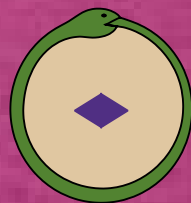
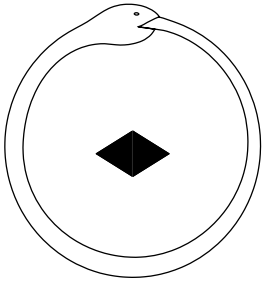


EDIBLE CITIES  
Alice Worcman

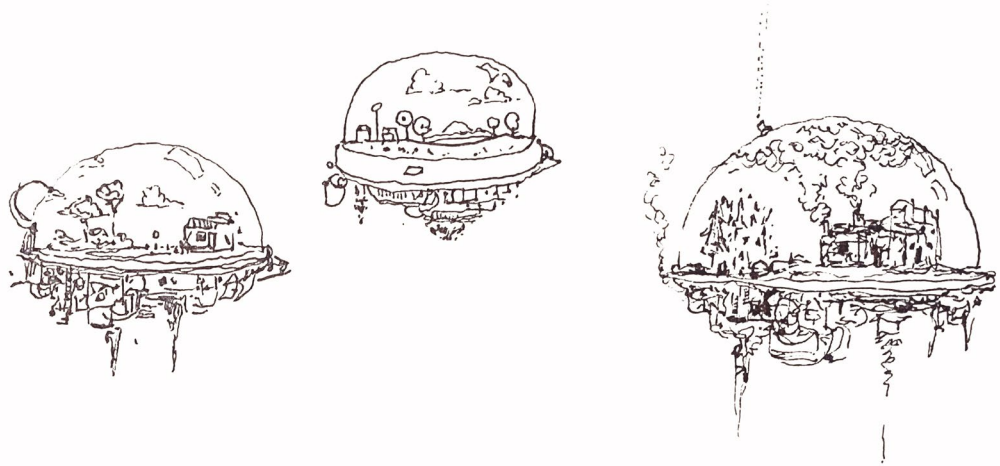


notebooks  
SELVAGEM



## EDIBLE CITIES Alice Worcman

This notebook was prepared by Alice Worcman to deepen her speech during the meeting of Plants that feed and regenerate cities, within the Gaia Regenerating Cycle, in June 2022. The illustrations that accompany the text are by Daniel Gabrielli.



You know, I wish I had the power here to do basically what all the Selvagem talks do to me, a kind of nourishment with a glimpse of the possibility of existence of other places we can walk towards rather than exhausting the conditions for human life on the planet.

I remember that the first time I participated in Selvagem, in 2018, I heard from Fabio Scarano, Ailton Krenak and Gustavo Porto de Mello that the natural environments they had known when younger didn't exist anymore. And I relive the anguish of glimpsing this also for my future almost daily. Unlike the generations that came before, I grew up knowing that we inhabit a planet with finite "resources" and that there were already areas completely degraded by human action, polluted regions, unsuitable waters for life, etc.

Lately it's been pretty hard for me to reach the glimpsing of a change of course, because all the degradation of the conditions that support human life on the planet seem very well designed and articulated to increasingly ensure the purpose of scarcity and degeneration of ecosystems.

The discomfort in inhabiting the place of not having the answers. And seek to do the exercise of sharing the questions.

Elaborating these questions seems to me so much more difficult than answering them.

