An Introduction

What kept people alive long enough to reproduce, and what killed them? Perhaps food and disease? Asking questions like that is like replacing the standard film in your camera with infrared or ultraviolet film.

Alfred W. Crosby The Columbian Exchange

CHANGING FILMS

The question at the heart of this book, the "film-changing question," to paraphrase Alfred W. Crosby, is the literary representation of globality and climate changes in Spanish-language literature in early modernity. Columbus's arrival to the Americas in 1492 changed the world in ways that even today are difficult to fully comprehend. In the 1970s, Alfred W. Crosby demonstrated that the changes unleashed in 1492 at the microbiological level were far more serious than those that were more immediately visible or perceptible. Crosby created the concept of the "Columbian Exchange," which is often invoked by environmental historians concerned with global climate change in the early modern period, climatologically known as the Little Ice Age (LIA). In environmental studies, then, the connection between early modern transoceanic exchanges and climate change is one hypothesis with big implications. Yet, whether or not Columbus's explorations, America's microbiological changes, and climate changes are all interconnected is a question of debate. One perspective is that the global network that began with the Columbian transatlantic journeys may be fundamental in our understanding of both the massive depopulation of the Americas and the global cooling that came afterwards. The first connection—Columbian exploration and the depopulation of the Americas—has been profusely covered in historical and literary criticism and analysis. The second one—the interconnection between the Age of Discovery and global climate change—remains at the level of hypothesis. Nevertheless, my contention is that the overlapping of transoceanic contacts and increasing mention of disruptive weather deserves

more attention in Iberian and Colonial literary criticism. Even if there was not a direct cause-effect relationship between expansion during the Age of Discovery and climate change during the Age of Cervantes, we can admit that there was a coexistence between both phenomena. Before continuing with the contemporaneous nature of global exploration and climate change, which informs the two-section structure of the book, it is important to highlight the concept of Little Ice Age and its relevance for Iberian literature.

Climate change has a history, and the LIA is just a part of it.¹ The temporal span of the LIA extends from *circa* 1300 to the 1850s, when the current global warming trend started. The most frequently mentioned causes of the LIA are: CO₂ decrease, volcanic activity, the sun's activity, and ocean oscillations (Koch, "Earth System" 26). The first one, CO₂ decrease, would be linked to the massive depopulation of the Americas after Columbus's transatlantic travels. Oceanic oscillations are mentioned increasingly, but the authors recognize very little is known about them, beyond their powerful influence on global climate. According to specialists, the LIA is neither an isolated phenomenon nor a stable one,² but there seems to be agreement that, by the end of the sixteenth century, there were climatic changes that affected the whole world.³ Beyond that, there is considerable debate about every other aspect of the LIA. Amid this vigorous debate and exciting field of research, Dagomar Degroot has made the following comprehensive synthesis about the state of the question:

Many historians and scientists believe that the Little Ice Age endured for around six centuries, until roughly 1850. Different definitions arise, in part, from a particularly cold period between approximately 1560 and 1720 that was bookended by two frigid, decade-scale climatic regimes: the Grindelwald Fluctuation (1560–1628) and the Maunder Minimum (1645–1720). Atmospheric and oceanic circulation changed in both of these cold phases, causing patterns of precipitation and storminess to shift from region to region. Weather from season to season and year to year was also less predictable than it had been ... In the so-called early modern

See the synthesis made by John L. Brooke (Brooke, *Climate Change*).

[&]quot;Various syntheses of LIA climate... indicate a scenario of climatic irregularity, with phases of high frequency of extraordinary events (floods or droughts) contrasting with phases characterized by similar conditions to those of the Medieval Warm Period... or the present day" (Thorndycraft, "The Catastrophic" 908).

³ See Dagomar Degroot (*The Frigid Golden Age*) and Geoffrey Parker (*Global Crisis*), among others.

centuries, from around 1450 to 1750, the lives and livelihoods of most people depended on local agriculture. Around the world, the weather of the Little Ice Age played a role in triggering harvest failures, commodity price shocks, famine, social unrest, and ultimately death on a vast scale. (Degroot, *The Frigid Golden Age 2–3*)

This is a very informative summary. Nonetheless, as we will see in the last chapter of this book, Degroot's depiction of the LIA is also a partial view of things. The intermezzo years from the Grindelwald Fluctuation (1560–1628) to the Maunder Minimum (1645–1720) were fundamental in the decline of Iberian Habsburg global power. From the point of view of Hispanic literatures, the Degroot narrative can be completed with the data in seventeenth-century testimonies from Iberia, Latin America and Asia, both literary and historical.

