

# 7

## EXPLORING SF ECOCINEMA

### Ideologies of Gender, Infrastructure, and US/China Dynamics in *Interstellar* and *The Wandering Earth*

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Our chapter features a collaboratively forged ecocinema ideology critique. We designed the process and product to transcend the limits of individual analysis. As an ideology critique, identifying and analyzing core contradictions in each of the two films we explore drives our work. One of our aims is to develop and extend the practice of ecocinema ideology critique articulated by Andrew in “Ecocinema and Ideology: Do Ecocritics Dream of a Clockwork Green,” in the original volume of *Ecocinema Theory and Practice* (Hageman 2013). To that end, we wrote this chapter through a series of collective discussions, drafts, and revisions to produce arguments that account for the distinct surprises, questions, confusions, and hypotheses that arose from our respective Chinese (Regina) and American (Andrew) ideological perceptions of one Chinese and one American speculative fiction (SF) blockbuster film in conversation. The key insights that emerge point to intersections of ecological futures with patriarchal structures and tensions between collectivities and individualisms.

The primary films in focus are Christopher Nolan’s *Interstellar* (2014) and Frant Gwo’s *The Wandering Earth* (2019). *Interstellar* imagines a near-future Earth ravaged by climate change combined with widespread agricultural blights and crop failures. The National Aeronautics and Space Administration of the United States (NASA), which now must work covertly, exploits a wormhole to seek out alternative planets and develops the technologies to transplant humanity once a suitable Earth-analog is found. *The Wandering Earth* imagines the Earth under threat as the sun is about to go red giant. A United Earth Government (UEG) is formed, and China takes the lead in engineering and constructing a set of Earth Engines to push the planet out of the solar system to seek a safe new system.

We chose *Interstellar* and *The Wandering Earth* because this pair of films is ready-made for ecocinema studies critical and transnational comparative dialogue. Both are massive budget SF blockbusters released within just five years of each other. Their plots are driven by planetary ecological crises and techno-scientific approaches to interstellar space travel to ensure a future for the human species. The protagonists are three-generation families dominated by grandfathers and fathers, with the conspicuous absence of mothers who died in circumstances connected to the ecological crises. All told, this pair of films shares many common variables in the dramatic SF eco-thought experiments they present, yet there are many disparate variables as well.

*Interstellar* comes out of Hollywood while *The Wandering Earth* comes out of China, so each film is marked by its own national film industry practices and its distinct appeals to domestic and international markets. Nolan's film embraces a narrative of leaving Earth behind as the cradle of humanity, while Gwo's film promotes a deep commitment to Earth but with a complicated treatment of the planet as a resource stockpile. Suggestively, Liu Cixin, the author of the short story/novelette which the latter film adapted, has commented on *Interstellar* that "it uses the kind of science fiction ideas more common in science fiction literature, but not common in science fiction films, such as black holes, so it is not very innovative" (*Dalian Evening Post* 2014) while praising Gwo's *The Wandering Earth* because it "uses a very rare idea in science fiction: push the Earth away as a spacecraft. This kind of idea would never be adopted in Hollywood" (Du and Dong 2019). The differences in genre conventions and originality that Liu emphasizes further establish the ideological dialogue this pair of films can spark within an ecocritical agenda.

In addition to the blend of shared and disparate variables, the critical responses to both films underscore the value in thinking through them in conversation. Comparing the critical literature available in English on both films,<sup>1</sup> it's apparent how *The Wandering Earth* is taken to be propaganda for China's government and geopolitics while *Interstellar* is treated as Nolan's auteurism and exemplary scientific realism. Articles on *The Wandering Earth* tend either to endorse or chastise its depiction of China's geopolitical strategies and tactics, from Amir Khan's and Weihua He's positive reads of the film's collectivity and cosmopolitanism to Molly Silk's critique of *The Wandering Earth* as soft power propaganda for the current "regime" in China and Ping Zhu's comment that the film "reinforces the authority of the Father and the nation-state" (Khan 2020, 20–37; He 2020, 530–540; Silk 2020; Zhu 2020, 94). By contrast, articles on *Interstellar* follow the film's own marketing moves by delving into the accuracy of its wormhole and/or black hole physics and imagery. Dr. Kip Thorne, a theoretical physicist now retired from the California Institute of Technology (CalTech), was an executive producer of and science advisor to the film. Thorne's book, *The Science of Interstellar* (2014), intensified attention to the scientific accuracy of the film in place of its ideological signals. A key exception

is Timothy Morton's exploration of love and openness when he writes of the film, with a powerful focus on the robot TARS, in *Humankind: Solidarity with Nonhuman People* (2017, 145–162). In our merging of the two films, we disrupt the smooth flow of these critical receptions to forge our planetary ecocinema analysis and imagine collective ecological futures.

