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Metabolic Cinema: From Hollywood to Socialist China

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Abstract: Drawing on Karl Marx's ecological concepts of the "metabolic rift" and the "emancipation of senses", this paper explores an alternative ecocinema that integrates the ecological with the social and the economic. Early Hollywood films, such as *Sunrise: A Song of Two Humans* (1927) and *The Good Earth* (1937), represent the metabolic rift in human relationships as a byproduct of the metabolic rift with nature created in the process of urbanization; hence, they can be regarded as precursors to an alternative ecocinema, which I refer to as "metabolic cinema". *The Story of the Golden Bell* (*Jinling Zhuan*), a comedy film produced during the Chinese Great Leap Forward in 1958, offers an intriguing case for socialist metabolic cinema as a multisensory medianature that participates in and facilitates the metabolic process between humans and nature, as well as the social metabolism among humans, despite the period's notorious ecological record. The film not only consciously moves away from the visual-centric model associated with capitalist consumerism by using the aural to rectify the once-aberrant visual but also demonstrates how romantic love, as one of the human senses, must be emancipated along with other senses through denouncing utilitarianism and commercialism and, subsequently, returning to need-based labor as the universal condition for the metabolic interaction between humans and nature.

Keywords: ecocinema; *Sunrise*: *A Song of Two Humans*; *The Good Earth*; *The Story of the Golden Bell* (*Jinling Zhuan*); Marx; metabolic rift; emancipation of senses; labor; Great Leap Forward

1. Ecocinema Reconsidered

Roger C. Anderson, a professor of biology at the University of Central Oklahoma, coined the word "ecocinema" in 1966. Addressing the severe pollution problems, he sarcastically proposed a multisensuous cinematic experience that was more genuine than nature: "The motion pictures should be shown in certain special theaters (I propose they be called Ecocinemas) in which all the appropriate sights, sounds, and smells would be brought together, refined, and improved to produce an art form vastly superior to nature itself" (Anderson [1966] 1975, p. 452). Anderson believes that this kind of ecocinema could quiet the public fears of nature being destroyed by creating "something as genuine as, or even more genuine than, nature itself" (Anderson [1966] 1975, p. 452). Ironically, Anderson's vision of "ecocinema" is inherently anti-ecological. He claims that if such an ecocinema were to replicate and preserve nature through technological means, those so-called nature enthusiasts would no longer need the real natural world. At that time, people "will be able to deal with the pollution reasonably, so that our factories will not have to shut down because a song sparrow has laryngitis" (Anderson [1966] 1975, p. 452). As a result, "a pestiferous nature" can be made "a habitat fit for creation's most noble animal" (Anderson [1966] 1975, p. 452).

Ironically, Anderson's sarcastic account of ecocinema has found its contemporary reincarnations in consumer culture. Today's so-called 4DX movies have turned Anderson's sarcastic vision into reality. Audiences sit in special motion seats and can appreciate movies with multi-sensory experiences, feeling the wind, water droplets, mist, bubbles, scents, temperature changes, and lightning. Compared to traditional films, however, 4DX

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movies require massive material consumption and have a more disastrous impact on ecology. As an epitome of ironic capitalist commodities, they induce human consumers to accelerate the destruction of nature under the illusion of enjoying it.

Scott MacDonald has redefined "ecocinema" in his 2004 essay "Toward an Eco-Cinema". MacDonald asserts that both cinema and the natural world are in inevitable processes of decay and transformation. Nature gradually disappears under humanity's endless material exploitation, while the disappearance of cinema is twofold: materially, the images on film strips fade when exposed to light; culturally, the art form of cinema may eventually be replaced by new artistic forms, such as digital media, leading to its ultimate demise (MacDonald 2004, pp. 107–8). MacDonald sees "the fundamental job of an ecocinema as a retaining of perception, as a way of offering an alternative to conventional media-spectatorship … as a way of providing something like a *garden*—an 'Edenic' respite from conventional consumerism—within the *machine* of modern life, as modern life is embodied by the apparatus of media" (MacDonald 2004, p. 109).

MacDonald has cautioned us about the mechanistic functioning of media, which exemplifies technicism. The essence of technicism lies in the conquest and dominance of nature, fragmenting it into manageable areas and resources. Under the mindset of technicism, nature is to be conquered, exploited, and ultimately exhausted. Because technicism fragments and objectifies nature, it prevents us from understanding the holistic process of nature's metabolism or envisioning a sustainable system in which nature and humanity coexist. Consequently, nature becomes something that is disappearing. Therefore, ecocinema under the shadow of technicism inevitably leads to a dead end.

Chinese film scholars were among the first to explore the concept of ecocinema. In 2009, Sheldon H. Lu and Jiayan Mi co-edited the volume *Chinese Ecocinema: In the Age of Environmental Challenge*. In the introduction of the volume, Lu provides a definition of ecocinema that moves beyond technicism: "In the simplest terms, ecocinema is cinema with an ecological consciousness. It articulates the relationship of human beings to the physical environment, earth, nature, and animals from a biocentric, non-anthropocentric point of view" (Lu 2009, p. 2). Lu insightfully proposes treating ecocinema as "a critical grid" and "an interpretive strategy" (Lu 2009, p. 2). This definition significantly expands the concept of ecocinema, pointing to an interdisciplinary research domain. By employing ecology as a methodological tool, it places ecology on par with class, race, and gender for examining environmental and social issues. Lu also writes that like any form of art, "In its highest aspiration, ecocinema purports to redeem the fallen world of ruins and eco-catastrophes and re-enchant the imperiled planet" (Lu 2009, p. 14). However, if ecocinema aims to redeem nature following the same ethical imperative, compared to literature, painting, or photography, what role does the film medium itself play in such a redemptive act?

In the 2013 anthology *Ecocinema Theory and Practice*, the editors Stephen Rust and Salma Monani have also redefined ecocinema in terms of its specific medium. Expounding on Sean Cubitt's reconceptualization of cinema as a new form of mediation between humans and the natural world (Cubitt 2005, p. 23), the editors view ecocinema as "a form of negotiation, a mediation that is itself ecologically placed as it consumes the entangled world around it, and in turn, is itself consumed" (Rust and Monari 2013, p. 1). As a new form of mediation, cinematic texts, "with their audio-visual presentations of individuals and their habitats, affect our imaginations of the world around us, and thus, potentially, our actions towards this world" (Rust and Monari 2013, p. 2). Therefore, "*all* films present productive ecocritical exploration and careful analysis can unearth engaging and intriguing perspectives on cinema's various relationships with the world around us" (Rust and Monari 2013, p. 3).

