The Rural Landscapes of Archaic Cyprus

An Archaeology of Environmental and Social Change

Catherine Kearns

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The ninth to the fifth centuries BCE saw a series of significant historical transformations across Cyprus, especially in the growth of towns and in developments in the countryside. In this book, Catherine Kearns argues that novel patterns of urban and rural sedentism drove social changes as diverse communities cultivated new landscape practices. Climatic changes fostered uneven relationships between people, resources like land, copper, and wood, and increasingly important places like rural sanctuaries and cemeteries. Bringing together a range of archaeological, textual, and scientific evidence, the book examines landscapes, environmental history, and rural practices to argue for their collective instrumentality in the processes driving Iron Age political formations. It suggests how rural households managed the countryside, interacted with the remains of earlier generations, and created gathering spaces alongside the development of urban authorities. Offering new insights into landscape archaeologies, Dr. Kearns contributes to current debates about society's relationships with changing environments.

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For Alex

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Preface

Two sketches: in one, someone doctors a poster board map of the southeastern United States with a permanent marker to extend a projected impact area of Hurricane Dorian around southeastern Alabama. The correction followed the personal tweet of the then-President of the United States in early September 2019, which claimed that Alabama, along with Florida, South Carolina, North Carolina, and Georgia, would "likely be hit (much) harder than anticipated. Looking like one of the largest hurricanes ever."[1] Intervening between the bombastic tweet and the visual prop of the hurricane's altered "zone of uncertainty" were various contradictory official statements from the local Birmingham division of the National Weather Association (NWA) and the National Oceanic and Atmospheric Association (NOAA), caught in the optics of a struggle over weather prediction involving the White House, meteorologists, the media, and various publics, especially those vulnerable to storm damage and dislocation. Embattled NOAA head Neil Jacobs, at an annual NWA meeting, called for his colleagues to remember that "weather should not be a partisan issue." In the second sketch, photographs of icicles hanging from ceiling fans and videos of pipes bursting through the floors of homes in Texas circulate on social media during the days following a vortex of dangerously low temperatures in February 2021. This icy rupture of household things caused numerous deaths and wide-scale property damage, chiefly because vast sections of the region were subjected to rolling power blackouts from the lack of energy supply in the state's privatized electrical grid. After people spent days without running water, or resorted to burning furniture for warmth, and with public and state tensions erupting, we could read in news headlines that "even the weather is polarized now."[2]

This book argues that weather has always had the potential to be political, because of how we humans experience it and perceive it as climate, unevenly, in material and ideational ways. The infrastructural conflict or failure in these sketches emerges not only through our unequal preoccupations and motivations, or through our fumbling to respond to unfamiliar weather events, but also through the volatile propensities of water, ice, or natural gas, and our expectations of their activity and force. Behind these

vignettes are mounting pressures to address global climate change and the increasingly great effects that greenhouse gases and carbon emissions are having on the frequency of hurricanes or the severity of Texan winters. The sketches prompt us to ask questions of who the "we" is or ought to be in the stories we tell about climate change: politicians, capitalists, scientific authorities, regulatory bodies, or diverse and unequally precarious communities. The weathering of our everyday experiences and material environs catalyzes new political relationships and opens up places for unruliness, made legible in a Sharpie-covered poster board or iPhone photos of bottom-up, community efforts to provide clean water, clothes, and food amid storm wreckage and state negligence. While the media presentations behind such sketches would suggest that deleterious climate change and heightened scrutiny of disasters are politicizing weather in novel, modern, and even neoliberal ways, this book seeks to acknowledge the deeper histories of the political and social dimensions of weathered surroundings and to examine these relationships in one series of ancient landscapes across south-central Cyprus. Rural landscapes, the "sedimentations" of history and sociology that Henri Lefebvre (2016 [1956]: 68) urged us to analyze, invite inquiry into the ways that materials and climatic changes spur on new political relationships. In this book I put forward several arguments about studying the places and environmental engagements of smaller settlements together with the growth of what we would call urban sites, but key to all of them is the claim that landscapes like these were, and are, weathered and made political through the actions of humans, their norms and institutions, and the other-than-human soils, waters, airs, and things around them.

Writing a book on ancient rural landscapes is a challenge – not just to sustain a long-form argument using a notoriously patchy dataset, but to accept and admit that the established scope may falter as more data are explored, synthesized, and interpreted in new ways and with different frameworks in the future. In committing these arguments to the genre of the monograph, I stitch together several close and interrelated examinations of ancient town and countryside formations in south-central Cyprus, but I do not aim to produce definitive conclusions or to finish conversation. I offer this book, in the spirit of what Rosi Braidotti (2006: 115) has called epistemological humility, as a provocation for more research on environments and ambient things through a close study of small Iron Age sites. Satisfying answers are few and far between; I focus more on posing questions and presenting plausible patterns and hypotheses from conjectural, and even speculative, footings. It goes without saying that I dearly hope that more evidence, more posthuman approaches, and new archaeological

insights appear in the coming years on non-urban sites and environmental change that unsettle and greatly expand on some of the evidentiary claims made in these pages.

I finished writing this book with the generous support of a Loeb Classical Library Fellowship as well as a fellowship from the American Council of Learned Societies on a year of teaching leave. Its origins, however, grew a bit more haphazardly from years of fieldwork in the Vasilikos and Maroni valleys on Cyprus, conversations over Keo with mentors, colleagues, and friends, and presentations for critical audiences in which I tried to make scholarly gains for all the other avenues of interpretation that seemed to dead end. I am deeply grateful to Sturt Manning for encouraging a project on Iron Age settlements and for pushing me to undertake it, even if it meant spending those hot afternoons walking through maquis with me that he could likely have used more productively. Bernard Knapp has been a tremendous help and I am very grateful for his taking the time all those years ago to listen to my ideas about landscape and to support and edit my writing. Sturt and Bernard pushed me early on to contact Maria Iacovou, of the University of Cyprus, who graciously let me tag along with her field project at Palaipaphos/Kouklia *Laona* and whose commitment to understanding the Iron Age of Cyprus has been a guiding force for my own efforts.

