

*Recensione*

## **A. Tsing, *The Mushroom at the End of the World***

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### **The Adventures of Difference in Capitalist Ruins**

Science is a translation machine. Not only because protocols and zealous technicians select the parts to be integrated into a unified system of knowledge. Science is also translation because its insights are drawn from diverse ways of life. (217) Anna Lowenhaupt Tsing develops a science of the ecologies of encounter. This science looks at every form of life across every link of the supply chain. Every link is a source of surplus; and every link is valorized in the translation from one form of life into another. This science behaves as *unresolved translation*. Interpreting nature, as in the case of the Japanese *matsutake* science of Shiho Satsuka, requires training with both the machinic parts and “the eruption of difference.” Adventures of difference are at the core of Tsing’s groundbreaking work *The Mushroom at the End of the World: On the Possibilities of Life in Capitalist Ruins*. Tsing’s biocentrism decenters the tales of the *anthropos*. The *matsutake* mushroom is the nonhuman protagonist. The nonhuman lens allows multiple transformative commodifications to emerge, and to reveal how a commodity organizes life-cycles across the species. Or better yet, how life organizes itself around patches of local semantics.

Tsing revels in the messiness of science. Here the mushroom plays as a metaphor for unpredictable insurgencies. A delicacy on the Japanese and international market, the *matsutake* is mostly picked in Oregon and other similarly deforested areas. This labor is carried out by Southern Asian immigrants, as a post-modern manifestation of freedom, and a side-job. The entanglements of markets, rituals, the stories of pickers, environmental histories, laws, philosophies and everyday life are so tight, that the book enhances a morphology of world-historical processes.

The long trajectory of this terrific and vertiginous journey remains clear across individual stations. The question can be formulated as follows: are human interventions (normally oriented to preserve capital —state conservation policies,

in particular) more preserving or disturbing of new “natural” insurgencies in post-industrial areas? New processes of inhabitation entangle marginalized labor and “nature.” According to Tsing, the question mobilizes the development of conservationist politics in the US, where the lives (and deaths) of a forest recall similar bifurcations in the Chinese Yunnan of the Great Leap Forward, with a fungus that flourished without human or state action. It was in the 1950s, in fact, that a clash between peasant activities and state-conservationism emerged around new enclosures of American “parks.” These politics were enforced even in traditionally nonproductive areas, where industry had already been dismantled. This and similar comparisons of seemingly distant phenomena also illuminate the ways in which prohibitions for pickers to collect, camp, or to have free access to seasonal settlements, free, and “safe,” is framed on the well-oiled mechanism of dispossession of Native peoples from their lands. As an illustrative case, Tsing recalls the 1954 “termination” or ending of all treaty obligations to the Klamath Tribes, the last great Native dispossession in Oregon.

Mushrooms stay in troubled relationships with both the stories of the pickers and their migration, and the history of Native Americans and their land. But mushrooms are also signified in the idioms of industrial modes of production. This last, fungal form of existence tells something about frames of scalability. Central to Tsing’s theory of political economy, scalability has been a criterion for industrial development since the 1950s, but it is also a current principle for translation and story-telling.

In the 1950s, scalability was a matter for citizenship as well as resource use. America was the melting pot, where immigrants could be homogenized to face the future as productive citizens. Homogenization allowed progress: the advance of scalability in business and in civic life. This was the climate in which legislation was passed to unilaterally abrogate US treaty obligations to selected Indian tribes. In the language of the day, members of these tribes were said to be ready to assimilate into American society without special status; their difference would be erased by law. (199)

“Scalability” involved a general dissemination of a standardized mode of production and consumption, coupled with ideologies of *assimilation*. Digesting the Indians was a political agenda, as much as the rhetoric of biological “outsourcing” describes relations of fungal symbiosis in economic terms today. Biology often describes organisms with the words of the market. But «fungi have always been recalcitrant to the [Weberian] iron cage of self-replication.» (144)

Like bacteria some are given to exchanging genes in nonreproductive encounters (“horizontal gene transfer”); many also seem averse to keeping their genetic material sorted out as “individuals” and “species,” not to speak of “populations.” When researchers studied the fruiting bodies of what they thought of as a species, the expansive Tibetan “caterpillar fungus,” they found many species entangled together. When they looked into the filaments of *Armillaria* root rot, they found genetic mosaics that confused the identification of an individual. (143)

Mushrooms repopulating industrial deserts are promiscuous and expanded selves. Like a feminist troupe, you invite one for dinner and various others will show up. This is called co-development. Co-development has been observed and theorized by biologist Scott Gilbert. He claimed that «nature may be selecting ‘relationships’ rather than individuals or genomes.» (142) Complexes of organisms and their symbionts, such as the forest and the mushrooms, tend to shape the road to the development of new species. The pickers, the packagers, the sellers, the buyers, distributors and the chefs are all components of this evolutionary unit, the “holobiont.” But not on the scale of “symbiosis,” with a host and guest dynamics, as it seems at first sight.