Our approach to ecocinema ideology critique in this chapter modifies the method Andrew originally adapted from the work of Slavoj Žižek by distinguishing each film's *constituted* and *constitutive* ideological textures. The constituted ideology is what the film appears to promote explicitly, and seemingly intentionally. These are the values the films wear on their sleeves. The constitutive ideology is what the film actually seems to promote implicitly, and seemingly unconsciously. These are the values the films rehearse whether knowingly or not and whether or not their makers would disavow such values. By homing in on where the constituted and constitutive ideological textures contradict each other, we pinpoint the limits to imagining ecological futures that must be engaged and overcome. While Andrew demonstrated this method in the original *Ecocinema Theory and Practice* volume, our chapter radically advances this work by featuring two scholars with backgrounds in disparate national-ideological contexts collaborating to produce a shared analysis of the constituted and constitutive ideologies of each film from both national-ideological contexts.

Our analysis of the constituted and constitutive messages of both films is divided into two sections. First, we delve into the ideological gestures and contradictions in both films' uses of educational settings with a special emphasis on how these scenes establish the principle of young women characters Murphy Cooper and Han Duoduo. Both young women are the educated and the repressed in the system, silenced and purportedly protected when large crises take place. They appear assertive, confident, and intelligent but without real agency. From an ecofeminist perspective, Murphy and Duoduo's roles parallel those of planet Earth, which is forced to provide the last crops of grain in *Interstellar* and be saved from the solar doomsday in *The Wandering Earth*. The planet and the women appear to be loved and valued as the key to the future of humanity yet are figured ultimately as weak objects for male heroism. Furthermore, representations of schools and pedagogies feature frequently in SF cinema as part of its world-building imaginings, and a recent turn in ecocriticism, illustrated by Sarah Jaquette Ray's *A Field Guide to Climate Anxiety* (2020) and Chris Schaberg's *Pedagogy of the Depressed* (2021), is theorizing and redesigning education for this era of anxiety and depression about impending futures near and far. Schools are ideology replication factories, so they are key to ecocinema ideology critique. Second, from the ideological fabrics of education, we pivot to those that inform the food systems and practices both films depict within their eco-crisis futures. Food production has played a fundamental role in producing the Anthropocene and must be a core part of surviving and ameliorating

warmer planet futures. These films can reveal through ecocinema ideology critique the unsustainable extent to which agriculture is currently dictated by global capitalism and the ways to potential alternatives.

For a final introductory note, as we revised our first draft of this chapter in October 2021, two unique space travel events unfolded within a three-day span. Billionaire Jeff Bezos sent former *Star Trek* star William Shatner briefly into space aboard a privately owned rocket and China sent three taikonauts, including female pilot Wang Yaping, to the space station it recently completed as part of its long-range plan to establish a moon base to support further missions into space. Ideology critique of SF ecocinema looks to the future, yes, but also helps us find the meanings in yesterday's news.

## Education and Ideology

Classrooms and campuses provide productive sites for anticipating which technical acumen, as well as forms of control, both ideological and repressive, might be called for by future conditions of political economy and planetary ecology. School sequences appear early in *The Wandering Earth* and *Interstellar* and perform two interrelated functions. First, these sequences establish the characters of Han Duoduo and Murphy Cooper, the young women protagonists who play important roles in solving their respective planetary crises. Second, the pedagogies deployed in both schools are shaped by the particular ideological responses to planetary ecological catastrophe that each film projects in its constituted and constitutive textures. Educational philosophies and practices, as well as characters' reactions to these, comprise constituted ideologies as they overtly articulate values. Our analysis focuses on contradictions in a combination of individual and social elements in these sequences to identify the constitutive ecocinema ideologies at work in each film. In the process, we leverage the China/US dynamic to critique these imaginations of education at the end of the world.

Han Duoduo's first appearance in *The Wandering Earth* portrays her as a disaffected and rebellious individual, too cool for the academic agenda in this school. The sequence opens with a medium close-up shot of her hand flipping her pen in a style well-known in Chinese classrooms. Juxtaposed with this visual is the collective voice of the students reciting a text about spring, planning, and hope from a famous text, "Spring" by Zhu Ziqing. In actual Chinese education, recitation of this text serves largely to familiarize students with excellent writing. Reframed by the ecological context of the film, "Spring" gains the added power of equipping young people to confront the anxieties and depression of people and the planet in peril. This short scene plants a Humanities education seed that blossoms later in the film as a counterpart to the Technical education behind the Chinese engineers' Earth Engines.