I am indebted to colleagues and friends who took the time to read parts or all of this manuscript, especially the valiant efforts of Bernard Knapp, Sturt Manning, and Nathan Meyer, and dear friends Georgia Andreou, Peregrine Gerard-Little, and James Osborne. These last three I owe special acknowledgments not just for reading the entire thing but for the cherished comradery forged over chats in rented pickups, at wobbly taverna tables, or in the classroom hashing out archaeological thought. Hervé Reculeau, a gracious interlocutor on ancient environments, and Kathryn Morgan also worked through more grisly iterations of these arguments. Two anonymous reviewers provided generous and critical feedback as the final manuscript took shape, and I thank Michael Sharp who took a chance on reading my initial proposal and facilitated its publication with Cambridge University Press.

I have been very lucky to receive numerous opportunities to research and write about Iron Age ruralization and environmental change. My departmental home in Classics at the University of Chicago has provided an encouraging and intellectually stimulating base for pushing my ideas beyond a dissertation. I especially thank Jonathan Hall for being a steadfast mentor as well as Cliff Ando, Emily Austin, Alain Bresson, Chris Faraone,

Sarah Nooter, and Kathy Fox for their support and inspiration. Beyond these colleagues I am grateful for the vibrant scholarly community in and around Chicago, especially Fredrik Albritton Jonsson, Elizabeth Chatterjee, Patch Crowley, Mickey Dietler, Seth Estrin, Ömür Harmanşah, Morag Kersel, Young Kim, Matthew Knisley, Sarah Newman, Yorke Rowan, David Schloen, and Alice Yao. At Cornell, where this work first took shape, I benefited from the critical guidance of Lori Khatchadourian, Adam T. Smith, Kurt Jordan, and Kathryn Gleason. I am also very thankful for and inspired by rewarding conversations on landscapes at pubs or in conference hallways from Palo Alto to Ithaca with Anne Austin, Andrew Bauer, Jesse Casana, Grace Erny, Elizabeth Fagan, Lin Foxhall, Kathryn Franklin, Dominik Hagmann, Emily Hammer, Mac Marston, Eva Mol, Ruben Post, Melissa Rosenzweig, Günther Schörner, and Jason Ur. Audiences at several American Schools of Overseas Research, Society for American Archaeology, and Archaeological Institute of America annual meetings and at Stanford, Berkeley, Duke, the Oriental Institute, the University of Western Ontario, Universität Wien, St. Andrews, and the Cyprus American Archaeological Research Institute (CAARI) listened to and gave important feedback on these ideas.

In the field, I have received grants and funding from the US State Department and Fulbright Program, the Mellon Foundation, the Loeb Classical Library Foundation, the Society for the Humanities at Cornell, and the College of the University of Chicago. The Kalavasos and Maroni Built Environments (KAMBE) Project provided the home base for this research and I am lucky to have had the team support of Carrie Atkins, Georgia Andreou, Kevin Fisher, Amanda Gaggioli, Rachel Kulick, Jeff Leon, Brita Lorentzen, Sheri Pak, and Tommy Urban, as well as the numerous students who helped me collect and record data. I would like to thank especially Larry Carrillo, Grace Erny, Olivia Hayden and Kathryn Morgan for their assistance and collegiality. Ian Todd and Alison South have been wonderful guides and supportive of my project from the beginning, and I am hopeful that this work continues the foundational reconnaissance and interpretations of the archaeology of the Vasilikos and Maroni region that they helped initiate. My heartfelt thanks also go to Zomenia Zomeni, for letting me join her geomorphology road trips, to Anna Georgiadou for agreeing to work with me and for her expertise, and to Athos Agapiou, Agata Dobosz, Marina Faka, Artemis Georgiou, Lina Kassianidou, Giorgos Papantoniou, Thierry Petit, Harry Paraskeva, and Anna Satraki, for their technical support, help, and encouragement over the years. I feel lucky to have spent a year at CAARI with Vathoulla Moustoukki and to have benefited from the

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Between the two sketches above, in 2019 and early 2021, came the devastation of the novel coronavirus pandemic. I thank my friends and family for supporting me, and the writing of this book, while the world raged around us. Tessa Burke, Madigan Burke, Adam Lovallo, Tim Lovallo, Susan Williams, Frana Allen, Vinni Hall, Alex Puliti, Mary Galeani, and Joe Kearns kept my spirits up and cheerfully asked about this project (but not too much). This book is for Alex Lovallo, who persistently and affectionately gives me the space to set my goals and go for them, and for Francesca, whose wit, curiosity, and humor keep us going.

1 Introduction

Around the middle of the fifth century BCE, royal authorities in the inland town of Idalion, on the island of Cyprus, commissioned a large bronze plaque to be placed in the sanctuary of Athena, a prominent section of the civic and ideological center (ICS 217). The inscription, forged with a side handle, was written on both sides in Greek using the local Cypriot syllabic script and found near the acropolis of Idalion during the nineteenth century (Figure 1.1).[1] It records the deeds of a doctor, Onasilos, who, along with his brothers, was conscripted to give free medical relief to the wounded during a siege of the town by the Medes, or Persians, and by Kition, a prominent town on the eastern coast.[2] As compensation, Idalion's king, Stasikypros, along with the city (*polis*), decided not to give the customary monetary prize, a silver talent from the city's treasury, the "house of the king." Instead, this authoritative collective granted productive agricultural land outside Idalion in a district called Alampria to Onasilos and his extended family, for posterity. In the provisions associated with the land, the king and city outline the rights to exploit it and its produce, the entitlements associated with its tax-exempt status, and the purview of enduring ownership (lines 1–13).

