

Introduction

“What’s the name of them wild beasts with humps, old chap?”
“Camels?” said I, wondering why he could possibly want to know.

—Joe and Pip in Charles Dickens, *Great Expectations*

THIS BOOK IS ABOUT AN ANIMAL that is not as prominent in the Bible as sheep and goats, not to speak of horses, donkeys, cattle, and snakes. The camel suddenly appears as a pack animal in the life of the patriarchs but vanishes on the brothers’ way down to meet Joseph as the Egyptian vizier. In the books of Judges and Samuel, it is mainly seen in the hands of the “sons of the east” and culturally related peoples. The animal most prominently served as a long-distance mount for the myth-enshrouded queen of Sheba, who came all the way up from southwest Arabia to Jerusalem. The kings of Israel and their administration did not care much about the camel. Camel caravans in the service of imperial powers are first mentioned by the Latter Prophets. According to the postexilic narratives, the Jews that had been exiled to Babylon returned with donkeys, mules, camels, and horses. Last, but not least, the camel becomes proverbial in the Gospels, when Jesus talks about the sheer impossibility of a large animal going through a needle’s eye.

The camel never played a prominent role in biblical studies. However, with the rise of Egyptology and Near Eastern studies as major fields of research in the nineteenth century, scholars recognized that the camel was rarely ever mentioned in ancient texts before the first millennium BC. Back then (and till this day), Egyptologists were unable to find the camel in hieroglyphic writing. Although François Joseph Chabas (1872, 408–9) assumed to have identified a reading for “camel,” an assumption endorsed by William Houghton (1889, 83–84) and Heinrich Brugsch (1897, 387), this reading was later rejected by E. Lefébure (1907, 25–30) and others (Caminos 1954, 14). Moreover, pictorial evidence for the camel in Egyptian art was almost nonexistent at that time and

restricted to a faience bowl with a kneeling camel published by Auguste Mariette in 1880. Nevertheless, some scholars tried to integrate Chabas's misleading conclusion into the broader picture of camel descriptions in the Pentateuch and the Former Prophets. Others began to question the camel incidents in the book of Genesis, particularly in the Abram in Egypt episode (Gen 12:16). John Skinner (1910, 250), for instance, postulated that the "she-donkeys and camels" of Gen 12:16 represented a late gloss.

Fresh momentum was gained with William F. Albright's influential study *Archaeology and the Religion of Israel* (1942). Although Albright had been a strong supporter of the authenticity of the patriarchal narratives, he nonetheless echoed the skepticism expressed by earlier scholars, contending that any mention of camels in Genesis constituted an anachronism (96), and that dromedaries entered the biblical world no earlier than ca. 1200 BC. Albright's skepticism elicited Joseph P. Free (1944) to publish a summary article elaborating on various representations of camels and their osseous remains from Egypt, and on inscriptional evidence from Mesopotamia. He concluded that "it is quite true that the total evidence would indicate that the camel came into general use in the Greco-Roman period, . . . but . . . it would appear somewhat presumptuous to set completely aside as an anachronism the reference to Abraham's having camels in Egypt" (193). However, some of the evidence pointing to an early use of the camel in Egypt presented by Free was dubious at best, as argued by Albright (1945) and Roland de Vaux (1949, 287–88), a point to which we will return below (§3.4).

A major limitation to the study of the camel's origins and its exploitation in the Levant and adjacent regions was the poor knowledge of the dromedary's domestication history. This issue was addressed for the first time in detail by Reinhard Walz in 1951. Based on his critical review and weighing of the available evidence, Walz postulated that the most likely area of domestication was central Arabia. He did not propose a definite domestication date, thus leaving open the question as to whether Gen 24 and Gen 37 had to be considered anachronistic, although he realized the difficulty of reconciling Gen 12:16 with the general situation in Egypt. Three years later, Walz (1954) published a follow-up article that focused on the early cultural history of the Bactrian camel, notwithstanding that at that time hard evidence was scanty at best. While essentially in line with Albright's thesis, Walz wisely refrained from committing himself to a definite domestication date. During the following decades, both Albright's and Walz's conclusions received broad acceptance (cf. Weippert 1967, 107). Moreover, Walz conceded that if the camels at Abram's disposal were Bactrians, he would not consider it an anachronism (Walz 1956, 196 n. 27), a most unexpected but striking conclusion that unfortunately was overlooked in subsequent studies dealing with the topic.

Shortly thereafter, an entirely new approach to the development of ancient Bedouin life was presented by Walter Dostal (1958, 1), which implied that dromedaries must have already been in use as mounts by the end of the third millennium BC. Dostal argued that the success of Bedouin tribes engaging in war-like activities depended largely on the type of camel saddle available. According to him, the second millennium BC witnessed the development and use of such innovative equipment. For decades Dostal's hypothesis exerted influence on subsequent studies dealing with the relationship and value of dromedaries for Bedouin tribes (see, e.g., Bulliet 1975, 71–110), until it was put *ad acta* by Michael C. A. Macdonald (2015).