The camera cuts to a medium shot of Duoduo chewing gum with her mouth closed in subtle resistance to the recitation work and then dropping her pen on

the floor out of sheer boredom and/or to reject this indoctrination of hope. The next cut moves out to reframe Duoduo from the side, a shot that spatially emphasizes the many symmetrical rows of desks filled by uniform-clad teenagers. Her rebellious spirit is set off by Duoduo's classmates attentively performing for the teacher, who then calls on the class monitor, a top student designated as a classroom model/supervisor, to define hope. While the monitor stands and rehearses a poetic line about how precious hope is in this time of planetary crisis, Duoduo slouches further and delivers an audacious eye roll that does not escape the teacher's notice. Moments later, Duoduo sneaks out of the classroom during a diversion created by Liu Qi, her older brother by adoption.

Through content and form, this sequence characterizes Duoduo as a strong-willed individual and Chinese educational pedagogy as a superficial program for producing compliant cogs to maintain the social machine. For US spectators in particular, Duoduo may act as an individualistic point of identification within this unfamiliar educational scenario that is grounded in collectivity and prescribed programming of what to think and believe. Yet, this initial constituted ideology of force and agency is undermined across much of the film in favor of a constitutive patriarchal approach to ecological crisis.

As the plot of *The Wandering Earth* unfolds, Duoduo plays a surprisingly low-impact role in light of her initial in-school persona. When confronting challenges during the mission to help save Earth, Duoduo almost always appears fearful and ineffectual, whimpering for help from men: her brother, grandfather, and other male members of the rescue team. From an ecofeminist perspective, this lack of imagination in her character arc and development is as unsurprising as it is significant. Duoduo's weaknesses of character imply a failure on the part of the filmmakers, and in social ideologies at large, to imagine what women with strong senses of agency might produce to address planetary ecological catastrophes. Sure, she can chafe against the school and the ideology it perpetuates, but for the majority of the film, the ruling order of patriarchy remains undisturbed.

Even Duoduo's original act of rebellion, the cornerstone of her character, is recontained by her eventual contribution to saving Earth and humanity. When Liu Peiqiang, Liu Qi's biological father and Duoduo's adoptive uncle who left the family years ago to serve on the space station orbiting the wandering Earth, asks the UEG to order remaining units to assist in a last-hope endeavor, he's rejected. The UEG replies that this leadership body will not demand that people set aside their individually chosen ways to meet doom to pursue a low-probability effort at collective species survival. In response to this liberal humanist surrender, Duoduo acts. She delivers an inspiring speech to humanity via a universal public-announcement system – a medium of collective ideology dissemination conventionally familiar in China but coded as dystopian in the United States as a tool of totalitarianism. Specifically, Duoduo rehearses the phrases taught and internalized in that first classroom scene. Duoduo takes up the same role as the teacher she disrespected. True, Duoduo's experiences

endow her words with the power of practice beyond theory alone. However, the superficial appearance of elevating Duoduo actually recontains her role, and that of women more broadly, as mere support to a male agenda, which is also true of medical rescue team Lieutenant Zhou Qian. In preserving the patriarchal hierarchy, the film undermines its utopian element of the people of Earth astoundingly forging transnational solidarity and moving the planet out of the solar system. In this way, the constitutive gender ideology of Duoduo appearing strong and savvy while reinforcing a misogynistic status quo works against the constituted ideological vision of a collective ecological future on the far side of its imminent crisis. After all, structural exploitation and extraction of people based on gender as well as race, religion, and more go hand in hand with the exploitation and extraction of nonhuman beings and objects. As Chelsea Mikael Frazier asserts in “Black Feminist Ecological Thought: A Manifesto,” ecocriticism must develop, not by adding approaches but by fundamentally changing its “committ[ment] to understanding the intersections of gender, race, and class and bringing those commitments into a larger discussion of ecological approaches to literature, art, and culture” (2020).

All told, the depiction of education in *The Wandering Earth* is marked by the core contradiction of paving the way to a human collectivity forceful enough to save the planet and species yet unable to achieve escape velocity from structural patriarchy. This mix of productive aspects and problematic baggage in speculative education approaches is rendered especially visible through this process of ecocinema studies collaborators applying ideology critique to a mix of films from different nations. This is a way toward challenging the nationalistic, patriarchal, and other conservative forces that we have all inherited and that prohibit planetary thought and practice.