> When the Medes and Kitians had the city of Idalion under siege, in the year of Philokypros, son of Onasagoras, King Stasikypros and the city (πτόλις) – the Idalians – called physician Onasilos, son of Onasikypros, and his brothers, to treat people who were wounded in battle, without payment.
>
> And so, the king and the city agreed to give Onasilos and his brothers, instead of payment and additional gratuity, a talent of silver from the house of the king and the city (ϝοίκωι τῶι βασιλῆϝος). But instead of that silver talent, the king and the city gave to Onasilos and his brothers land of the king which is located in the district of Alampria: the piece of land (χῶρον) that is in a swampy meadow (ἕλει) – that which adjoins the vineyard (ἄλϝω) of Onkas – and all the new plants (τέρχνιϳα) there, to possess them with absolute right to sell, forever, without taxes. If ever someone evicts Onasilos or his brothers or Onasikypros' children's children from that piece of land, then, he who will expel them shall pay Onasilos and his brothers or their children the following amount: a talent of silver.

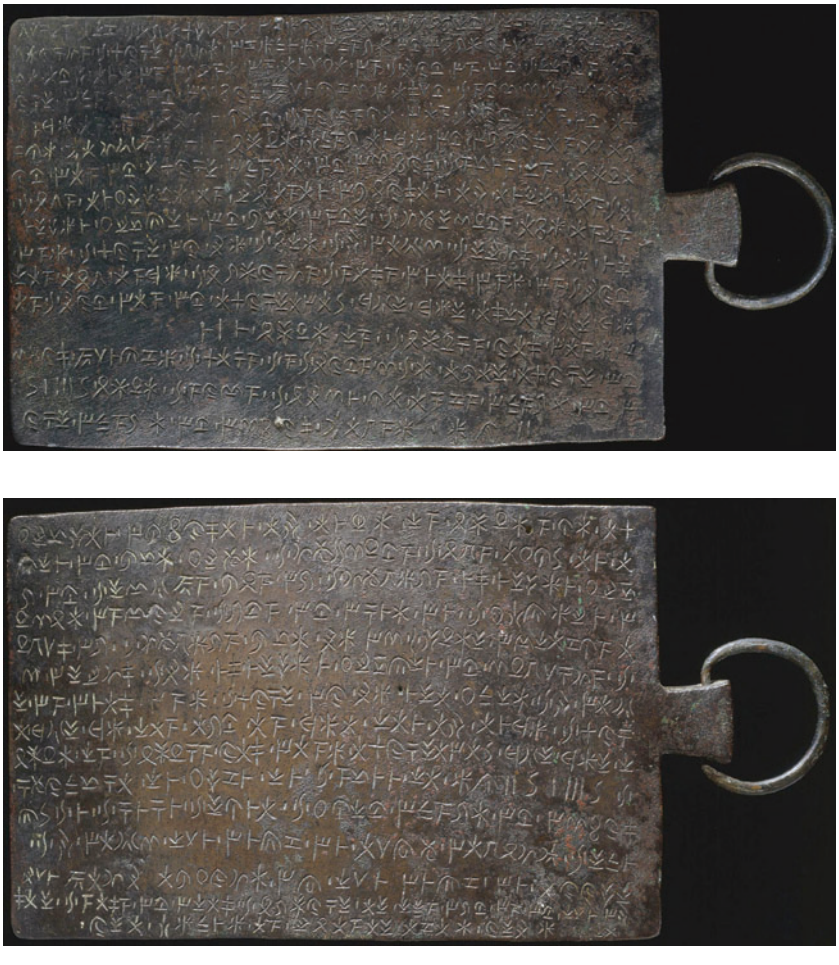

Figure 1.1 Idalion Tablet, (a) Face A and (b) Face B (Bibliothèque Nationale de France, Cabinet des Médailles, inv. 2297)

In the following sections the contract continues, this time gifting land in a nearby valley solely to Onasilos and his immediate family. It borders the productive plots of someone named Amenia, the Drymios River, a sanctuary of Athena, and a garden in a field of Simmis, potentially another place name (lines 14–31).

> And for Onasilos alone, without his brothers, the king and the city agreed to give, instead of additional gratuity, besides payment, four silver *pelekeis* and two double *mnas* of Idalion. But instead of that silver, the king and the city gave Onasilos land (γə̃[?]ι) of the king which is in the plain (πεδίjαι) of Malania: the piece of land that adjoins the vineyard of

> Amenia and all the new plants there, (land) that reaches the river Drymios until the sanctuary of Athena and the orchard (κᾶπον) that is in the field (ἀρούραι) of Simmis – the one that Diweithemis the Armaneus had as orchard, contiguous with that of Pasagoras, son of Onasagoras – and all the new plants there, to possess with absolute right to sell, forever, without taxes. If ever someone evicts Onasilos or Onasilos' children from that land or that garden, then, he who will evict them shall pay Onasilos or his children the following amount: four silver pelekeis and two double mnas of Idalion.
>
> And this cartouche, which is inscribed with these words, the king and the city submitted it to goddess Athena, she (who protects) the area around Idalion, with vows not to violate these terms, ever. If someone violates these terms, may the curse fall upon him. These lands and these gardens, the children of Onasikypros and his children's children will own them forever, those who shall stay in the area of Idalion.

