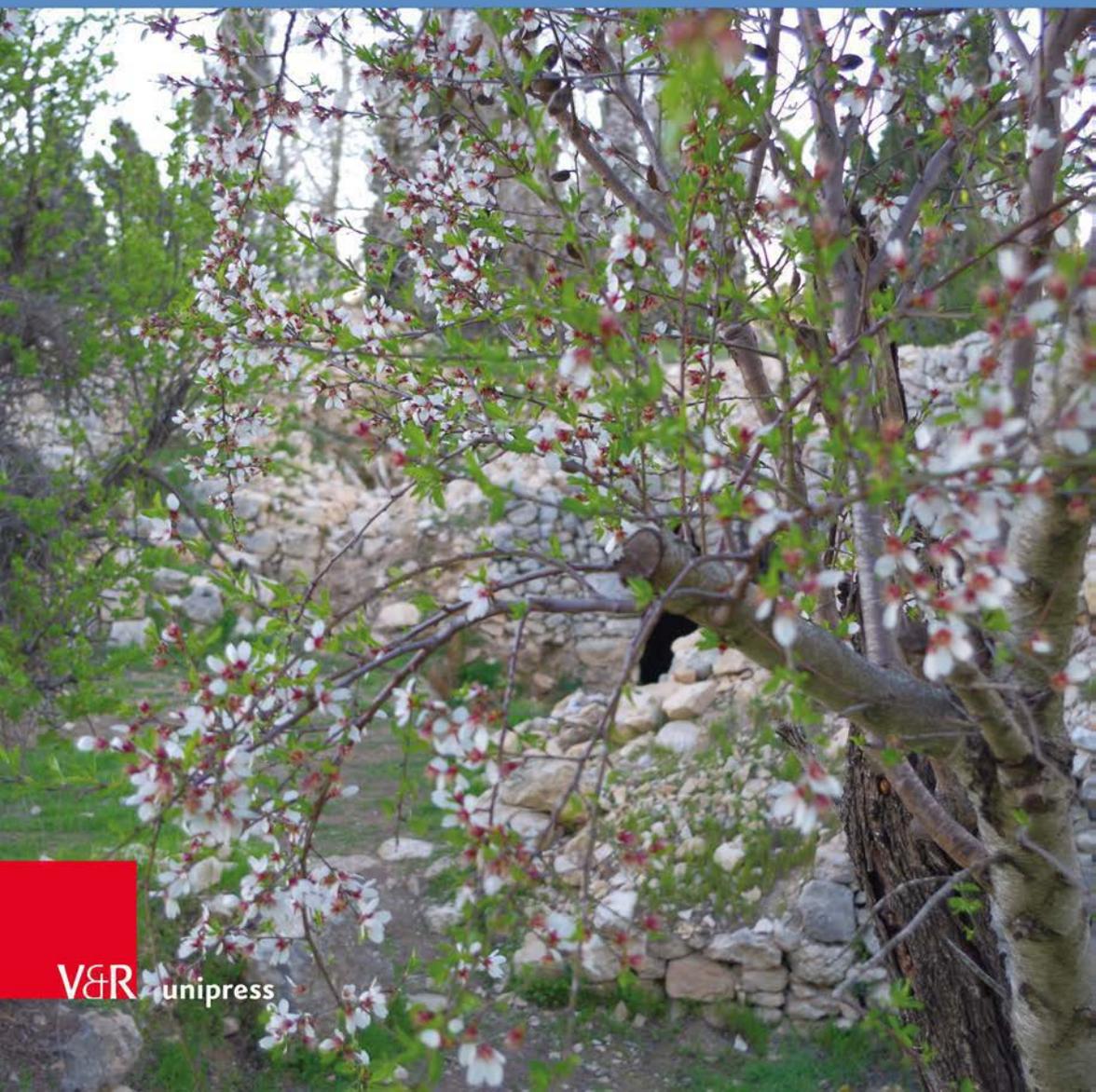


Bethany J. Walker / Abdelkader Al Ghouz (eds.)

# Living with Nature and Things

Contributions to a New Social History  
of the Middle Islamic Periods

Bonn University Press



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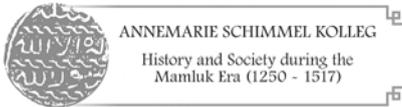


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# Mamluk Studies

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## **Editorial Introduction**