With the ideology critique underway, we now add the two-film dialectic by turning to education in *Interstellar*. Patriarchal ideology dominates the education sequence that provides Murphy’s initial characterization. Unlike Duoduo’s introduction, the *Interstellar* analog features Murphy’s father, teacher, and school administrator discussing her academic performance and disruptive rebellion in a parent-teacher conference while she waits in the family truck outside the school. Ideologically speaking, the narrative choice reinforces the father as the keeper of agency, knowledge, and perspective. Similar to Duoduo, Murphy rebels against an education she considers facile, in this case, because she believes the history textbook’s account of the Apollo moon landing to be fraudulent. The textbook claims the landing was faked. Murphy’s rebellion against this educational manipulation is grounded in the knowledge her father has provided. Cooper appears dumbstruck when he first hears why Murphy acted out, and he quickly disabuses the educators of interpreting his response as disappointment in his daughter’s disobedience. Instead, Cooper supports his daughter’s assessment of the textbook’s lie and launches into a thematic diatribe that captures the essence of *Interstellar*’s ideology.



FIGURE 7.1 Cooper attending a parent-teacher conference in *Interstellar*.

Cooper, and by proxy, Murphy, significantly attacks only the veracity of the Apollo moon landing itself and not an education board's decision to disseminate this revisionist history, which frames past US space exploration as a move to bankrupt the former Union of Soviet Socialist Republics. By glossing over the pedagogical choices that shaped the textbook and the broader ideological programming it supports, Cooper implicitly focuses his resistance on the politicization of national space programs. The constituted ideological focus asserts that Cold War politics did not play a role in the Apollo moon landings and should not diminish that great techno-scientific achievement. As such, a sequence ostensibly about Murphy's savvy and rebellious spunk is actually about a privileged white man angrily asserting that space exploration and the planetary ecological crisis are apolitical, ahistorical demonstrations of a universal human call to explore. In short, an ideology with more than a whiff of Musk (Elon, that is). Murphy is thereby introduced as an echo of her father and the fantasy of patriarchy free from history, politics, and ideology that he believes he embodies.

Not only does *Interstellar* twist this education scene away from the young woman supposedly at its center, but it seeds subsequent messaging on morally-warranted control of public narratives. While Cooper chafes at the textbook, he isn't concerned about the false narrative disseminated to the nation about NASA's covertly-continued budgeting and research toward an end for which they believe the public has no will. This instance of a powerful white man, Dr. John Brand, essentially controlling and concealing a public-funded agency doesn't ruffle Cooper's feathers. On the contrary, this patriarchal lie is exactly what lets Cooper do the aeronautical piloting that he's talented at and thereby

leave behind the agricultural work he despises. In many ways, the constituted ideology of *Interstellar* perpetually forgets about Murphy, and Earth, as the driving narrative force is Cooper's second chance to realize his colonial, masculine-coded adventures. Recall the joke near the end of the film when Cooper assumes that the station to assist Earth was named after him, but he's informed that it was, in fact, named after Murphy. This brief comic relief moment just before the aged Murphy nudges her father along once more to venture forth and settle the new frontier planet can be read as a return of the repressed in the film's constitutive ideology. Cooper cannot imagine Murphy as a central agent, and the constituted ideological texture itself obscures that role for her in favor of light humor that endorses the continuation of colonial, patriarchal impulses.

More importantly, behind the big lie about NASA having been dismantled is the still more massive one of Dr. John Brand pretending to have nearly solved the gravity issue of transporting the human population off of Earth. In the end, Murphy solves for gravity, but her achievement is made possible by white men's lies while secretly using public works funding, and by her education only after it was removed from a public system that engages political economy and placed in the hands of a paternalistic white male mentor. The fact that NASA is now in the abandoned North American Aerospace Defense Command (NORAD) facility acts as one more return of the repressed. At the surface, the location seems intended to signal the need for post-political thought and transnational work to solve planetary ecological crises. But upon closer inspection, this location can remind audiences that these ecological crises emerged from political and economic conditions. What was the Cold War about if not intensifying global capitalism and its attendant carbon emissions, climate change, and deep wealth inequalities that unevenly distribute the impacts of ecological crises?

*The Wandering Earth* and *Interstellar* generate insightful ideological frisson in their representations of women in school. Both leverage their young women protagonists in sites of education as points of identification for the audience. Both minimize these women's roles in their narratives so that space programs and exploration, as well as the agency to save Earth and its human inhabitants, are the domains of men. Yet, on one side of this eco-patriarchal coin, *The Wandering Earth* aims to supersede capitalist individualism with the collective political, a concept Xi Jinping has coined "Community with a Shared Future for Mankind." The concept of "Community" here originates from French philosopher Jean-Jacques Rousseau, which refers to the Social Contract in which each individual resigns all their rights to the collective union of the people (Zhao 2017, 28–31). Xi innovatively expands this political idea to articulate "Community with a Shared Future for Mankind" as a central strategy and value in China's approach to politics, economy, culture, security, ecology, and space exploration. The theme film of the Chinese Pavilion at the Expo 2020 Dubai was entitled *Space Dream*, for example, and, like *The Wandering Earth*, it featured a group of culturally and racially diverse astronauts.