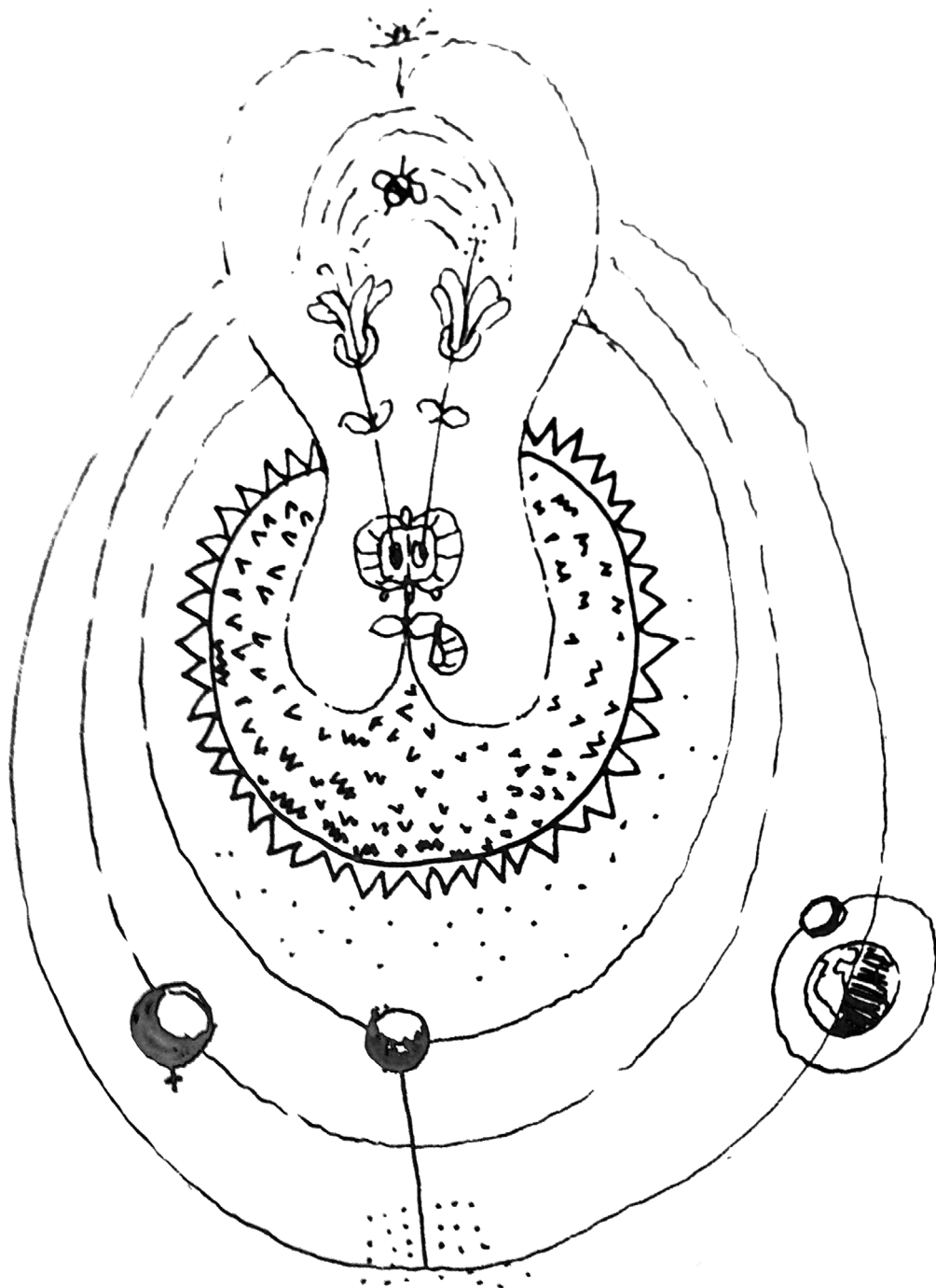
Nowadays, it isn't news to anyone that all large cities are sustained in the scarcity and concentration of the few resources that inhabit urban environments. The vast majority of the food we consume in these environments needs more energy to be produced and arrive at its destination than it offers when consumed.

Where is the logic when Brazilian agribusiness celebrates record harvests of grain production while the country returns to the hunger map, with 33 million people living this reality?

Who is interested in continuing to support realities that allow an ultra-processed food to be cheaper and more easily available for consumption than natural or minimally processed foods? Are we really going to continue allowing the poorest people to get sick of food in Brazil, the country with the greatest biodiversity on the planet?

“The western systems of knowledge have generally been viewed as universal. However, the dominant system is also a local system, with its social basis in a particular culture, class and gender. It is not universal in an epistemological sense. It is merely the globalised version of a very local and parochial tradition. Emerging from a dominating and colonising culture, modern knowledge systems are themselves colonising.”

VANDANA SHIVA – MONOCULTURES OF THE MIND



At the same time that human existence itself is the consequence of an opposite path to this one, we're the result of a gradual process of complexification of life at increasing levels of diversity. The human species, as large mammals, is co-dependent of environments that complexify life, as it happens with the forest organism. All the plants that support the base of our food chain are species that inhabit these environments and participate in their natural dynamics.