Regarding the two-part structure of the book, the 1590s are the inflection point between the first and second parts of this book, for two reasons: one is environmental history, the other concerns aesthetics. The 1590s is a significant decade as much for paleoclimatologists as for literary critics. For some, the glacial "high tide" of the Little Ice Age in the Alps lasted from about 1590 to 1850, before the ebb began, known today as global warming, 4 while in the 1590s erratic weather became the norm. In the realm of literature, the first part of Guzmán de Alfarache was published in 1599, pointing to a sea change in Spanish literary history. By 1605, as Enrique García Santo-Tomás says, some profound changes had already happened in aesthetic taste that led to the creation and publication of four of the most significant books of the seventeenth century: *El Buscón* by Francisco Quevedo, the sequel of Guzmán de Alfarache by Mateo Alemán, the first part of Don Quixote de la Mancha by Miguel de Cervantes and La pícara Justina (García Santo-Tomás, "The Spanish Baroque Novel" 500). Following the same line of thought, while in 1585 La Galatea by Cervantes contained impressive narratives of friendship and networking attached to Renaissance values and re-Latinization projects of the pastoral genre, in the first part of *Don Quixote* (1605) they simply do not exist with the same values.⁵ On the contrary,

⁴ It has been said also that "[t]hese two and a half centuries at the climax of the Little Ice Age straddle momentous changes in European society" (Fagan, *The Little* 120).

⁵ One of the tenets of Irigoyen-García's analysis of the success of the pastoral in Spain is: "The symbolic opposition to everything Moorish in Spain was the basis of pastoral's success between the 1560s and 1620s" (Irigoyen-García, *The Spanish Arcadia* 21).

in the 1605 *Don Quixote* one of the most famous representations of imperfect friendship of the early seventeenth century is in the *novella* known as "El curioso impertinente." From 1599, the year of publication of the first part of *Guzmán de Alfarache*, we can observe the resurgence of the picaresque genre, but also the quick transition to the troublesome friendships and relationships cultivated by Guzmán.⁶ Of course, *La Galatea* and *Guzmán de Alfarache* belong to completely different narrative genres: pastoral and picaresque. The pastoral responds to a proto-national project, while the picaresque is a critique of those proto-nations from the point of view of those who are left behind.⁷ The pastoral agglutinates monolithic identity, neo-latinization, re-Christianization, etc., while the picaresque coexists comfortably with variety and its conflicts. And yet, one would expect a smoother transition. In some fifteen years, the discourses on relationships were going to descend to profound levels of disenchantment.

For such a noticeable transformation, there is a combination of explanations; without negating any of them, this book adds climate change overlapping with the Columbian Exchange and globalization trends of the early modern period to that list.⁸ All over the Mediterranean, during the Little Ice Age, the consequences of the decrease in CO₂ levels in the atmosphere became oppressive, much like today's consequences from

In fact, Irigoyen-García separates himself from formalistic issues and the influence of

⁶ See Antonio Herrería Fernández ("Las amistades imperfectas") and Donald Gilbert-Santamaría ("Guzmán de Alfarache's 'Other Self'").

imitation in the following manner: "Pastoral romances became one of the most representative genres in the negation of Moorish Spain-but served as well as a space for contestation. Their success goes beyond any facile explanation based on literary influence or a formalistic imitation of the prestigious Italian Renaissance models... The fact that more pastoral romances were published in Spain than in the rest of Europe altogether is symptomatic of social and symbolic values that surpass any explanation based on pan-European aesthetic tastes" (Irigoyen-García, *The Spanish Arcadia* 16–17). By the 1560s, erratic climate phenomena were noticeable. As J. H. Elliott pointed out, in the 1560s there are a significant number of revolts whose interconnections might need to be studied (Elliott, "The General Crisis" 61). Three decades later, in the 1590s, the climate was consistently unpredictable. Sam White has published a study of causes and long-lasting consequences of the Celali Rebellions in the Ottoman Empire, which became a turning point in the history of the Eastern Mediterranean. Beginning in the 1590s because of extreme cold and drought, and disrupting provisioning systems, its effects spilled well beyond the turn of the century. We know that the Western Mediterranean polities also confronted dramatic events, but the usual explanatory frame is institutional, economic, social, religious, cultural, etc. There might be some parochialism and nationalism at the base of those explanations for the 1590s changes.

the increase in CO₂ levels are daunting on a global scale. In both the seventeenth and the twenty-first centuries, fiction becomes a place of reflection about challenging emotions, growing fears, and unspeakable frustrations. As today we have climate fiction, by the end of the 1590s we had Baroque aesthetics percolating into literature. Based on that context, changes in the representations of emotions and relationships in literature from the 1580s to the 1600s should not be a surprise. The question is how those emotions are codified in literature, how the fears jump out of the pages, how the frustrations changed literary careers. That is the concern of the second part of this book.