On the reverse side of the eco-patriarchal coin, *Interstellar* rejects the political, especially collectivity, to double down on the purported power of individualism to solve problems. True, *Interstellar* is willing to embrace the role of a benevolent authoritarian, but only in the form of a paternalistic white man rather than a committee driven by expertise and/or common values. While *The Wandering Earth* questions and then re-embraces a pedagogy of benevolent propaganda, *Interstellar* takes a more libertarian approach to pedagogy as a tool best kept out of public oversight and implementation. We see it as telling that the former approach is tied to a story about sticking with the troubled Earth, while the latter is tied to a spirit of colonial expansionism that gladly leaves the ruined Earth to molder in its cascade of extinction.

### Food and Ideology

In this section, we dive into the food acquisition and allocation in both films. The global ecological crises are depicted as bringing about severe scarcity that ripples through individual, family, national, and species levels. This shared central concern leads to distinct models of food plans and/or practices in *Interstellar* and *The Wandering Earth*. The former portrays a food structure and system that continues the current practice of individual farmers cultivating large single-crop farms geared toward capitalist industrial production of corn products. The latter film imagines a collective food structure and system that plans and distributes nutritional foods at the city level. Such distinctions hint at the different ideologies manifested through foods in the United States and China, and which are rendered clearly through the emergency conditions of planetary catastrophe.

*Interstellar* begins with a focus on farming and famine. An elderly woman, talking in the style of a documentary interview, delivers the first line of dialogue, “My dad was a farmer, like everybody else back then. Of course, he didn’t start that way.” Then the shot cuts to a corn field in a burnt yellow hue and then to a flashback of Cooper’s air crash nightmare. The memoir-like narration of the elderly woman continues on how an entire wheat crop had died because of blight and they only had acres of corn and lots of dust. Once more, the camera switches to the corn field but this time with a sandstorm blowing and the crops at the brink of devastation. The beginning scenes set the tone with a strong concern for food and farming at the individual and family level.

As the film proceeds, we observe Cooper and his son responding to varieties of crop blights and failures that are especially devastating when agriculture appears to still be organized by corporate interests rather than genetic diversity. The visual and narrative impacts of these scenes at the constituted ideological level work through a kind of ecohorror aesthetic: if the species is going to starve to death on Earth, all the more reason to move to Planet B, so the film suggests. But dig into the constitutive ideology, and what’s missing from the

narrative are any considerations of what Timothy Morton has called agrilogistics in *Dark Ecology* (2016). Although Cooper stays ahead of his neighbors by using his engineering capacities to bolster his farm practices, the farm remains massive monoculture fields.

A provocative contrast with the role of corn in *Interstellar* is the short film *The 6th World* (2012) written and directed by Nanobah Becker. Instead of attempting apolitical shots of sprawling monoculture fields of corn, *The 6th World* hinges on antagonism between some Omnicorn Corp scientists who use corn by stripping it away from its plenty plenitude and political-economic history and Navajo Nation scientists who engage corn from an Indigenous perspective that regards its whole being. Salma Monani has argued about the compelling ecological interconnectedness in this film with cultural and political economic history (2017). Corn plays a similar decolonizing role in technoeological futures in Alex Rivera's film *Sleep Dealer* (2008), which features a utopian conclusion to what Andrew and Sharada Balachandran-Orihuela call a "neo-milpa" elsewhere (2011). These and other films help triangulate the ideological fabric of *Interstellar* that the film itself obscures, if not outright ignores, which helps us to further understand the issue behind the monospecies-dependent food industry in America.

The corn-focused food theme continues as Cooper and his children head to the education scene we explored above. When a large autonomous drone passes low and loudly overhead, Cooper diverts their trip so he can capture and repurpose the device. The following action-sequence revels in the cinematic spectacle of a speeding pickup truck plowing through a sprawling cornfield. On a micro-level, the drone chase illustrates the carelessness toward food that's at the film's core, a long way from the traditional Chinese saying that "Every grain of rice is a drop of sweat from a farmer's brow." On a macro-level, the scene is an easy, cheesy way to characterize Cooper as beating swords (a former military drone) into plowshares. The peacefully productive drone is destined only to patch over the structural failure of capitalist-organized agrilogistics embodied in these monoculture fields. After all, these fields are not tied to feeding the starving human population. Vast swathes of corn like those in the film are destined to be processed into high fructose corn syrup, livestock feed for climate-devastating meat industries, and so on, which is not explicitly featured in the film, but reasonable to assume.