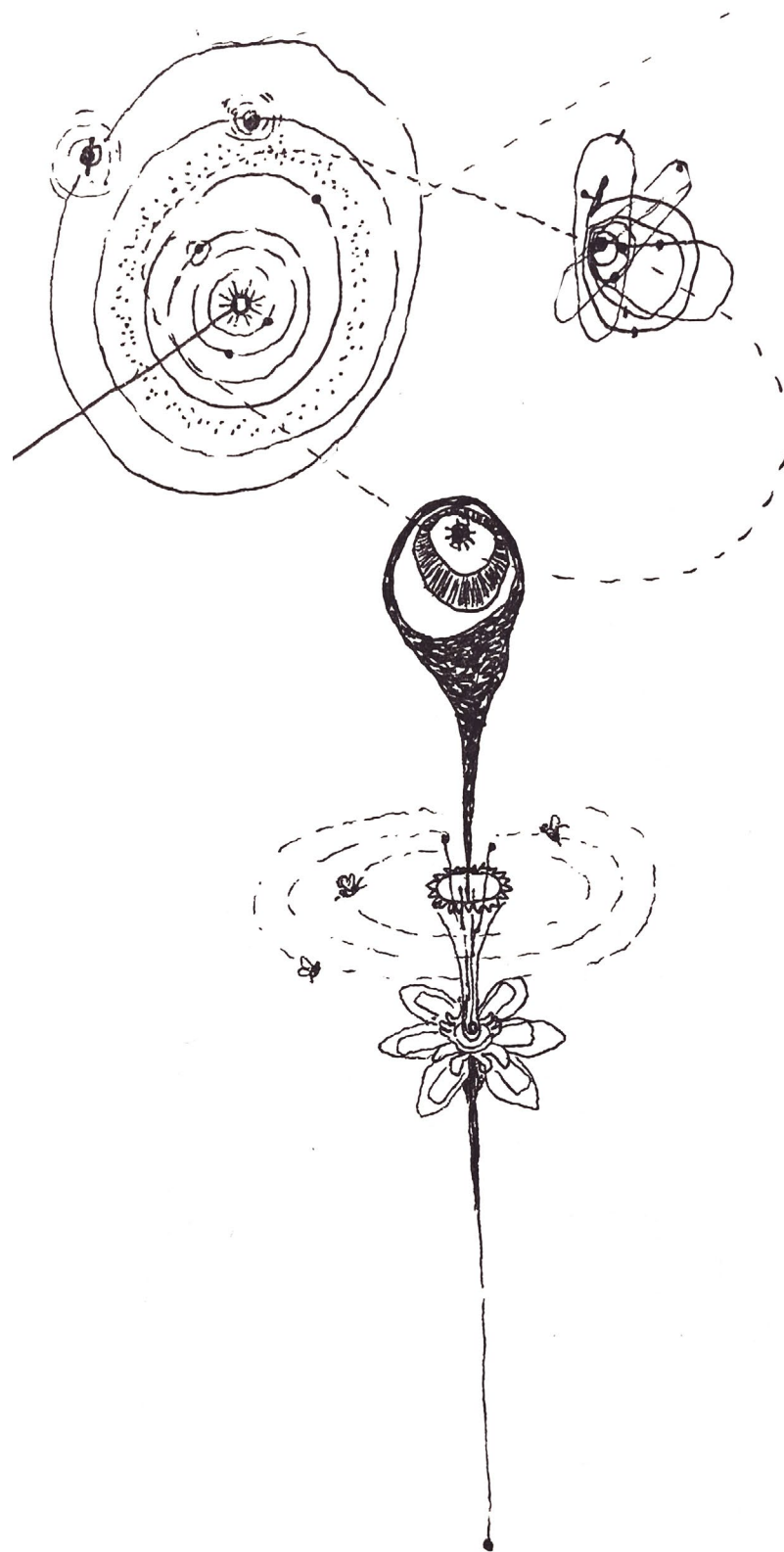
The natural (or ecological) succession of species is one of the natural dynamics that the planet has found to take care of these organisms. Life naturally becomes complex and increases in diversity over time, and it does so from the simplest to the most complex.

The domestication of the plant species that we eat today has only been made possible thanks to the complex environments that exist in forest organisms. Without the fertility of a forest organism's soil, we cannot grow our grains, fruits, vegetables, roots, etc.

Very quickly, we need to consider that it was this abundance of fertile soil, clean waters and good conditions of food production in general that made it possible for the human organization to establish itself in what we know today as the main cities of the world. It was forest organisms that enabled the development of cities.

Every big city on the planet was built based on the abundance that these organisms generate. And for a long time, we as *Homo sapiens* were part of that organism. The Amazonian socio-biodiversity is the biggest empirical proof that we still have of this process, and today we can access it due to the difficult access of large machinery to these regions, added to the tireless resistance fight for the existence of native populations from these places.

What is the level of alienation needed for us to be able to survive further and further away from these forest organisms? What are we not looking at when we establish cities without considering the organisms that are necessary to sustain them? How then, with the development of urban areas, can we be increasingly moving these forest organisms away from us?



In the urban context it seems that we purposely lengthen the productive chain of our food and objects until we lose sight of it. At the same time, a crack in the concrete is enough for the forest organism to send a reminder message: the plant succession of life happens.