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Bethany J. Walker

## Introduction: The Physical World as a Social World

In Jerusalem the almond trees blossom in late March, making of the city a canvass of pastels. In the flowering grove on the cover of this volume you see an orchard of almond trees and pomegranates, built on a series of terraces in the ruins of an archaeological site known locally as Khirbet Beit Mazmīl. Barely visible through the branches are the remains of its 19<sup>th</sup>-century farmstead. Underneath this are the ruins of what was once a thriving agricultural estate, of unknown name, built five hundred years earlier. Peasant families transformed this place over the course of the late Mamluk and Ottoman centuries until recent times, building ever more terraces on the nearby hillslopes and cultivating a wide range of fruits and vegetables for the Jerusalem markets. They increasingly took advantage of the opportunity to buy land and developed it through terracing; the agricultural real estate “boom” of the 17<sup>th</sup> and 18<sup>th</sup> centuries coincided with a transformation of the landscape of Jerusalem’s hinterland in this manner and the growth of this farmstead. In tracing the history of gardening here, the borders between the human, natural, and material worlds are blurred. Peasants terraced and cultivated with profit in mind, permanently changing the face of hills and slopes. At the same time, the demands of building and maintaining terraces impacted local society, transforming in important ways the legal and economic systems and restructuring labor relations and traditional modes of resource-sharing.<sup>1</sup> The history of Khirbet Beit Mazmīl, its agricultural terraces, and the people that lived and farmed there is the ideal entry point for a volume on material culture and environmental history of the Middle Islamic periods. It is a story of the constant dialogue between a late medieval farmstead and the peasants who “fed” Jerusalem, the agency of landscape, the biography of a place (and its built environ-

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1 The results of these excavations, under the co-direction of the author, took place for several seasons between 2015 and 2019 and are currently under final publication. Preliminary technical reports and historical studies based on the project can be found in Walker “Settlement Abandonment and Site Formation Processes”; Walker et al, “Agricultural Terracing and Rural Revival”; and Walker and Dolinka, “Khirbet Beit Mazmīl”.

ment), and the human hands that molded both. It is essentially a story of relationships, and this, of course, is the making of social history.

The following collection grew out of a pair of conferences, planned as a unit and sponsored in two consecutive years by the Annemarie Schimmel Kolleg of Mamluk Studies in 2016 and 2017: “Environmental Approaches in Pre-Modern Middle Eastern Studies” (December 5–7, 2016) and “Material Culture Methods in the Middle Islamic Periods” (December 8–10, 2017). The coupling of environmental history and material culture studies was quite deliberate, as were the echoes in both venues of sociology and modern archaeological theory. The Kolleg in these years aimed at pushing the disciplinary boundaries of Mamluk Studies chronologically, methodologically, and conceptually and encouraged innovative scholarship that combined traditional text-based historical approaches with geography and spatial analysis, art history, archaeology, and even the natural sciences. Building on the foundations of modern sociology, the intellectual places where text and the physical world met became a testing ground for ideas about the nature of the societies of the Middle Islamic period (11<sup>th</sup>–16<sup>th</sup> centuries), the processes of social change, and a richer picture of social relations in the physical world. This world is not limited to Cairo, Damascus, or Istanbul, but includes the family home, villages, rural landscapes, and more intimate locales of ritual and worship. Exploring the relations between people and places (where socialization takes place) and between people and things (as both are actors with their own “social lives”) requires a spatial and materialist approach. Inspired by, but going beyond, the traditional focus in Mamluk Studies on political and urban clerical networks, the approach advocated in these conferences, and in these years of programming at the Kolleg, focused on two-way relationships and privileged the social over the political, economic, or intellectual. As a result, the participants in these conferences, and the contributors to this volume, include historians who adopt materialist approaches to their texts, environmental historians, archaeologists and art historians influenced by anthropological and sociological theory, and historically-trained botanists and faunal specialists. Together they explore what it meant to be a social being in the pre-modern era and reconstruct the contours of daily life in unexpected places.

## People and the natural environment

Defined in as many different ways as there are disciplines in the humanities, environmental history is the study of relations between people and their natural environment through time. On one level, it offers perspectives on the impact of climatic and other environmental changes on society, and on another it is a window on the varied ways people make use of, understand, control, and main-

tain their natural resources.<sup>2</sup> Rejecting the outdated models of environmental determinism, environmental historians tend to either study the environment as a very powerful actor in socio-cultural change or as the locus of social conflict.<sup>3</sup> Environmental history can be a potent tool for contextualizing political change and explaining the complex combination of factors behind dynastic decline in pre-modern societies. It also provides a useful tool for social, legal (laws and ethics related to the management and equitable access to scarce resources, and disputes over them), and intellectual history (perceptions of the natural environment – color, space, etc.); urban studies (the “Islamic garden”, urban gardening and the development of urban “green spaces”); and, most importantly, the study of knowledge transfer (the agrarian manuals). Social history can certainly benefit from such lines of inquiry. Environmental approaches are, in short, uniquely positioned for writing holistic histories.<sup>4</sup>