A bit later in the plot, Cooper talks with his son, Tom, about choosing his future path – a fake choice due to lack of real alternatives. Confronted by the ecological catastrophes, capitalism seems to have collapsed, and many of the "glorious" professions have vanished, like NASA piloting. He (and later his son) run the private farm as part of an effort at feeding the human population. The film doesn't disclose much about what the US government has done to feed their people, but we can extrapolate that the pre-catastrophe agrilogistics have not shifted much, if at all. The patriarchal logic continues in the

family-based survival mode. The food sections of *Interstellar* feature mostly, if not exclusively, strong-willed, middle-aged white men as the central pillar of the family. They are responsible for daily farming as well as family decisions. When Tom reaches middle age, the issue of dust and blight has worsened. However, he refuses to leave the farm and even resists having his son, who is suffering severe respiratory problems, see a doctor. The connection to the farm and the role of the food provider is key to Tom's authority in the family and his patriarchal control. Thus, he represses the will of his wife and son, risking their health to maintain their farm life, even though the farm itself is dying. As such, patriarchal structures not only continue to work but are strengthened by dire food scarcity.

A final and complicated engagement with agriculture in *Interstellar* appears toward the very end of the film. After returning from the black hole and reuniting with Murphy, Cooper sits on the porch of a re-creation of the homestead where the film began. Cooper's body language conveys discomfort, perhaps dismay, in this revenant place. Throughout the film, Cooper consistently denigrates the work of farming. Therefore, an obvious reading would be that he remains an explorer at heart, which fits neatly into his decision to appropriate a ship and fly to Dr. Amelia Brand. Such an interpretation comes bundled with the ideological baggage of individualistic white male privilege as the closing tone of the film celebrates his unilateral resource grab to jump the queue in transplanting to humanity's new home planet. That said, there's also the constitutive ideological messaging of Cooper's reaction to this pseudo-farm in space. Not only does the homestead miss what he personally aspired to, but it embodies a failure of imagination as humanity pivots away from Earth. In this decisive leap forward, the shackles of agrilogistics shaped by global capitalism are not shaken off and left behind. The eerie echo of the early twentieth-century American Dust Bowl in the documentary video recordings at the start of the film suggests a desire to learn from history, yet the recreated homestead reveals the difficulty in realizing that desire. Cooper and the small, privileged sector of the humans who utilize the data from the black hole show little to no sign of imagining their way out of unsustainable food systems. Ecocinema ideology critique of food thus pulls our attention back from the romantically-inclined next chapter for humanity leaving Earth behind so we can wonder harder about what escape velocity from ecologically-devastating ideologies and practices might be and do.

While *Interstellar* locates the food focus in the nuclear family home and farm, *The Wandering Earth* takes a very different approach to representing post-disaster food scarcity. A voiceover near the start of the film states, "At first, nobody cared about this disaster – just another wildfire, another drought, another extinction, another vanishing city – until everyone is entwined with this disaster" while news footage of catastrophes in various languages scrolls across the screen. This sequence delivers vital narrative exposition even as it

establishes the tone of collectivist ideology that permeates the entire film. The UEG rises to act as central governor for the survival of all humankind. Ten thousand Earth Engines are built to push the planet away from the sun and an underground city is built under each Earth Engine to accommodate humans who can no longer live in the aboveground climate. The administration of these underground cities appears to be modeled on Chinese cities today, relying on micro-level administration and commodity economy regulated by macro-level central governance. This type of social structure is depicted as maintaining a certain level of food/nutritional diversity despite the scarcity.

Shortly after the opening sequence, we see our protagonists Liu Qi and Han Duoduo planning an escape from the underground city of Beijing. It is during the Lunar New Year and Duoduo is tempted to leave after eating *jiaozi* distributed by the neighborhood committee. *Jiaozi*, small dumplings filled with mixtures of minced meat, greens, or herbs, is a signature food in China. It is both a feature of festivals in northern China and a daily food that every family can make on their own. Although it is quite common in China for local micro-level social units to give out food at festivals as a kind of welfare and care, the fact that Duoduo doesn't want to give up the *jiaozi* distributed by the neighborhood committee hints that it cannot be easily made or acquired daily in that era. To Chinese audiences, these *jiaozi* symbolize the severity of food scarcity and the commitment of a benevolent government to maintain core pieces of identity and ideology beyond mere survival. The scene is a contrasting parallel to Donald, Cooper's father-in-law, waxing nostalgic over hotdogs at baseball games in *Interstellar*.