The inscribed contract locates the land donated to Onasilos and his brothers among a constellation of private plots, landscape features, sacred groves, and royal properties, providing a detailed window into the intersections of the state and its control of the surrounding agrarian landscape. The terminology reflects this diversity, a kind of literacy of place: while plot shapes and sizes are unclear, segments of land are described as *choros* (plot, field, or ground), *ga* (land), and *aroura*, distinguishing the latter as arable or ploughed land, as well as *alwos* and *kapos*, vineyards and orchards or gardens (Van Effenterre and Ruzé 1994: 136; Georgiadou 2010: 180–181).[3] The representations of the land not only mark its location within a territorial administration, but also its capacity for productiveness, particularly for young trees and plants (*terchnea*), which Onasilos and his male household could use or perhaps sell. The first parcel of the king's land intended for the larger extended family would be situated within marshlands, near water, and adjacent to a private plot of someone named Onkas. The naming of the Alamprian district further signals a larger aggregation of administrative regions that Idalion organized through networks of transaction in land holdings beyond its immediate countryside, or *chora* (Satraki 2019: 233; see also Georgiadou 2010: 179).[4]

In this book, I argue that rural plots, plains, and perimeters such as those of Onasilos emerged through the interactions of different social groups, their land use and resource practices, and shifts in climate and ecology, and that they in turn shaped novel political institutions and forms of inequality in tandem with the growth of the Cypriot urban polity. Towns such as Idalion were dynamically interrelated with the communities

living and working in diverse landscapes around them. In its discursive mapping of a political landscape, and as one of the few extant texts about Cypriot land use in antiquity, the Idalion inscription raises fascinating questions about the development of these forms of authority and economy during the early first-millennium BCE. How did the polity of Idalion come to create and institutionalize these royal, civic, and private places, and how were their conditions of economic productivity measured or evaluated? How did ownership or management of property in productive fields, orchards, or extractive industries instigate or mediate forms of social difference, and how did the state help protect property claims? How did these countryside places become integrated in political and cultural ways with those of the town? And which subjects and landscape features of the polity's *oikoumene*, its "known inhabited world," does the Tablet exclude?

To answer questions such as these, we need to push back before the fifth century BCE, to ask how fields and countrysides grew alongside, and helped define, centers of authority such as Idalion or Kition in the horizon of major social, cultural, and political transformations commonly called the Iron Age (ca. 900–475 BCE). This book contextualizes the historical processes that established the local and regional changes in household structures, communities, and investments in agropastoral settlements evident in more consolidated political form by the fifth century BCE. The social actors and groups instigating these transformations were, I argue, differentially experiencing and making sense of the precarity and dynamics of Cypriot environments. Amassing a range of archaeological, textual, and scientific evidence, this book uses new interpretive lenses on landscapes, environmental history, and rural communities to argue for their collective instrumentality in the processes driving novel political formations. Positioning the Idalion Tablet as an opening frame, I fashion questions for Mediterranean archaeology that seek landscape developments outside the central place or town (*polis*): the lived and worked *chorai*, the *oikoumene*, and rural and wild extremes, or *eschatiai* (Snodgrass 1987: 73). I theorize environmental changes as important aspects of the interactive formation of societies and meaningful places – relationships that were uneven and fostered unequal social change.

The Idalion Tablet emphasizes these politics by braiding the privileged position of Onasilos and his family within the spatial concerns of the state. The doctor's personal estate, for example, was circumscribed within a social and economic field full of inherent value to the royal household, the civic body, and the broader authoritative scope of Idalion's landed interests, from the *polis* to the farther plains. His family would own plots bound

by institutions vital to the polity: fruitful orchards and arable fields managed through royal and inheritance property laws and surrounded by ritual spaces connected to the central acropolis through processional routes, festivals, and border features such as rivers and valleys. These conditions reproduced Onasilos' family as an important intergenerational asset of the state, which could promote its rule beyond the events of the siege into the security of land for Onasilos' future descendants. The properties and the productive crops granted to Onasilos' kin would be tax-exempt and protected by the regime – but also guarded by curses enacted against anyone who might try to take possession of the fields in the future. Moreover, the intentional placement of the inscribed decree within a central sanctuary of Athena, and its shape fashioned with a handle to be hung for viewing, made public and legible these values of territory to Idalion's citizens. It also enveloped Onasilos and the wider citizen body within the care of Athena, whose divine protection operated in "the area around Idalion." Beyond Onasilos' new farms and orchards were of course numerous other rural actors, from Alampria and elsewhere, who lived and worked within the polity and whose less privileged land use and environmental practices are much harder to identify and interpret but no less integral to the making of Idalion's landscape.

Read as an object of political history, the Idalion Tablet has largely served to anchor scholarly interpretations of state organization, dynastic sovereignty, and even the historical contexts of doctors during the first-millennium BCE (Stylianou 1989: 402; Georgiadou 2010; Lejeune 2010; Cannavò 2011: 92–96; Hatzopoulos 2014; Papasavvas 2014; Pestarino 2022: 48–77). This Iron Age period witnessed the rise of Phoenician city-states, the Neo-Assyrian Empire, and the Greek *polis* following a context of apparent settlement displacement, population change, and increased mobility after the close of the Late Bronze Age (ca. 1700–1050 BCE; Killebrew 2014; Lemos and Kotsonas 2020; Knodell 2021). As the longest Cypriot syllabic inscription, the Idalion Tablet has illuminated institutions of Cypriot politics whose origins scholars trace back to this Iron Age horizon. In the repetitive conjoining of a magistrate king and city, as a decision-making collective, the Tablet attests to a complex governing structure that accommodated the agency of the civic body in tandem with the royal house (Lejeune 2010; Fourrier 2013: 104). The Tablet has also provided evidence for the legitimation and dating of the rise of Kition and its domination over inland centers such as Idalion during the Classical period (ca. 475–330 BCE; Satraki 2019: 233). Consequently, the histories of these cities have guided scholarship, linking evidence such as the Tablet to arguments for political topography and

structural continuities from the Bronze Age to the Iron Age and later Classical period (e.g. Iacovou 2007, 2008). But the Tablet also makes compelling claims to fix a newly honored member of the civic community within the established transactional powers of the state. In doing so, it offers ways to move beyond particularist history into new theoretical and comparative approaches to ancient landscapes.

