Farming Odd Kin in Patchy Anthropocenes

by Yen-Ling Tsai

How do we make sense of the uneven landscape in Yilan, Taiwan, where small-scale organic farming and luxurious country houses grow side by side? This essay suggests that we see both the rise of luxurious housing and eco-friendly farming as different patches of human-to-land relationships woven together through a landscape structure undergirded by the rise and fall of nuclear-family farms in post–World War II Taiwan. The uniqueness of the eco-friendly farmers in Yilan lies in their abilities to foster new livelihoods through creative assemblages of more-than-human economies and ecologies. By taking care of the wandering ghosts in the paddies, for example, new farmers join old farmers and villagers to enact a more-than-human world where both the material and the formless matter. By taking care of the paddy creatures, new farmers also join the health- and environmentally conscious urban consumers in enacting a more-than-human world where human well-being depends heavily on the well-being of nonhumans. Recognizing these interweaving practices of both normative and odd kinship making in relation to farmscape making helps us to think of more nonexclusive ways of farming and co-living in patchy Anthropocenes.

This essay is about the hope and despair of living and farming in Yilan, an alluvial plain in northeast Taiwan. As can be gleaned from the aerial photograph (fig. 1), what lies behind the beguiling bucolic scenery is a landscape changing so fast that in the past decade, on average two luxurious country houses were built each day in Yilan.[1] Meanwhile, with every spring planting season comes not only a new batch of seedlings but also a new batch of novice farmers. Both landless and experience-less, many new farmers prefer eco-friendly farming over conventional farming and see in agriculture not just a career or business but also a way of life.

I joined this modern back-to-the-land movement in 2012 and have since become the farmer-manager of 0.16 hectares of rice paddy for a women's cooperative farm called the "Land Dyke Farm" (Tolaku Farm 土拉客農場, "landdyke" hereafter).[2] Quickly, however, I began to see a deep-seated irony rooted in the landscape I work, where small-scale organic rice farming and luxurious country houses grow side by side. Moreover, the eco-friendly farmers are using low-input, less fossil-fuel-intensive and more cost-efficient farming methods on what has arguably become the most expensive farmland in the world.[3] How do we make sense of this uneven landscape, and what does it say about the patchy nature of our current space-time now understood as the Anthropocene?

Sociologists are quick to identify this landscape as emblematic of what Karl Polanyi calls the "double movement" (Polanyi 1957). That is, capitalism has gradually encroached on the fictive commodity of farmland in Yilan, while the new farmers' movement has become the social protectionist countermovement seeking to decommodify farmland and restore it to a position of fundamental value (e.g., Lii 2010, 2011). Such interpretation situates the new farmers' movement outside capitalism without explaining why. It also preempts discussion of what is involved in the process of land commodification, while to me that process is precisely what needs to be explored rather than assumed. This essay takes a different approach by taking seriously the entangled socialities found in processes of farmland commodification. Having been alerted to the fact that many retiring farmers in Yilan are selling their land to ensure their children's or even grandchildren's education or urban home ownership, I suggest that it might be more fruitful to contextualize the land crisis in Yilan within the larger crisis of

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1. Since the opening of a highway connecting Yilan to the capital city of Taipei in 2006, which is now about an hour's car ride from Yilan, more than 7,000 luxurious country houses have sprung up locally and have driven the average land price up threefold.

2. Founded by four LGBT farmers, the name of the Land Dyke Farm pays homage to the 1970s separatist lesbian back-to-the-land movement in the United States. As of 2019, the farm has three full-time farmers and two part-time farmers, collectively managing 0.8 hectares of rice paddies, 0.5 hectares of vegetables, and 0.2 hectares of bamboo garden (for bamboo shoot production), plus 0.9 hectares of citrus orchard under the mentorship of an experienced male fruit farmer. Because of Land Dyke Farm, every spring my life is a race between the rice paddy and the university: I go to the rice paddy to check on water levels first thing in the morning and replace some seedlings that have been eaten by golden apple snails. Then, it is teaching and research during the day, and back to snail-picking in the paddy at night for 2 hours before sleep.

3. The average price of arable land in Taiwan is $50,000 per hectare, far more expensive than average arable land prices in Europe and Japan (Tang 2015).

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Figure 1. Patchy landscape of Yilan in northeast Taiwan, where many said "houses grow faster than paddies." (Copyright: UDNData. Photo by Jian-Zhong Su.) A color version of this figure is available online.

family farming in Taiwan. Perhaps not unlike the coffee rust which has spread across the world through unshaded monoculture plantations (Perfecto, Jiménez-Soto, and Vandermeer 2019), luxurious country houses have spread across Yilan under the precondition of the aging nuclear-family farms. To put it crudely, it first took the aging nuclear-family farm, with its declining labor power, simplified land ownership (see below), and desire to exchange land for intergenerational reproduction, to allow the luxurious country houses to become an epidemic. But on the other hand, the eco-friendly back-to-the-land movement, too, is contingent on the overall weakening of nuclear-family farms, which are the dominant form of farm organization in Taiwan (Directorate-General of Budget, Accounting and Statistics 2017). Although unable to afford a piece of farmland, the new farmers nevertheless have plenty opportunities to lease paddy fields and fruit orchards in a Yilan whose farmer-owners are getting too old to work them.