By introducing this ecological dimension of cinematic media, we can reconsider the interactive relationships among nature, humanity, and cinema. This approach encourages us to examine the complex connections between film production and capital operations from material, social, technological, and sensory perspectives. For example, one of the contributors of *Ecocinema Theory and Practice*, Adrian Ivakhiv, proposes a triadic model of

cinema consisting of material ecologies, social ecologies, and perceptual ecologies (Ivakhiv 2013, pp. 90–91). Among the three, perceptual ecologies refer to "the interactive milieu within which the material or 'objective' becomes the social and 'subjective', (and vice versa) and in which sensations and sensory organs, bodies and desires, social groups and medial formations, all become connected in specific ways" (Ivakhiv 2013, p. 91). Based on the triadic model of cinema that grasps the medium's richness and efficacy, Ivakhiv redefines cinema as "a cultural instrument, a machine, for producing worlds through the sequential presentation of moving sound-images" (Ivakhiv 2013, p. 91).

Given its nature as a medium of moving sound-images, cinema has the potential to steer people away from a visual-centric perspective to explore more complex interaction between media, humans, and the world. However, up to today, world eco-cinema still cannot break free from the constraints of visual centrism. The volume *Ecocinema Theory and Practice 2*, published last year, uses "Cut to Green: Tracking the Growth of Ecocinema Studies" as the title of its introduction. The very phrase "cut to green" implies ecocinema frequently employs a homogeneous set of visual semiotic systems. The introduction cites film studies scholar Jennifer Fay's discussion, depicting cinephilia and ecophilia, the love of film and the love of nature, as "a desire to dwell in the image" and "a love of dwelling in the world", respectively (Fay 2018, p. 163). Ecocinema, therefore, becomes "love of dwelling in the world *through* the image" (Fay 2018, p. 163). This conceptualization, which reduces cinema to mere visual images, is fundamentally antithetical to the previously proposed research methodology of cinematic ecologies.

The reduction of cinema to mere images effectively transforms ecocinema into ecological photography or ecological slideshows, a problematic paradigm from which contemporary eco-films or eco-documentaries must struggle to extricate themselves. The lopsided emphasis on the visual aspect of the film experience is a product of visual-centric consumerism, turning nature, "man's inorganic body" (Marx 1977, p. 72), into objects of "conspicuous aesthetic consumption" of a fashionable society (Williams 2011, pp. 128–29). Whether employing long takes, close-ups, macro shots, wide-angle lenses, slow motion, time-lapse, underwater cinematography, or aerial photography, numerous eco-films, guided by the ethos of "going green", are, in effect, using the camera to voyeuristically observe, intrude upon, and metaphorically hunt nature. This approach results in the production of aestheticized images of pristine nature for public consumption. Gregg Mitman cautions us in his 2009 book *Reel Nature: American's Romance with Wildlife on Film* that wildlife documentaries aim to portray a nostalgic and pristine nature, yet they fail to account for the complex interrelationships between natural environments and human activities. "By embracing an aesthetic of pristine wilderness, nature films reinforced a management scheme that effectively divorced humans from the natural landscape" (Mitman 1999, p. 202). Mitman also emphasizes the absurdity and impracticality of this wilderness aesthetic. With human activities permeating virtually every area of the earth's surface, "environmentalists could no longer afford to focus on the preservation of pristine nature as their sole cause. Humans had become thoroughly enmeshed in the ecological web of life" (Mitman 1999, p. 107).

Therefore, it is necessary to maintain vigilance regarding the inequitable power structures underlying any visual-centric conceptualization of ecocinema. The visual effects resulting from voyeuristic observation and passive contemplation of nature are frequently predicated on an ideological framework that posits a binary opposition between humans and nature. Heidegger has already elucidated that perceiving the world as an image represents a distinctive mode of episteme employed by modern humans in their apprehension of reality. The origin of this perception, he posits, can be traced to technological thinking, a paradigm that perpetually seeks to reduce the world to manipulable and controllable resources and commodities (Heidegger 2002, pp. 57–84). Visual culture serves as a primary mechanism through which capitalism stimulates consumerist desires, enhances the exchange value of commodities, and maintains its economic order. Concurrently, com-

modity culture, industrialization, and capital have consistently positioned themselves as antagonistic to nature.

Visual domination of nature finds parallel expressions in the objectification of women on screen and the portrayal of indigenous cultures in ethnographic films. Laura Mulvey has argued that the cinematic gaze produces visual pleasure by constructing the female body as an object of display and voyeurism. This process, she argues, ultimately reinforces the unequal power dynamics between the male spectator and the female on the screen, underpinned by the patriarchal ideology inherent in the cinematic apparatus (Mulvey 1975, pp. 6–18). The nature that is being watched, analogous to the objectified female on the screen, is frequently subjected to observation, exploitation, and violation. It is rendered as a "great body without organs of woman", to borrow a metaphor of nature from Gayatri Chakravorty Spivak (Spivak 1993, p. 196). Moreover, we must note that ethnographic documentaries are often replete with images of nature. These cinematographic representations frequently juxtapose pristine nature with the lives of indigenous inhabitants, thereby reinforcing the ethnic and cultural superiority of the technologically equipped filmmakers. This approach positions modern civilization as the normative standard, while framing indigenous civilizations as deviations from this benchmark.

Since the 1990s, some environmental humanists have criticized the concept of a pristine nature untouched by human activities. Robert Goodin stresses that "even things that are largely the product of natural regeneration are still to some (perhaps significant) degree the product of human handiwork" (Goodin 1992, p. 41). Timothy Morton asserts that any ideas of "an extra-social nature" are impossible; therefore, "To write about ecology is to write about society, and not simply in the weak sense that our ideas of ecology are social constructions" (Morton 2007, p. 17). Kate Soper warns against "a certain nature aesthetic—one that is essentially visual and has ruled out taste, touch, and smell; for which landscape becomes an event in 'automotive space,' and is comparable in its one-dimensionality to the view of it had in aerial photography" (Soper 1995, p. 242). In order to transcend the binary and inequitable relationships between humans and nature, as well as among different human groups, and to re-examine and reconceptualize the ecological notion of nature inclusive of humanity, ecocinema must not only stop being complicit with the visual-centric consumer culture but also confront the challenge of facilitating human reintegration with nature within a sustainable ecological model. In the following pages, I will explore a theoretical model of an alternative ecocinema, which I refer to as "metabolic cinema", based on the Marxist concept of metabolism.

2. Metabolism with Medianature

The visual-centric perception of nature is a symptom of humans' separation from nature, and it can be remedied by a Marxian reconceptualization of nature as "the sensuous world as the total living sensuous activity of the individuals composing it" (Marx and Engels 1998, p. 47). Metabolism (*Stoffwechsel*) is a recurring concept that Marx used throughout his mature works, and it has become a central concept in Marxist ecological critique.[1] Viewing labor as material exchanges between humans and nature following the natural laws, Marx wrote: [The labor process] is the universal condition for the metabolic interaction (*Stoffwechsel*) between man and nature" (Marx 1976, p. 290). Humans, through labor, acquire material resources from nature, altering nature in this process while also returning the waste products generated by natural metabolic processes back to nature. In this mode of existence, modeled after traditional agricultural labor, the metabolic processes of nature and the metabolic processes of human society are harmoniously synchronized. However, in the modern era, this sustainable symbiotic relationship between humans and nature has rapidly withered away under the onslaught of capital. The capitalist mode of production, characterized by aggressive accumulation and concentration, progressively violates the metabolic processes. Marx warned us that one of the negative consequences of capitalist production is the so-called "metabolic rift", which occurs when the agricultural population decreases and the industrial population increases.

