Communal Labor in Ecovillages: Contradictions, Impasses, and Possibilities within the Notion of Self-sufficiency

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Abstract Our goal is to outline the concept of communal labor in ecovillages of Brazil. To do that, we considered three elements: (1) political orientation for self-sufficiency; (2) technical-productive orientation in self-managed work and in plural economic practices; and (3) socio-environmental orientation centered on the recovery of biodiversity. We collected data in four ecovillages for 49 days, through a methodological path of inspiration ethnography with fieldnote and participant observation, followed by remote monitoring for 22 months. Our option was for flexible procedure to collect complex dynamics of management and routines of life by dialogues between researchers and informants. The results show that communal labor emerged in ecovillages as a resistance to market-centric society, although dependent on it incidentally. If, on the one hand, there are tensions and contradictions, on the other they reveal a strong organizational practice that shows possibilities and ways of redefining the relationships among human beings, and between collective organizations and ecosystems, by mitigating elements of alienation on values that inspire human emancipation.

Keyword Ecovillages · Communal labor · Self-management · Alienation · Human emancipation

Introduction

Ecovillages’ ideals are guided by reciprocity among human beings, and between them and ecosystems, to (re)order the way of living in society. When ecosystems are turned into a commodity for capital accumulation, there is an imbalance between human beings and the ecosystem, meaning a metabolic disruption (Foster, 2012) derived from the private ownership of the means of production and paid work (Marx, 2013). Social metabolism between human beings and ecosystem, in this scenario, reflects the precariousness of life on the planet as a whole, with loss of biodiversity and habitats, hunger, and inequalities. In contrast, ecovillages appreciate social reproduction in harmony with ecosystems, sharing production resources, production systems, and work results.

Principles of self-management, adopted in ecovillage movements, open possibilities for the re-signification of human relationships in capitalist societies, and also, for organization and meanings of labor (Tres and Souza, 2021). Self-management represents denial, on a small scale, of a specific mode of production, considering that it does not occur in a pure state in capitalist organizations. Such an occurrence would require overcoming capitalism and its contradictions (Faria, 2017). The singularities of social life in ecovillages studied by Tres and Souza (2022) revealed economic plurality in terms of domesticity, reciprocity, redistribution, giving and solidarity and restricted relations with the economic market guide, help to identify the possibilities to overcome its contradictions.

Resistance to market-centric society (Ramos, 1981) inspires labor and life practices in ecovillages, converging to a configuration of organic (natural) community. Hence, labor would incorporate two organizational characteristics addressed by Ramos (1981): a substantive rationality and a
political ecology nature that go beyond conventional disciplinary areas, and approach a new scientific paradigm (Boeira, 2002).

We addressed the ecovillage organizational arrangement under the notion of human emancipation, in Marx’s terms, although restricted to the condition of heterotopia (Foucault, 2008). For this author (p. 3), we deal with “[...] species of achieved utopias, where all other real places of a given culture can be found, and simultaneously represented, contested, and inverted.” From ethnographic inspiration, we approached a wide set of information on the dynamics of life in ecovillages, especially labor, self-management, and economy. With this cutout, we aimed to outline the concept of communal labor, taking as reference the experiences of ecovillages in Brazil. To this end, we started from the following question: What technical-organizational, political-institutional, and socio-environmental elements are revealed in ecovillages experiences typifying the concept of communal labor?

The importance of studying ecovillages is to expand the possibilities of thinking about management beyond the technical domain and profit as the driving force of human action. The studies show that there are possibilities for organizing work in a counter-hegemonic perspective, through other alternatives for articulation between human beings and ecosystems, mitigating processes of socio-environmental degradation, although under contradictions. Thus, community work synthesizes an ecological behavior based on community self-management (political) and the sharing of ideals for the recovery of biodiversity (socio-environmental), through plural economic practices aimed at self-sufficiency (technical-productive).