In other words, I propose that the key to understanding the patchy farmscape in Yilan lies not in seeing luxurious country houses and new eco-friendly farmers as essentially antagonistic to each other—with the former being the embodiment of land commodification and the latter the embodiment of decommodification. Instead, I suggest that "friendly farming" (*youshan gengzuo* 友善耕作)—a local term referring to farming practices that are more eco-friendly than conventional farming but without organic certification—too contributes to land commodification. I wish to argue that luxurious country houses and friendly farming are different but related "forms-in-relation" woven together through a landscape structure (Tsing, Mathews, and Bubandt 2019) undergirded by the rise and fall of nuclear-family farms in post-WWII Taiwan. The tensions between country housing and friendly farming arise when owners of luxurious country houses and new farmers form different more-than-human assemblages in their relationship to the land. Most owners of the luxurious country houses cemented their farmland and consumed the surrounding farmscape without taking care of the land. The eco-friendly farmers, on the other hand, perform care work for the land through multispecies collaborations between the farmers and the fauna, flora, and nonliving beings in wet-rice ecology. Furthermore, by adopting eco-friendly farming methods, these new farmers are able to sell their produce directly to health- and environmentally conscious urban consumers at a price much better than that of the conventional producers, hence creating a rural livelihood based on a new set of contingent foundations for themselves as well as others in the assemblage. Although not without its limitations, it seems to me that this more-than-human collaboration harbors some hope for a differently aligned politics and a more inclusive and livable Anthropocene.

In what follows, I will first explore how nuclear-family farming became Taiwan's basic unit of farm organization in

the post-WWII project of agricultural modernization. Such historicization shows that nuclear-family farms are anything but the "natural" or "traditional" unit of agricultural production and family reproduction as they might appear today. As will be demonstrated, they are one of the homogenizing effects of the mid-twentieth-century land reform and Green Revolution, which not only promoted monocropping but also promoted nuclear-family farming and the associated individual land ownership by marginalizing other messier forms of human-land relationship (see the next section). The result is a modern farmscape controlled by the intertwined logic of capital and nuclear kinship. And when nuclear-family farms are in crisis, so is the land they control (see "Nuclear-Family Farms in Crisis").

Meanwhile, the persistent existence of other forms of farm organization in Taiwan, past and present, suggests that the regime of the nuclear family never really monopolized how farmers bond with each other as well as their land. The section "Survival through More-than-Human Entanglement" of this paper demonstrates that the farmscape in Yilan is in fact shaped as much by ties made by nonblood, nonmarriage, or even cross-species practices of kin making as those made by ancestry or genealogy. That is the "patchy Anthropocenes" this paper wishes to foreground and identify. I believe, if it is indeed true that "hope is patchy because capitalist and ecological structures themselves are patchy" (Tsing, Mathews, and Bubandt 2019), then recognizing the patchiness of normative and odd kinship within Yilan's farmscape might direct us to possible ways of transforming the landscape as well as overcoming the agriculture and farmland crises we face today.

The Cold War Production of Nuclear-Family Farms in Taiwan

In 1953, 4 years after the embattled Chiang Kai-Shek–led Chinese Nationalist Party (*Kuomintang*, KMT) fled China and set up a government in exile on the Japanese ex-colony of Taiwan, the "Land Rights for Tenant Farmers" (*geng zhe you qi tian* 耕者有其田) Act was implemented. This was the beginning of the largest social engineering program to take place in Taiwan in the postwar period, and it deeply influenced the fate of Taiwanese agriculture and land use. Within 10 years, the KMT state transferred nearly half the farmland from the former landlords to the tenant farmers who worked the land. Researchers in favor of the land reform emphasize that it promoted the even distribution of wealth and successfully modernized rural land ownership. Skeptics, however, believe that the land reform was in the service of an iron-fist state, through which the KMT effectively weakened the local elite class and took control of Taiwan's food resources along with other rural surplus values.

The reality was of course more complicated than either side made it out to be. Recently published in-depth studies (e.g., Chu and Liao 2015) have pointed out that the local Taiwanese elites, mostly members of Taiwan's Provincial Parliament, came to a political compromise with the ruling KMT government in the final days before implementation of land reform, raising the limit for individual land ownership from 2 to 3 hectares. In contrast, however, "collectively owned land" (*gong ye di* 共業地; see below), which lacked any strong backing in political institutions, was expropriated by the state in its entirety, regardless of size, in order to help meet the land reform targets established by the KMT technocrats. In practice, then, the 1953 land redistribution program spared each individual landowner 3 hectares of land while denying collective owners any chance to keep even the smallest plot. A great majority of land expropriated and transferred to the ownership of former tenant farmers in the 1950s was therefore collective land previously owned by large groups of people loosely connected to each other through extended familial or village ties. As a consequence, many collective shareholders who made their living off of collectively held land were thrown into destitution (Hsu 2010).

A further elucidation on the rules ordering human-to-land relationships in pre–land reform Taiwan can further shed light on the weight of this displacement of collective land ownership. From the eighteenth to the nineteenth century, waves of Han Chinese pioneers/militias moved from southern Taiwan to the north and from the east to the west. Armed with weapons and hoes, the invading militias brought with them wet-rice farming and violently replaced the swidden farming originally practiced by the indigenous Taiwanese, paving the way for the Qing dynasty government to move in on their heels. From that era up to the early 1950s, the Han Chinese used the so-called *Ye-Dian* System to order human-to-land relationships. Simply put, *Ye* (業) refers to land proprietors, and *Dian* (佃) refers to tenant farmers. Tenant farmers paid rent to proprietors, while proprietors were morally obliged to work with the tenant farmers on irrigation, defense, and social welfare as well as village worship. In other words, the *Ye-Dian* relationship in Taiwan's Han Chinese settler colony was never simply about land ownership; rather, it was part of a comprehensive social mechanism of local autonomous rule, covering matters from economic livelihood, to cosmological ordering, to social well-being. Seen from this view, the KMT land reform in fact played a crucial role in converting the more extended, relational, and community-bounded *Ye-Dian* relations to the absolute, exclusive, and individualized notion of modern property ownership (Ho 2015).

Moreover, this post–land reform individuated land ownership is heavily bounded by practices of a male-centered nuclear family, which was at the core of the US imagination and promotion of land reform in postwar Asia. According to Nick Cullather's study (2010), Wolf Ladejinsky, the US advisor to the KMT land reform program, had intentionally associated the tenant-to-owner Asian farmers with the Jeffersonian yeoman—the idealized all-American independent homesteaders. He had a clear vision about winning the cold war against communism through replicating and multiplying the American "owner-cultivator" farm families in Asia, citing Thomas Hart Benton's 1826 dictum that "the freeholder . . . is a natural supporter of a free government" (Ladejinsky 1977:287). Specifically, the 3 hectares allotted for each individual in the reform program was

based on the assumption that a man could support a family with a farm of that size.[4] As such, the "individual" at the center of Taiwan's land reform was also a specifically gendered individual: the working, married male farmer.