Marx's concept of "metabolic rift" is derived from the writings by German soil chemist Justus von Liebig (1803–1873). In Liebig's writings, he condemns the advanced industrialized agriculture in England as "a modern robbery culture, based on the total alienation of the soil, was the antithesis of a rational agriculture rooted in the application of science" (Cited in Foster and Clark 2018, p. 5). Therefore, the industrialization of agriculture marks the onset of a metabolic rift in nature, stemming from humans' irrational and technological mindset, ultimately resulting in ecological disasters.

In the first volume of *Capital*, Marx wrote: "Capitalist production collects the population together in great centres, and causes the urban population to achieve an ever-growing preponderance […] it disturbs the metabolic interaction between man and the earth" (Marx 1976, p. 637). In the third volume of *Capital*, which was published posthumously, Marx again wrote that an ever-increasing industrial population concentrated in large towns "produces conditions that provoke an irreparable rift in the interdependent process of social metabolism, a metabolism prescribed by the natural laws of life itself" (Marx 1981, p. 949). In the second passage, we can see that Marx developed the concept of "social metabolism", which refers to the material exchanges between nature and humans that occur in the process of labor and production. Building upon the concept of natural metabolism, social metabolism represents the connection formed between humans and nature in the labor process, and it aims to achieve a rational balance where humans follow natural laws. Capital not only causes metabolic disasters in the natural world but also creates rifts in the social metabolism of human society, manifested in the alienation of the relationship between humans and nature, as well as the alienation between human beings.

The logic of capital, through processes of industrialization, urbanization, and commodification, alienates humans from nature. As a modern medium born in the capitalist world, cinema has functioned as a representational apparatus for the metabolic rift for a century. The 1927 American synchronized-sound romantic drama *Sunrise: A Song for Two Humans*, for example, is an exemplary work of early cinema that reflects on the negative consequences of urbanization and alienation from nature. The director F. W. Murnau (1888–1931) exhibited "a Romantic attitude to nature", holding the simple life of peasants "against the corruption and artificiality of the city" (Cited in Fischer 1998, p. 33). In the film, a woman from the city comes to the countryside for a vacation. There she seduces a young peasant, makes him mortgage his land to moneylenders, and even urges him to kill his peasant wife so he can move to the city with her. The young man almost makes a grave mistake of committing uxoricide in the city, but fortunately, he is pulled back by his moral conscience at the last moment. The film ends with the man coming to his senses and deciding to return to their life in the countryside with his wife, reconciling with her and reaffirming their commitment to their simple, rural life.

Sunrise is a typical story of the rift that appears in the process of social metabolism with the invasion of capitalism. At the beginning of the film, a neighbor says that this peasant couple used to live a happy life, working in the field every day like two carefree kids. However, after the man has ruined himself for that woman from the city and lost his farm to the moneylender, he becomes gloomy and crazed. Still unable to resist the seduction of the woman from the city, he almost accepts the evil idea of killing his wife.

Sexual relationships, which are the most primal form of all social relationships, can be seen as an allegory for social metabolism in the film. Murnau has created a famous scene in *Sunrise* in which the reconciled peasant couple, once again deeply in love, stroll through the city streets, oblivious to their surroundings. Suddenly, the background magically transforms from the cityscape to the countryside, enveloping them in scenic nature as they passionately kiss. However, the background soon shifts back to the bustling city, with vehicles honking at them for obstructing traffic [Figures 1 and 2]. This scene, probably created by the double exposure technology, is quite avant-garde for its time and conveys an ecological message: the feeling of love can only flourish through micro-interactions with nature, that is, by returning to the processes of natural and social metabolisms.

Figure 1. The background magically transforms from the cityscape to the romantic pastoral as the man and woman start to kiss each other.

Figure 2. Their passionate kissing is interrupted by the traffic noise as the background shifts back to the city.

Another early film that represents the metabolic rift is *The Good Earth*, adapted from Pearl S. Buck's (1892–1973) award-winning novel of the same title. Stephen Spencer attributes the success of this novel to middle-class and working-class Americans' "valuing of

the land and nostalgia for rural life in a time of expanding industrialism and urbanization" (Spencer 2002). The deep reverence for land in agricultural China thus resonated strongly with American culture in the 1930s. Directed by Sidney Franklin with Victor Fleming, Gustav Machatý, and Sam Wood, the film was released in 1937 and received immediate critical acclaim, winning two Academy Awards (Best Actress and Best Cinematography) afterwards. The male protagonist of *The Good Earth*, Wang Lung, is a poor but hardworking farmer in northern China. He marries O-Lan, an ordinary-looking, poor, but diligent woman. Later, with O-Lan's help, Wang Lung becomes wealthy and transforms into a landlord who no longer needs to work in the fields. He even takes a beautiful concubine and moves into a grand house in town. However, his family begins to fall apart: Wang Lung's father is upset with the "bad woman" (the concubine) living in the house, and the concubine starts to seduce Wang Lung's second son. At the same time, Wang Lung drives O-Lan out of the house and threatens to sever ties with her. In a fit of rage, he also fires his steward and friend, Ching. At this point, a locust plague arrives. Encouraged by his eldest son, Wang Lung returns to the land after many years, leading peasants to fight the locusts and protect the crops. After the plague is eliminated, Wang Lung comes to his senses. He sells the grand house in town and returns to the countryside to live with the land and O-Lan.

The Good Earth depicts the profound and interdependent relationship between humans and the land, emphasizing how the farmers' survival and well-being are intricately tied to the land they cultivate. Natural elements such as wind, rain, drought, and seasonal changes are depicted as significant events in a farmer's life. In the film, O-Lan's enduring love for the land is evident throughout. On the day she marries Wang Lung, she finds a seedling by the roadside and plants it in their yard. This tree, a symbol of natural and social renewal, bears witness to Wang Lung and O-Lan's experiences of labor, harvest, joy, and hardship.

As Wang Lung becomes a landowner (analogous to a capitalist) and distances himself from the land, he gradually abandons the natural principles of social metabolism that once guided his life. Despite acquiring a beautiful concubine who seems like a "dream person", he finds no happiness in satisfying his desires and instead faces the disintegration of his family. After fending off the locust plague, Wang Lung decides to return to the familiar land, the extended family, and the community, where the natural and social processes of metabolism can once again be in harmonious synchrony. He rediscovers his deep love for the land and also for O-Lan. In the film's final scene, as O-Lan lies dying, she tells Wang Lung, "One day I will die, but the earth will remain after me". After her death, Wang Lung stands under the large tree that O-Lan had planted years before and suddenly realizes, "O-Lan, you are the earth". O-Lan is plain in appearance and does not adorn herself with pearls and silks like the concubine; Wang Lung had once been dismissive of her looks after becoming a landowner. However, O-Lan proves to be as vital to his life as the earth itself.

