THE CLIMATE OF REBELLION IN THE EARLY MODERN OTTOMAN EMPIRE

The Climate of Rebellion in the Early Modern Ottoman Empire explores the serious and far-reaching consequences of the Little Ice Age in Ottoman lands. This book demonstrates how imperial systems of provisioning and settlement that defined Ottoman power in the 1500s came unraveled in the face of ecological pressures and extreme cold and drought, leading to the outbreak of the destructive Celali Rebellion (1596–1610). This rebellion marked a turning point in Ottoman fortunes, as a combination of ongoing Little Ice Age climate fluctuations, nomad incursions, and rural disorder postponed Ottoman recovery over the following century, with enduring impacts on the region’s population, land use, and economy.

Dr. Sam White is Assistant Professor of History at Oberlin College, where he teaches courses on global and environmental history. He has received grants and fellowships from Columbia University, the American Research Institute in Turkey, and the Delmas Foundation. His articles have appeared in the International Journal of Middle East Studies and Environmental History, among other publications. This is his first book.
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(continued after Index)
To Emily and Mocha.
And now Violette (maybe you can help with the next book).
THE CLIMATE OF REBELLION
IN THE EARLY MODERN
OTTOMAN EMPIRE

Sam White
Oberlin College
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PREFACE

This book began as an attempt to understand the impact of human land use on the environment of the Near East during early modern times. In the course of that research, I started to look at a number of climate studies, including new data from the analysis of tree rings. It was then I discovered that Ottoman lands had entered their longest drought in the past six centuries from 1591 to 1595. Recalling the outbreak of the devastating Celali Rebellion in Anatolia in 1596, I figured the timing had to be more than mere coincidence. However, as I worked at the problem, the path from climate to crisis proved more complicated than I had imagined, and the ramifications of these events proved much more far-reaching than I had anticipated. In the end, that question became the focus of a whole new study.

In the attempt to understand how the Little Ice Age triggered a general crisis in Ottoman lands, my research shot out in a number of directions. Ultimately, this work had to cover a wide range of topics from provisioning, settlement, agriculture, and land tenure, to demographics, climatology, and the course of famines and epidemics. In some cases, other historians had already cleared the way for me, but as often as not, I was forced to cut my own trails through the evidence, sometimes leading to unexpected conclusions.

Although the argument that follows may be complicated in parts, the overall structure of this work remains fairly straightforward. Part I provides the context of the crisis: It investigates the imperial management of provisioning and land use, and how population pressure and inflation rendered this “imperial ecology” vulnerable to disruption from warfare and natural disasters. Part II provides the narrative of the crisis: It explains the climatology of the Little Ice Age in the Near East and demonstrates in detail how climate fluctuations led to waves of famine, flight, and rebellion starting in the 1590s. Finally, Part III analyzes the crisis as a shift in human ecology: It explores the long-term consequences of Little
Ice Age disasters, particularly the way that nomadic invasions and a flight to the cities prolonged the contraction of population and agriculture in the Near East, leaving the Ottoman Empire relatively thinly populated and underdeveloped by the late eighteenth century.

For the most part, this study has followed the usual conventions of Ottoman historical writing. To transliterate Ottoman phrases, I have employed standard Turkish orthography, particularly the conventions followed in recently published mühimme defters, using as few accents and diaritical marks as necessary. I have also used the plural “-s” with Ottoman words for the sake of simplicity. (The actual Turkish plural is “-lar” or “-ler” and many Ottoman words used irregular Persian and Arabic plurals.) All dates have been converted into the Gregorian calendar with the new year beginning in January, except where quoting directly. I have typically left Ottoman weights and measurements in the text with metric equivalents in parentheses where appropriate. For the most part, these conversions are based on Walther Hinz, Islamische Masse und Gewichte (1955), as well as the works of Suraiya Faroqhi and Halil İnalcık. In the use of technical terms from Ottoman history and from climatology, this study has tried to strike a reasonable balance between precision (for the specialists) and readability (for everyone else).

Finally, a note on sources: My principal fount of evidence for the critical developments of the late sixteenth century has come from the Ottoman Archives (Başbakanlık Arşivi) in Istanbul and particularly the series of documents known as mühimme defters (MD), which translates roughly as “registers of important matters.” These are notebooks that include copies of orders from the imperial divan issued in the name of the sultan, prefaced by summaries of reports or petitions. (Because most researchers currently work with scans and not original notebooks, I have cited these orders by defter and document number only, leaving out the page numbers cited in older works.) Generally speaking, these are among our most important sources of information on the sixteenth- and early seventeenth-century Ottoman Empire. Their limits and their potential should become clear as more explanations and examples follow in the text. Elsewhere, this study has relied largely on narrative accounts, particularly seventeenth-century and early eighteenth-century Ottoman chronicles. In a work of this scope, and one intended to reach beyond a specialist audience, it would prove distracting (if not downright impossible) to offer the sort of exhaustive critical analysis of these sources advocated by some recent Ottomanists. Instead, I have opted to triangulate statements in these chroniclers’ accounts with evidence from official
documents, reports from foreign observers, and where climatic events are concerned, with data reconstructed from physical proxies. As the reader will see, the results demonstrate that their narratives of natural and human disasters at the heart of this study do not represent mere rhetorical flourishes, as sometimes supposed, but rather descriptions of real events.
GLOSSARY OF OTTOMAN TERMS

akçe a small silver coin, the standard Ottoman monetary unit in the sixteenth century

ardab a measure of grain equal to about 70 kilograms or 90 liters

askeri belonging to the ruling military class in the Ottoman Empire

avanız an extraordinary wartime cash tax, which came to be levied regularly in the seventeenth century

beylerbeyi provincial governor

bölük-başı commander of a mercenary army or a unit of sekbands (q.v.)