The land reform and Green Revolution encouraged large extended families to transition into nuclear families in more ways than one (Chu 2017:153). In anticipation of the implementation of the 3 hectare per person limitation, many landowners preemptively split up their landholdings among their sons. Together with the family planning program promoted in full force in the 1960s (Huang 2016) and the state-sponsored Agricultural Association that, to this day, only grants membership to the head of the farm family household, while organizing women and rural youth separately according to the US 4-H Club model, the nuclear family farm, along with its culturally defined male supremacy, had been institutionalized and naturalized in rural Taiwan by the 1960s.

The result is a peculiar "small farmer system" characterized by highly fragmented farmland managed by highly self-reliant and entrepreneurial farm families, maneuvering through Taiwan's fast-changing postwar economy. When, during the 1950s, land reform and the use of chemical fertilizers enabled farmers to generate profits, owner-cultivator agriculture became a business with bright economic prospects. The nuclear-family farms used their unpaid and flexible labor to turn their farmland into an effective production machine (Greenhalgh 1988). Later, as the emphasis of economic development shifted toward industry, the family farms started to turn their farmland into textile or plating factories, forming part of the extensive global supply chain that turned Taiwan into a tiger economy (Hu 1978, 1991). As subcontracting capitalism moved again to Southeast Asia and China in the search for cheaper labor, the main source of income for the Taiwanese family farm shifted once again, primarily relying on the urban industrial or service sector income of their sons and daughters. At this point, the vast majority of wet-rice paddies were no longer farmed by owner-cultivators but were rather outsourced to large-scale farming contractors who owned large-scale farm machinery. Now, the remaining significance of owning farmland, besides the exchange value of the land, was that it allowed old farmers to receive social benefits and subsidies and served as collateral for financing loans for the entrepreneurial endeavors of the next generation. Like its owner-farmer, the farmland has drifted further and further away from farming.

Nuclear-Family Farms in Crises

So far in this article, my analysis has treated the family farm as a seemingly unified whole, but the very notion of a free and freedom loving, self-cultivating farming family in fact depends heavily on an imposed sexual division of male and female labor. Despite demonstrating a degree of participation in farm labor that does not fall short of their adult male counterparts, women's role in farm production is rarely acknowledged. When the members of landdyke first moved to Yilan, to a village called "Deep Ditch" (*Tshim-Kau* 深溝), we were frequently questioned by villagers passing by our fields: "Whose daughter or daughter-in-law are you?" as though female farmers can only work for men.[5] When the value of their contribution goes unacknowledged, women and children often feel alienated from farm labor. I often chatted with elder village women while they cooked for temple events and had a moment's rest. Much to my surprise, I heard story after story of hardship, drudgery, or even abuse—bitter memories about their early lives coming from the double burden of having to work both on the farm and at home. Such conversation with these women sometimes ended in tears.[6]

Male farmers also talk about the hardships of the past, but they tend to frame their hardship in a different narrative structure. While women farmers have almost unanimously agreed that their lives are much better now, many male farmers lament a "golden age" long past. This golden age was after land reform, when all of a sudden tenant farmers could enjoy the freedom and satisfaction of being the owner-cultivators. The availability of small farm machinery as well as chemical fertilizers and pesticides in the 1950s also alleviated the burden of farm work in very significant ways. Based on their narratives, the good old days of the male independent owner-cultivators came to an end after the 1970s, when the state-sponsored amalgamation of rice paddies encouraged the rise of large-scale rice farming machine contractors.

The result was a lose-lose situation. For the machine contractors, large machinery was so expensive that they were pushed toward endless expansion of the contracting area in order to pay back their debts before the next faster and more expensive machines hit the market. Meanwhile, the smallholder owner-cultivators were forced to outsource farm work to machine contractors in order to catch up with the sped-up rhythm of the public rice-buying system. As a consequence, their already meager profits suffered from further cutback.

4. Note the resemblance of this system to the allotment of 3 hectares of forest territory for each indigenous Taiwanese family during the Japanese colonial period (Kuang-Chi Hung, personal communication).

5. But statistics show that the villagers are probably right. In 2015, 80% of family farms in Taiwan were headed by men. Although the civil law has since 1930 ensured equal inheritance rights to men and women, the total size of land owned by men according to the latest statistics is 2.7 times more than land owned by women, and the total worth of properties inherited by men is 3.5 times more than that inherited by women (Ministry of Finance 2016). Most revealingly, when it comes to farm land inheritance, the male percentage goes up to 89% (Directorate-General of Budget, Accounting and Statistics 2017).

6. Once, a friend's mother excitedly said that she wanted to come to Yilan to see my rice paddy. As soon as she arrived beside the paddy, however, she insisted on leaving immediately. Her son apologized repeatedly for his mother's peculiar behavior, but it was not until much later that I have come to appreciate the important lesson her brief "back to the land" drama has taught me. Despite having succeeded in becoming a teacher and advanced her way into the urban middle class, and despite having a real nostalgia for her farming childhood, standing beside my rice paddy that day, she was nevertheless still overwhelmed by the memories of hard labor half a century ago.