Environmental history is far from a new field of study. What began as an American preoccupation with the climate change in the 1970s, has spread to the study of modern, pre-modern, medieval, and ancient societies worldwide. It is well established in Ancient Near Eastern Studies and Classics, and has come to occupy an important position in the historiography of medieval Europe.<sup>5</sup> Middle Eastern Studies has remained remarkably remote from these trends in scholarship. In the last few years, fortunately, there has been a surge in publications among Ottomanists, who have turned to environmental history to address problems ranging from peasant and tribal rebellions and political decline to the working of the Ottoman state on the local level and the agency of local communities.<sup>6</sup>

It is rather surprising that only recently has Mamluk Studies been caught up in the “environmental turn”.<sup>7</sup> Mamluk-era historians were certainly aware of the impact of environmental change, in its various forms, on their contemporary societies. Drought, for example, was a constant preoccupation of medieval Arab historians. The chroniclers demonstrate a real understanding of and concern for a wide range climatic and environmental conditions (rainfall, temperature, land use and abuse), which they regularly cite as the direct cause of famines, revolts, and political decline. The annals of Damascene historians, in particular, are full

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2 İnal, “Environmental History as an Emerging Field”.

3 Appuhn, “The Nature of Ottoman History”.

4 O’Connor, “What is *Environmental History*?”.

5 For example, Pfister et al, *Climatic Variability*.

6 Michail, *Nature and Empire in Ottoman Egypt*; Michail (ed.), *Water on Sand*; White, *The Climate of Rebellion*; for earlier studies Griswold, “Climatic Change: A Possible Factor in the Social Unrest”.

7 The first state-of-the-art study was published only in 2014 (Frenkel, “Introduction to the Environmental History”).

of detailed references to rainfall, road conditions, prices of foodstuffs, and peasant and Bedouin riots, which they suggest were all interrelated. Many of these historians gained their income from managing rural endowments, and others maintained close contact with family in villages (note the colorful historian Ibn Ḥijji al-Ḥusbāni): they were sensitive to the relationship between man and his physical landscape and the role of the natural elements in causing economic suffering. That there was a relationship among the political, social, and natural orders was duly acknowledged by contemporaries. Al-Maqrizi's *Ighathāt*, an Egyptian treatise on famine, is a veritable lament of the state's misuse of natural resources and mis-action in times of drought. The Mamluk state, as well, had a vested interest in the environment, natural resources, and particularly the viability of agricultural land and maintenance of water systems. It had clear agricultural policies, in certain sectors of that regime, and conflicts over natural resources were important flash points at times with local communities.<sup>8</sup> Contemporaries were, in modern parlance, environmentally aware.

That is not to say that there has been no interest in environmental issues among Mamlukists. The trajectories followed in the small body of scholarship that has been published to date in many ways parallel that of current "Ottoman environmental history": the adaptation of local communities to changing environmental conditions, – this is at the center of a growing body of archaeological literature<sup>9</sup> – the environmental impact of state policies,<sup>10</sup> the social impact of environmental disasters,<sup>11</sup> the legal framework of urban water systems,<sup>12</sup> economic studies of imperial water systems,<sup>13</sup> indigenous agricultural practice,<sup>14</sup> *ṭarḥ* and the moral economy,<sup>15</sup> urban soundscapes,<sup>16</sup> and "feeding the city" (a topic more often than not making use of *waqfīyyāt*).<sup>17</sup> However, investigations into the complex, dialectical relations among climate, land use, and socio-political systems – which remain central to environmental history<sup>18</sup> – have escaped

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8 Walker, *Jordan in the Late Middle Ages*; Walker et al "Did the Mamluks Have an Environmental Sense?"

9 Walker, *Jordan in the Late Middle Ages*.

10 Kareem, *Settlement Patterns in the Jordan Valley*.

11 Ghawanmeh, "Earthquake Effects"; Ghawanmeh, *Dimashq*; Tucker, "Environmental Hazards".

12 Levanoni "Water Supply in Medieval Middle Eastern Cities"; Shoshan, "Mini-Dramas by the Water".

13 Borsch, "Nile Floods and the Irrigation System"; Borsch, "Environment and Population"; and Rapoport and Shahar, "Irrigation in medieval Islamic Fayyum" for the late Ayyubid Fayyum.

14 Sato, *State and Rural Society*; Walker, "Struggle Over Water"; Walker et al, "Did the Mamluks Have an Environmental Sense?"

15 Shoshan, "Grain Riots"; Levanoni, "The al-Nashw Episode".

16 Frenkel, "Mapping the Mamluk Sultanate".

17 Eychenne et al, *Le waqf de la mosquée des Omeyyades de Damas*.

18 Rosen, *Civilizing Climate*; Lucke et al, "Questioning Transjordan's Historic Desertification".

the attention of most Mamluk historians, though it sits at the heart of work by historical geographers and landscape archaeologists whose work spans the Mamluk period.<sup>19</sup>

Shared by most scholarship in environmental history is the concept of “resilience”, which is a useful one for our purposes for understanding why communities survive political upheavals and what ultimately undermined the solidarity of others during different crises. Resilience is the ability of a system to remain stable in the face of stress and to recover following a disturbance. For environmental historians it refers to the ability of local societies to weather the storms of environmental disasters (and particularly droughts). On a more abstract level, resilience theory involves the study of the complex relationships between natural and man-made systems; that is between landscape and climate and human societies (in all of their political, economic, and cognitive complexities). It has recently been adopted by archaeologists to assess the impact on ecosystems of human extraction of natural resources and the struggle for control over the same resources.<sup>20</sup> A growing interest among Mamluk and Ottoman historians in natural resource management, political ecology, and agricultural knowledge and practices betrays the influence of resilience theory and the impact of concerns over the global challenges of the day, such as human migration and sustainability in food production.