Broadly contemporaneous with Albright's work, the mid-1940s witnessed the publication by A. Leo Oppenheim and Louis F. Hartman (1945) of an important set of lexical tablets from first-millennium BC Babylonia. Containing many intriguing entries for domesticated and wild animals, their study formed the basis for a critical edition of the bilingual lexical series *Ḫar.ra = ḫubullu* by the famous Benno Landsberger (MSL 8.1).¹ The same year witnessed the publication of Wilfred G. Lambert's study in which he pointed to the mention of dromedaries in Middle Babylonian copies of lexical texts, arguing that the species must already have been known in the Old Babylonian period ca. 2000–1600 BC (Lambert 1960b).²

Nonetheless, most work subsequently published lent support to the assumption that the camel was a comparably late addition to the biblical animal world. Probably the most influential study published during the 1970s was the monograph by Richard W. Bulliet (1975), entitled *The Camel and the Wheel*. As the title suggests, Bulliet pointed to the rivalry of both modes of transportation, starting with the observation that the camel replaced wheeled vehicles after the decline of the Roman Empire. To elucidate his viewpoint, the author presented a state-of-the-art history of domestication, husbandry, mode of exploitation, and the rest of both the Bactrian and Arabian camel, thereby drawing upon a variety of research disciplines, including anthropology, archaeology, art, biology, history, philology, and technology. Relative to the dromedary, Bulliet argued that the most probable region of domestication would be south Arabia, and the most probable date for the onset of the process the beginning of the second millennium BC. He furthermore distinguished carefully between the early domestication of the camel, its very limited use prior to the beginning of the Iron Age around 1200 BC, and the species' widespread use in long-distance trade in arid

1. Also referred to as *urra = ḫubullu*, *ur₅-ra = ḫubullu* or *HAR-ra = ḫubullu*. The series is called after its incipit, wherein *ḫubullu* means “interest-bearing loan.” See §3.2.4 for more details.

2. The Old and Middle Babylonian periods are reckoned in this study according to the Middle Chronology.

southwest Asia during the first millennium BC. He also addressed the history of the development and decline of the incense trade and the partial integration of the Arabian camel nomads into ancient Near Eastern civilizations. Two years after the publication of Bulliet's book, another contribution particularly relevant to our understanding of the spatio-temporal exploitation of the camel in the biblical world appeared. Therein Béatrix Midant-Reynes and Florence Braunstein-Silvestre (1977) critically reassessed the zooarchaeological, pictorial, and inscriptional evidence for camel use in Egypt. These authors were able to discard some of the shakiest claims for early camel exploitation in Northeast Africa, a point to which we will return later (§3.4).

Since the 1980s, researchers from the humanities and natural sciences have been adding pieces to the jigsaw, but detailing the cultural history of the camel has faced several major obstacles. One of these concerned the late nineteenth century AD view that the two domestic forms, the Bactrian or two-humped camel and the Arabian camel or one-humped dromedary, would descend from a single wild ancestral species possessing two humps (Lombardini 1879). This assumption was based on Luigi Lombardini's observation in histological specimens of a reduced second hump-like structure in fetal dromedaries. Later on, his conclusions seemed reinforced by the close resemblance of the two species in postcranial morphology (cf. I. Köhler 1981, 24; Herre and Röhrs 1990). Yet, detailed analysis of the postcranial osteology of the two forms discounted this view, influential for such a long time (Lesbre 1903; Steiger 1990; Peters and von den Driesch 1997). Finally, after more than 130 years, the rebuttal of this erroneous assumption of a two-humped stage characterizing fetal development in one-humped camels (Kinne et al. 2010; Knosp et al. 2012) opened new venues for interpreting archaeological, iconographic, and textual evidence.

Equally important in this respect was the conclusion that in biblical times, camels were not species native to the Levant or Mesopotamia but had to be introduced from outside. Comparative analysis of ancient texts confirms that human-motivated introduction of the domestic form already occurred prior to 1000 BC. In his entry "Kamel" in the *Reallexikon der Assyriologie*, Wolfgang Heimpel (1980a) drew attention to the mentioning of the Bactrian camel in Sumerian literature of the early second millennium, and of the Arabian camel in a lexical list of the late second millennium BC. Recently Wayne Horowitz (2008) revisited the early cuneiform sources and presented inscriptional evidence for the (Bactrian) camel that would push this domesticate's presence as far back as the Early Dynastic period, dated to around 2900–2350 BC. Moreover, another camel term might be concealed in a tablet dating to the Ur III period (ca. 2100–2000 BC, Steinkeller 2009). As such, Horowitz's article stimulated me to dig deeper into the Mesopotamian evidence for the camel (Heide 2011), and Horowitz in turn commented on some of my proposals (Horowitz 2014).

Despite growing evidence to the contrary, some scholars still continue claiming that camels are absent from second-millennium BC written sources of the ancient Near East (e.g., Na'aman 2010, 176). Moreover, in biblical studies focusing on the Levant, the species of camel (גָּמָל *gāmāl*) mentioned in the Pentateuch has never been evaluated in detail. In other words, previous work has always *assumed* that camels appearing in the Genesis narratives were one-humped Arabian dromedaries, which would invariably imply that their mention is judged to be merely a literary intrusion (e.g., Ebach 2007, 99–100).

In conclusion, in order to address the spatio-temporal history of the camel in the biblical world, integration of data generated by different disciplines is essential, but similar efforts up to now have suffered from ineffective dialogue. To achieve this goal, a reappraisal of published information and of lines of evidence gleaned from archaeological camel remains, iconography, inscriptions, and texts is intended, starting around 3000 BC and covering a time period of some three millennia. Because the history of the camel in the biblical world can only be understood against the background of the species' domestication and early exploitation in the respective regions of origin, portraying the cultural trajectories of the two domestic forms necessitates inclusion of relevant data from southwest Asia, Iran, and Arabia. However, before any historical data can be properly assessed (from chapter 3 onward), it is imperative to have a clear picture of the biology of the camel, including the species' adaptations to arid landscapes, which will be presented in chapter 2.