In short, the land reform and Green Revolution did once transform a majority of Taiwan's male rice farmers from tenant farmers to autonomous owner-cultivators as was envisaged by Ladejinsky. However, in its endless pursuit of efficiency, the Green Revolution also pushed for the reseparation of land ownership and on-the-ground farm management, and in so doing alienated the once-happy male owner-cultivators from their work and their land. Meanwhile, let us not forget that the work that was defined as female—such as childcare, cooking, farm animal care, vegetable growing, harvesting of pulses, and so on—has undergone only a very limited degree of mechanization to reduce the burden on women (even though such small machines were readily available, at least in Japan and the Philippines). Therefore, it is not hard to understand that when one after another export processing zone (*jiagong chukou qu* 加工出口區) was established along Taiwan's west coast in the late 1970s, they were promptly embraced by young women from the countryside. Having enjoyed the relative financial autonomy and physical mobility that factory work offered in contrast to work on family farms, these rural young women began to choose to marry men with urban, nonfarming backgrounds. Beginning in the 1980s, the number of Southeast Asian immigrant women marrying rural Taiwanese men increased significantly (Hsia 2002). This is a sharp reminder that by then, rural young women had already rejected the postwar nuclear-family farms en masse, and their collective decisions have foretold the crisis into which nuclear-family farms in Taiwan have fallen today.

It is critically important to recognize that it is the "nuclear-family farm" that is collapsing, not the "nuclear family" itself. To the contrary, just as the number of nuclear-family farms is declining while those remaining rapidly age, the nuclear family in Taiwan seems to be thriving. I believe this is an emergent phenomenon brought on both by the increasing privatization of personal well-being under neoliberal globalization and by the fact that, in the absence of strong social welfare, families have typically functioned as the site of resource and financial allocation in Taiwan.

Regarding the former, Melinda Cooper (2017) forcefully points out that neoliberal reformers of the 1980s successfully revived the tradition of private family responsibility in the idioms of household debt through politics designed to democratize credit markets and inflate asset values. Advocating for the privatization of education, housing, health care, and childcare, more and more states now expect the market to make up for the lack of public infrastructure, turning the nuclear family into the primary safety net or even the last resort for those who cannot afford to purchase the necessary service. Correspondingly, the resource distribution of the twenty-first century is no longer channeled through the instrument of the Fordist family wage (and I would add: its rural sibling in the Ledjinskyian "owner-cultivator family farm") as was the case in the mid-twentieth century. Instead, it operates more and more through the wealth-transmitting mechanism of private inheritance (Piketty 2014). Recent studies on the increasing income gap between wealthy and poor families in Taiwan confirm this trend (Lee and Lin 2017). Meanwhile, it is necessary to add that Taiwan's social welfare distribution mechanisms, in particular housing and medical care, have always been inseparable from the practices and idioms of the heteronormative family. The queer people, the homeless, and the single people are therefore in danger of a "double marginalization"—first for falling outside of the heteronormative household and second for falling outside of public welfare systems (Chao 2005, 2017).

The nuclear-family farms in crisis and the trend of privatizing personal well-being through intergenerational familial reproduction have formed a critical conjuncture. Essentially, the more the states turn the nuclear family into the primary safety net for personal well-being, the more pressure is placed on the farming families to sacrifice their farmland in exchange for family upward mobility. And the stakes get higher and higher. In January 2000, in anticipation of the first party alternation through election in Taiwan's history, the KMT worked hand in hand with its opposition, the Democratic Progress Party, to liberalize the farmland market in Taiwan. Both parties were bidding for populist votes. As a consequence, the landholding system in Taiwan has since shifted from the post-WWII "farmland owned by farmers" (*nongdi nongyou* 農地農有) policy to a "farmland for farm use" (*nongdi nongyong* 農地農用) policy, allowing nonfarmers to buy farmland provided that they keep the farmland for agricultural use—essentially a deliberate strategic loophole to encourage farmland speculation. Unsurprisingly, the next 2 decades witness a surging of farmland prices all over Taiwan. Between 2000 and 2017, more than 30,000 country houses were built in the name of "farmers' residences," while quite ironically, the total number of farmers in Taiwan had been in decline. It shows that the family farms that were once the backbone of Taiwanese agriculture are now cashing out from agriculture by selling off their farmland. The family-farm crisis has thus become a farmland crisis, which is further evolving into a crisis of agriculture in Taiwan, and which, in turn, is leading to new ways of living and being on the patchy landscape of paddies and sprawl. It is with these histories and futures in mind that I now invite you to visit my rice paddy in Yilan.

Survival through More-than-Human Entanglement

A night at the beginning of March, which is also the period of the "Insects Wake" (*jingzhe* 驚蟄), I'm wearing a hunter's headlamp, bent down in the midnight rice paddy picking golden apple snails (*Pomacea canaliculata* Lamarck, 1822). That morning at 6:00 a.m., 20 trays of rice seedlings were rolled up at the nursery, trucked to and transplanted into my rice paddy. These seedlings sprouted in the typical Yilan February of endless cold fronts and misting rains. Tonight, less than 20 days old, they are already facing a competition for life and death where every second counts: underneath, in the mud, more than 20,000 golden apple snails are wide awake from a good long winter's sleep,

waiting for their first bite of young seedlings since last April.[7] The moment these snails surface above the mud and make contact with the paddy water, two antennae extend out from their shells. The antennae can detect chemical particles of the seedlings, so that the snails know exactly which way to crawl despite near-sightedness. Meanwhile, the seedlings quickly develop new roots, to strengthen their bodies, and toughen the fibers in their stalks so that the snails can't get their slicing tongues through them.

There are other protagonists in this competition. One month before the transplanting, farmers begin to prepare the paddies, pick snails, cut weeds, and adjust the water levels. The goal is to maintain the lowest possible water level after the seedlings are transplanted, in order to give the seedlings just enough water to grow, while minimizing the mobility of the aquatic golden apple snails. Meanwhile, the transplanting machine stirs up the snails, along with little shrimps, fish, water scorpions (*Laccotrephes* spp.), mole crickets (*Gryllotalpa* spp.), paddy frogs (*Fejervarya limnocharis* Gravenhorst, 1829), toads, Chinese river snails, pointed snails (*Stenomelania plicaria* Born, 1778), and native clams. These little creatures seem harmless to both snails and the seedlings, but they do attract the spot-billed ducks and moorhens. The round-bodied ducks knock over rice seedlings when they swim, and the narrow moorhens pull the seedlings out of the mud, leaving a ready feast for the golden apple snails. On the other hand, the movement of the waterfowl also disturbs the paddy water, stirring up microorganisms and organic matter to be more easily absorbed by the seedlings. "Human feet are fertile," is what senior farmer Grandpa Chang used to say to encourage new farmers to walk and work in their paddies more often. Now I've learned that the waterfowl have fertile feet as well. The difference is that these paddy birds take off from work as soon as the sun sets, but we human farmers like to wait until midnight to pick the snails—when they are said to be most active. And while picking the snails, I easily get distracted by the cacophony of mole crickets, paddy frogs, and toads, spending minutes or hours watching tiny shrimps and other small creatures swimming, eating, copulating. Midnight snail-picking may sound strange or even crazy, but it is also a ticket to the late-night congress of paddy beings, for unless a cold front keeps things quiet, an organic rice paddy is at its most boisterous and vital on such spring nights.