Following this concomitance between transoceanic travel and climate change, this book is divided into two parts. As globality centers on longdistance exchanges on a large scale, the first part of this book focuses on those exchanges at the material and symbolic levels. On the material side, we encounter hard goods, such as spices, silver, humans, plants, and many others. On the symbolic side, we will analyze representations of giftexchanges and friendship from around the world. While material goods are invoked in most of the books concerned with the creation of globality during the early modern, analysis of discourses of friendship and gift-giving are not that common. Yet, mentions of friendship and gifts populate colonial literature from Columbus and Álvar Núñez Cabeza de Vaca to Matteo Ricci and Antonio Pigafetta, as a code that reflects their efforts to represent networks in societies where they were alien. Successful or not, those exchanges transformed the world and its networks. During the sixteenth century, global exchanges increased to levels that enriched parts of the world while also creating profound imbalances at a global level. Coincidentally, the global climate also experienced profound irregularities in its cycles.

The second part of this book explores various literary representations of the consequences of this climatic unbalance. In Valencia, a diarist says with great alarm, "the seasons are out of season." For today's readers, it should not be difficult to tie this phrase to current climate change and erratic weather, and as we will unveil in this book, it also easily connects to the Little Ice Age's unsettling weather. This book seeks to answer how the consequences of "seasons-out-of-season" weather were expressed in the seventeenth century Iberian world. To do that, the second part of the book examines the traditional topics of storms, shipwrecks, floods, sickness, comets, etc., as literary expressions of the multiple levels of disruption caused by the Little Ice Age's misplaced seasons. In this context, representations of hyperbolic emotions, intense dreams, devastating storms,

and cataclysmic friendships are all analyzed as transpositions of weather-disrupted lives, enterprises, and empires.

Elliott lacks sufficient explanation when formulating that in the 1590s many transformations took place in Iberia and Europe, leading to the brink of the multiple crises, revolutions, and uprisings during the first twothirds of the seventeenth century, all of which has helped historians form the so-called General Crisis paradigm (Elliott, "The General" 52-73). This book contends that the missing cause of the global "shipwreck modernity" had to be larger than religion, politics and economics;9 for that reason it is tempting to say that the Little Ice Age can be considered—against the background of current global warming—as a consequence of the sixteenth century increased economic activity that created the conditions for the "global cooling" of the seventeenth century. To amass fortunes through long-distance commerce, the globe, as Quevedo said, once immense, had already become a "small district" for the size of the ambitions and desires of merchants. 10 Seafaring produced varying regional economic effects and anxieties. As represented in El Criticón by Baltasar Gracián, seen in chapter four, the moments of peace that Critilo and Andrenio enjoy in their secluded life on a deserted island come to an end, causing increasing anxiety in Critilo, 11 when "some flying mountains" appear off the Atlantic Island:

-I see—he said—some flying mountains, four winged marine monsters, if they aren't clouds that sail.

–They are but ships—said Critilo—, though you well said clouds, which rain gold upon Spain.¹²

Instead of bringing a sense of relief to Critilo, at the sight of these flying mountains that rain gold upon Spain, he "began to sigh, drowning in his sorrows" (Gracián, *El Criticón 99*). Iberian literature contains a large archive of the hopes and sorrows caused by exploration, seafaring, and empire-building, and their global consequences can be felt even today in so many ways.

⁹ I am paraphrasing Steve Mentz's book *Shipwreck Modernity* here.

Reference to the "Sermón estoico de censura moral" (Quevedo, *Poesía* 121).

Critilo "començó a suspirar, ahogándose en penas" (Gracián, *El Criticón* 99).

[&]quot;-Veo —dixo éste— unas montañas que vuelan, cuatro alados monstruos marinos, si no son nubes que navegan.

⁻No son sino naves —dixo Critilo—, aunque bien dixiste nubes, que llueven oro en España" (Gracián, *El Criticón* 99).