In the following topic we present ecovillages in a world of socio-environmental crisis to indicate that, in private organizations, it is possible to detect forms of production and management based on sustainability and solidarity principles. In the topic 3, we discuss capitalist society and the processes of alienation. The method adopted is presented in the sequence. The results, on the topic 5, are synthesized from three categories: political orientation for self-sufficiency, technical-productive orientation in self-managed work and in plural economic practices and socio-environmental orientation centered on the recovery of biodiversity. Finally, our conclusions reveal that ecovillages set up labor routines focused on social reproduction and collective appropriation of work results.

**Socio-Environmental Crisis and Ecovillages**

Ecovillages are intentional communities where human activities are oriented toward a harmonious relationship with the environment, favoring healthy and continuous human development (Bang, 2005), both physically and emotionally, mentally, and spiritually (Gilman & Gilman, 1991). In Brazil, ecovillages emerged from ideas and actions that value states of freedom, spirituality, cultural tradition, and mutual relationships among individuals, and between them and the environment (Tres & Souza, 2019, p. 15). Hence, in organizational processes prevail isonomic relationships (Ramos, 1981), and multiple forms of economic interaction (Cunha, 2010). These organizations are sustained by the formal or informal associative act. They adopt solidarity political-economic practices, even if susceptible to conflicts.

The option for community life is, in itself, a counter-hegemonic political position that shows, in ecovillages, complex social metabolisms between human and ecosystem demands in the midst of the socio-environmental crisis. Ecovillages are a protest movement, intended for social reproduction beyond mere value creation within the capitalist logic, even if inserted in it. The kind of agriculture practiced, land sharing, and the daily life oriented to self-sufficiency, by working to create useful products, show a particular set of organizations driven by the ecological appeal, and not by competitive market interests. Thus, plural economic interactions might emerge (Tres & Souza, 2022).

In the agriculture of large economic conglomerates, the commodification of nature expresses imbalances, while submitting human labor to extreme levels of precarization (Antunes, 2018), full-time work (Negri, 2015), a future led by credit (Jappe, 2013), and automatic processes for maximizing production. Ecovillages express counterpoints to such directions, to what Shiva (2003) calls monocultures of the mind, that is, the relationship between human beings and nature for exclusively financial purposes. Thus, it is important to understand the reach, limits, and possibilities of countermeasures, which we address here from the communal labor.

The so-called Green Revolution (GR) of the 1950s, based on the intensive use of chemical inputs, of genetically modified organisms (GMOs), irrigation, and mechanization (Altieri, 1998), changed wide biodiverse areas into agricultural monocultures. The monoculture is not an agriculturist, since, by definition, he is the one who takes care of the land, and not who exploits it. Agricultural monoculture reduces human cognitive multiplicity. From GR on, the farmer lost the intellectual character of cultivating crops, so that knowledge and traditions began to suffer attacks from the capital, and for destitution (Shiva, 2003). The hegemonic productive force materializes a social relationship of alienation (Marx, 1978), through expropriation of labor and of natural resources by the owners of production methods, extension of the economic production base, and clearing one’s conscience regarding the human condition.
The expansion of agricultural monoculture was responsible for phenomena such as soil decay, biodiversity decrease, and a high incidence of pests and diseases, at the dawn of GR (Primavesi & Primavesi, 1964). Almost six decades later, these phenomena have reached global scale and, despite substantial advances in productivity and food production, hunger and inequality indicators prevail in the world. Thus, GR represented political-economic power, domination, and submission of the countryside to the gears of capital reproduction, and no guarantee of human nutrition.

Resistance to the advance of technologies originating in GR emerged around the world. Agroecological and organic production practices, both against the use of agrochemicals and based on a system of production, selection, and management of seeds by the farmer himself, at the local cultivation environment, called native seeds, are examples. Other initiatives are food banks, which have expanded in Canada since the late 1990s, and encourage food safety for vulnerable population segments (Black & Seto, 2020).