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What is unique and important about the friendly farmers and their collective endeavors in Yilan lies in their ways of fostering new local livelihoods through various creative assemblages of more-than-human economies and ecologies. As mentioned previously, the crisis of family farms has made way for both a new friendly farming movement and a luxurious country housing market to flourish in Yilan. At its core, this crisis of Taiwanese family farms is the crisis of Taiwanese rural kinship compounded by other general crises in agriculture as well as urban home ownership. Selling off their farmland in order to facilitate intergenerational reproduction in the cities, these retiring farming families, along with the houses and land released by them, allowed outsiders to gain traction in Yilan's farmscape, which had heretofore been largely inaccessible to nonkin others.

Golden apple snails, too, participated in one such friendly farming assemblage. First imported to Taiwan in 1979 as a food source, golden apple snails have become a major agricultural pest, feeding on rice seedlings and other aqua produce such as Manchuria wild rice (*Zizania latifolia* (Griseb.) Turcz. ex Stapf), taro, and lotus roots. Hand picking is by far the most effective but also most labor-intensive method of snail removal, by which farmers can minimize the damage of golden apple snails while keeping the rest of the paddy animals alive. It is more ecologically friendly than the state-sanctioned and certified organic rice farming method, which encourages farmers to use camellia seeds as pesticides and kills the majority of paddy creatures along with golden apple snails. Many friendly farmers therefore pride themselves on forging a less antagonistic relationship with the golden apple snails: if friendly farmers can make a strange bedfellow even with the golden apple snails, we surely can make peace with everyone—and everything—in the paddies![8]

From the start, "friendly farming" in Taiwan has been in critical conversations with the state-controlled organic certification system.[9] But besides contesting who gets to define organic farming, there is more to the story. Organic certification in

7. Based on the estimation of field ecologists and fellow friendly farmers, Fang-Yi Lin and I-Han Chen (Lin and Chen, personal communication).

8. In January 2018, the Agricultural Council of Taiwan launched a new farm subsidy scheme to encourage eco-friendly farming. In February, the council revised the current farmers' health and social benefits plan to cover tenant farmers. In May, Taiwan witnessed the birth of its first Organic Agriculture Promotion Act. It is worth noting that the term "friendly farming" (*youshan gengzuo* 友善耕作) is used in all three of the new regulations, to refer to farming practices that are more eco-friendly than conventional farming but have no organic certification. Generally, the writing of a concept into law indicates general acceptance of said concept within Taiwanese society; however, that was not the case with the codification of the term "friendly farming" in 2018. The general public's understanding of "friendly farming" ranges from produce with no detected pesticide residue to "organic" farming with higher ecological standards than "certified organic." In short, there is no agreed-upon standard on what it means to be "friendly farming." I discuss the history and development of friendly farming extensively in Tsai (2016).

9. In 2007, Taiwan passed the Organic Foods Management Regulation that forbade the use of the term "organic" to describe any product that had not undergone official organic certification. This regulation would criminalize farmers like Chin-Sung Lai and A-Bao Li, two leading figures of Taiwan's back-to-the-land movement, who have been farming organically but did not want to or were unable to receive organic certification. Developing a discourse on "friendly farming" in this context, then, was their way of reasserting their rights to farm organically outside of the state-sanctioned space of the certified organics. Moreover, in its emphasis on a comprehensive, "all-friendly approach" (*quanfangwei youshan* 全方位友善) to the environment, the farmer, as well as the consumer, as opposed to the narrow emphasis on organic inputs in the 2007 Organic Foods Management Regulation, the discourse of "friendly farming" also offers a sharp critique to the technicized and conventionalized certified organic system in Taiwan.

Taiwan requires a long-term lease on farmland. However, such leases have become nearly impossible in the post–land reform Taiwanese countryside. Out of fear that reallocation of land will occur once again, few farmers are willing to formalize the landowner-tenant relationship on paper. This fear applies even to kinsmen who are within the same extended families, because this is exactly what land reform did: it first reclassified communal relationships between kinsmen as landowner-tenant relationships before redistributing land accordingly. Consequently, at least up to 2010, almost only landowners or the very close relatives of landowners (plus a minority of farmers who lease public lands for organic farming) have been able to successfully apply for organic certification. The material condition of organic farming is thus highly contingent on either one's ability to own a piece of farmland or one's ability to secure a long-term land lease through kinship ties.

Seen from this angle, "friendly farmers" are often those who are without official access to Taiwan's farmland ownership—through either kinship or market. In fact, because Taiwan's legal system defines farmers based on farmland ownership, and because the majority of friendly farming land use occurs with only a verbal contract, these "landless" plus "lease-less" friendly farmers are essentially nonexistent in the eyes of the state. The official legal codification of "friendly farming" in 2018 therefore represents a novel attempt by the state to render legible this grassroots initiative as well as its heretofore illegitimate hope—that is, hope for long-term, stable access to farmland, which is the precondition for a more ecologically sounding approach to farming.

