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Proteinic Geontopower

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ABSTRACT

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PGP is a study of how we come into intimate contact with capitalism through our digestive tract. It is a study of the increasing valuing of protein in contemporary diet culture, focusing on how this phenomenon has resulted in mass-scale global soya production. Protein synthesis and distribution are rearticulated in this work as a set of molecular transactions enacted within/out bodies, moving loosely through ligaments and industrial machinery.

PGP is a speculative exercise in communing with a damaged planet through our daily ingestions.

Soybeans (Glycine max L.) teeter on a hemispheric axis. Cultivated at a commercial scale for over 1000 years in East Asia, this crop and its genetically-modified variations has now become a force in the transnational food industry. Soya is currently the most valuable oil-producing harvest for human consumption and animal feed in fish farming.[1] Cheap, high-protein, fast-growing and land-restoring, its cultivation has skyrocketed, and shifted from its historic origins of Manchuria and China to North and South America.[2]

Thousands of hectares in Argentina, Brazil, and Paraguay have been converted to accommodate the production of soy—a process that continues to exponentially displace local farmers and crops in favor of this monoculture. While most of it is used in the meal industry, the rest is distributed as an ingredient in processed foods in the form of lecithin, emulsifier, soybean oil, and other multi-use protein liquids/powders. While major soy-consuming countries such as China and India have partial GMO bans, the U.S. and most of Latin America produce most of genetically modified Monsanto Roundup-Ready soy to sell within the Americas and, ironically, to export to China and Europe.

Soy is prized as a crop for its plasticity and adaptability. The North/South latitudinal axis allows for year-round production of this plant in accordance to temperature conditions. Soy can thus be harvested from the beginning of spring through winter, either as a monocrop, or in rotation with corn, wheat, sunflower, and sometimes cotton, sorghum and rice, while also restoring soil through atmospheric nitrogen fixation.[3]

Mercosur countries account for 60% of global soya production.[4] Latin soy supplements U.S. production when crops fail. The plant is distributed via a hemispheric whim, drawn by bacterial codes in genetic modification and mobilized by geopolitical desire. Grown, shipped, processed, and shipped again across continents in avoidance of legislation. Global agricultural forces grow and shape destructive landscapes fueled by deforestation.[5] The crop becomes an active extractive agent, a noxious enforcer of neoliberal reign. The "soybean [as] Latin America's new colonizer."[6]

1 Ricardo Melgar, et al. "Soja En Latinoamérica." (Agroeditorial, 2011).

2 In the early 20th century, Manchuria was still the dominant soybean producer, followed by China, where soya was cultivated as early as 7000 B.C. G. F. Deasy. "The Soya Bean in Manchuria." (Economic Geography, 1939), 303. Currently, according to the USDA, Mercosur countries jointly account for 60% of global soya production, and South and North American countries together account for over 86% of it. This is led by the U.S. (34%), Brazil (30%), and Argentina (18%). USDA. "Oilseeds: World Markets and Trade, April 9, 2019" (USDA, 2019), 14.

3 Ali Nawab. "Soybean Processing and Utilization." (The Soybean: Botany, Production and Uses, 2010), 345–374.

4 Ricardo Melgar, et al. Soja En Latinoamérica. (IIP Boletín No. 20, Agroeditorial, 2011), 10.

5 Soybean cultivation in the Amazon has pushed for land conversion via massive deforestation. Global Canopy Programme, The Little Book of Big Deforestation Drivers. (Global Canopy Programme, 2013).

6 Miguel Altieri and Walter Pengue. "GM Soybean: Latin America's new Colonizer." (Seedling, 2006).

Forms of domination and colonial structures that have been upheld by the highly visible crops of wheat, sugar, and cotton in previous centuries are now also shaped by GM soya. They are not only upheld by it but they take on its qualities, laden with the crop's same mutability, pervasiveness, and monoculture. Contemporary power structures act on top of historical forms of domination with even more fluidity and permeability. They mirror global soya production in all its movements across geo- and biological bodies and in all its scalar shifts. GM soya alerts us to the nature of contemporary biopolitical forces present in webs of life and non-life, enacting micro and macro violences on a host of bodies.

This kind of regime is slightly different than Michel Foucault's figuration of biopower. In his formulation, life itself becomes an object of power, and power a force that administers and manages life. "Biopower is a form of power that regulates social life from its interior, following it, interpreting it, absorbing it, and rearticulating it. Power can achieve an effective command over the entire life of the population only when it becomes an integral, vital function that every individual embraces and reactivates of his or her own accord."[7]

While biopower speaks to the body and acknowledges the ways in which bodily management is a technology of control, it doesn't fully apprehend the spectrum of life and nonlife because it focuses primarily on the management of human bodies. We should expand the notion of biopower to include bodies in a wider sense in order to get a fuller understanding of the mechanisms of power. In the third part of *Ethics*, Baruch Spinoza proposed that all things have *conatus*: an endeavor to persevere, to maintain themselves. He posited that humans as well as all other beings and things have the capacity to be affected, and that their potentials are unknowable. With that insight came a question: what can a body do?