In Brazil, the rescue of native seeds, as opposed to GR precepts, has an expanded use under a community perspective, through the practice implemented by the nongovernmental organization “Articulação Semi-árido Brasileira” (Brazilian Semi-arid Articulation—ASA). In 2015, ASA launched the Program for Training and Social Mobilization for Living with the Semi-Arid: Management of Agrobiodiversity—Semi-Arid Seeds, which intends to value the genetic heritage by strengthening existing practices of community self-organization. Farming families, members of the Program, select the best seeds and save them for the next planting, in a self-managed regime, within a network of community seed houses.

There are rural refuges that produce for their own consumption, and resist the imposition to produce for the market (Grespan, 2015). Among those that make use of native seeds, ecovillages adopt similar practices of conservation and sharing, recover the cultural heritage and preserve biodiversity, from the perspective of agricultural systems’ coevolution. However, that productivity in resistance movements is contested, and as life in the countryside is continually expropriated and commodified, processes of alienation have been intensified.

The ecovillage organization, by bringing together residents and neighbors through mutual relationships, fosters local bonds of solidarity based on communicative action, opposing the “expansionist” trend, caused by systemic need and tensions generated by capitalism. Referring to Habermas, Power et al. (2020) mention the search of conditions for an “ideal speech situation,” where disagreements and conflicts are rationally solved through communication, free from compulsion and guided by the best argument’s strength. This perspective of decision-making appears in the concept of communal labor, which we explain later, both through horizontal decision-making, characterizing an isonomic organization, and through the participation of ecovillage residents in collaborative networks and local and territorial exchanges.

### Alienation in Capitalist Society

The social division of labor, which separates the various work spheres to increase productivity, makes up the production process of life in society. This is why Marx and Engels (2007) emphasized the important role of the division between city and countryside in this process, which is a false opposition relationship. However, the countryside has also become an object of capitalist exploitation, especially since GR. Hence, Fontes (2010) mentions a primary and a secondary expropriation—the first being the extraction of the means of production (land, instruments, materials, seeds); and the second, from the counter-reforms that revoke rights conquered by the class (work contract, vacations, paid rest, retirement). This is the social division of labor, which reproduces antagonism among producers, making them indifferent to the environment’s degradation and to the impoverishment of those who work, whether in the countryside or in the city.

Workers’ expropriation and the social division of labor stem from the private ownership of the production methods, in a dialectical relationship with the workforce sale by the free worker. This, in turn, manifests itself in the fetish of the commodity, and is “a social relationship determined among men themselves, which here takes the ghostly form of a relationship among things” (Marx, 2013, p. 147). Alienation occurs when we project our individuality onto something other than ourselves, that is, when we objectify our subjectivity into something external (Marx, 2015).

When this alienation occurs mediated by workforce sale, that is, by wage labor, what is produced is not the objectified subjectivity, but something distinct—strange—from who produced it. The individual, when finding the object of his work strange—which is objectified outside him, and beyond him, thus becoming powerful and strange—and when he finds strange the very practice of the act of production within the work, he alienates from himself. The socialization of the odd job leads to individualism, as it moves away the individual from the human race, making him rationally selfish. Since he no longer sees himself as nature (as part of the gender that humanizes nature through his production), and as part of humanity, the individual is a stranger to his fellows.
as he no longer sees himself as such (Marx, 2015) (Ferraz, 2020, p. 81).

It is both an objective production of external nature and a subjective production, that is, the way human beings reflect their own lives. When they are mediated by private property, there is a process of strangeness that puts the relationship between individual and nature as separate and opposed. In this act of self-production as a living being, the individual produces his humanity as a social being (Marx, 2013; Mészáros, 2016). Strangeness inhibits the awareness of the dialectical and inseparable relationship between the organic and the social; that is, external nature provides the elements that make life possible, while individuals change external nature through work.

In capitalist society, strangeness arises from the circulation of purchased and sold goods, in a double sense: it needs to be, at the same time, a useful object (to meet a need from the stomach or mind), and express an exchange value, in order to circulate in the market. This double character of the commodity coexists with past or alternative forms of production that persist in some locations (Polanyi, 2013), and which we find in the cases outlined below.