Landscapes – the places, practices, and materials through which people dynamically and differentially experience and perceive their environments, which connote the living things and geophysical phenomena that create their surroundings – were vital to the making of towns such as Idalion, and archaeologists have become adept at studying the traces and spatial distributions of settlements, work sites, monuments, or other socially constructed features that made them up. But archaeologists generally follow these traces to explain urbanism.[5] Small rural sites or villages may be the more stable forms of inhabitation that we find in the archaeological record, the "'workhorses' of any settlement pattern," but towns and cities tend to fascinate us and shape our research (Fletcher 2020: 41). In Cypriot archaeology, a preoccupation with detailing the spatial extent of independent polities such as Idalion and Kition has privileged the study of first-millennium BCE towns. There are several reasons for such an imbalance, including the history of archaeology on the island and the methodological difficulties in finding and identifying evidence of rural settlements (e.g. Given and Smith 2003; Janes and Winther-Jacobsen 2013). Scholars also cite the problem of an "urban palimpsest," in which the continuously occupied settlement formations of the Iron Age sit beneath the island's current urban fabric (Brown 2011: 5, 138).

For these reasons, the study of Iron Age landscapes on Cyprus has typically leaned towards urban history and topography. The later Geometric (ca. 900–750 BCE) and early Archaic periods (ca. 750–600 BCE) signal a watershed in such settled landscapes across the island. Scholars posit that during these centuries, towns such as Idalion consolidated into autonomous powers, so-called city-kingdoms, in a segmented arrangement around the island (Iacovou 2002a, 2005a; Satraki 2012; Fourrier 2013; Cannavò and Thély 2018).[6] Consisting of a series of capital centers, positioned mostly along the coasts and with hierarchical settlement networks stretching inland, a prevailing city-by-city vision of Cypriot Iron Age geography has tended to obscure the complexity of interstitial, non-urban landscapes (cf. Sørenson and Winther-Jacobsen 2006; Toumazou et al. 2015; Figure 1.2). Archaeologists regularly presume that dependent hinterlands, the productive areas tied through trade to urban centers, were controlled by ruling

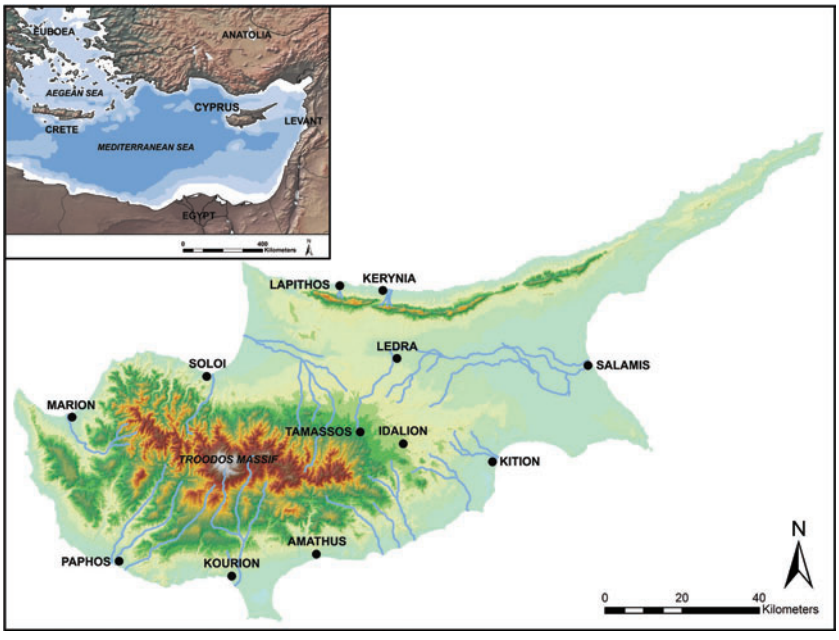

Figure 1.2 Map of Cyprus showing its position in the eastern Mediterranean, the central Troodos massif, and major historical sites. 75 m DEM

authorities (Iacovou 2005a; Satraki 2012: 333–334). The Idalion Tablet's near-cadastral recording of districts and histories of land ownership confirms, in these interpretations, the centripetal power of the city and its dominance and administrative grip over smaller-order villages (e.g. Hatzopoulos 2014: 225). This interlocking of the constitution of the classical polities with the "very stable urban topography" of capitals, some of which stretch back into the fourteenth century BCE, has cleaved the surrounding countrysides from the interrelationships that generated landscapes, economic growth, and political power (Fourrier 2013: 113).

This book examines how the rural infrastructure of these landscapes might have developed alongside the substantial social and political transformations of urban authorities across the ninth to fifth centuries BCE, what I will call a long Archaic timescale. It further advocates the study of the region's environmental history as recursively shaping those changes. For the plots that Onasilos was to acquire and pass on to his descendants were shaped not just by land use technologies and forms of resource management, but by shifting environmental constituents such as soils, rivers, vegetation, and drought and storm frequencies. Those who commissioned the Tablet were focused on property transactions and yields, but also on

longer-term environmental practices and knowledge of land tenure. How did communities with unequal access to "good land" and freshwater or stable soils help condition these systems? Taking the Idalion Tablet's urban history at face value and reading it only as an event of political patronage risks an approach that regards Cypriot landscapes as unchanging. A common scholarly concession that Mediterranean environments are largely the same as they were four millennia ago can render any "natural" or environmental changes as gratuitous for understanding historical progression (Rackham 1996; Kearns 2013: 109; Manning 2022b). Within studies of the regeneration of social complexity on Cyprus during the Iron Age, scholars tend to conceive of the island's economically valuable natural features as immutable (*sensu* Iacovou 2013a), or, constrained by systematic irregularities in semiarid soils and water availability. In this view, resources such as copper from the central Troodos massif provided lasting and "inexhaustible" opportunities for economic control over metal production, even as political boundaries may have changed (Georgiou and Iacovou 2020: 1134; see also Kassianidou 2013, 2014). The compelling longevity of several sites and cemeteries established in the centuries surrounding the collapse of the Late Bronze Age system, around 1200 BCE, and persisting in various forms until the Roman and Late Roman periods (first centuries CE and on), can further make the surroundings of these towns seem like stagnant backgrounds (Counts and Iacovou 2013).