Environmental history is not limited to the study of climate and natural resources, however. Studying the ways that people identify with natural landscapes is a very promising venue for understanding how “homelands” are socially constructed, identifying factors behind migration that were not specifically politically or economically motivated, and investigating how individuals were socialized into rural communities. The relationship between cities and their agricultural hinterlands (“feeding the city”), spatial analysis of Bedouin life,<sup>21</sup> and the complex relationships between “state” and local society are landscape-focused topics that are gaining ground in Islamic historiography, as this volume demonstrates. Anthropologists understand landscapes as one arena of socialization; the widely used term “socialized landscapes” captures the special ways in which people relate to places and spaces, creating meaning in them. It simultaneously refers to landscape utilization, the perception and experience of landscapes, and the ordering of landscape through social practice. A useful concept

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19 See, for example, Lucke et al, “Soils and Land Use” and Walker et al, “Agricultural Terracing and Rural Revival”.

20 See the special issue on resource extraction of *American Anthropologist* (107/1, 2008), guest-edited by Charles Redman, for a state-of-the-field. On natural resource management in the Mamluk era, see Walker 2017 and Walker et al 2017.

21 One notes, in particular, Kurt Franz’s forthcoming *Atlas der Bedouinen unter dem Sultanat 564–735/1169–1335: Bedouinische Gruppe in mittelislamischer Zeit II* (Wiebaden: Reichert).

for understanding village networks from this perspective is that of “fluid landscapes”, a term coined by the anthropologist Susan Sutton in her analysis of mobility of village communities in Ottoman Greece.<sup>22</sup> As land use cannot be separated from land tenure – they function together as one socio-economic unit – archaeological research on landscape development is increasingly investigating changes in both as proxies of daily life in rural communities, a subject not readily visible in textual sources.<sup>23</sup>

In this volume the contributors consider the physical environmental in all of its forms – climate, landscape, agriculture and pasturelands, water systems, and natural resources. Rather than identifying climate as a determinate in all human behavior, they evaluate it as a trigger and one factor, which puts pressure local communities, in ways similar to political and economic crises. The theme of political ecology (the study of the struggle over natural resources) is woven through several of the papers, providing a window on the social conflicts of the period, particularly on the local level.

## People and things

Our social world is as much defined by the materiality of the world we fashion as the physicality and spatiality of the natural world in which we live and move. Materiality is the quality of being composed of matter, a material quality or thing. It refers to the material quality of the medium, with the understanding that the physical properties of a cultural artifact have consequences for how the object is used.

The study of material culture was central to anthropology in its incipient stage of disciplinary development in the 19<sup>th</sup> century, and remains at the heart of archaeology, a field that reconstructs peoples’ lives from the things (artifacts) they fashion and leave behind. As with other historical disciplines, the “material turn” entered the mainstream of Islamic Studies in the 1990s, under the influence of Marxism, Foucault, and aesthetics theory, by considering the role that objects play in human interaction, through the entanglement of material and social elements in practices. Objects are understood, then, as the “frame of (human) interaction and behavior”; they are part of the “cultural landscapes in which

22 Sutton, “Liquid Landscapes: Demographic transitions in the Ermionidha”. For a historians’ use of the concept, see Forbes, “Early Modern Greece: Liquid Landscapes and Fluid Populations”, and Walker, “Mobility and Migration in Mamluk Syria” for a historical-archaeological application. Gibson, “Archaeology of Movement” provides a complementary spatial-motion study from Cyprus.

23 Given and Hadjianastasis, “Landscape and Landholding in Ottoman Cyprus”; Walker and Dolinka, “Khirbet Beit Mazmil”.

social structures and institutions operate”.<sup>24</sup> No work has had a greater influence on material culture studies in this regard than Bourdieu’s *Outline of a Theory of Practice* (1977), which considers the ability of objects to condition human behavior and define *habitus*. Objects, for him, create order, which lays the foundations for socialization. In this way objects exhibit agency, a point to which we will return shortly. Objects and the practices that people develop in using them are as important as social relations in the process of socialization, that is how people learn to act as members of a community.