In the production of goods, regarding this article, we specifically address land products, which have been mainly cultivated as exchange value in a predatory way, resulting in socio-environmental degradation. The degradation of soil, water, and biodiversity, the use of agricultural practices based on monocultures, the loss of food safety and sovereignty, and, more recently, the Coronavirus health crisis, resulting from the reckless interaction between humans and the ecosystem, are the corollary of how the metabolism between humanity and nature takes place currently.

The experiences at ecovillages intend a non-strange connection between external nature and humanity, as we show below. Although based on ideals of sustainable production, ecovillages are subject to limits set by capitalist society from which they are a result—that is, they are not free from the hegemonic capital/labor relationship and from monetary and trade relations. Thus, ideals of self-sufficiency and biodiversity recovery, in addition to plural economic practices, serve multiple interests, in the midst of internal and external contradictions and tensions, but focus on emancipated human socialization mediated by self-management.

The Methodological Path of Ethnographic Inspiration

Regarding the method used for data collection and analysis, this research relies on ethnographic studies. Through ethnographic resources, it is possible to notice contradictions, understanding that daily interaction enables the assimilation of forms, often tacit, from which people attribute sense and meaning to life (Moisander & Valtonen, 2006). The ethnographic approach “aims less at understanding social events or processes from the reports on these events, but rather at understanding the social processes that produce these events” (Flick, 2008, p. 31), and in situ phenomena (Moisander & Valtonen, 2006).

Tres & Souza (2019) found, in a review of Brazilian research on ecovillages, at the stricto sensu graduate level, a wide application of ethnography techniques. In organizational studies, there is also validation of the method (Lopes & Ipiranga, 2021). We warn, however, that periods of immersion in the field in ethnographic studies can last from months to years. For this reason, we assume, in terms of Pinheiro (2019), an approach of ethnographic inspiration. We also draw the attention of readers that there is no single way in terms of fluidity, flexibility, and reproducibility of ethnographic studies. The peculiarities and context of each studied location must be considered. We assume, following Holloway and Todres (2003), “that there is an essential tension between flexibility on the one hand, and consistency and coherence on the other. Such tension may encourage qualitative researchers to consider the intentions and philosophical underpinnings of the different approaches in greater depth in order to arrive at an epistemological position that can coherently underpin its empirical claims.”

The collection of different types of materials, and the researcher’s participation in the activities help to reveal the meanings regarding the object’s context (Elliott & Jankel-Elliott, 2003). For this reason, participant observation is important to circumvent problems resulting from interviews, secondary data collection, and document analysis, by deepening the investigated subjects. The field diary recorded subjects, impressions, life reports, motivations, and the work of ecovillage members. Elements such as solidarity relations with neighbors, social activism, actions oriented to environmental education, natural constructions, cooperation and organization within and among communities emerged, thus qualifying communal labor.

During the months of July and September 2019, we collected data in the field for 49 days in the four ecovillages: Comunidade Campina, Floresta de Iroko, Source Temple Sanctuary, and Ecovila Tibá. The selection followed these criteria: self-acknowledgment as a community
or “ecovillage”; to have been in place for at least five years; to have, at least, five members/family units or associates; some degree of sharing of the property and means of production; and to practice some type of natural agriculture. Table 1 summarizes ecovillages’ general attributes.

We conducted three semi-structured interviews: with one Campina resident (20 min duration), one from Tibá (1 h and 4 min), and one from Source Temple (43 min). Each interviewee signed the Free and Informed Consent Form. The interview sessions checked coherence, convergences and differences between speech and practice, in addition to capturing an expanded view of communities’ history, perspectives, and guiding values of each unit, and in particular of the interlocutor. At E covila Floresta do Iroko, we discarded the interview’s report at the interviewee’s request, who preferred informal conversations during the researcher’s stay at the community.