Some of the most valuable records of all those travails and tribulations are inscribed in the uncountable books, letters, reports, logs, maps, etc., produced during the sixteenth and seventeenth centuries concerning not only the Americas, but also the rest of the global "district," paraphrasing Quevedo. America was a land of passage for the ambitious representatives of empire-making.¹³ As it is well known, Columbus wanted to arrive to Cipango. What is less known is that Castañeda de Nájera conceived the idea that the U.S. Southwest was connected by land with both Asia and Norway; Menéndez de Avilés was convinced that the rivers leading inland from Newfoundland flowed into the Pacific and a maritime route to Asia; Joseph de Acosta believed in the Strait of Anian; and Juan de Oñate was looking for a triangulation of commerce between New Mexico, China, and Perú. As shown in chapter two, all these agents of empire in America transmit the excitement—anxiety even—to locate the next passage to Asia, through which even more profitable business could be conducted. As we know, the consequences were dreadful for the populations of this land of passage that became America.

Colonial literature related to America certainly contains many representations of the interactions between Europeans and the Other. Yet, in the first two chapters we mostly work with representations of exchanges—both material and symbolic—in areas of the world beyond today's officially Hispanophone and Lusophone countries, such as China, the Philippines, India, the United States, Australia, and the Republic of Vanuatu, among many others. I contend that it is in the margins of the Habsburg conglomerate of power that the profound breadth of early modern globality can be perceived without the distortions of national curricula, academic posturing, and accumulated scholarship. As we will see in the first part, Cabeza de Vaca, Antonio Pigafetta, Francis Xavier, and others, all made fascinating representations of their successful and failed exchanges that enriched the medieval world of Christian Europe with new information, while creating the path for the changes that will come later.

Today, as global climate change has spurred debate in all societies, several intellectuals have started to reconstruct the history of climate, arriving at astonishing conclusions about the agency of climate during the early modern period. Since World War II, thanks to Ferdinand Braudel and

Paul E. Hoffman, Kimberly C. Borchard, and Ricardo Padrón, among others, point out this idea in more than one work, which are incorporated in this book in several places.

Emmanuel Le Roy Ladurie, climate became a decisive historical player according to their approaches to the history of the Mediterranean basin and the Alps. In the last decade, environmental history methodologies have enlarged our understanding of the early modern Ottoman Empire, the Dutch Republic, France, China, England, and the Iberian Habsburg's global conglomerates. 14 Due to this trend in scholarship, this list increases with every new publication mentioning the Little Ice Age. During the last decade the number of publications with an interest on the topic has increased enormously, and another epistemological change has occurred. It seems that the need to accommodate both weather and crisis within the framework of environmental historiography has helped the merging of two European historiographical traditions. I am referring, on the one hand, to the British school of thought of the "Great Crisis" and, on the other, to the French school of the Annales; the legacy of these two schools now may be merging in some historians' work, thanks to the immense revision necessary to create a productive framework that will inspire intellectual responses to our current climatic crisis.

While sixteenth and seventeenth century climate variations were overlooked in the history of the "Great Crisis," ¹⁵ the first attempts to incorporate climate to historiography are said to have come from the hand of Ferdinand Braudel in *The Mediterranean and the Mediterranean World in the Age of Philip II* (1949), where the Mediterranean Sea is perceived as a whole; and from his mentee, Emmanuel Le Roy Ladurie, whose book *Times of Feast, Times of Famine* (1971) incorporated the disruptive power of climate, glaciers, lakes, and floods into seventeenth century history with his seminal study on the influence of the movement of Alpine glaciers on the history of Europe. He emphasized the social consequences of the advancing glaciers: floods, destruction of land, relocation of towns, migration, religious demonstrations and superstitious ones. ¹⁶ To avoid the

See Sam White (The Climate of Rebellion); Alan Mikhail (Nature and Empire); John L. Brooke (Climate Change); Ling Zhang (The River); and Dagomar Degroot (The Frigid Golden Age).

See J. H. Elliott's discussion of the theory of general crisis in the seventeenth century in British historiography and his comments on the origin of the composite monarchy concept, in the chapter "The General Crisis in Retrospect: A Debate without End" (Spain 52–73).