celali term applied to some bandits and rebels in the sixteenth and seventeenth centuries

cel tep a wealthy individual charged with supplying sheep

cizye the imperial head tax levied on non-Muslims

ciki about 250 kilograms

çeltükcü reaya peasants growing rice in a special sharecropping arrangement on state lands

cift a pair of oxen, or by extension, the amount of land a pair of oxen could plow

cift-bozan akçesi the fine that the reaya (q.v.) had to pay in order to lawfully leave their land

ciftlik a farm; in the seventeenth and eighteenth centuries this term was used to describe larger, often commercial, estates

cift resmi the tax levied on reaya households according to the size of their land holdings

desişe the regular distribution of grain from Egypt to the Hijaz
### Glossary of Ottoman Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>dirhem</td>
<td>unit of weight equal to about 3 grams, or a silver coin of that weight</td>
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<tr>
<td>ferman</td>
<td>an imperial rescript</td>
</tr>
<tr>
<td>hane</td>
<td>a household</td>
</tr>
<tr>
<td>ilizam</td>
<td>a tax farm</td>
</tr>
<tr>
<td>imaret</td>
<td>a building complex established by a pious foundation, especially a soup kitchen</td>
</tr>
<tr>
<td>kadi</td>
<td>a judge and local administrator</td>
</tr>
<tr>
<td>kantar</td>
<td>a variable unit of weight, usually around 50 kilograms</td>
</tr>
<tr>
<td>kasap</td>
<td>a butcher; kasaps also had to put up capital to help guarantee the meat supply in Ottoman cities</td>
</tr>
<tr>
<td>kaza</td>
<td>a judgship, the administrative district of a kadi</td>
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<tr>
<td>kile</td>
<td>about 1 bushel, or 36.4 liters, but even more than other measurements the kile could vary from region to region</td>
</tr>
<tr>
<td>kisla</td>
<td>winter pasture</td>
</tr>
<tr>
<td>korucu</td>
<td>guardian of a miri koru (q.v.)</td>
</tr>
<tr>
<td>kurus</td>
<td>a larger silver coin, which became the standard monetary unit in the eighteenth century</td>
</tr>
<tr>
<td>levend</td>
<td>an irregular soldier</td>
</tr>
<tr>
<td>malikâne</td>
<td>a lifetime tax farm</td>
</tr>
<tr>
<td>malikâne-divani</td>
<td>a system by which tax revenues from the reaya were shared between the imperial government and owners of large estates or vakıfs (q.v.)</td>
</tr>
<tr>
<td>mezraa</td>
<td>fields or pasture outside the village lands, usually uninhabited and used only periodically</td>
</tr>
<tr>
<td>miri</td>
<td>belonging to the state, as in miri koru, or state forests</td>
</tr>
<tr>
<td>micerred</td>
<td>unmarried man past the age of puberty</td>
</tr>
<tr>
<td>müd</td>
<td>a highly variable measure of grain, usually equal to about 500 liters in official Ottoman accounts of this period; the “Bursa müd” was perhaps 110 liters to 120 liters</td>
</tr>
<tr>
<td>mufassal</td>
<td>detailed, as in mufassal tahrir defter, or detailed cadastral survey</td>
</tr>
<tr>
<td>mühimme defter</td>
<td>a “register of important matters” consisting of imperial orders usually prefaced by summaries of petitions from the provinces</td>
</tr>
<tr>
<td>mülk</td>
<td>freehold</td>
</tr>
<tr>
<td>nahiye</td>
<td>the smallest administrative unit, consisting of part of a kaza (q.v.)</td>
</tr>
</tbody>
</table>
Glossary of Ottoman Terms

narh  the officially set price for commodities
nüzul  an imperial requisition in kind, usually of grain
okka  see vukiye
öşür  a tithe on the reaya (q.v.)
palanka  a fort
pekmez  grape molasses
reaya  Ottoman subjects, particularly tax-paying villagers
rencber gemi  a rented vessel
sancak  a district, a division of a vilayet (q.v.)
sancakbeyi  governor of a sancak (q.v.)
sekan  an irregular infantry soldier; or just a member of any irregular military unit, militia, or private army
sipahi  a cavalry soldier holding a timar (q.v.)
sohta  a madrasah student; imperial orders commonly used the term to refer to unemployed students in violent gangs
suğla  irrigated land
sürgün  forced resettlement
sürsat  forced purchase
tahrit  cadastral survey
temlik  an imperial practice of granting land as mülk (q.v.)
tezek  dried animal manure used for fuel	timar  assignment of land revenues in return for military service
vakıf  pious foundation
vilayet  a province, usually consisting of several sancaks (q.v.)
vukiye  a unit of weight, usually about 1.28 kilograms
yayla  summer pasture
zimmi  a non-Muslim subject
Ottoman Empire c. 1550. Source: Halil İnalcık and Donald Quataert, eds., An Economic and Social History of the Ottoman Empire, 1300–1914 (New York: Cambridge University Press, 1994). Reprinted with permission.
Ottoman provinces c. 1600. *Source:* Halil İnalcık and Donald Quataert, eds., *An Economic and Social History of the Ottoman Empire, 1300–1914* (New York: Cambridge University Press, 1994). Reprinted with permission.