We used documents provided by interviewees, who contributed to explain legal and dynamic forms of the associative act, the coexistence. The documents considered were: (a) from Tibá, the association’s statute and the website www.ecovilatiba.org.br; (b) from Floresta de Iroko, the statute and the document “General Coordination,” which guides activities of maintenance and investment in infrastructure; (c) Source Temple recommended the website www.sourcetemple.one; and (d) from Campina, the website www.comunidadecampina.org.

All residents, visitors or volunteers were aware of the research, and each community accepted the procedures. We told residents that their identities would be preserved; to refer to them, we chose to present comments, ideas, and actions based on demonyms (a term related to a location): campineira, templaria, tibaense, floresteira.

After face-to-face data collection, we did remote follow-ups for 22 months. This period included a specific review of field information, through arbitration by a focal point of each community, who updated researchers on changes regarding the social dynamics. This stage took place during the health crisis caused by the Coronavirus, which changed the internal systems of work and coexistence within the communities.

**General Characteristics of the Ecovillages Studied**

The Campina Community is the result of reflections on spirituality and ecology. A campineira bought some land, in her words, “at the time very cheap, degraded.” Reports indicate that 60 or 70 people have already lived there, mostly in tents, in a social structure without many agreements/rules. Campina is an informal association, and everything that exists there is for common use. The formal ownership of the land is in the name of a campineira, and due to some pending issues, she has not transferred it to the association yet. This fact is not an obstacle for establishing long-term relationships.

Floresta de Iroko was created in 2013, when a group was looking for a rural area to live, plant, and protect the environment. Despite being an informal association, there is a statute that defines decision-making processes, assemblies, purchase and sale of shares, allocation of common areas, etc. The statute emphasizes environmental aspects, forest regeneration, riparian forest, and construction. The community’s occupation plan is based on land lots, where each shareholder can do his/her activities and build his/her house.

The Source Temple Sanctuary existed in Spain, occupying a house in the urban area. In 2010, a templaria, who owned an area in Cunha/SP, suggested that the group moved to Brazil. The community’s intention is spiritual and its legal form is a Church. For the residents, the property is collective. We chose a spiritually motivated community for data collection because, for this community, the relationship with nature is inseparable from the search for one’s own spiritual elevation.

Tibá is a reflection of a group of teachers, students, and workers in general who started the project from conversations on socio-environmental issues. By considering the creation of the community in a rural area, where they could have more space for practicing agriculture, education, and environment preservation, the ecovillage concept emerged and developed. Tibá is a non-profit association, which has the ownership, and each partner has a bond or share.

Floresta de Iroko and Tibá rose from well-defined groups, in terms of legal aspects, and they are formally rural condominiums, where legal property rules are interrelated with the community ideology. The opposite happens at Source Temple, where the processes of entry and exit of residents are spontaneous, and the flexibility to come and go relates to the spiritual assumptions of the community. Campina was moving toward formalization in 2021. As with Source Temple, Campina defined that, after construction, the community will own the houses.

**Elements of Communal Labor**

Communal labor shows an ecological behavior that goes beyond green consumption, cleaning, economy, and activism, according to Pato and Tamayo (2006). It is not, for example, activism centered on protesting and awareness of the importance of environmental preservation, environment defense, and the fight against pollution and environmental degradation. It is an ecological behavior, which originates in the production, for the ecovillage social reproduction.
The results presented below articulate the three components that are the foundations of communal labor: political, technical-productive, and socio-environmental orientation. It is the connection between these components, and their inseparability, that underpin the understanding of communal labor, its limits and possibilities, both inside and outside the ecovillages. We run the risk of being too adamant in attributing certain parts and conclusions to just one of these elements. However, for didactic purposes, this is necessary.