Wang Lung's final decision to return to the land indicates a return, in the words of Raymond Williams, from the "community of consumption" to the "charity of production—of loving relations between men actually working and producing what is ultimately, in whatever proportions, to be shared" (Williams 2011, pp. 30–31). The charity of production is established on men's metabolism with nature, which follows the natural laws. In the film, the peasants laboring on the land have gained resilience and moral strength deeply connected to the rhythms of nature. Those left the land, in contrast, encounter a metabolic rift characterized by insatiable consumption and hyper-visual sensitivity. This latter condition leads the male protagonists in *Sunrise* and *The Good Earth* astray from their good wives towards seductive women and broken social relationships.

Sunrise and *The Good Earth* both emerged during a peak period of industrialization and urbanization in the United States. Although their themes are not primarily focused on nature and the environment, both films contrast social relationships based on natural laws with those based on commodity economies. Social relationships grounded in nature are characterized by a respect for natural laws and maintain a rational, dynamic balance be-

tween needs and returns. In contrast, social relationships driven by commodity economies lead individuals astray amidst endless desires and the pursuit of money. Both films critique urbanization, commodity economies, and the visual manipulation of desire while emphasizing the organic bond and sustainable symbiosis between humans and the land through agricultural labor. Marx views traditional agricultural labor as a form of ecological production, "an aspect of the *land*" instead of capital, noting that in this human activity, "Labor is not yet understood in its universality and abstraction but is combined with a particular natural element as its material, thus being recognized only in a specific, naturally determined form of existence" (Marx 1977, p. 92). In this sense, both *Sunrise* and *The Good Earth* can be seen as early examples of eco-cinema that conjoins society and nature.

Having established that cinema can, and should, represent and critique the metabolic rift in society, we can now ask: Can the cinematic experience, a unique experience of this modern medium, play a role in mending the metabolic rift between humans and nature? The cinematic experience, according to Vivian Sobchack, is an embodied experience that is figurative and literal, both spiritual and material; "the film experience is a system of communication based on bodily perception as a vehicle of conscious expression. It entails the visible, audible, kinetic aspects of sensible experience to make sense visibly, audibly, and haptically" (Sobchack 1992, p. 9). The cinematic experience thus shall not be dominated by the visual. In addition to receiving the figurative/narrative messages from the film, the audience also actively engages in a kind of material exchange with the film. Therefore, the film experience relates to "our primary engagement (and the film's) with the sense and sensibility of materiality itself. […] our lived bodies sensually relate to 'things" that 'matter' on the screen" (Sobchack 1992, p. 65). If, by interacting with our senses, cinema helps mediate the relationship between humans and the material world, then we can imagine a new collective assemblage of metabolism that involves humans, nature, and technology—this would be the second, deeper meaning of "metabolic cinema".

In fact, cinema blurs the boundary between nature and technology due to the material and energy exchanges that occur with the audience. Therefore, it is possible to conceive of cinema as part of nature and the cinematic experience as part of natural metabolism. Jussi Parikka has used the concept of "medianature" (2018) to "grasp the intensive co-determination and co-emergence of the two spheres of natural dynamics and media cultural epistemologies, of the onto-epistemological situation that defines our technical modernity" (Parikka 2018, p. 103). Developed from Donna Haraway's notion of naturecultures in *The Companion Species Manifesto* (Haraway 2003), medianature expands the scope of nature to include media, which can form a continuum with nature through its mediation, which "happens across a whole spectrum of material realities irreducible to the media devices" (Parikka 2018, p. 105). Since media can be seen "to consist of an assembly of elements of nature" (Parikka 2018, p. 105), the micro-interactions between humans and media also include those between humans and nature. In this way, nature is not simply "out there", but also "at home" (Bao et al. 2023, pp. 305–6).

The idea of medianature allows us to conceptualize the cinematic experience as a kind of human-nature metabolism. In other words, we can examine how humans metabolize with cinema and how an alternative form of non-visual-centered ecocinema can be theorized in light of the Marxist notion of metabolism beyond the semiotic level. We can imagine a form of metabolic cinema that facilitates balanced exchanges between the visual, aural, and haptic dimensions of cinematic experience as a way of promoting a healthy metabolism with nature. Both *Sunrise* and *The Good Earth*, in fact, already employed varying soundtracks to complement their visual narratives; hence, they can be regarded as precursors of metabolic cinema in the world.

Since metabolic rift is a Marxist concept, I turn to films made in Socialist China (1949–1976) as a potential reservoir of metabolic films. In the following pages, I will focus on *The Story of the Golden Bell* (*Jingling zhuan*), a 1958 Chinese film, to further illustrate this kind of metabolic cinema and its relationship to senses, labor, romantic love, and socialism. This socialist film not only mediates the human-nature relationship and mends the metabolic

rift by challenging the visual-centric regime of representation like *Sunrise* and *The Good Earth*, but also unsettles the duality of city and countryside by pinpointing the ultimate divider of human senses—unalienated labor.

3. The Audio-Vision

Produced by August First Film Studio (aka. Bayi Film Studio), *The Story of the Golden Bell* was scripted by an amateur writer, Zuo Lin, and brought to screen by director Liu Peiran. The film was made and released in 1958, during the Great Leap Forward (1958–1960) in China. The Great Leap Forward overlaps with the Second Five-Year Plan period (1958–1962), during which the leader of the Chinese Communist Party, Mao Zedong, proposed radical policies to build socialism and catch up with the developed countries. Following the Soviet style of heavy industrial development, the Party moved millions of people from the countryside to the cities and deployed them as industrial workers. According to data from the National Bureau of Statistics of China, during the Great Leap Forward period, Chinese urban population increased by over 31 million. The proportion of the urban population rose from 15.4% to 19.8%, and the number of cities in China grew from 176 to 199 (Zheng 1991, p. 79). During this period, the household registration system that was used to restrict people's mobility was also relaxed, which allowed farmers greater freedom to migrate to urban areas for work. This led to a rapid urban population increase from 1957 to 1960 and caused a labor shortage in agriculture. Due to the rapid urbanization, in late 1958, a food shortage already appeared in the cities, and the Party started to call for a reverse urban-to-rural population transfer called "downsizing" to relocate some of the new urban population back to the countryside. The final correction of this central planning mistake, however, did not come until China experienced the greatest famine of the twentieth century (1959–1961). The Great Leap Forward was undoubtedly a disastrous period for both humans and nature.[2]