Archaeological perspectives on material culture and socialization are highly relevant in this regard. For archaeologists, one locus of identity-making and socialization (and arguably the most important) is the household – a place where a group of people work and use things together. These people may or may not live under the same roof. Thus, the built environment usually identified as the “house” becomes a material and spatial proxy for the most basic unit of production and consumption. The layout of the house, the location and public visibility of “activity areas”, – where concentrations of artifacts associated with particular activities are located, – the organization of the larger settlement – in which the house belongs to a neighborhood – and the location of areas of production and the tools associated with production – demonstrating the transfer of communally valuable skills and indigenous knowledge – are socially relevant components of the physical household that reveal in different ways the process of socialization at the local level.<sup>25</sup> Bourdieu’s *habitus* is formed in such settings, and this is where individuals learn communal values, though they may later reject them. So much of this activity leaves a material (or archaeological) trace; the social meaning of it all can be understood only when considering the spatial context – where objects are found and with what other kinds of objects. In this way objects have relationships with one another; they have use-lives – they are produced, consumed, and eventually reused and given new life or thrown away. In other words, from the human perspective, these things have a kind of agency and their own social lives, social networks, and life histories.

Defined by Ahren as the “socio-culturally mediated capacity to act”, agency is the ability to act in a way that makes a difference or forces a reaction.<sup>26</sup> Latour’s arguments that the lines between the world of the material and that of the human are fuzzy, and that things exhibit agency when people’s lives are impacted through interaction with them, have been most influential in framing

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24 Miller, “Material Culture”, p. 277.

25 For the state-of-the-art in household archaeology in a comparative perspective, see Yasur-Landau et al, *Household Archaeology in Ancient Israel and Beyond*; Parker and Foster, *new perspectives on Household Archaeology*; Routledge, “Household Archaeology in the Levant”; and Fogle et al, *Beyond the Walls*.

26 Ahern, *Language and Agency*, p. 110.

contemporary debates on object agency.<sup>27</sup> Ultimately, objects acquire agency through the human agency that changes their meaning or function. This usually happens when the social context changes. This could happen through reuse of an old object in a new way, or “travelling objects” that enter new cultures and are reinterpreted and refashioned, for example.<sup>28</sup>

Together with object agency, reconstructing object biographies can help us ask new questions about how people relate to the things they make and use.<sup>29</sup> The possibility that objects have social lives was first raised by Appadurai in his ground-breaking work on the commodification of objects, in which objects gain new meaning as they move and are recontextualized.<sup>30</sup> Kopytoff’s frequently cited contribution to the same volume introduced the concept of “cultural biographies”, which, while maintaining the same emphasis on commodification, asks a range of questions that allow us to explore the shared world of people and things.<sup>31</sup> These questions relate to production, – who made it, under what conditions, and for what purpose? – distribution, – how did it reach markets and consumers? – and consumption – how did its function, meaning and value change over time? This is a functional, economy-based approach, of course, and one that resonates in art history and archaeology, where the study of materiality leads naturally to a study of production, distribution, consumption, and disposal. They essentially represent the life cycle (or “use-life”) of a single object.<sup>32</sup>

While social network theory has penetrated Islamic Studies and has become mainstream, particularly as regards intellectual and urban elite social networks, it has been slow to be taken up by those working with material culture. “Travelling objects”, in terms of trade and exchange of elite goods, is a mainstay of Islamic art and archaeology, of course. How the movement of things created or modified human relationships, remains an unexplored venue with, however, great potential. One would aim to trace the movement of a single object from one place to another, and investigate how its function may have changed during this time, how local communities engaged with it, and how the experience of “consuming” and then sending on the same object (commodity, good) to another set of hands. “Object itineraries” go well beyond the study of artifact distribution and circulation, as it aims at documenting what impact that object has locally while making its journey. Through the mobile lives of everyday household goods

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27 Latour, *We Have Never Been Modern*; Latour, *Pandora’s Box*. On the impact of Latour’s theories in general, see Miller, “Material Culture”, pp. 278ff.

28 On the changing meaning attributed to objects in different cultural settings, see Flood, *Objects of Translation*.

29 Hoskins, “Agency, Biography, and Objects”, p. 82.

30 Appadurai, *The Social Life of Things*.

31 Kopytoff, “The Cultural Biography of Things”.

32 Harris and Cipolla, *Archaeological Theory in the New Millennium*, pp. 80ff.

and foodstuffs, for example, we can learn much about village networks, the relations between town and village, and rural social hierarchies. Food stuffs, in particular, has the capacity to reinforce and even restructure social relations. I cite one example from Mamluk-era Jordan, which was a component of the everyman's diet: dried parrot fish.