A study that has attempted to link the LIA to systemic campaigns against the alterity is Christian Pfister's 2006 article "Climatic Extremes, Recurrent Crises and Witch Hunts: Strategies of European Societies in Coping with Exogenous Shocks in the Late Sixteenth and Early Seventeenth Centuries."

traditional imperial, national, religious, and cultural boundaries, Braudel and Le Roy Ladurie built the space of their historical analysis around the "role of the environment" in the formation of the Mediterranean basin and Central Europe as unified areas under the influence of the seas and the glaciers. Within this environmental perspective, along mountains, plateaus, plains, seas, coasts, deserts, communication routes, and cities, there is a "unity of climate" that might influence history:

It is a matter of some importance to the historian to find almost everywhere within his field of study the same climate, the same seasonal rhythm, the same vegetation, the same colours and, when the geological architecture recurs, the same landscapes, identical to the point of obsession; in short, the same ways of life. (Braudel, *The Mediterranean* 176)

For Mediterranean countries, the consequences of this basic uniformity are notable, some of them being competition, mobility, and interdependence (Braudel, *The Mediterranean* 178–79). As said by the other forerunner of environmental history, Emmanuel Le Roy Ladurie, the relation between climate, cost of life, sickness, epidemics, and demographic compression is complicated.¹⁷ That said, it is even more complicated when transoceanic travel, transcultural systems of exchanges, and literature are added to Le Roy Ladurie's equation.

These phenomena had consequences in political, economic, social and, as I argue in this book, artistic developments. But, before approaching the question of Baroque literature in connection with erratic climate (especially, but not only, representations of storms, travel, friendship and dreams), let me expound on the three hypotheses of this essay on globality and climate: first, that climate changes seriously affect and transform emotions attached to the human experience;¹⁸ second, that fiction serves humans as a means to process individual and collective experiences;¹⁹ and third, that Iberian literature contains a register of these changes that has not yet been examined by literary critics from the perspective of cli-

See Emmanuel Le Roy Ladurie (*Histoire humaine et comparée du climat 2 392*): "la relation Classique climat / subsistance / prix / disette / épidémies / baisse démographique est compliquée."

¹⁸ Teresa A. Myers, Matthew C. Nisbet, Edward W. Maibach, Anthony A. Leisrowitz ("A Public Health Frame"); Sabine Roeser ("Risk Communication").

¹⁹ A flurry of articles on climate fiction has appeared in significant weekly publications since 2013, see below.

mate change and its connection to extreme emotions. Scientific research supports these three hypotheses, even though there is noisy debate at the political level, and indecision about the measures needed to quickly adapt to the evolving environmental reality.

Concerning my first assumption, Glenn Albrecht discussed the need to create a concept for the desolation felt when facing "a land-scape that has been devastated." The result was the concept of "solastalgia," a compound term of "solace" (comfort) and "algia" (anguish or pain). Solastalgia can include "feelings of general distress, loss and be-reavement, but these can escalate into more serious health and medical problems such as drug abuse and physical or mental illness" (Albrecht, "Solastalgia" 35–36). We could think about solastalgia-induced behaviors following the transatlantic examples from the 1590s and 1690s both in New Spain and Iberia. In the 1590s, sixty years after the arrival of the slave riders described by Cabeza de Vaca to the Tepima corridor in the 1530s, Native Americans in the proximity of the Tepima corridor were described as infant killers due to the total fallout of their ecosystem during the sixteenth century. Documents from the 1590s show the sinking societal reactions:

The imposition of forced labor to produce surpluses for Spaniards was only one of the accruements of the conquest. Even more disorienting and disruptive ... were epidemic diseases... producing mortality rates as high as 40 percent... Jesuit reports during the 1590s mention a variety of indigenous responses to such catastrophic change, including abandonment and even burying alive the sick. According to the Jesuits, child sacrifice was also practiced as a trade-off to restore health to dying adults. (Deeds, "Indigenous Rebellions" 35)

Out of distress, Native Americans resorted to extreme behaviors to expel the evil that decimated them once and again, in recurrent epidemic waves. One hundred years later, in 1692, also in New Spain, we have the astonishing example of Carlos de Sigüenza y Góngora attributing the excessive and unseasonal rains as the cause of revolts in Mexico City. As we will see in the last chapter, Sigüenza y Góngora was a remarkable case in the analysis of weather-inflicted pain. He thought that natural phenomena like comets and floods had to be studied in a proto-scientific manner, and that astrological or providential explanations were unacceptable. For this contribution, Sigüenza y Góngora is on the same level of thinking about nature as his European contemporaries Pierre Bayle and Christiaan