Set against the backdrop of the Great Leap Forward, *The Story of the Golden Bell* diverges from the period's predominant focus on industrial development to explore the issue of rural women's matrimonial prospects. Screenwriter Zuo Lin's narrative eschews the prevailing rhetoric of industrialization, instead advocating for the retention of youth in the countryside to foster agricultural development. The film's central narrative revolves around the romantic entanglement of Mancang and Lanying, a young couple residing in a rural village. While Mancang exhibits a fervent commitment to agricultural labor and village development, Lanying is influenced by another village girl, Dajinzi, and develops an aversion to agricultural labor. Dajinzi, desiring the comfortable lifestyle in the city, enters into a romantic relationship with a city-based police officer. Motivated by this, Lanying solicits assistance from her elder brother, who is deployed with the military in the city, to secure a job there. Concurrently, she contemplates terminating her relationship with Mancang. As the story unfolds, Lanying faces criticism from her elder brother, the village leader Liu, and the village women's association. At the same time, Mancang becomes a model laborer, and he successfully invents a chimney composting method that solves the village's fertilizer shortage. These events lead Lanying to reflect on her choices, eventually realizing her mistakes and rediscovering the value of agricultural labor. In the end, Lanying and Mancang make up and commit themselves wholeheartedly to agriculture. They also joyfully solidify their marriage plan. This ending not only supports the film's favorable view of rural life but also subtly critiques the urban-rural hierarchy prevalent during the Great Leap Forward.

The plot of *The Story of the Golden Bell*, therefore, echoes those of *Sunrise* and *The Good Earth* in addressing the metabolic rift created by urbanization. It reminds us that the culture of any historical era embodies the contradictions and complexities of the era. Despite being characterized by an unrealistic drive for development that disregarded natural laws, the Great Leap Forward period produced a film that sought to reconcile the human-nature divide. This film can thus be interpreted as an example of ecocinema in socialist China. Ban Wang has astutely asserted: "Although the real, existing socialist states in the past

have failed, it is important to recover the unfulfilled and forgotten ecological motifs for the contemporary age" (Wang 2023, pp. 76–77). It is precisely for this reason that rediscovering this forgotten socialist film is meaningful to today's environmental humanities.

Like *Sunrise* and *The Good Earth*, *The Story of the Golden Bell* is critical of the visual-centric regime of representation. In the film, Lanying's attitude towards agricultural labor directly affects her romantic relationship with Mancang. When she decides to detach herself from the land, a rift appears in their love, but when she wholeheartedly reengages with agricultural labor, the rift is mended, and their love is consummated. Agricultural labor not only nurtures the land's harvest but also catalyzes the fruit of love. The growth of crops and the love between the couple are intertwined in a harmonious metabolic process. This narrative about the metabolic rift places the film on par with *Sunrise* and *The Good Earth* as examples of metabolic cinema.

However, *The Story of the Golden Bell* goes one step further by demonstrating how film, as a multi-sensory medium, can mend the metabolic rift through recalibrating human senses. The film depicts Lanying's transformation not through overt ideological instruction, which was common among Great Leap Forward films, but through a nuanced sensory engagement with the world. While the film includes instances of political discourse, such as Lanying's elder brother advocating for the equality of all forms of labor and Director Liu depicting a utopian vision of modernized rural life, Lanying's transformation is predominantly represented through a *sensory recalibration*. In this way, the film demonstrates how the metabolic processes of nature and society are interconnected through human senses and how these connections can be organically represented in cinema.

As can be inferred by the sound object (the golden bell) in the title, the film has a well-crafted soundscape that produces and conveys meanings in conjunction with the visual images. French film theorist Michel Chion uses the concept of "audio-vision" to argue that sound and image are not two separate elements in the creation of a film but rather two complementary and interdependent elements working together to create meaning, affect, and narrative (Chion 1994, p. 34). The sound in film is not just an adjunct or accompaniment to the visual image, nor an invisible supplement that reinforces the image, but is an additional element that adds a dimension to the image. The concept of "audio-vision" invites us to explore, according to Chion, the "immediate and necessary relationship between something one sees and something one hears" (Chion 1994, p. 5). Sound and image form a dialectic relationship through a two-way "contamination and projection" (Chion 1994, p. 9), as Chion writes:

> … the most successful sounds seem not only to alter what the audience sees but to go further and trigger a kind of conceptual resonance between image and sound: the sound makes us see the image differently, and then this new image makes us hear the sound differently, which in turn makes us see something else in the image, which makes us hear different things in the sound, and so on. (Chion 1994, p. xvi)

The fusion of sound and image plays an important role in the semiotic system of *The Story of the Golden Bell*. They are dialectically linked, working together to restore the natural metabolic progress in the film's diegetic world.

The film opens with a black screen, then with a fade-in technique that simulates the human eyes from waking up, we see the village in the morning twilight. As the camera slowly pans around, we hear the crowing of roosters and then see several roosters appear on the screen. Next, we hear and see a wobbling golden bell, which is a recurring sound object in the film [Figure 3]. The bell sound immediately follows the organic sound of nature—the rooster's crowing—suggesting a healthy, natural rhythm of life in the village. However, when the female protagonist (Lanying) wakes up to the sound of the bell, the scene cuts between the sounding bell and a close-up shot of Lanying's distressed face. Despite her boyfriend Mancang's eager bell sound, she goes back to sleep, her kicking legs showing her restless mind. Obviously, the bell sound is not pleasant to her ears. The audio-

vision in this opening scene tells us that there is a disconnect between the man and woman, as represented by their disconnected senses to the bell sound.

Figure 3. The golden bell that tolls each morning.

The sound of the bell embodies dual significations in the film; on the one hand, it serves as a signal for Lanying and Mancang's morning rendezvous; on the other, it marks the commencement of a new day of agricultural labor. Love and labor are thus intertwined in the sound of the bell. Lanying experiences distress at the bell's sound due to her growing aversion to agricultural labor under the influence of Dajinzi. Her desire to move to the city means that she would have to break up with Mancang. While Mancang, who cherishes both the rendezvous and agricultural labor, finds joy in the bell's sound, Lanying is conflicted and distressed.

Dajinzi is a symbol of the visual-centric commodity culture. When she debuts in the film, she is dressed in beautiful floral clothes, wearing multiple hair bows, and frequently takes out a mirror to groom herself. She proudly shows Lanying a photo of her boyfriend in the city, Xiao Liu, who is dressed in a police uniform. Upon arriving in the city, Dajinzi immediately perms her hair, and when she goes on a date with Xiao Liu, she insists that he wears the uniform to appear stylish. Dajinzi, who enjoys a comfortable life and admires vanity, also represents the self-commodification and self-alienation of women perpetuated by residual feudal and bourgeois cultures. As the Village Director Liu notes in the film, Dajinzi's desire to live in the city is driven by her love of money. This criticism is already implied in her name: "Dajinzi" means "Big Gold" in Chinese. However, Dajinzi's marriage plan fails later because even Xiao Liu decides to go to the countryside. In one scene, when the disappointed Dajinzi leaves her boyfriend in tears, the camera zooms in on a fictional film poster in the background, which reads: "Comrade, you are wrong!" This is a visual message of her mistake.