Notwithstanding all the difficulties, since the 2010s a community of friendly farmers has begun to take root and thrive in Tshim-Kau. Why Tshim-Kau? Because the wife of a pioneering couple, By-Hoong Chu and Chin-Sung Lai, was a village native. Through By-Hoong, Chin-Sung was able to lease paddies from her relatives, although still without any written contract. When there were more paddies than Chin-Sung could farm independently, the couple decided to make them available to other friendly farmers—not through kinship ties nor commercial mechanism but through a project called "Two Hundred Hectares" (*liang bai jia* 倆佰甲). For an aspiring farmer to get access to a piece of paddy via this project, all it takes is to go through an interview with the project leader, provided that s/he agrees to care for his/her rice without using any chemicals. The project also provides the basic know-hows of organic wet-rice cultivation, including eco-friendly ways to manage the golden apple snails that I try to illustrate in the ways that I have described above. Now, instead of having nuclear kinship ties or land ownership, it is the promise and practices of taking care of the paddy creatures that grants a friendly farmer access to farmland. Land ownership and kinship ties still play a role, but they are no longer exclusive roles. They are now part of the socioecological web of connections that allows a community of friendly farmers and the creatures they care for to co-thrive in Tshim-Kau.

I wish to emphasize that the rise of the friendly farming community in Tshim-Kau is a story of surviving-together and becoming-together through forging more-than-human alliances. The mainstream media often tells stories of new farmers as people "running away" to the countryside to "escape" urban boredom and start life anew. But in a very tangible way, what friendly farmers encounter in the countryside are in fact ecological and social wastelands resulting from a long regional and transnational history of uneven development carried out in the name of Progress. Think, for example, about the farmland left fallow due to foreign agricultural imports since Taiwan joined the World Trade Organization (WTO) in 2002. Or those irrigation channels with water quality so poor that only golden apple snails can survive. Or the acidified soil in vegetable fields from years of excessive fertilization. Or old farmers in dialysis treatment after years of pesticide poisoning. These sites and bodies are ecological "ruins" created by an ever-expanding transnational industrial food regime that Taiwan is still trying hard to further integrate with.

Think also of the village elders being taken care of by Southeast Asian migrant domestic workers. Or of the elementary schools facing shutdown year after year due to low enrollment rates, which resulted from the flow of rural to urban out-migration combined with Taiwan's world's third-lowest fertility rate, which, in turn, has to do with Taiwan being one of the top five longest-working countries in the world (Central Intelligence Agency 2017). The empty schools and houses in the countryside are the social ruins created by Taiwan's export-based economy, which has failed to deliver the alleged "multiplier effects of employment and income growth" that it theoretically should have offered (Gibson-Graham 2011:6). What has happened instead is that, after the countryside has been gutted of its resource, youth, and talent, thousands of luxurious country houses owned by nominal farmers now stand obtrusively in the middle of thousands of rice paddies in Yilan. These luxurious "farmer's houses" further convince old farmers that they should cash out from agriculture once and for all, by selling their farmland to speculators in exchange for a piece of property in Taipei, which promises better opportunities for long-term familial upward mobility.

However, when human and nonhuman species meet each other in these ecological and social ruins, things start to change. When working-poor youth met fallow paddies, they turned the over-abundance of "weeds" in those former wastelands into "biodiversity" much appreciated by the UN-Satoyama Initiatives (Takeuchi 2010). When golden apple snails were given the chance to survive in friendly farmers' paddy fields, they became a food source for various paddy animals as well as an extra source of income through selling to fish hatcheries who prefer the quality of chemical-free snails. When former office workers encountered rural elementary schools in danger of closing, they started to bring vegetables grown by old villagers to elementary school lunch tables, triggering the interest of the school principal to further invite old and new farmers to teach students how to use eco-friendly farming methods to plant rice. This and other initiatives were promptly recorded by young farmers in various media forms, who later turned these stories into highly acclaimed publications (Chen 2015) and online media

sensations (Agriculture Design Workshop 2016). Within 5 years, more than 70 families and individuals have started a farming career through Two Hundred Hectares in Tshim-Kau and nearby villages. By regenerating local knowledge and social alliances, as well as promoting identity and culture that strengthen local economic viability and diversity, these new farming units rebuild the social, political, economic, and cultural web of life that allows one to advance in the transformation of a failed and harmful industrial agro-food system (see fig. 2).

In short, practices of friendly farming in Yilan are retrofitting the nuclear kinship ties that, since the land reform, have largely confined the access to farmland and agriculture knowledge within nuclear-family farms. By taking care of various paddy creatures while killing fewer golden apple snails, friendly farmers join health and environmentally conscious urban consumers to enact a more-than-human network where human well-being depends heavily on the well-being of nonhuman fauna and flora in the foodway. And by strengthening material and nonmaterial ties with urban consumers, new farmers also strengthen their foothold in the patriarchal countryside to enact a more-than-human network where both kin and nonkin matter. Significantly, more and more old farmers are joining these more-than-human assemblages by bringing in their own creative projects. In spring 2017, a citrus farmer approached landdykes to offer his knowledge in organic fruit farming in exchange for our commitment for a 4-year apprenticeship. He was convinced that neither the state-centered agricultural extension system nor his family was capable of passing down his 20 years of accumulated farming expertise. We accepted his offer; since then, this family man has become the guru of five LGBT farmers.

Active participation in local storytelling and listening also reveals alternative modes of associating and becoming-with through farming. Quite incidentally, landdykes learned that one of our paddy fields was once cultivated by a well-respected widow who worked the land to raise three children through the help of many nonkinsmen villagers, while her close kin repeatedly plotted against her. The story of this strong-willed and collaborative woman farmer predecessor serves landdykes well, not only because it affirms what we are trying to do as a collective but also because it reminds us of more historical precedents of farming with nonkin.

Another example came directly from the early Han Chinese settler-colonizers to Yilan, who organized themselves based on an autonomous system of brotherhood, *jie-so* (結首). Bachelors from the same dialect group were formed into bands of aggressive farmer-militia to take over the indigenous Kabalan land and open irrigation canals (Wang 1999). These earliest batches of wet-rice farmers also farmed with certain strange and odd kin at the expense of their racial others. The gender nonnormativity and violent racial exclusion behind the story of early Han Chinese settler landscape-making in Yilan creates even more memories of patchiness.