Shortly after the dumpling scene, the implications of food shortage are further signaled by Duoduo's interest in durian-flavored dried earthworms, and, later on, her grandpa Han Ziang's attempt to bribe prison guards with aged-dried earthworms to let Liu Qi and Duoduo go. Both moments show that earthworms have become a staple food source in this speculative future. In an added scene in *The Wandering Earth: Beyond 2020 Special Edition*, a director's cut of the movie with an extra 11 minutes, Duoduo and Liu Qi sit in a restaurant, but the "two large juices" they order are served in small test tubes, and the "earthworm skewers" are in fact "tiny mini." According to the "Brief Introduction to the 'Worldbuilding' in *The Wandering Earth*," we learn that "Food, water, costumes, and other necessities are regularly distributed by the government...but everyone can pay extra credit points (the currency in the film world) to buy more resources" (Yan and Yang 2019, 270). Based on the conversation between the protagonists and the restaurant owner, they are regular customers and have dined there before, but the food served to them this time is lower in quantity and quality compared with before, which implies that the alternative food resource cannot fully dispel the clouds of intensifying environmental degradation during the planet's trip away. However, various cooking methods and flavors of earthworm-based cuisine reflect the flexible attitude



**FIGURE 7.2** “Two large juices” are served in two small test tubes in *The Wandering Earth*.

toward this new protein source: it can be a daily staple, a fun snack, the precious gift, and a small luxury at a restaurant.

These comestible earthworms send a multivalent signal that can endorse and undercut planetary politics with Chinese characteristics in the film. At the constituted level of ideology in which the film promotes Chinese geopolitics, the worms as food work in two positive ways. First, in turning to worms for food, China demonstrates its flexibility when facing a planetary ecological crisis. Just as the Chinese government and general populace outside the film proved ready, distinct from swathes of the US government and general populace, to accept the scientific consensus that climate change is a phenomenon and is caused by human activities, the Chinese government and citizens of its underground cities inside the film prove adept at adapting to the actually existing conditions. Again, contrast this with Donald’s remark at the baseball game in *Interstellar*: “Popcorn at a ballgame is unnatural. I want a hot dog.” The hotdogs in that instance, a chewy tubular counterpart to the earthworms, are an index of the rigidity bundled with American exceptionalism and nationalism. Confronted with planetary ecological collapse within his grandchildren’s lifetime, Donald laments the loss of highly processed foods produced by the profit-driven monoculture food systems that contribute to the collapse and are linked to systemic health crises in the United States. As metonymy of the American food attitude in *Interstellar*, Donald provides an ecological analog to the America-first version of globalization in Roland Emmerich’s *Independence Day* (1996). To be sure, *The Wandering Earth* lays out an Earth future with Chinese characteristics, yet with flexibility and adaptability rather than a re-entrenchment in practices

causing the catastrophe. The worms are pulled into traditional flavors and food preparation ways to model cultural malleability for the common future of humanity on Earth.

The second positive valence of the worms is that they connect the film diegesis to current trends outside the text of pivoting toward alternate sources of protein and reducing the carbon emissions tied to beef, hogs, and other large-animal husbandries. *The Wandering Earth* skips over the pivot process unfolding outside the films. Even as the film portrays China's food flexibility as laudable, the consumption of worms may trigger hostile ideological responses in audiences outside of China and/or those who are committed to opposing the nation's approach to political economy and geopolitics. The dominant theory of the COVID-19 pandemic places patient zero at a Chinese wet market. The virus transmission from nonhuman to human in that market is tied to trade in animals not typical in Western food systems. However, many of the animals featured in such wet markets are in fact at the extreme margins of mainstream Chinese cuisine, a point often omitted or downplayed in Western journalism.

For one more twist of the worms and ecological ideologies, these beings connect with the fact that humanity has now relocated underneath the Earth's surface. People are becoming like worms. This is a powerful counterbalance to the techno-scientific power of the Earth Engines. Instead of framing the engineering feat to avoid total ecological catastrophe as total domination of nature, this innovation must be meshed with the humbling act of going underground. And this implication of people and worms in parallel can shape readings of many scenes throughout *The Wandering Earth* featuring large-scale mining to maintain life and the engines. Although such scenes may at first strike spectators as deeply unecological in their ready treatment of the planet as a stockpile of exploitable resources, the worms help connect this digging directly to the collective future, quite distinct from actual large-scale mining that serves the interests of a handful of global corporations.

