I follow a flowering grass that most readers here call rice (*Oryza*). Its ubiquity and heterogeneity make it a fascinating yet intimidating plant to follow. Archaeobotanists study traces of grains planted as early as thirteen thousand years ago along the Yangtze River and the Himalayas, naming rice as one of our oldest food crops and companion species. Ecologists, agriculturalists, and geneticists consider it one of the best model organisms for mapping how people and plants co-evolved through mutual selection and propagation. Rice also appears in historians’, artists’, and humanists’ inquiries into difference and agency, belief and power, matter and meaning, to name a few. Feminist science studies and multispecies ethnography teach me to consider different modalities of rice as more-than-human entanglement (Barad, 2007), dynamic assemblages of biogeochemical and technoscientific ways of being. This means something other than seeing plants or seeing like plants in addition to people. "Subjects, objects, kinds, races, species, genres, and genders are products of their relating," writes Haraway (2003, p. 7), pushing away from the centrality and boundedness of (human) species-beings and towards historical contingencies and performativities of significant otherness. Why does *this* kind of rice grow *here*, *now*? Why only here, or why here *and* there? Rice does not pre-exist its relations; what counts as rice (in its various modalities) arises when differential trajectories crisscross, forming unruly assemblages. Questions about relationality and specifically the temporalities of relating have led me to multiple sites, including paddy fields along the Mekong, a river preserve in California, an experiment station in Puerto Rico, genetic labs in the Philippines, a seed vault in Svalbard, and so on. Each site
materializes by crisscrossing others.

Early in my research, I was struck by one of the ways in which agronomists and scientists at rice institutes organize seed collections: "modern" or "elite" seeds and genetically modified or "improved hybrids"; "traditional" or "native" landraces; "weedy" relatives; and "wild" ancestors. Classifications have genealogies and consequences (Bowker & Star, 1999; Haraway, 2003; TallBear, 2013). The taxonomic distinctions represent degrees and hierarchies of human intervention: moderns and hybrids are bred intensively to bear functional traits (e.g., high yields, fast growth, disease resistance) for predictable performance in different types of climate regions; traditional landraces are cultivated by Indigenous groups, highly variable and linked to particular places; weeds are noxious, out of place, and destined for elimination; wilds resist domestication, valuable for their embodiment of diversity and natural selection. Most striking were the temporal orientations of racialized difference: moderns and hybrids serve a postwar future, obligated to fight world hunger and ensure universal peace through high yields; traditional landraces belong to a vanishing past, heirlooms of ancestral tastes, aromas, and reified cultural heritage; weeds and wilds are incommensurable, biding their untimely times in cold storage or genetic labs until one trait or another might be reintroduced to supercharge the future of moderns and hybrids. Racial discourse, played out through typecast seeds, scaffolds research at institutes that now produce 75% of rice varieties grown (IRRI, 2013). Equating moderns and hybrids with better futures rationalizes the assemblages that go along with them: chemical fertilizers and pesticides, dams and irrigation networks, erosion of genetic diversity, the dispossession of non-moderns, the rule of transnational agroindustry. These have disrupted major cycles through which life in this epoch becomes possible: nitrogen, water, carbon, photosynthesis. In turn, the disruptions enable novel assemblages to flourish: brown planthoppers and stunt viruses, water hyacinths and snail fever, fungal blasts and bacterial blight throw futures into question as they introduce relentless more-than-human indeterminacies (Gan, 2017).

Meanwhile, among the so-called traditionals are over 350 varieties cultivated by Ifugao farmers of rice terraces in the Philippine Cordilleras. The seeds were meticulously gathered by anthropologist Harold Conklin and Ifugao collaborators. From 1963 to 1985, the seeds were catalogued for conservation at the US-backed International Rice Research Institute (IRRI) in the Philippines. The multispecies assemblages that go along with Ifugao rice are co-constitutive of and contemporary to the assemblages of moderns like IR8, the first successful IRRI cultivar, cross-bred from Indonesian and Taiwanese varieties and released for field
production in 1966. Yet they have been cast along different trajectories. The Ifugao rice terraces are listed as a UNESCO World Heritage site, valued for aesthetic beauty and harmony from ancient civilization. IRRI fields are part of a global consortium (CGIAR) for agricultural innovation, signifying human mastery over the future. This is not to say that seed collection and classification led to these current positions. The contemporaneity suggests that they articulate a broader historical conjuncture. Just as race emerged from the bodies of cane workers in Puerto Rican plantations and produced much of the wealth in nineteenth-century Europe (Mintz, 1985; Tsing, 2012), race continues to be produced and reproduced here in a new form of plantation called Crop Science.

References


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