Indeed, despite the emphasis on blood ties and kinship within the Han Chinese moral universe, in different times and places the Han Chinese have strategically gathered in kinship-like communal identities and established these imagined communities as the medium for estate inheritance. Fictive kin ties had always served the Han Chinese traders, sojourners, and settlers well as they trod unfamiliar waters and terrains. It is worthwhile mentioning, though, that recent research findings of the so-called "Huanan School" (*huanan xuepai* 華南學派) of Chinese historians and anthropologists also suggest that practices of fictive kin-making happened frequently "at home" as well (Faure 2007; Faure and Liu 2000). Reexamining the Han Chinese notion of the "clan" (*zongzu* 宗族) through archival materials of southeastern Chinese provenances, they suggest that the "clans" that developed in the Ming dynasty were not the hereditary lineage group found in anthropological textbooks, nor were they some kind of traditional institutions specific to the Han Chinese culture and society. Instead, they were part of the civilizational projects of the Song and Ming Confucius intellectuals, who deployed various kinds of kinship-making techniques—compiling clan genealogy, building ancestral halls, elaborating on rituals of ancestral worshipping, in order to compete with popular Taoist and Buddhist practices at the grassroots level. In other words, it turns out that the Han Chinese just as frequently mobilized each other along fictive-kinship ties and that "blood" relations were only one of the many organizing and solidifying principles in Han Chinese societies.

Living and farming in Yilan, however, we even find prevalent practices of worship based on neither kinship ties nor fictive-kinship ties. "Big Brothers" (*lau-tua-kong* 老大公), we were told, are the deceased who have no descendants to regularly worship them. Thus, cutting loose from the conventional web of sociality strung through kinship or fictive-kinship ties, these lone souls like to wander around and may find shelter by a piece of rock or take residence in a paddy field as they please. According to elder villagers, it is advisable to make offerings to appease them, both at the beginning and the end of each planting season. Alternatively addressed by local villagers as "Lord of the Paddy" (*tsan-tau-tsu* 田頭主), these wandering ghosts are a force to be reckoned with if anyone wishes to yield a good harvest. When novice farmers got into car accidents or became ill, village elders also helped us to read signs given by these invisible beings residing in our paddy fields. In a way, they have also become a touchstone of a good tenant farmer for many old farmers/landowners. Just like they would quietly stroll by their paddies and check whether the tenant farmers are diligent enough to keep all the weeds down, old farmers also keep track of whether or not their tenant farmers are paying due respect to the Big Brothers and the Lord of the Paddy. In this perspective, tending a plot of land also means having to tend the ghosts there, who in return may help the farmers to tend the land. This chain of reciprocity grows and extends. Gradually, we have learned that what is produced through agricultural work has never been limited to the agricultural products whose prices rise and fall. Instead, a farmer is expected to take care of the *tsan-thau tsan-bue* (田頭田尾), literally, the paddy field in its entirety. Such a task

Figure 2. Mapping various assemblages of friendly farming in Tshim-Kau. (Copyright: AgriCulture Design Workshop.) A color version of this figure is available online.