As the fields of archaeology and ancient history have turned in recent decades to reassessing past climatic shifts, through increasingly available scientific data and proxies, it is becoming clear that the environments of the first-millennium BCE were not only dynamic, and more fitful than previously assumed, but are key to a more robust understanding of historical transformation (e.g. Blouin 2014; Izdebski et al. 2016; Haldon et al. 2018a; J. G. Manning 2018). Idalion's transactional landscapes formed through human investments in and relationships with the soils, marshes, and settled places of communities, as well as through shifts in water availability and drought cycles and the growth and reduction of forests and vegetation. The environmental history of the Idalion Tablet, in other words, hints at the fissures and underlying tensions in the seemingly stable semiarid terrain we often assume for ancient Cypriot polities. What were the economic, social, or political costs of maintaining such a lively landscape? What were the processes and landscape interventions through which some in Idalion came to control more land? How were the intergenerational claims of households integrated within its political economy, and who might have been left out?

In the wording of the inscription, the king of Idalion and his citizen constituents acknowledged the probability of a changed agricultural landscape and its implications for the kin network of Onasilos. The sovereign authorities allowed for the possibility of commercial use of crops and land, or even the forcible removal of Onasilos, and accounted for such future events by prescribing fines. Indeed, the redistribution of these plots to Onasilos and his family tacitly implies prior ownership of the land, whether royal, public, or private, or more directly references previous contracts with the field of Simmis, earlier owned by someone called Diweithemis. Together, the land is defined not through fixed boundaries but through the dynamic interests of the state and the flexibility of property claims (Mackil 2017; Foxhall 2020; see also Ludden 1999: 73). Most provocatively, the prescribed gifts are directed at "those who shall stay in the area of Idalion," anchoring Onasilos' new lands and gardens through his household's service, intergenerational stability, and long-term affiliation with Idalion, perhaps in his duties as a local doctor (Georgiadou 2010: 181). Through such control over who owned or managed what, the polity could foster allegiance by catering to the privileged and could inculcate collective beliefs in the values that sustained their social order. The Tablet imagines a landscape of change, captured as a performative and likely public episode of joint royal and civic concession. It speaks not just to a viable arable possession, but to a fifth-century evaluation of land planning, property boundaries, sacred spaces, and collective decision-making, at least in appearance.

The flexibility and historical textures of these features created what J. B. Jackson (1984) called a vernacular landscape, one shaped over generations by communities living, moving, and working within the material environments of the region of Idalion and central Cyprus. This book privileges the study of landscapes in order to access more fully how rural groups engaged with and experienced the social and environmental changes driving political formations. Our urban frameworks tend to highlight instead the official, utilitarian nature of the Tablet, which can externalize rural landscapes and their temporal and spatial complexities. Looking at the city also usually emphasizes the language of power, the Idalion king and his sovereignty, rather than the vernacular: the locally grounded practices of those who may have lacked certain kinds of power yet who participated in, reproduced, or resisted political change. Biases towards understanding authorized, top-down urban narratives of course predominate in our twenty-first "century of cities," when just over half of the world's population resides in urbanized places and when globalization, neoliberal capitalism, and transnationalism among developed and developing countries have pushed rural

matters, and their associated environmental changes, to the background. Yet non-urban communities and social groups, many of them indigenous, are increasingly proximate to and impacted, oppressed, or challenged in diverse ways by ecological and climatic disturbances related to industrial development, resource extraction, pollution, and sea level rise, among myriad others (Nixon 2011).

When people living along Pigeon Creek, West Virginia (USA) woke up to disastrous flooding in their homes one day in May 2009, for example, they knew that the material destruction was somehow related to the strip-mining of coal in the surrounding hills of Appalachia, not just the bad luck of sudden storms.[7] Lawsuits pitting these rural communities against coal mining companies such as Alpha Natural Resources, as well as associated research into the causes of the flooding, would point not only to the complex hydrology of the larger Ohio River watershed and the Appalachian mountain range, but equally to the effects that the slow destruction of mountaintop removal coal mining can have on stormwaters, which are increasing in frequency and severity with global climatic changes (e.g. Pericak et al. 2018). Thunderstorms had dumped several inches of rain that swelled creeks, caused flash floods, and released inundations polluted by acid mine drainage. The waters seeping into the households and communal built environments of rural settlements along Pigeon Creek were thus intertwined in varying ways with residential histories, local, state, and federal economic policies of resource use, the profit maximization and deregulatory practices of mining companies, and the actions of soils, chemicals, and storms. They were also grounded in the pasts and futures of the interaction between villagers, workers, and coal in these valleys. The material legacies of coal mining will indeed impact these places long after the industrial companies shut down operation. The stories like these playing out today in forms of land tenure and environmental policy, resource sustainability, and industrial production among smaller-scale rural communities offer important insights, and counternarratives, to the dominant lens of urban socioenvironmental dynamics.

These narratives reveal the interacting ways that power, difference, and social complexity materialize and historicize rural spaces and landscapes in ecological flux, in an era of seemingly fast-moving and anxiety-inducing climatic shifts. They also highlight how we experience, perceive, and imagine environments in highly contingent ways, relative to scales of personhood, family, community, and broader political belonging. Where stormwaters could mean huge loss for some families along Pigeon Creek, devastation to the plant, animal, and biotic life along the waterways, and justification

for raising costly legal action, the same weather could be inconvenient to those in the mining corporations. With the Idalion Tablet, and the questions I pose in this book about the legacies of land use beneath its text, I aim to make parallel arguments for the study of histories of landscape in the ancient world. I do not equate the Iron Age past to the twenty-first century present, which would romanticize a sense of timeless ruralism and unethically map neoliberal inequalities onto antiquity. Rather, I push the evidence to make claims about the uneven power relationships and interactions of multiple forces driving landscape transformations and settlement histories, and to call for more attention to studying diachronic patterns to contemplate our contemporary anxieties about climate futures. In this way I am interested in the convergence of social and environmental history in understanding how relationships to environmental changes can create and shape new inequalities (Taylor 1996: 11–15).