In a deliberate departure from the visual-centric regime of representation, in the subsequent minutes, the film skillfully employs audio-visual techniques to illustrate why Dajinzi is wrong. As Dajinzi returns to the village following the failure of her marriage plan, a juxtaposition is presented through a sequence of audio-visual montage that starkly contrasts

the arrivals of two distinct groups. The first is some cadres from the city who are on their way to the village to contribute to rural development. The film employs a vibrant and cheerful musical score to depict the exuberant reception these sent-down cadres receive from the rural community. This lively and festive atmosphere, characterized by loud music and a celebratory crowd, is sharply contrasted with the solitary and furtive presence of Dajinzi. Whereas the cadres advance towards the camera amidst a backdrop of music and applause, Dajinzi retreats from the camera through a lonely and shadowed gate, enveloped in a silence that underscores her isolation. Through this audio-visual montage, the film conveys a clear message: Dajinzi is wrong—her fixation on material wealth and urban lifestyle has alienated her from genuine human experience and community, leaving her world soundless.

Dajinzi's hypervisual perception of the world affects Lanying. During a conversation with Mancang, Lanying expresses her desire to reside in the city because there she anticipates a greater capacity to "see and experience more", contrasting it with the countryside, where she merely sees "manure" and "crops". This visual-centric rhetoric reveals Lanying's preoccupation with the superficial glamor of urban spectacles while failing to understand the organic (and less visible) connection between "manure" and "crops", which happens to be the key to the preservation of soil fertility as a natural condition, according to Marx's concept on metabolism.

The transformation of Lanying is represented as a rectification of the relationship between the aural and the visual, in which sound takes on a commanding role over the previously aberrant vision. The transformation occurs when Lanying reads a newspaper report praising Mancang's new invention that solved the fertilizer shortage in the village. This encounter prompts Lanying to reassess her previous negative ideas about agricultural labor. Her flashbacks that appear in double exposure are structured by the sound of the bell and mediated by shifting non-diegetic music that reflects her emotional responses to past events in a new, human way. As Lanying engages in a reflective examination of her past, the film's score evolves to become animated as the camera progressively zooms in on her face. The montage of flashbacks serves to illuminate various pivotal moments in her history, each accompanied by a distinct musical theme that underscores her emotional response to these memories. The flashback depicting the villagers' enthusiastic participation in the people's commune is underscored by lively and festive music. In contrast, the flashback of her early morning rendezvous with Mancang is accompanied by warm and evocative music. Conversely, the flashback illustrating the negative influence of Dajinzi is paired with tense and dissonant music, which amplifies the discomfort of the recollection. During this sequence, Dajinzi's face is superimposed over images of the city, with the camera employing a Dutch angle to convey a sense of disorientation, unease, alienation, and absurdity. [Figure 4] The film then transitions to a flashback of Lanying's fight with Mancang and the subsequent criticism she receives from others, accompanied by stirring and dramatic music. The final flashback, which depicts the moment when Dajinzi is discovered sneaking back to the village from the city in a state of shame, is punctuated by a resonant drumbeat.

As the flashback concludes, the music transitions to a calm and stabilized state, signaling that Lanying has achieved a profound liberation of her senses. At this juncture, she has adopted a new value system that enables her to recognize the intrinsic worth of agricultural labor and the negative aspects of urban culture. In this moment of revelation, Lanying begins to write a letter to her elder brother, putting down the words "Brother, I was wrong" as the initial line on the paper. In the next scene, accompanied by peaceful and gentle music, a resolute Lanying is waiting for the sound of the bell at dawn. When the golden bell tolls, the camera captures a close-up of her face, revealing a hearty smile. This moment explicitly evokes a direct reference to the film's opening scene. Throughout these scenes, music "directly express[es] its participation in the feeling of the scene, by taking on the scene's rhythm, tone, and phrasing" (Chion 1994, p. 8). The film therefore participates in and facilitates the metabolic process between humans and nature, as well as

the social metabolism among humans. Cinema, as a multiple sensory medium, becomes an extension of the human senses that seek to sync with nature.

Figure 4. Dajinzi's face is superimposed with shots of the city at a Dutch angle.

4. Sound, Labor, and Senses

Although *The Story of the Golden Bell* relies on an artificially constructed city-countryside binary, it simultaneously deconstructs it by featuring characters in the city (e.g., Lanying's brother and sister-in-law, Xiao Liu, and the cadres) who love labor and possess human senses. The film promotes the idea that all types of labor are equal and that the countryside will be as prosperous as the city through people's hard work.

After the initial script of *The Story of the Golden Bell* was published in the magazine *Chinese Films* (*Zhongguo dianying*), the editorial office organized and hosted a symposium on 6 March 1958 to discuss and improve the script. The guests they invited include the screenwriter Zuo Lin, Zhang Ke (Head of the Directing Department at Beijing Film Academy), Sang Fu (Director of Beijing Film Studio), Chen Mo (Deputy Editor-in-Chief of *Literature and Art Gazette* [*Wenyi bao*]), and editors at *Chinese Films*.

The prominence of the sound in the film is not accidental. At the symposium, Zuo Lin noted that while writing this script in a village, the sounds he heard in the early mornings served as a major source of inspiration.

> At that time, I stayed in an east room in a peasant's house. Every night shortly before dawn, the moon shone on the window, creating a tranquil moment. After a while, the crowing of roosters, both near and far, can be heard. In a moment, the street-facing doors of every household were opened one after another, and the clinking of the iron chains on the doors always stirred my emotions. (Sang et al. 1958, p. 62)

The sounds of the clinking chains represent the peasants heading to the fields for labor at dawn. In this sense, they are part of the sounds of humans metabolizing with

nature, embodying the time-honored rhythm developed through humanity's symbiosis with nature over history.

One of the guests at the symposium, Zhang Ke, also exhibited an interest in the acoustic events of the script. He suggested commencing the story with the sounds of roosters crowing and a bell tolling. In addition, Zhang recommended ending the story with another reference to the sound of the bell (Sang et al. 1958, p. 59). Both of Zhang's recommendations were subsequently incorporated into the final film script. Echoing Zhang's enthusiasm in the bell sound, Zuo Lin confessed that his creative intention was a shout-out for the male peasants: "Girls, love us, the young lads who loyally build socialism in the countryside, and firmly oppose those views on marriage that value money over people!" (Sang et al. 1958, p. 63) In his script, this shout-out has been transformed into the sound of a golden bell: "I hope that the small golden bell, while waking up thousands of households to go out to labor, also awakens people like Dajinzi and those girls who, to varying degrees, share Dajinzi's thoughts" (Sang et al. 1958, p. 63).

Those conversations at the symposium indicate that sound was deliberately incorporated into the script and the film for its rectification functions. The sound of the bell, which follows the rhythm of nature, is pitted against the desire for money, which represents the capitalist worldview. Using sound as a tool of moral rectification has a long history in Chinese culture. In the Chinese language, the phonetic proximity between the Chinese lexemes for "sage" (圣 shèng) and "sound" (声 shēng), differentiated only by tonal variation, establishes a semantic and philosophical connection that elevates the auditory sense to a position of primacy among the sensory faculties. The Silk Manuscripts discovered in a tomb at the Mawangdui in 1973, which date back to the Western Han dynasty (206BCE–9CE), contain texts such as "The sage is in the sound" and "Listening is keeping the sage in the ears" (Xia 2021, p. 13).

