between South Asia and the Mediterranean. These led to the spread of the plant species studied in the remainder of the volume.

Ch. 2 examines the spread of Old World cotton, acknowledging one species' (*Gossypium herbaceum*) presence in Nubia, Egypt and Libya between c. 100 B.C.E. and 500 C.E., before

examining the spread of its sister species, *Gossypium arboreum*, or tree cotton (68). Following the evidence for the latter westwards from Mesopotamia into the Mediterranean, M. suggests that local production of cotton in the Middle East was neither significant nor esteemed enough to compete with imports from India (97).

In ch. 3, M. examines the movement of Asiatic rice. This grain was an important crop in the eastern Mediterranean and the Middle East during the late antique and early Islamic periods. But our knowledge for earlier periods is problematic because the links between the written evidence and archaeology, or lack thereof, skew any definitive chronology widely; varieties of rice appear in written records that provide a *terminus ante quem* c. 500 B.C.E. (108–11), but the archaeology for rice cultivation before 100 B.C.E. is disputed (112). This, M. suggests, indicates a slow spread westward from the Iranian plateau (122).

Ch. 4 studies the movement of citrus, namely citrons and lemons, from South Asia to the Mediterranean in the first millennium B.C.E. Here, our evidence is better, although Mesopotamia is an outlier (142), and discussions range from cookery to agricultural techniques (that is, irrigation and scion grafting). Interestingly, M. suggests that the general popularity of citrons and lemons was based on their novelty and pleasant scent (144).

The cucurbit family, including the ‘humble cucumber’ (148), is the focus of ch. 5. Cucurbits were well known in South Asia, with their ubiquity illustrated by a rich vocabulary in regional languages (149). Cultivated melons appear in Egypt and Mesopotamia in the fourth millennium B.C.E., and even earlier where local varieties existed, and in Greece between c. 500 and 300 B.C.E. The smooth luffa, or ‘Indian’ cucurbit, appeared in Greece in the early third century B.C.E. (166–9), and the cucumber was known in the Mediterranean and northern Europe by the first century C.E.

Ch. 6 examines the Indian lotus. Appearing in South Asia in the late third millennium B.C.E., the plant held a prominent place in Egyptian agriculture by c. 400 B.C.E. and was perhaps common before 525. The lotus was used as food, in medicinal applications and even as tableware (177–81), but it is unclear how the species spread: while the plant is frequently attested in evidence from Egypt and the Mediterranean, the same cannot be said of the Middle East (184–5).

The taro is the subject of ch. 7. The evidence for this plant is disputed, due both to linguistic difficulties in the written evidence (188), and to the absence of early archaeological data and the need to use ancient textual evidence which is hardly definitive (189–93). The earliest attestations focus on the Nile Valley, and as with the Indian lotus, do not appear in Mesopotamia and Iran; M. posits that taro arrived in Egypt through Red Sea trading routes (193).

The sissou, the Indian rosewood, is considered in ch. 8. While the tree appears more readily further west than other plants examined here, it likely travelled along the westerly trade routes from Asia, appearing in Mesopotamia — as an import — by 2250 B.C.E. (197–201). The westward spread of sissou, however, appears to have been limited: Babylonian sources suggest early Achaemenid use, and the *Periplus Maris Erythraei* mentions its export to the port of Omana. There are scattered references in later material, but none appears to mention the spread of sissou in the Mediterranean.

Ch. 9 examines agency in the context of the four stages of movement and dissemination in crop transfers: familiarisation; experimentation; routinisation; indigenisation. The cultivators, or agents, involved in this stage were critical in these ‘opportunistic events’ (211), which speak to more than subsistence. Some of these agents were political actors, using these species for several reasons, from displays of political power through to social prestige. This was a slow process with limited successes (217), and in some cases regular, sustainable cultivation and local acceptance followed (218–19). This, over a long time, could lead to indigenisation and integration into agricultural and socio-economic networks. The processes established here continued beyond late antiquity, and the gradual ‘tropicalization’ of agriculture brought the ancient world, to some degree, closer to our own globalised world (223).

Supported by a voluminous bibliography, M. offers a thought-provoking and persuasive treatise: his treatment lays out the progressively complex exchanges and connections between Asia and the Mediterranean, which became ever more sophisticated. This is an excellent monograph, and a significant addition to our understanding of archaeological, economic and environmental history.

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