**Political Orientation of Communal Labor—Self-management**

The operationalization of production, construction, and waste disposal systems is self-managed, in initiatives that integrate residents in all practices of daily life. The assumption of equality prevails, respecting differences among residents. This is isonomy (Ramos, 1981), since members have equal authority and decision-making power, with shared responsibilities according to their particular capacities. At Tiba, for example, a group comes from the academic environment; therefore, a *tibaense* is responsible for filling the spreadsheets for managing activities and for financial control:

I designed some shared management tools and proposed to the group; after we accept the procedure, each one is free to take care of it. I’m not in charge, nobody brings me a purchase receipt and asks me to put it in the spreadsheet, in the cash book, for example, or asks me to go buy something. I don’t do secretarial work. Everyone has autonomy to feed the spreadsheets and organization tools.

Similarly, a *templaria* comments that she was responsible for financial organization until the group reached a consensus on how the control processes should be. She took the spreadsheets and cash flows several times for discussion. In Floresta de Iroko, they established three boards of directors: general, infrastructure, and agro-ecology. Each board feeds an activity spreadsheet and shares it with the group. At Campina, those who take care of routine activities are responsible for reporting the progress to the collective.

Self-management connects the work of the group through the notion of isonomy (Ramos, 1981). However, there are trade relationships (financial flows) and labor division by technical competencies. Therefore, communal labor for self-sufficiency is limited by the need for financial exchanges, to provide what cannot be achieved internally. In addition, there are people who have a financial life “outside the ecovillage,” which allows them to live under conditions different from those who depend entirely or largely on communal labor.

Self-management does not intend to accumulate capital or make a profit; on the contrary, its orientation toward self-sufficiency is clear, even when goods are exchanged for money (through sales), to enable buying other merchandises. There is no surplus value, since there is no exploitation of wage labor. Thus, financial results come from the production and sale of surplus goods and service provision (food, courses, accommodation, and others); in other words, members’ workforce adds value for ecovillage reproduction.

Cooperation for work and specialization are at the base of the organization of capitalist production, but the appropriation of the result is private, while in ecovillages the result is for the collective. In the case of bioconstructions in ecovillages, for example, the fruits of communal labor are distributed to the group. Paradoxically, it does not mean to turn its back to capital dynamics, but it is a dialectical relationship, because even this bio-built house oriented to the collective is valuable and can be subject to expropriation. Hence, when a *campineira* says that it was “cheap,” because the house cost only R$ 200, we can reflect on the contradictions and impasses between the search for social transformation and, at the same time, the logic of capitalist accumulation, which can commodify and price solidarity (Wellen, 2008).

Self-management faces challenges, especially due to the incorporation of new members, a procedure that finds an obstacle in the dichotomy between the rhythms and notions of time in the city and life in the nature, which are revealed in the way a *tibaense* tells:

| Elements | Campina | Tiba ecovillage | Floresta de Iroko | Source temple |
|----------|---------|-----------------|------------------|--------------|
| Days in the field | 11 | 12 | 15 | 11 |
| Intention | Ecological | Ecological | Ecological | Religious |
| City/State | Palmares/BA | São Carlos/SP | Itacaré/BA | Cunha/SP |
| Year of creation | 1991 | 2006 | 2013 | 2010 |
| Residents | 19 | 30 | 6 | 40 |
| Houses | 11 | 9 | 3 | 29 |
| Area (hectare) | 188 | 25 | 35.8 | 23.5 |
Sometimes people think they like it, that they are willing to change, but life here can be very different from what people idealized, and each one deals with it in his/her own way. Some cannot bear living off the land, without the madness and things the city offers, and want to bring city’s life here by any means; they end up returning to the life they said they didn’t want any more [to the city].

From an organizational point of view, the case confirms what Ramos (1981) called cognitive policy, the result of practices of market-centered societies, from which people embody rules imposed on society uncritically. The case is also useful to show tensions between idealized and achieved, between the horizon of life and work instilled, learned, and the criteria required within ecovillages.