The ancient Chinese attributed profound ethical and political significance to sound. In the Zhou Dynasty, the blind music officials were entrusted with the vital responsibility of listening to the sounds of the wind, discerning musical tones, and observing the harmony or disharmony of the seasons. These practices were employed to judge whether conditions were suitable for agricultural cultivation, which was crucial to the stability of the emperor's governance (Xia 2021, p. 13). This political model is simultaneously an ecological model, wherein the sounds of nature served as the ultimate measures for human activities. Taoist philosophers conceptualized "listening" as a tripartite process: one can listen with the ears, with the heart, or with *qi* (Zhuang 1968, pp. 57–58). The ultimate listening, therefore, enables humans to transcend their physical and subjective limitations. As a vital energy that flows through all things, *qi*, when listened to, integrates humans with nature in a holistic manner.

Historically, not only in China but globally, the sense of hearing had been more crucial to human existence than the sense of sight. R. Murray Schafer states that in the West, "the ear gave way to the eye as the most important gatherer of information about the time of the Renaissance, with the development of the printing press and perspective painting" (Schafer 1977, p. 10). This shift to visual dominance was subsequently accelerated with the advent of mass media and consumer culture in the modern period. Schafer also asserts that hearing is connected with touch: "Hearing and touch meet where the lower frequencies of audible sound pass over to tactile vibrations (at about 20 hertz). Hearing is a way of touching at a distance and the intimacy of the first sense is fused with sociality whenever people gather together to hear something special" (Schafer 1977, p. 11).

While all the above views from Chinese and Western cultures substantiate the primacy of sound, Zuo Lin's fascination with the clinking chains in the early morning also points to the relationship between hearing and labor. How can human labor affect the human ear? Marx has long told us that human senses develop in the process of material exchanges (metabolism) between humans and nature, in other words, through labor. "Labor is, first of all, a process between man and nature, a process by which man, through his own actions, mediates, regulates and controls the metabolism between himself and na-

ture" (Marx 1976, p. 283). The process of material exchanges between humans and nature is closely related to the development of all senses. In *Economic and Philosophic Manuscripts of 1844*, Marx points out that by engaging with nature as the object of human use and human labor, humans are able to awaken and cultivate their senses, allowing them to more fully experience and appreciate the richness of the sensuous world (Marx 1977, p. 101). In addition to the five bodily senses of vision, hearing, taste, smell, and touch, Marx also considers love and will as "mental senses" (Marx 1977, p. 103). Therefore, the romantic feelings of love, like other bodily senses, also develop in the process of material exchanges between humans and nature.

However, Marx notes that humans can only develop and refine the *human* senses when they are in a healthy relationship with nature. Ecological ideas, therefore, must be united with political and economic arguments. When nature is seen as an object of exploitation and accumulation of capital, the egotistical subject is disconnected from nature and his own human senses and only possesses *crude, non-human* senses (Marx 1977, p. 102). "In the place of *all* physical and mental senses there has therefore come the sheer estrangement of *all* these senses, the sense of *having*" (Marx 1977, p. 101); "*the sense of immediate, one-sided enjoyment, merely in the sense of possessing, of having*" (Marx 1977, p. 100). What the capitalist consumer culture sells is precisely the feeling of "having", rather than any direct sensory connections between people and objects, people and people, or people and nature. Therefore, Marx calls for the abolition of private property, which is a prerequisite of emancipating all human senses:

> The abolition of private property is therefore the complete *emancipation* of all human senses and qualities, but it is this emancipation precisely because these senses and attributes have become, subjectively and objectively, *human*. The eye has become a *human* eye, just as its object has become a social, *human* object—an object made by man for man. (Marx 1977, p. 101)

With the emancipation of senses, humans can view nature not as a *mere utility* simply serving human needs but as a sensuous object to interact with and appreciate. Traditional agrarian practices, wherein farmers produce sustenance for their own consumption, facilitate the development of refined human senses. Conversely, alienated labor inherent in the capitalist mode of production reduces senses to their most crude forms.

The Story of the Golden Bell is eventually a story about how the eye will become a human eye and the ear will become a human ear. In the film, the difference between the human sense and the crude sense is dramatized through the opposition between the countryside and the city. However, it is not the locations themselves that cause the differentiation of the senses, but rather human consciousness that determines them. The film diligently portrays the significant role of sensory emancipation in the process of social metabolism. As mentioned before, Dajingzi metaphorically loses her human eye and subsequently her human ear due to her egotistical and superficial ideas. Lanying develops an aversion to the sound of the bell when she regards agricultural labor as an obstacle to personal development. It is only after her problematic ideas are cleared that she is able to regain her human senses (including her feelings of love for Mancang) and wholeheartedly appreciate agricultural labor. In contrast, Mancang loves agriculture and enjoys the sound of the bell in the morning, indicating his respect of natural laws. The metabolic rift, therefore, is at the same time a metabolic rift in human senses.

It is noteworthy that despite the developmental impulse of the Great Leap Forward, Mancang is a character in the film who actively facilitates peasants' healthy metabolism with nature in agriculture. The chimney composting method he invents is precisely aimed at addressing the issue of how humans can return wastes as fertilizer to the land and achieve a rationally guided, sustainable development in the process of metabolism with nature. Ostensibly, in the film, Mancang's invention serves the purpose of increasing agricultural productivity, but it also represents an awareness of, and perhaps anxiety about, a more ecological model of human-nature symbiosis during the Great Leap Forward.

There is an interesting scene in the film that contrasts Mancang's human senses with his mother's relatively crude senses. The bell in Mancang's house was originally hung on the doorframe by his mother to prevent her lamb from running out. While other families in the village had already entrusted their sheep to Uncle Nine in the People's Commune for collective grazing, Mancang's mother was reluctant to do so due to her lingering sense of private ownership. To persuade his mother to hand over the lamb to Uncle Nine, Mancang removes the bell from the doorframe, forcing her to comply. Shortly afterwards, however, Mancang learns that Lanying is willing to marry him, so he is overjoyed and eagerly anticipates their morning rendezvous the next day. When Mancang opens the door in the morning, there is no bell sound, and only then does he realize that the bell has been taken off. He quickly returns inside to search for the bell, waking up his mother in the process. Below is the conversation between Mancang and his mother:

Mancang's mother: "What are you looking for in darkness?"

Mancang: "The bell!!!"

Mancang's mother: "I already let the old shepherd take care of the lamb, what's the use of the bell?"

Mancang: "I want to find the bell to listen to its sound!"

Mancang's mother: "What? You little brat. You want to piss me off?"

Mancang: "I won't leave if I can't find the bell today!"