Fish, in general, was not an important part of the diet in this region in the Mamluk period. The one exception was parrotfish – a colorful, tropical fish that frequents coral reefs. It is indigenous to the Red Sea (and the Gulf of Aqaba) and is still eaten today; the sweet, buttery flesh tastes a bit like crab. Parrotfish was a common food source in Transjordan from the Early Roman to Mamluk eras.<sup>33</sup> The popularity of parrotfish consumption waned after the Crusader and Mamluk periods, and it appears to have slowly disappeared from the local diet – until a revival in recent times.<sup>34</sup>

The itinerary of the “travelling” parrotfish in the medieval era originally reflected networks of Christian communities that tied the Transjordanian countryside to the Red Sea and the Sinai. In the late 13<sup>th</sup> century, dried fish from the Red Sea was obtained by Christian merchants from Karak and Shawbak in exchange for raisins, olives, and olive oil.<sup>35</sup> The St. Catherine archives in the Sinai make reference to a regular exchange in dried fish between the Christian communities of al-Tur (a port in the Sinai) and Shawbak (a castle site in southern Jordan) in the 13<sup>th</sup> and 14<sup>th</sup> centuries.<sup>36</sup> The abundance of fish remains at such Crusader castles and villages with large Christian populations may have been related to dietary restrictions of the Christian calendar. Nonetheless, its distribution at sites across the eastern Mediterranean, from the Iron Age until Ottoman times, and association with Muslim and Jewish communities, as well as Christian, suggests that consumption of parrotfish went beyond the strictly confessional. Parrotfish bones have been recovered from 13<sup>th</sup> and 14<sup>th</sup>-century contexts in notable quantities in the Petra Valley and from the castles at Karak and Shawbak, and at Ḥisbān, castles which were then controlled by Mamluk forces. At the village of Ḥisbān, a village that was predominantly Muslim at the time and that produced generations of Muslim scholars, dried parrotfish from the Red Sea continued to be consumed both in the village and Citadel through the Mamluk period.<sup>37</sup> The village is located 250 kilometers from the Red Sea, a

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33 Van Neer et al, “Fish remains from archaeological sites”; Brown and Reilly, “Faunal remains from Mamluk and Ottoman occupations”

34 Brown and Reilly, “Faunal remains from Mamluk and Ottoman occupations”.

35 al-Bakhīt, *Das Königreich von al-Karak*, 35.

36 Walker, *Jordan in the Late Middle Ages*, 173ff.

37 In recent excavations, only a few bone fragments of parrotfish have been recovered from Mamluk levels at Tall Ḥisbān: three in the Citadel and seven in the village. Corbino in Walker et al, “Did the Mamluks Have an Environmental Sense?”, 222. This suggests that consumption

distance that would have required eight to fifteen days of overland transport via the King's Highway to bring the foodstuff to the village market.<sup>38</sup> It took considerable effort and resolve to maintain this kind of transport. In short, the trade and consumption of parrotfish at Ḥisbān, as elsewhere in the Transjordan, reinforced ties between Christian communities in the Byzantine and Crusader periods. Parrotfish, however, retained its popularity with Muslim consumers thereafter, helping to retain, at least for a time, social relations between Christian and Muslim villages and towns.

The second half of this collection of essays explores ways in which “things” fashioned by human hands defined, molded, and reconstituted relationships: the relationships between craftsman and consumer, patron and client, and within social or intellectual groups, for example. They raise a range of questions, from what kind of relationships develop between “things” to the circumstances under which objects gained a second life – through reuse or recycling. The authors consider how social relationships were consolidated or transformed through consumption (or performance), display, or disappearance of things from public view. The ultimate goal is not to understand better the things themselves, but what we can learn about the societies of the day in this manner.

## Living with Nature and Things

The following work is divided into three parts, which correspond to the themes of the two conferences (Contributions to Environmental History and Material Culture Studies) and a third which bridges the gap between the two approaches (Practice and Knowledge Transfer). My responsibilities as conference organizer and co-editor of this volume were made easier in that the contributions naturally gravitated to topics that are current in both sub-disciplines. The first part is subdivided into three sections: Socialized Landscapes, which describes the perception of an exploitation of the countryside by urban communities; Resource Management, which documents the ways in which patrons and communities met their needs for building material, water, and food; and Disease and Environmental Crises, which explores the impact of and local responses to the great environmental challenges of the 11<sup>th</sup> and 14<sup>th</sup> centuries. Part Two is divided into four sections: Complexity of Patronage, an art historical exploration of urban patronage of public buildings and their furnishings in Cairo and Fayyum; The Materiality of Identity, the contributions of which systematically investigate

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of parrotfish was slowly declining. For studies of the parrotfish remains at the site of Tall Ḥisbān from earlier excavations, see Lepiksaar, “Fish Remains at Tell Hesban”.

38 Van Neer et al, “Fish remains from archaeological sites”, 137.

changes in communal identity as reflected in the built environment and objects of elite consumption; *The Materiality of Ritual*, a collection of essays on material culture, ritual, and ritual experiences; and *Decoding Daily Life*, two essays on the ways that everyday objects reveal patterns of economic and social life. Part Three includes two essays that belong to both environmental history and material culture studies, by investigating what people generally knew about the physical world in which they lived and how they shared this knowledge with others.