Understanding the environmental and social changes as well as the political economies that intersected and created these kinds of histories of landscape, and the contributions their archaeology can make to current conversations on societal relationships with environments, serves as a primary goal of this book. I center on the later ninth through fifth centuries BCE, which specialists identify through the presence of later Cypro-Geometric (CG, ca. 900/850–750 BCE) and Cypro-Archaic (CA, ca. 750–475 BCE) ceramics. According to the most recent evidence, explored in more detail throughout Chapters 4 to 6, an apex of dry and arid conditions in the eastern Mediterranean occurred during the early first-millennium BCE, followed by an interval of wetter contexts with varied effects from the eighth to the mid-sixth centuries BCE (Finné et al. 2019). Colder temperatures peaked around the eighth century BCE and average temperatures would have gradually warmed until the Roman period of the first few centuries CE (Manning 2010, 2013a: 113). These findings come from ongoing work that reveals significant transitions in precipitation and temperature operating at multiple regional and temporal scales across the eastern Mediterranean. We can connect these transitions to natural physical processes as well as to human-led changes in land use during the Holocene, the term given to the geological epoch beginning after the end of the last interglacial period, around 11,000 BCE. Even with the coarse resolution of the currently available evidence, the eighth and seventh centuries BCE were marked by progressively wetter environmental conditions, which consisted of fewer interannual droughts and more reliable water availability, likely in the form of rainfall, springs, and seasonal streams, in semiarid places such as

Cyprus (Kearns 2019). For an island with long-term records of droughts and struggles with water accessibility, these shifts would have had attendant material effects on plants and crops, minerals and sediments, and soils (e.g. Christodoulou 1959; Griggs et al. 2014). More rainfall, moister dirt, fuller streams, thicker spring and summer vegetation, and higher-yielding crops, such as olives and grapes, would have transformed the environmental experiences of varied social groups, creating new ideas of *climate*, a term I use to refer to the durable ways that humans make sense of weather (Hulme 2016: 2–7).

Centuries after the Idalion Tablet was commissioned, the writer and geographer Strabo captured this environmental history of the island, as it became altered not just by public investments and technological change, nor least of all by the new interventions of the Roman Empire, but by the growth of forests (*Geography* 14.6.5):

> In productiveness (ἀρετὴν), [Cyprus] is inferior to none of the islands, for it is rich in wine and in oil and has enough grain for its needs. At Tamassos there are abundant mines of copper in which chalcanthite (copper sulfide) is produced, and also the rust of copper, which is useful for its medicinal properties. Eratosthenes says that in antiquity the plains were thickly overgrown with woody vegetation so that they were covered with woods and not cultivated; that the mines helped a little against this, since the people would cut down trees to burn the copper and the silver, and that the building of the fleets was further added, since the sea was now being navigated safely, with naval forces, but that because they could not thus prevail [over the growth of forests], they permitted anyone who wished or was able to cut down the timber and to keep the cleared land as his own property and exempt from taxation.

His description reveals insights into the shifting and active materials mired in Roman preoccupations with this province in the early first century CE. There is the cluster of olives, grapes, and grain, which familiarized Cyprus within a Mediterranean *topos* of virtuous agriculture (Kearns 2018: 55–56). There are also, importantly, minerals such as sulfur-bearing chalcanthite whose weathering created the means to recognize copper ore deposits around the island's mountains, also exploited for medicinal practices.[8] For Strabo's purposes, the arable, mineral, and vegetal things of the island together mediated the imperial expectations of the new province's output and commodified wealth. They also served to historicize the island's landscapes. He cited a time, according to the earlier Greek writer Eratosthenes, when environmental change upset the

prevailing system – when unruly trees were growing so out of control that they threatened the island's productivity, *arête*.[9]

Strabo does seem to domesticate a commercial understanding of Cyprus' climates, by outlining which attributes lent themselves more to economic investment and imperial understandings of prosperity. Scholars tend to concentrate on copper, for example, as the resource that substantially drove the island's ancient economies, emphasizing its commodity status (Kassianidou 2004; Knapp 2008: 76–78; Iacovou 2014a). Yet copper existed within a relational material world and gained or changed value alongside the workings of other things, such as trees and imported tin. Indeed, the productivity of Cypriot environments has always been intertwined with the actions of human groups and their technological choices and practices, as well as with the shifting expectations and challenges of environmental matter such as water, soils, minerals, and trees. To underline resources and shipping networks critical to empire, Strabo described copper's entanglements with these surroundings: the burning of trees to fire kilns, the distribution of men and goods through maritime trading networks and the wooden ships and naval forces keeping seas safe for transit, the human labor necessary for turning minerals into metal products, and the local authorities responsible for managing and taxing forest resources. He left out other, no less important relationships, particularly in the supply of imported tin to make bronze, the necessity of water, or the values of other metals for strengthening or changing copper alloys.[10]

The spatial and environmental imaginations at work in the Idalion Tablet and Strabo's geography of empire aptly open this book, which offers a starting point to examine the landscapes and environmental history of the Cypriot city-state and to situate its political economies, especially those generated by rural actors beyond the city walls, in greater historical and social contexts. Expanding out from the ideological and prosaic programs of these texts, the book reviews the material records of Cyprus to explore how environmental change, shifts in rural and town settlement, and developing vernacular landscape practices underwrote the apparent growth of marked social differentiation and inequality.[11] How might a critical landscape archaeology of these textual renderings of place and environment begin? What are the methods and theoretical tools available for investigating the emergence of such landscapes during the ninth and eighth centuries BCE, and their modifications and stabilization over the following three centuries? I present such a framework, pressing a suite of evidentiary

categories into service to build up a holistic approach to the shifting, complex environments and landscapes that co-constituted ancient social worlds.