Modern nature diversified based on a scientific model of self-replicating things, with analogous scales, «models of the kind of nature that technical prowess can control.» (140) The discovery of the stability of self-replicating properties of DNA in the 1950s was «the jewel in the crown of the modern synthesis.» (Ibid.) In the model of self-replication, each scale transfers a self-enclosed genetic inheritance. With the foundation of evolutionary developmental biology, however, things changed. Specifically, in studies of the *Euprymna scolopes*, “a tiny Hawaiian squid” colloquially known as “the bob-tailed squid,” it has been observed that juvenile squids do not produce their organs unless they come into contact with a particular species of bacteria, *Vibrio fischeri*, that they must encounter in the seawater (Ibid.). It is not the opposite sex that induces reproduction. This, and other examples, challenge our concept of generation, which is again, informed by modern industrial scales such as seriality. The interspecies ties of mushrooms constitute a similar challenge to the seriality of generation, which unifies in the plantation model both industrial settlements and DNA replication. Mushrooms extend beyond the single root, to the whole patch, and to different patches in the forest. “Mychorrhal networks” proliferate when the fungus extends its body into the host’s root and sucks some of the host’s carbohydrates with «specialized interface structures, made in the encounter.» (138) Some fungi did not expand and inhabit a host without fruitful bodies. But the relation of plant and fungal associates is never the same within the patch. No patch is “representative.” Each one has its own history, and this is what makes it difficult to think of the mychorrhal network as a utopian political paradigm. Anna Tsing defines this political potential as a “latent commons,” an entanglement that *might* be mobilized in a common cause. Such potential relies on shifting alliances and coalitions that go well beyond the friend/enemy paradigm that still belongs to the serial binarism of disciplined reproduction.

The *matsutake* mushroom is not a symbol for utopian politics for another reason: because of the processes of commodification and standardization through which it goes. Like every other food supply, mushrooms transition from being an object of the “gift economy” to the “salvage accumulation” of the current capitalist economy, and vice versa. We live in “salvage accumulation.” And we are not mushrooms. Even in the re-naturalisation of the activity of picking, when mushrooms once again become trophies of the hunters, when they are

not “alienated” as commodities, their memory in exile is haunting. Freedom is a ghost-ridden memory for the gatherers. Their narratives are haunted by labor, even when rejecting labor and claiming gathering as freedom (78). Factual scales of “freedom” continuously divide human and nonhuman. Freedom appears here and there in Tsing’s writing as the currency of translation. Ambiguously claimed both by the labor force in terms of non-wage labor, and by investors and policy-makers, freedom tends to be identified on both fronts with the universality of money. It constitutes a back-up door for capital. For when freedom is claimed, performed and signified, capital follows close behind.

Tsing’s political economy even compares the dollar and the yen, in dangerous liaisons, through the fungal signifier. Since the ultimate market of the mushroom is Japan (and Japanese kitchens all-around the world), she reads Japanese-American hegemonic politics against the grain, and confronts their divergent forms of imperialism. In doing so, she references Gibson-Graham and Hardt and Negri, «the most trenchant early twenty-first century anticapitalist critics.» (66) Tsing’s synthesis sounds as follows: capitalist and noncapitalist forms interact in pericapitalist spaces (Ibid.). Capitalism is only one form among many economic models and behaviors, but it acts with a tendency to become hegemonic and all encompassing. On one hand, a segregated economic form behaves like infestive weeds in the garden (pericapitalist). On the other hand, it depends on noncapitalist forms of life. And it is only through this economic diversity that accumulation is possible. This is the meaning of “post-capitalist” politics, how to confront and navigate salvage accumulation. How is it even possible to live in capitalist ruins, where unregulated production is translated into commodity chains by an abstract and intermittent offer-demand mechanism as rigorous as science, and even imagined as freedom?

Tsing’s style has been defined as “a riot” of short chapters, like the flushes of mushrooms that come up after rain (*The Guardian*). Flushes and patches disorient the common currency of the “fields;” and not only as a metaphor. A “rush” of stories constitutes new assemblages in a bond of human and nonhuman (*Anthropological Quarterly*). Nevertheless, Anna Tsing’s co-evolutionary object definitely realizes Barbara Cassin’s notion of the untranslatable. All attempts to restore a given sense of politics determining life will fail the novel political space of Tsing’s language. The adventures of the mushroom at this given time are so immanent to the Babelic diversity of her languages that we won’t dare to restore a universalist story in its name. But we can learn to translate local forms of life’s insurgencies. We have a hunger for realism. Out of the metaphoric use of the mushroom, the multitude of jargons and narrative scales can still be filtered by scientific accountability. And this is what really satiates the appetite.