The section on Socialized Landscapes includes three papers. Quickel's study on Mamluk Cairo's garden economy explores the theme of "feeding the city", illustrating the blurred line between "urban" and "rural". Through a textual perspective (making use of chronicles, endowment documents, travelers' account, and administrative manuals), he reconstructs the foodstuffs brought into the city from its immediate outskirts and from intra-urban gardens, as well as the mechanisms for food production. The following contribution, by Şen, enters the conceptual world of a 16<sup>th</sup>-century, Ottoman subject, and his perceptions of the countryside of contemporary Syria. The focus of the study is an encyclopaedic geographical work, written at an early stage in the development of Ottoman geography and cosmography. The final contribution to this section on landscapes takes a different approach to the perceptions of Egyptians in the Mamluk and Ottoman periods of the countryside. Braun uses medieval occult literature and magical rituals and formulae to document the ways in which the countryside was defined by its ancient ruins, and was for contemporaries a place of vast, undiscovered treasure.

The three chapters in the section on Resource Management survey what is a relatively new area of research in pre-modern Islamic Studies. Adopting an interesting variant on this theme, El Sayed's paper focuses on the politics of acquiring building material. In her study, she interrogates the ways patrons of religious architecture in Mamluk Cairo acquired the supplies needed for large-scale construction in times of financial need. Recycling and reuse were common strategies, which reveal fascinating ways in which social ethics, the legal system, and political power intersected. Peychev's study, which follows, considers the ways in which urban identity can be formed through engagement with water systems. Pulling on both textual (court records and endowment documents) and archaeological sources, the author argues that Ottoman Sofia's vast hydraulic infrastructure became the reference for "urbanness" of its denizens. The final paper in the section, authored by the zooarchaeologist Corbino, uses the remains of animal bones from the ongoing excavations at Tall Hisban as a window on landscape exploitation, food and identity, and the relationship between the Mamluk state and the local community.

The three papers on Diseases and Environmental Crises that complete Part One of the volume demonstrate ways in which the climate and disease have

agency and drive human responses. In his study of the Fatimid Fayyum, Rapoport focuses on the crisis of 1068, a watershed event usually associated with a climatic collapse and which was felt over large parts of the eastern Mediterranean. The author explored the many political, financial, and social ramifications of this event in Egypt, in part through later texts that record memories of the disaster. The following two contributions on the Black Death deal with the ways that political bodies and peoples coped with disease. Hoffman's essay analyses the impact of price-stabilizing policies by Mamluk sultans to respond to price gouging and food shortages. Ruhaak's study shifts the focus from the state to local society, in an innovative comparison of the resilience of two vastly different cultures (the Irish Gaels and the Bedouin of the Mamluk frontier) to the impact of the plague. The author cites local environmental conditions, diet, economic systems, and social structures as factors in the ability of small-scale communities to weather the storm of the pestilence.

The four contributions to the section on the Complexity of Patronage are authored by art historians, all writing on the topic of Mamluk architecture and the furnishings of those buildings. Abdulfattah's essay on the Qalawunid complex in Cairo interprets an architectural project as a social project. The author pulls on a large corpus of written sources (endowment deeds, plans, and drawings) and material ones (building inscriptions and ornament and the architecture itself) to study the social networks and hierarchies behind the construction of the building. In his study of the Umm al-Sultan Sha' bān madrasa in Cairo, Shabaan interrogates the agency of an institution, in this case Islamic endowments (*awqāf*) and their founding documents (*waqfiyyāt*), in fulfilling the multiple agendas of various patrons. The question over who actually ordered the construction of this building and established the endowment is addressed through reference to the endowment record itself, building inscriptions, and narrative sources, revealing complex reasons why patrons try to influence public perceptions through the manipulation of a physical space. Abou-Khatwa makes the case for the importance of a single patron's personal tastes and preferences in her paper on the patronage of the Mamluk amir Şirghitmish al-Nāşirī. The amir's predilection for Persian learning, art, and culture pervaded his patronage of architecture and the minor arts (namely Quran manuscripts), transforming the face of urban Cairo in the 14<sup>th</sup> century. The final essay, by Kühn, investigates the social conditions that led to the proliferation of minbar production for mosques in the Mamluk period, focusing on a case study from the Fayyum. Here she provides evidence for changing patronage structures that reflect shifting power relations between the political and civilian elites.