Elements of alienation mentioned by Marx reveal that a radical transformation goes beyond individual wishes oriented toward collective life, for fighting the hegemonic economic system. In this sense, ecovillage’s capacity to change the capitalist dynamics is negligible. However, from the standpoint of the organizational universe, ecovillages show possibilities to view subsistence in non-estranged relationships among individuals (which is nature) and between them and the environment (the external nature). In short, far from a simplification between “inside or outside” capitalism, what emerges from the study of ecovillages is the understanding of how resistance practices arise and develop currently, with their multiple mediations.

Technical-Productive Orientation—Self-sufficiency and Plural Economy

With both internal and external collaborative networks, sharing prevails under multiple economic forms “beyond the market relationship,” where stand out domesticity, due to an autarchy type of management, reciprocity, through the symmetry among the members and between them and the surroundings, and redistribution, by concentrating the financial result in a common cash, with later distribution (Polanyi, 2013). In this sense, once based on communal labor, multiple forms of economic relationships within and around ecovillages were found by Tres and Souza (2022).

The notion of self-sufficiency manifests itself in residents’ purpose to produce items necessary for subsistence. Thus, they reduce the need for external purchases and make exchanges with small local producers. Communal labor focuses on meeting internal needs for food and construction, called bioconstruction, by using local materials.

The increasing productivity of the land, achieved from hegemonic agriculture, based on monocultures and intensive use of machines and agrochemicals, projects the monoculture of the mind (Shiva, 2003). Polycultures in ecovillages follow the opposite path, as they search for food and nutritional safety and sovereignty, based on benefits and rights to food diversity, which protects and regenerates ecosystems through natural production methods. Communal labor sustains such agricultural work and adopts different processes to provide agroecosystems’ fertility. The notion of self-sufficiency, in this case, reduces dependence on external inputs.

In all the communities visited, there are interrelationships with the surroundings, mainly with family farming properties, through exchanges of food and seeds. Part of the food comes from internal production or local exchange. Even at Floresta de Iroko, which had recently started agricultural operations, almost no food comes from far away, since neighbors have vegetable gardens and orchards, and carry out exchanges and donations with residents.

There is a network for exchanging native seeds, mentioned above. A visit to a neighbor of Floresta de Iroko, for example, resulted in the donation of seeds to a floresta and to one of the authors of this text. The donated red corn seed came from a “friend from the North,” said the donor. In general, seeds sold on the market are genetically modified, and affect the genetic variety. In administrative/financial/accounting terms, the seed is the farmer’s main asset. Those who do not have their own seeds have to work for the market, imprisoned by it (Shiva, 2003).

The farmer submissive to the GR logic has his future subject to variables he cannot control (Shiva, 2003). Machines, seeds, credit, fertilizers, and chemical pesticides are chains used by the market. At that moment, time no longer belongs to the farmer, and his cultivation wisdom is worthless. For this reason, self-sufficiency in ecovillages rescues a cultural element of food sovereignty, such as the cultivation of non-conventional edible plants (NCEP). In Campina, there is a specific vegetable garden for NCEP. For a floresta, in turn, “the variety of new plants that we are discovering in the region is very large. We take them to the fair and show to more people that these plants come from here, that they are adapted and nutritious at the same time.” Here, we notice an expanded notion of self-sufficiency, connected to the community surroundings, by encouraging the consumption of locally available food.

The notion of self-sufficiency also appears in bioconstructions, based on the concept of natural buildings. Most of the houses are bioconstructions that use materials from the region and communal labor, usually through joint efforts. However, there is external work for specialized services, showing that the search for autonomy collides with the social division of labor, in the lack of local competencies to solve specific demands. In Campina, for example, they used stones as tiles and floor, clay for mud-brick/wattle and daub houses, and to produce adobe bricks.
(which do not require firing), and recovered wood from the forest for roofs.