For Mancang's mother, the bell's sole purpose was to prevent the lamb from running away. Once the lamb was sent away, the bell lost its utility. However, for Mancang, the bell symbolizes his love for Lanying. To him, the bell's sound has no practical function but serves as a sensory signal connecting him and Lanying. As a symbol of love, the bell's sound evokes a delightful feeling. Therefore, when Mancang says he wants to "find the bell to listen to its sound", it is a genuine expression of his emotions. At that moment, the relationship between Mancang and the bell is purely sensory and aesthetic. In this scene, the bell symbolizes the emancipation of human senses from the ideology of private ownership.

The climax of the film occurs when Lanying and Mancang join the villagers in working the fields. Accompanied by joyful and upbeat Chinese orchestral music, this scene of collective farmwork radiates openness and energy. The sensory experience of being outside—feeling the sun on bare skin, the crops' stems and leaves brushing against healthy bodies, and sweat dripping into the soil—feels invigorating, exhilarating, and libidinal. Mancang, wearing a vest emblazoned with the characters "Labor Hero", and Lanying continually exchange glances, transforming their feelings of love into the energy for manual labor. In Herbert Marcuse's words, this is a moment of "the erotic reconciliation (union) of man and nature" (Marcuse 1966, p. 176). Lanying with her emancipated senses is rewarded with a felicitous romance, which is parallel to the abundant crops they are harvesting in the field. The repentant Dajinzi also joins the autumn harvest and unexpectedly reunites with Xiao Liu in the fields, hinting at a possible rekindling of their relationship. The harmony between humans and nature and the harmony between individuals are once again synchronized. Love, labor, and nature form an organic and metabolic ecology in this autumn harvest scene.

The Story of the Golden Bell depicts the emancipated senses not only of the two protagonists but also of other villagers, fully situating the relationship of the couple within the entire rural community. From the beginning of the film, people in the village are already secretly and merrily observing the romantic drama between Mancang and Lanying. Every morning when the roosters crow and the golden bell rings at Mancang's house, the big village bell is also struck, signaling everyone to go out to work. As villagers pass by Mancang's and Lanying's houses, they laugh and tease the couple from a distance, playfully proclaiming the golden bell as "a matchmaker who doesn't speak". If the small golden bell awakens the feeling of romantic love in Mancang and Lanying, then the crowing of the roosters and the tolling of the big village bell represent the awakening of the entire village's human senses.

Humans are part of nature; hence, the love and marriage of young farmers are also a necessary component of the village's metabolism. While concerned about agricultural production, the head of the village, Director Liu, simultaneously pays attention to how many couples are dating in the village. At the end of the film, the golden bell from Mancang's house is hung around the neck of the donkey that Director Liu rides. He jokingly says: "The bell from Mancang's house has completed its mission. From now on, if anyone wants to find a partner, come to me and borrow it". It can be seen that the recurring sound of the bell, as a symbol of complete sensory emancipation from the ideology of private ownership, has become a mediator of a larger metabolic progress in socialist China.

In the end of the film, Director Liu rides the donkey and races along the road, leaving behind the sound of the golden bell along the way. This ending suggests that the bell is no longer just a token for Mancang and Lanying, or for the village, but rather a symbol of the emancipation of thought and senses in socialist China. Nature, love, and the entire society thus form an interconnected and organic ecology.

5. Conclusions: Toward a Socialist Ecocinema

Like *Sunrise* and *The Good Earth*, *The Story of the Golden Bell* depicts how the metabolic rift leads to social and sensory rifts. The film's subtle ecological critique is closely linked with a social and economic critique, as the destruction of nature and the destruction of human relationships are both byproducts of unsustainable modes of production. Many Marxist ecologists maintain that "The poisoning of social life by money and the poisoning of the air by industrial smoke are […] parallel phenomena, stemming from the same perverse root—the ruthless domination of utilitarianism and commercialism, the dissolving power of quantitative calculation" (Sayre and Löwy 2020, p. 6). It is in this sense that we must broaden the category of ecocinema to include films that represent the metabolic rift and its many social ramifications.

The Story of the Golden Bell tells a rural romantic story against the background of rapid urbanization during the Great Leap Forward. It is noteworthy that this socialist rural romance is decisively different from those pastoral romances in English literature, in which "the eclogue and natural description were absorbed into the essentially different world of an idealized romantic love" (Williams 2011, p. 20). In the latter, the nature of the rural world becomes "the nature of observation, of the scientist or the tourist, rather than the working countryman" (Williams 2011, p. 20). To borrow Williams' words again, the joy *The Story of the Golden Bell* provides is not the "nostalgia or charm or the simple mysticism of nature" (Williams 2011, p. 203), but rather a human community that metabolizes with nature through need-based agricultural labor, syncing with the rhythm of nature. This ecological underpinning emanates from the socialist conception that communism "is the *genuine* resolution of the conflict between man and nature and between man and man" (Marx 1977, p. 97).

It cannot be denied that *The Story of the Golden Bell* also romanticized the countryside and agricultural labor. However, in this film, the collective labor and the communized countryside are not depicted as relics of the past for nostalgic attachment but as a new community in contrast to the outdated ideology represented by the city. In this new socialist utopia, private property is abolished, alienated labor has disappeared, and human senses have been emancipated. Nature, therefore, emerges as a rich source of sensory experience within the dynamic process of material exchanges. Despite the limitations of the era, this socialist metabolic film subtly advocates against the exploitation of nature as merely an object.

Labor, considered the "universal condition" for metabolism by Marx, occupies a central role in the socialist romance, thereby offering a distinctive angle for ecological critique. Ban Wang's concept of ecosocialism also centers around the notion of labor:

> Premised on ecological metabolism between humans and nature, the ecological notion of labor works against the exploitation of humans and domination of nature. In opposition to market value, profit, inequality, and consumerism, ecoso-

> cialism maintains that workers engage in labor to produce use value and provide goods to satisfy human needs and sustain the integrity and continuity of their community. (Wang 2023, p. 8)

Metabolic cinema such as *The Story of the Golden Bell* embodies the idea of ecosocialism in both its content and form, both semiotically and materially. It conjoins society and nature, ideology and senses, offering a new way to integrate the cinematic experience into the environmental discourse.

We have discussed three metabolic films, from Hollywood to socialist China, that bring together romance and nature, social critique and ecological critique. If we follow Robert Sayre and Michael Löwy's broad redefinition of romanticism as "a cultural critique, or rebellion, against capitalist-industrialist modernity in the name of past, premodern or pre-capitalist values" (Sayre and Löwy 2020, p. 3), then we should have no problem reconciling ecosocialism with romanticism, and we should be able to discover more metabolic films such as *The Story of the Golden Bell* from the dredges of history.

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Notes

[1] For a thorough discussion of Marx's concept of metabolism, see (Foster 2000, pp. 141–77).

[2] The total number of premature deaths during the Great Leap Forward famine at between 16.5 and 30 million. For the environmental destruction caused by the movement, see (Shapiro 2001, pp. 67–94).

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