The three essays that appear in the section Materiality of Identity are written by archaeologists and deal with the ways that the built environment and ceramics reflect (and mold) identity. Pini's contribution is an anthropology of settlement

organization, in which the author “reads” social structure – such as the nuclear and extended family, and the clan and tribe – from the spatial organization of rural sites. To this goal he compares the changes in spatial organization of three archaeological sites in Jordan and Syria, each of which had long histories of occupation. The collaboratively written essay by Pruno, Marcotulli, and Ranieri investigates the repurposing of the Crusader chapel at Shawbak Castle in Jordan into a soap factory in the Mamluk period, and the accompanying changes in everyday ceramics, as reflections of the cultural transformations that were experienced here after the Crusader interlude. The reception of Islamic material culture in Greece in the Byzantine and Ottoman eras is the topic of the final paper in this section by Vryzidis. The author considers the shifting Christian context of this reception, which ranged from cultural appropriation and co-option to investing imports with new meanings, as well as the afterlives of early Islamic objects in Ottoman-era contexts. The essay thus raises important questions about what was really “Islamic” about Islamic art in this context.

The agency of objects in ritual is the topic of the three papers that constitute the section of the Materiality of Ritual. Bonnéric, an archaeologist, explores in her study the spatial and symbolic functions of lamps in Mamluk mosques. It is a spatial and experiential approach that proposes ways in which different lighting effects were planned in different parts of the mosques to enhance the ritual experience. In the historian Nünist’s essay, a single amuletic scroll of the 14<sup>th</sup> century is interpreted in the context of heterodox leanings, in a ritual world that has resulted from the joint veneration of Sunnis and Shi’īs, the migration of mystics, and the patronage of the Mamluk ruling elite. The physical connection between body and amulet reinforces the very intimate and personal nature of the ritual materialized by the object itself. Complementing this study is the final essay of this section, on the personal connection between the calligrapher and his pen. In Badat’s carefully crafted text, performative ritual reinforces ties between craftsman and tool. Here the calligrapher’s pen becomes a repository of cultural meaning through pen burials and the imitation of the gravestone of the 16<sup>th</sup>-century calligrapher Şeyh Hamdullah.

The “stuff” of daily life is the topic of the final section on material culture. The first of the two essays, by the numismatist and economic historian Schultz, considers the degree to which rural areas participated in a monetized economy in the Mamluk period, through the study of copper coins. The medieval equivalent of “pocket change”, the *fulūs* were used for daily transactions and are omnipresent at archaeological sites. Pulling on the numismatic record from sites in central and southern Jordan, the author queries how many of these coins were imported, how they were used and valued over time, and what they meant to the inhabitants of these small communities. In the paper that follows, the architectural historian Kale relies on the personal possessions of Ottoman ulema to

reconstruct social networks. In doing so, she makes use of descriptions of inlaid cabinets found in inheritance inventories, as well as a corpus of architectural writings, to assess encounters between scholars and artists and the various settings of those encounters, where exchange of artistic knowledge, and the making of “taste”, took place. The life histories of these cabinets, as revealed in the inventories, becomes a window, then, on human social relations.

The concluding part of the volume includes three essays on the ways knowledge about nature and things were transmitted in the Middle Islamic period. The first, by Shopov, centers on the earliest agricultural treatise of the Ottoman era. The rapid increase of interest in agriculture beyond peasant communities in the late Mamluk and early Ottoman decades was related to important changes in land tenure, the popularization of urban gardening, and the development of market agriculture. Shopov systematically interprets a 16<sup>th</sup>-century treatise against the background of tax registers and endowment documents, offering suggestions about the intended readership and social context of the composition and copying of such texts. De Block's study on a 15<sup>th</sup>-century treatise on time-keeping, which follows, explores the intersection between science and practice, recognizing the role of the text as an educational tool. Inspired by Latour's Actor-Network theory,<sup>39</sup> she examines this text as a node in a network of texts, scholars, and institutions, as well as the treatise's ever-changing meaning as it passed hands to other readers. The final contribution to the volume, by Frenkel, surveys European travelers' accounts for descriptions of landscape and climate in the eastern Mediterranean. Such sources not only reveal perceptions about the local environment by foreigners, but transmits local knowledge, as well.

This volume does not include all of the papers that were presented at the two conferences, as several participants had previous publication commitments. It is worthwhile to survey the topics covered by these papers, as they attest to the breadth of research today on environmental and material culture approaches to the social history of the Middle Islamic periods. They included such topics as urban pollution, local perceptions of weather, the impact of a volcanic eruption in Iceland on Ottoman Egypt (our keynote address), rural estate economy, Sufi understandings of nature and the body and mind, houses and socialization, the experience of childhood, text and gardens, local know-how and interdependence in medieval Syrian agriculture, crop selection and the medieval agricultural economy, the archival life-cycle of administrative documents, the itinerary of inscribed metals, Ottoman glazed wares and identity, and medieval Arabic graffiti and migration.

Each contribution to this volume has been blindly peer-reviewed. The peer-review process was in the able hands of the co-editor of this volume, Dr. Ab-

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39 See Latour, *Reassembling the Social*.

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## **Part One – Contributions to Environmental History**