Unruly Landscapes

In this book I use an analytical focus on rural spaces and places and their instrumentality in social life as an entryway not just into elucidating the often forgotten smaller spaces or "emptyscapes" of typical settlement pattern analyses, but also into creating an alternative to the predominant archaeological framing of questions about politics, chronology, and social organization as urban (Campana 2018: 15). This kind of work involves grafting together several trends on the integration of town and country and human–environment interactions. I draw upon conversations among geographers, sociologists, and historians on ruralism and its material dynamics, cultures, and spatiality, especially in relation to state structures.[12] The archaeological survey records of non-urban lifeways on Cyprus, as the empirical backbone for the book's discussions, offer a compelling line of inquiry into the processes by which Archaic urbanizing landscapes took shape. I especially consider their contingencies in comparison to ways of analyzing and theorizing ancient agrarian landscapes in other cultural and chronological contexts, such as Mesoamerica, the Near East, south Asia, and the wider Mediterranean.[13] I also look to important work in the environmental humanities and social sciences on the varied ways that humans interact with, perceive, and live with climate and material environments, as well as in political ecology and its archaeological applications.[14] As Timothy LeCain (2017: 127) has put it, recent materialist approaches to history have opened up environmentalism "in the older sense regarding how our environments help to make us who we are." Taking this critical approach to environments and ruralism, I work to provide a complementary perspective to existing scholarship on pre-Classical political and economic organization on Cyprus, and to propose a landscape-oriented accounting of highly transformative periods such as the first-millennium BCE.

Insights from fields such as political ecology help reposition rural and urban landscapes as historically contingent relations that include people, things, and environments. I focus on their messy complexities, rather than the well-worn binaries of town and country or nature and culture. These are difficult concepts to work with, however. How archaeologists talk about landscapes as shaped by climatic change, for example, is particularly

challenging. Do some semiarid landscapes become drier through shifts in global temperatures and solar activity, and/or through human-led practices such as deforestation, over-grazing, or irrigation? The flood of information coming from scientific advances in the study of past climates and environments over the last few decades has been revolutionary, but has the potential to keep our focus on merely discerning the anthropogenic or climatic causes of certain high-profile historical episodes, such as the collapse of the Roman Empire and the ensuing effects of what many call the Late Antique Little Ice Age of the sixth and seventh centuries CE (Harper 2017; Harper and McCormick 2018; cf. Sessa 2019; see also Büntgen et al. 2011; Haldon 2016). A chief goal of this book, then, is to carve out an analytically productive middle ground between theories of landscapes as naturally produced resource zones on the one hand, or as socially constructed groupings of places on the other (Ashmore 2004; Kosiba and Bauer 2013).

Variably tied to the positivist and processual models of archaeology at work in the second half of the twentieth century, the former grouping tends to ask econometric questions of ancient landscapes: How large were settlement zones? How might they have conditioned the collection and management of resources, daily life, movement, or regional interaction? Such analyses are important to material histories but can flatten landscapes into natural systems whose permutations leave less room for human agency, and they risk attenuating a landscape's social dimensions.

The archaeological work influenced by postmodern thought emerging in the latter decades of the twentieth century has framed landscapes as products of human cognition, conception, and will, and has utilized social theories of spatiality and power to understand how past landscapes activated human memory, became tools of political control, or embodied community distinctions and subjective identities (e.g. Alcock 1993; Tilley 1994; Johnston 1998; Ashmore and Knapp 1999; see also Anschuetz et al. 2001). But these studies can eschew environmental data, amassing a growing number of theoretical frameworks that often divorce ancient landscapes from the non-living matter and biota that made them up, privileging instead their human-made monuments and artifacts.

These divergent archaeological inquiries into landscape, between the more environmental or human-focused, do not make a rigid binary, but they do make it hard to understand where environments, climates, and weather reside within various interpretations. As others have noted, the semantic ambiguity of the term landscape and its contingencies in diverse historical contexts discourages an all-encompassing conceptual definition

(Anschuetz et al. 2001; Smith 2003: 5–11; Johnson 2007). The field and methods of landscape archaeology, moreover, as Matthew Johnson (2012: 516) has written, constitute an "area of research that is full of woolly thinking." The methodologies for studying climates and ecologies further complicate work on society–climate interrelationships at multiple and often incommensurable scales, from the collapsing empire to the self-sufficient farmstead (Haldon et al. 2014). The availability of more paleoclimatic and paleoenvironmental evidence has, indeed, pushed the impasse between approaches to landscape into new light. In this book, I begin to bridge the gaps by investigating the entanglements of environmental materials, climates, and social formations through concepts of *weathering* and *unruliness*, introduced briefly here.

Archaeologists who study historical climates and their impacts on human society tend to define climate as a catch-all term, used to encompass geophysical, atmospheric, or earth-systems processes recorded in aggregate through scientific measurement, representing an average set of conditions for an area or region. But as a construct, climate means more. It structures how we think about weather, the events and processes "of a restless and constantly changing atmosphere" (Hulme 2016: 2, 3). Humans perceive and physically experience meteorological shifts and episodes, through bodily and material encounters, and create ideas of climate to facilitate and familiarize themselves with sudden downpours in spring, blizzards in winter, or scorching heat in the summer. Everyday encounters with weather become integral to local knowledge and daily practices, informing when and where to harvest or collect resources, how to anticipate weather shifts, and what material assemblages – clothing, tools, shelters, safety measures, and other infrastructure – might be necessary or desired for different conditions. Encounters also shape our affective relationships with the world around us, in building up individual and cultural ideas such as nature, wilderness, or the sublime. Such experiences and ideas of weather further shape senses of place and come to structure how people identify or affiliate themselves with the elements and rhythms of their surroundings – locales marked by fierce seasonal winds, months of continuous, pouring rain, or midday rhythms of intense heat. When normalized understandings of weather break down, ideas of climate and expectations of environmental phenomena shift, are unsettled, and in turn can catalyze social and cultural change. In 2021, for example, new climate "normals" can seem dystopian: Arctic temperatures reaching 50°C, increasingly deleterious wildfires, or hurricanes of greater frequency and magnitude. I use "weathering" and "weathered" to capture how landscapes take on new