Design and architecture writers Minh-Ha T. Pham and Léopold Lambert take us further. They posit that "contained within Spinoza's question is the radical idea that we not only don't know what a body can do, but that we don't even know what a body is."[8] Therefore, a Spinozan body is not necessarily even biological, or lively. It is any constitution brought into existence by material, social, and spatial encounters and forces. By applying a Spinozan notion of a body to biopower, we can think about its operation beyond the boundaries of human bodies and even of life itself, dissolving the boundaries of bio-somas and beginning to appreciate agricultural forces as bodies of their own: being managed and managing, and coming into intimate contact with an unimaginably wide array of biological, atmospheric, corporate, and geological bodies.

7 Michael Hardt and Antonio Negri. Empire. (Harvard, 2000), 23.
8 Léopold Lambert and Minh-Ha T. Pham. "Spinoza in a T-Shirt." (The New Inquiry, 2015).

The power formulation described is a form of geontopower. This is a concept brought forth by Australian late liberalism theorist Elizabeth Povinelli. It defines a power regime which "does not operate through the governance of life and the tactics of death but is rather a set of discourse, affects, and tactics used in late liberalism to maintain or shape the coming relationship of the distinction between Life and Nonlife."[9] In other words, power distorts the boundary of what is considered living/non in order to sustain its necropolitical and extractive regimes.[10] It distorts what is considered non-living in order to subjugate it with a different set of ethics than it would the living. This term more accurately reflects current and historical regimes of extractivism and eco-control. It is an amendment to biopower which also includes it (it is more of a bio-geo-onto power) while appropriately encompassing power formulations beyond just the living/biological.

Geontopower also acknowledges the co-extensivity of living and non-living beings, unbound by epidermal enclosures. Boundaries come undone through digestion and the breath, creating new molecular and cellular recompositions at every respiratory/metabolic turn. Through this breathing/digesting mechanism, we can see the delicate flow between life and nonlife, with materials being transformed by an exhale or an ingest. Within it, we can also witness macro processes being enacted within smaller frameworks: local interactions with materials such as carbon and protein within our bodies mirror, and are active parts of, global carbon cycles and agribusiness.

Ultimately, this formulation of power allows us to fully apprehend how agri-capitalism is built as an assemblage of living and nonliving forces, all participating through different means and at different scales. These are woven through planetary/geologic destruction as well as the governance of life and death. Soya is both symptomatic and creative of these assemblages. It is constantly being animated and in-animated through its manufacture by all the bodies it comes into contact with. In its near planetary omnipresence, and its existence across animation and space, it invites us to think more creatively about contemporary power formations.

9 Elizabeth Povinelli. Geontologies: A Requiem to Late Liberalism. (Duke, 2016), 4.

10 Necropolitical regimes are described by Achille Mbembe as those that rely on the "subjugation of life to the power of death" Achille Mbembe. Necropolitics. (Duke, 2003), 39.

Mid-20th century articulations of biopower were lacking in their limited ideas of animacy. They were also responding to a society with completely different food practices, which focused primarily on cereals and grains. The contemporary formations of international trade and agro-technology in today's global agriculture require updated language around them. We have shifted from bio/grain to bio-geonto/protein power.

Following Anna Tsing's thesis that the agricultural shift towards intensive cereal harvest and plantation systems structured patterns of ownership and hoarding of laboring/fertile bodies for centuries, the soybean seems a more adequate candidate for the societal structuring forces of the 21st century.[11] While cereals and grains prompted domestication, the nuclear family, and the plantation, GM soya (consumed by itself or processed into animal protein as the grain feed that powers most global industrial farming) demands different societal comports.

An agrarian society centered around a proteinic crop is one where labor has become increasingly precarious and immaterial, and familial systems more fluid and non-nuclear. Protein is processed through many layers and beings, providing more consistent energy and more direct life force. It shifts and allows for bodily optimization, hyper-productivity and hyper-individuation. Excessive protein intake doesn't value systemic balance. It wants to produce excessive energy with the same caloric intake. It values the hyper-energic, unbound body: a body that values exponential output over stability and domesticity. It is an unbound body that defies plant and metabolic rhythms, accelerating in favor of perpetuity. The speed of the soybean is the desired speed for neoliberal subjects: nonstop proteinic performance. Time dissolves in favor of constancy. Monoproductivity[12] is king, both for agricultural and corporeal landscapes.

Within the range of dietary decisions that we make (as determined by economic/geopolitical access), we are often absorbing agri-capitalism into our bodies. We process economic/production webs within our leaky bodies. As our cells, our bodies regenerate, they are doing so as cartographies of hyper-proteinic global food systems. Our cells metabolize health trends, international trade agreements and market crashes. They are queued by monoculture and excessive growth, beckoned towards monoproductivity. We act as translators, letting shards, dusts of intercontinental products enter our cellular networks as amino acids, insulin mimickers, and estrogens to maintain our seemingly discrete selves. We become extensions of an agricultural body: actively amplifying its effects while it become less and less traceable, hidden in its embodiment.