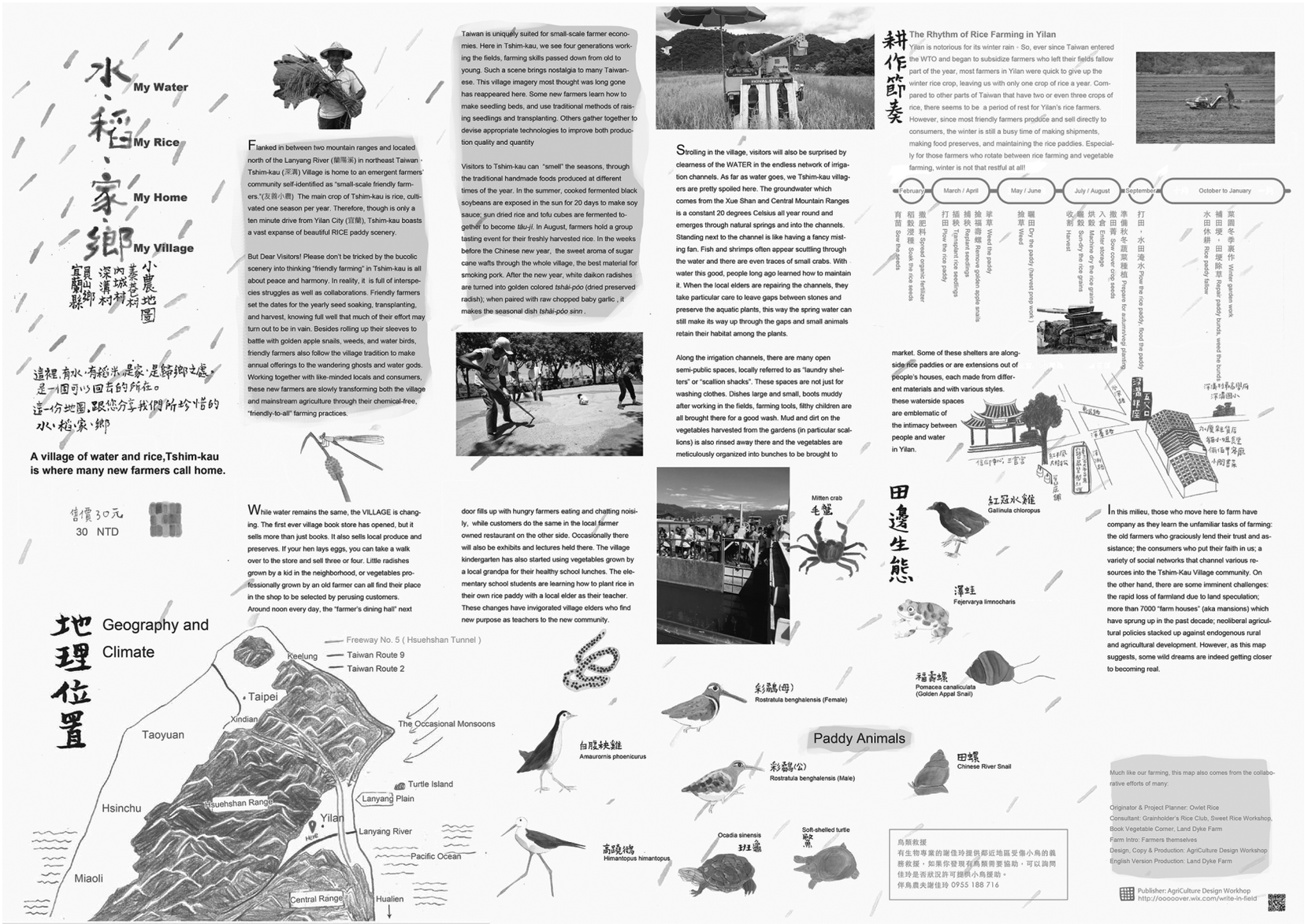

Figure 3. Farming multispecies co-livability in Tshim-Kau. (Copyright: AgriCulture Design Workshop.) A color version of this figure is available online.

encompasses all paddy beings, both material and formless. By taking good care of them, we will also be taken good care of (Tsai et al. 2016) (see fig. 3).

Conclusion

This paper is based on my long-term participation in, and contemplation of, ecological farming in Taiwan. As recent conversations about the Anthropocene acknowledge the planetary influence of agriculture in shaping the earth systems (some even proposing that the invention of agriculture be considered the beginning of the Anthropocene), could practitioners of agriculture contribute to the greater project of learning and relearning to survive in the Anthropocene? What kinds of agriculture, and what kinds of imaginings for the relationship between humans and land, could possibly bring forth better opportunities of coexistence and justice between the human and the nonhuman?

In my view, the current farmland crisis in Yilan urges us to see that, while ecological farming works hard toward creating new interspecies connections among humans and nonhumans, the logic of land distribution nevertheless remains under the control of capital and kinship that works through the entwined logic of property and intergenerational "reproduction." Such logic encourages the continuous pursuit of human-centered, monospecies, self-perpetuating communal reproduction, regardless of how fictive the community under pursuit may be. It would not be an overstatement to say that, just as agriculture in Taiwan has slowly but gradually transitioned toward a new paradigm of respecting difference and striving toward biodiversity, the prevalent logic of farmland use in Taiwan is in stark contrast, growing in the direction of sameness and homogenization. Needless to say, when the commercial value of land increases, its options for use essentially become restricted to exclusive housing, thus eliminating space for multispecies cohabitation.

The irony I am trying to paint here entails a more ambivalent understanding about the seemingly hopeful alternative agro-food network movement as experienced from the ground up. It seems clear to me that a new set of agricultural practices that emphasize biodiversity alone is insufficient to save us from the predicament of farmland speculation. What champions of ecological diversity cannot afford to ignore, I suggest, is the simultaneous pursuit of economic diversity, which requires careful reflections on dominant forms of social organizations within our current system. We need to ask, for example: How do particular forms of human organization, such as family farming, enable or limit our agricultural practices? As I have demonstrated, the specific configuration of contemporary family farms in Taiwan is a contingent product that arose from the complicated history when Taiwan as an ex-Japanese colony encountered the Chinese Civil War, Cold War geopolitics, and the post-WWII US export of the Green Revolution. And as land speculation has driven the price of farmland to a record high, family farms in Taiwan are now facing another historical conjuncture. How does the changing relationship between the "family" and the "farm" open up new forms of destruction as well as livability? Is it possible to belong in the patchy landscape of paddies and sprawl in ways beyond capital and kinship?

I believe that the answer to the last question is a yes, and recognizing that ideologies of family may be in the service of land commodification is an important start, but certainly not enough. It is equally important to come up with other possible ways to imagine as well as institutionalize human and land connections, wherein inheritance and ownership are only two among many options rather than the only exclusive options. The section "Survival through More-than-Human Entanglement" of this paper demonstrates that the paddy landscape in Yilan is in fact shaped as much by nonblood-, nonmarriage-based kinship ties as it is by ties of ancestry or genealogy. The wandering spirits of early bachelor-settlers from Southeast China are now being taken care of by modern LGBT friendly farmers. Golden apple snails from Latin America have coevolved with native snails, water birds, reptiles, and many kinds of fish to form multiple food chains both inside and outside the post-industrial wet-rice ecology. Urban precariats have assembled new livelihoods in the countryside by fostering new commodity chains that straddle hobby and work, artisanal and industrial, and capitalist and noncapitalist modes of production. Taken together, they formed a world of friendly small farming permeated with strange kin ties and have broadened our imagination of how to build alliances and make odd kin in and through farming. Significantly, while some people might prefer to tell these as heroic stories, to me they are stories of cosurvival, of human and nonhuman refugees helping each other out and turning industrial ruins into livable, inhabitable refugia (Haraway 2015; Latour et al. 2018; Tsing 2015). Most important, all of these are done with relatively little institutional support. Autonomous and spontaneous, these cases are among the best instantiations of "agricultural multifunctionality" in the fullest sense of the term.

Perhaps all of these stories past and present are not unlike the wandering Big Brothers and Lord of the Paddy that we friendly farmers have learned to respect in Tshim-Kau; their bones were said to be found, or spirits said to be residing, in the paddies; they were also said to be the deceased who voluntarily or involuntarily cut loose from the familial bonding that extends beyond life and death with an imagined endless male bloodline. Scattered but ever-present, shadowy but all the more significant, they continue to remind us that the paddy landscapes in Yilan are as much shaped by normative kinship as by other strange and odd kin. It is hoped that, by recognizing the interweaving practices of kin-making and farmscape-making, we can better tackle the regime of intergenerational familial reproduction and its accompanying farmland crisis, and to think of more nonexclusive ways of farming and co-living in patchy Anthropocenes.

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