Both films feature food shortages and scarcities caused by planetary ecological crises and how characters respond to them within the quotidian acts of daily life in their climate-changing contexts. In *Interstellar*, food production is highly dependent on the farming activity of each individual family, which ensures the patriarchal control of the male as the major labor force in the family over other members. In *The Wandering Earth*, a collective social system is maintained on the underground city level, where the centralized government provides food and shelter to its citizens (no matter their gender, age, or race) in return for loyalty and service to the common good. The desires for hotdogs in *Interstellar* and *jiaozi* in *The Wandering Earth* imply nostalgia and homesickness for the old days, whether it's the United States or China, the baseball game, or the Spring Festival. However, the former falls into agrilogistics by sticking to the old way of farming crops even when human beings step outside of Earth,

while the latter embodies flexibility in dietary structure by adapting to the new underground environment.

## Conclusion

We have examined the divergent education and food systems in *Interstellar* and *The Wandering Earth* as people adapt to similarly planet-scaled ecological catastrophes. What remains undiscussed is the matter of who got access to these fundamental resources of nourishment and knowledge. Both films are grounded in the idea that scarcity necessitates sacrificing part of the population – human and nonhuman alike – for the survival of humankind. The protagonists in both films have already survived the initial disaster shocks, ecological, social, political, and economic. In *Interstellar*, there's a key piece of information you could readily miss: the US government tried to make NASA “drop bombs from the stratosphere onto starving people,” intending essentially to sacrifice the poor for the survival of the rich. Additionally, there is only one Black person with a name in the film, no Indigenous or other people of color, and no explanation of why the team behind such an important mission is so deeply white. An ideology of eugenics where race and wealth intersect underpins the narrative, yet the characters involved either don't seem to notice this or simply capitulate to the logic as necessary under the emergency conditions.

In *The Wandering Earth*, the UEG conducts a lottery to decide who will be admitted into the underground cities. This method seems fairer and more democratic but no less violent since vast numbers of fellow human beings are to be dehumanized. In both films, the mothers in the central protagonist's families are absent, leaving adult males as the sole supports. While the mother in *Interstellar* died as a result of healthcare technology being deprioritized in favor of governmental investment in agriculture, the mother in *The Wandering Earth* was chosen to die by her husband Liu Peiqiang. A preexisting health condition meant she had a limited time to live, and her sacrifice would be the only way to have both her father Han Ziang and her son Liu Qi gain entrance to the Underground City while her husband served on the space station. Women, people of color, poor folks, and people with illnesses are abandoned for the ostensible benefit of the family and entire species. Neither film can shake loose this hierarchical ideology of domination, this narrative of current emergency demanding an intensification of gender, racial, and class privilege in the guise of a rising tide that will eventually float all boats. But in the Anthropocene, the death and devastation of rising tides will be asymmetrical, within humanity and without.

Both *Interstellar* and *The Wandering Earth* contain inspirational seeds for ecological futures and the ideological entanglements that threaten to distort or destroy these seeds. Our collaborative ideological ecocinema critique that transcends individual minds and national-cultural perspectives is a practice of locating the seeds to cultivate and the ideologies to weed. These processes are

complex, continual, open-ended, and urgent at the same time. We share it in the spirit of building collective futures on Earth through the power of cinema narrative and critique as one piece of the work.

## Note

- 1 There is a large body of scholarship on *The Wandering Earth* film in Chinese, ranging from humanities perspectives to law or science analysis in the film. A significant part of this focus on the science fiction film industry/production in China, and the domestic as well as international reception of the Chinese value and aesthetics represented in the film. On the other hand, papers on the science in *Interstellar* dominate the research on this film in Chinese, standing out from other approaches such as narration, sound, and ecological analysis. There have been a few comparative analyses of both films, from the perspective of value difference and hometown consciousness in China and the West, and the different approach of techno-mythic narration and catastrophe narration in the two films. See Wang Xinyu's "Jiyu *Liulangdiqu* he *Xingjichuan* yue qianxi zhongxifang jiazhiguan de yitong" [An analysis of the similarities and differences between Chinese and Western values based on *The Wandering Earth* and *Interstellar*] (2020); Zhou Qingping's "Kehuan dianying zhongde jishushenhua xushi: *Liulangdiqu* yu *Xingjichuan* yue de bijiao yuedu" [Techno-Mythic narratives in science fiction films: A comparative reading of *The Wandering Earth* and *Interstellar*] (2019); Li Xianyou's "Kehuan dianying zhongde zaibian xushi: yi *Xingjichuan* yue he *Liulangdiqu* weili" [Catastrophe narratives in science fiction films: *Interstellar* and *The Wandering Earth* as examples] (2021); Cao Litao's "Dongxifang jiauyanyishi zai dianying zhongde chayihua biao xian: yi yingpian *Liulangdiqu* he *Xingjichuan* yue weili" [The differentiation of Eastern and Western homeland consciousness in films: An example of the films *The Wandering Earth* and *Interstellar*] (2020).

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