11 "Plantations were the engine of European expansion. Plantations produced the wealth— and the modus operandi—that allowed Europeans to take over the world. We usually hear about superior technologies and resources; but it was the plantation system that made navies, science, and eventually industrialization possible. Plantations are ordered cropping systems worked by non-owners and arranged for expansion. Plantations deepen domestication, re- intensifying plant dependencies and forcing fertility. Borrowing from state-endorsed cereal agriculture, they invest everything in the superabundance of a single crop." Anna Tsing. "Unruly Edges: Mushroom as Companion Species." (Environmental Humanities 2012), 148.

12 This term is used in allusion to monoculture as in (a) the growth of a single crop of a time and (b) the encouragement of monolithic cultural values.

These are the contemporary modalities of power. Increasingly co-extensive. Metabolic. Increasingly excessive. Molecularly directive. Proteinic geontopower is breathed, eaten. Its enmeshment is cellular. Any separation we attempt from global food production ethics and nutritional trends is rapidly broken down by our need to eat. We are already made of this very matter—not neutral, but always-already molecularly composed by the regimes we might seek distance from. This is one form of what Michelle Murphy denotes alterlife:

> life already altered, which is also life open to alteration. It indexes collectivities of life recomposed by the molecular productions of capitalisms in our own pasts and the pasts of our ancestors, as well as into the future. It is a figure of life entangled within community, ecological, colonial, racial, gendered, military, and infrastructural histories that have profoundly shaped the susceptibilities and potentials of future life.[13]

Although Murphy writes of alterlife in the context of chemical pollution, it is very much applicable to the molecular exposure/breakdown of micro and macro nutrients. We contain indexes of differential history, exposure, access, as well as a myriad of specificities of agricultural and industrial food production. The presence of soya is one among a pool of these operations, and a particularly potent one due to its simultaneous hyper-presence and almost-invisible life as a trace substance present in mammalian and amphibian bodies, soil, and the crevices of food processing machinery. It inoculates seemingly unrelated products as an emulsifier. Its impact grows in scale and its form diminishes in size. While it would seem that the micro would be less impactful, it is the absolute opposite. Technoscience theorist Donna Haraway articulates this scalar mechanism of domination: "Miniaturization has turned out to be about power; small is not so much beautiful as pre-eminently dangerous."[14] The danger is in the ubiquity/invisibility. As a nutritional force, soya's omnipresence gets filtered into environmental dust in a way that is uncannily similar to how power relations make themselves in/visible in late liberalism.

13 Michelle Murphy. "Alterlife and Decolonial Chemical Relations." (Cultural Anthropology, 2017), 497.
14 Donna Haraway, "The Cyborg Manifesto." Manifestly Haraway (U Minnesotta, 2016), 13.

If we read soy within this mechanism, we can see its instrumentalization as a virus working toward a sickly global corpus. It is a phyto-force that moves across geologic, industrial, and mammalian bodies, constantly entering and exiting the bounds of the dead and lively, upholding macro frameworks by providing (and demanding) an immeasurable quantity of metabolic energy without calling attention to itself. It is a force so overarching that it becomes hard to see. So transmutable that it hides its mechanisms, moving easily and microscopically through borders and enclosures, and supporting the elusive quality of increasingly noxious modes of global control.

At its miniaturized influence, the distinction between bodies becomes as porous as the distinction between countries that share agricultural production: like a viscous vegetable oil made from a mixture of Indonesian palm oil, South American soybean oil, and Russian sunflower oil all bound inside a single-use Chinese container. Soy coaxes its way across strict border regulations and bodily passages. Travels across alibaba and grain-fed meets. Pushes, unrelenting and soft, transmuting its gargantuan force across materials, industries, and forms. We encounter neoliberal workings in our stomachs congealing as tofu, milk, our daily bread.

We encounter these massive formations with some innocence and hunger signals. Prepackaged, pasteurized, labeled. We salivate for them. We touch the body of the earth in all its morbidity within our expert digestive machines. We allow it to assimilate into our own, dissolving distinctions within our intestinal tracts with mild indigestion. We translate the symbolic and material domains of contemporary culture into amino acid chains.
We crave protein: the primordial enzyme, the origin of life. The base structure for our genetic composition, instrumentalized in the name of excessive production of life and death. The most direct channel: the fuel for a regime that demands more life to produce more death. The quickest ingestible path to sustain an excess of self, an excess of labor, an excess of production, extinction, and ecological collapse.

We access a terrestrial corpus laden with vitality and malady through our tongues.
We unceremoniously commune in nourishment and dis-ease with the sickly body of the earth, giving it a unique formation as a bowel movement. We feel full from this divine contact with terrestrial chaos.
We want a little bit more.

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