In the most degraded areas, creatures with chlorophyll, specialised in seeking resources in extreme life conditions, sprout. The grasses appear in a simple way to make these environments more complex. Their roots go deeper in the search for water and nutrients, in short, their existence in that place provides the necessary conditions for a more complex plant form to establish itself there over time.

There are times when the messages already arrive at levels of greater complexity, as is the case with spontaneous plant food. A beldroega [*Portulaca oleracea*] or cariru sprouting in that smallest crack of asphalt already indicates that there's more fertility there than a place where only grasses grew.

Learning from the language of the planet would then mean to stop trying to rebuild the forest organism from the sum of its constituent chemical elements. Making nutrients available separately in the soil isn't the same thing as structuring a living soil. Trying to plant soybeans in monocultural environments nourished by mineral fertilisers isn't a success, but rather a mistake, from the point of view that it generates more expenses than it provides energy. Reproducing the complex conditions of an environment that a species like soybean needs not only is more efficient, as it also follows the logic of life on the planet.

Wanting to rebuild an entire environment from the sum of its parts, as if that were possible, generates an energy expenditure that is basically impossible to replace. While we plant soybean monocultures, or other species with more and more fertilisers, whether organic or chemical, we fight against species, often food, that we classify as invasive due to the abundance with which they spread in environments affected by human action.

“Horses and humans remain separate organisms, as do plants and mycorrhizal fungi, but both are echoes of an ancient tendency for organisms to associate. The anthropologists [Natasha Myers](#) and Carla Hustak argue that the word evolution, which literally means ‘rolling outward,’ doesn’t capture the readiness of organisms to involve themselves in one another’s lives. Myers and Hustak suggest that the word involution – from the word involve – better describes this tendency: a ‘rolling, curling, turning inward.’ In their view, the concept of involution better captures the entangled pushing and pulling of ‘organisms constantly inventing new ways to live with and alongside one another.’ It was their tendency to involve themselves in the lives of others that enabled plants to borrow a root system for fifty million years while they evolved their own. Today, even with their own root systems, almost all plants still depend on mycorrhizal fungi to manage their underground lives. Their involutory tendencies enabled fungi to borrow a photosynthesizing alga to handle their atmospheric affairs. They still do. Mycorrhizal fungi are not built into plant seeds. Plants and fungi must constantly form and re-form their relationships. Involution is ongoing and extravagant: By associating with one another, all participants wander outside and beyond their prior limits.”

MERLIN SHELDRAKE – ENTANGLED LIFE



There is no regeneration that separates the individual from the collective or from their systemic relationships. Regeneration only happens when it inhabits these three spheres simultaneously.

Each plant species is only born where there are favourable conditions for its growth, so any artificial classification needs to be interpreted from a human language that has a utilitarian value judgement. Which in no way reduces its importance, but for this classification to be kept as important, it would be beneficial if it were considered just as one of the possible translations – and not the only one.

As we know, the hegemonic way in which globalisation took place extinguished several food cultures, and along with it, much of the knowledge about the food species that we have already used throughout our history. But thanks to the resistance of various populations who have taken care of these knowledge and species, we can access the place of recognizing these plants and reintroduce them into our lives.

Because they're plants that have always accompanied humanity over time, most are species that appear in anthropized areas, that is, places affected by human action. And many of these plants have food uses.

“89% of the most common weeds or aggressive weed species worldwide are edible or have some edible part.”

GUILHERME RANIERI - MATOS DE COMER [EDIBLE WEEDS]

The introduction of food biodiversity in urban eating could generate or increase income in urban spaces in addition to the creation of an entire local production chain that is inserted in the natural dynamics of its context environment, regenerating degraded spaces, managing together with the natural succession while producing food.

“By comparison, around 6 to 10% of wild plants are edible. It is easier to find an edible plant in a wasteland than in a forest.”

GUILHERME RANIERI - MATOS DE COMER [EDIBLE WEEDS]

We have moved the forest organism that made our existence possible in the urban centres further and further away from us, thus increasing the extension of the productive chain of what we need to live. Increasingly further away, increasingly costly to make it arrive, to bring to close. It seems to me that the way is to undo the distance in the linear logic that exists in a production chain.

What if we turned the linear production chain into snakes eating themselves?

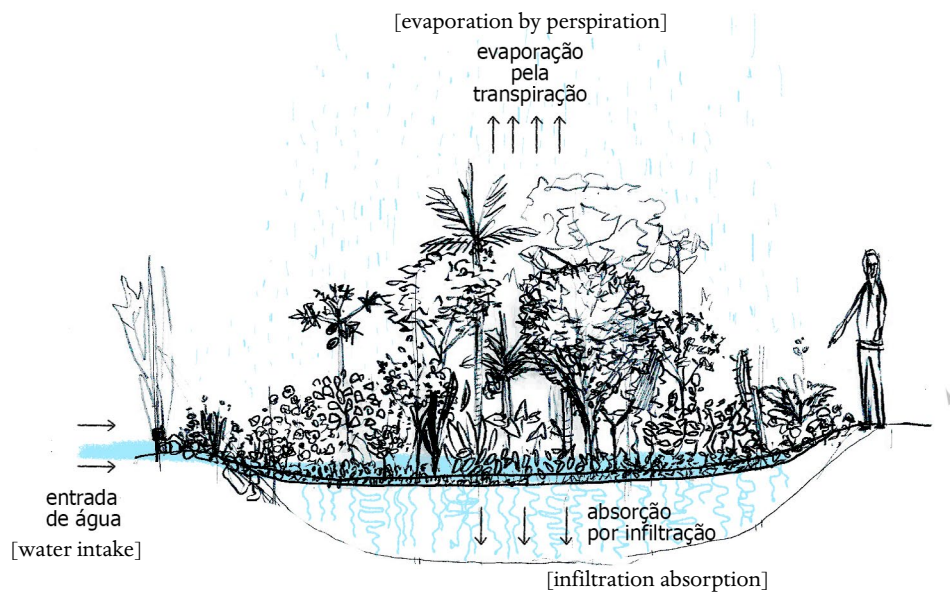
In life, there is no form without function. What are the human functions considering the complex form we are?



Could cities function like mycelial hyphae fetching their resources in a more efficient way?

“Mycelial coordination is difficult to understand because there is no centre of control. If we cut off our head or stop our heart, we’re finished. A mycelial network has no head and no brain. Fungi, like plants, are decentralised organisms. There are no operational centres, no capital cities, no seats of government. Control is dispersed: Mycelial coordination takes place both everywhere at once and nowhere in particular. A fragment of mycelium can regenerate an entire network, meaning that a single mycelial individual – if you’re brave enough to use that word – is potentially immortal.”

MERLIN SHELDRAKE - ENTANGLED LIFE



Is re-naturalising cities, producing food while regenerating environments a question of utopia or survival? It seems to me that regeneration is the natural way of life on the planet. It's up to us to know it and make humanity part of this process – or not.



## ALICE WORCMAN

Creator and founder of [Organicidade](#), a company that operates in a network to regenerate environments connecting ecosystems with the cultivation of food biodiversity PANC (Non-Conventional Food Plants) in the practice of urban agriculture. Specialist and self-taught researcher of food biodiversity, has specialisations with Ernst Gotsch, Valdely Kinnupp, Vera Fróes, Nat Muguet and trained in Design for Sustainability by Gaia Education Brazil. She studied Art History at UFRJ and currently is studying Chinese Medicine at ASBAMTHO (Sino-Brazilian Association of Moxibustion Acupuncture and Holistic Therapies). A practitioner and apprentice of urban agriculture, she believes that the continuity of the existence of our species is linked to observation, interaction and regeneration with the nature that we inhabit and that inhabits us.

The editorial production work of the Selvagem Notebooks is carried out collectively with the Selvagem community. The editorial coordination is by Mariana Rotili and the design by Isabelle Passos. The editorial coordinator of English translations is Marina Matheus.

More information at [selvagemciclo.com.br](http://selvagemciclo.com.br)

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Find out more at [selvagemciclo.com.br/colabore](http://selvagemciclo.com.br/colabore)

## TRANSLATION

### CAMILLA CARVALHEIRO DIAS

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course in Sydney, Australia. She returned to São Paulo in 2020 where she has been a yoga teacher ever since. She's currently studying Iyengar Yoga, in which the dimension of the body within the practice is explored with great care and detail. In addition to focusing on movement and body dramaturgy through yoga and dance, she also acts as a mindfulness and meditation guide in the online practices of a fixed group since 2020 of private students, as well as participating in the Insight Timer app with some self-directed meditations.

### **MARY HATAKEYAMA**

Mother, gardener, teacher, translator. Born and raised on the outskirts of São Paulo. Graduated in Pedagogy and Languages. Participates in Comunidade Selvagem since 2022, studying and learning new and profound ways of seeing and understanding life.

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### **ANA LUISA GREIN**

Woman, graduated in History, master's degree in Philosophy, in the field of Political Philosophy and Ethics. Is an English teacher and translator. Acts in the preparation and structuring of projects for public and private notices, as well as revision of textual genres. Interested and engaged on work aimed at expanding knowledge.