All communities have criteria for new buildings. Communal labor in bioconstruction is sometimes a shared activity in the form of events, involving residents, volunteers, neighbors, and friends. Joint efforts become moments of meeting, celebration, conversation, and learning. At Source Temple, someone reported “we have a lot of work force, each person knows a little bit of something. Imagine ten people doing something we need, all with experience. Things go fast, when everyone is together.” The ideal of self-sufficiency in bioconstruction explains this understanding.

In the city of São Carlos, there is a fair of agroecological producers on Saturdays, with Tibá’s participation. The exchanges at these fairs reveal practices that ensure food and nutrition safety and sovereignty, and strengthen community ties. Here again, the market (exchanges) is present and regulates, to some degree, the economic activities. On the other hand, these practices show a non-monetary economy (Polanyi, 2013), through the reciprocity between the ecovillage and its surroundings.

Agriculture is the center of communal life, especially at Tibá and Floresta de Iroko. Activities with visitors and volunteers are mainly oriented to agriculture. The seasons, the moon, the sun, and the stars are seen as part of everyday life, as a tibaense mentioned: “Today, those who are here prefer to live in the community, work in agriculture, and put forward environmental projects that will only be achieved if we get into the nature’s rhythm.” The biodynamic calendar, which determines the periods for sowing, harvesting, pruning, and plantation, guides the interventions in the planted area and, consequently, the rhythms of collective life, work, and production.

Socio-Environmental Orientation—Biodiversity Recovery

All visited communities practice cultivation in the agroforestry system, and recover degraded areas. In the case of Campina, the fires are recurrent problems in the region, and, for that reason, agroforestry cultivation techniques have emerged as an alternative. A campinea comments that there are “areas where we have never intervened and there is only pasture; it’s been almost 30 years. The system seems to need a lot more time than we thought to recover on its own. Through agroforestry, it can be faster.”

In addition to providing food, work in degraded areas promotes benefits that we cannot calculate only from commodities’ exchange value. A significant part of the trees is planted for their role in regenerating agroecosystems. Thus, we find a counterpoint to hegemonic agricultural practices that only consider exchange value in agricultural practices, as denounced by Shiva (2003). A Floresta de Iroko neighbor reported that 30 years ago, when he arrived in the region, the soil was dry, the land was infertile, exhausted by cassava monoculture. By introducing agroforestry crops, which care for biodiversity and soil, farmers in the neighborhood began to notice the benefits, and accepted the transition to agroecological systems. Considering that these crops have enriched the land, the interest in usage value attributed a higher (exchange) value to the land than before—although this was not the collective’s intention, but another element of the contradictions and impasses.

The essence of agroforestry is polyculture and, in the case of the ecovillages studied, the interest in such technology lies in soil recovery, aiming at food and nutritional safety and sovereignty. People understand that these systems, based on soil health, are capable of providing healthier and abundant food. This is “life creating life,” with benefits widely recognized in the four communities. The productivity and quality of food are superior to those from monoculture, and result from natural processes.

Polycultures embody the idea of mutuality among plants, something that monoculture rejects. In the more than 51 million hectares planted in soybean and corn monocultures in Brazil, soybeans, of oriental origin, or corn, from Central America, are not considered “weeds” or “invasive herbs.” GR has given such products the status of commodities, demanding productivity and increasing returns at the expense of unnatural processes in monoculture systems—mainly with seeds modified in laboratories and the use of agrochemicals. Such processes inhibit agroecosystems from remaining alive and complex. The strangeness between human beings and external nature makes this type of instrumental relationship with the earth more dramatic. On the other hand, resistance is clear in the ecovillages studied, through agroforestry and among family farmers in general, with organic and agroecological production practices in polyculture systems.

A tibaense said that sugarcane monoculture is expanding in the region. In Tibá, at dusk, a toucan appeared in the forest during data collection. At first, it would be something positive, but immediately the tibaense commented: “The toucan is showing up because we are turning into a savannah. The densest areas of forest are disappearing and the fauna is changing.” To oppose this process, the planted area under the responsibility of three tibaenses is expanding constantly, in an agroforestry production system.

With ecovillages, we learned that a symbiotic relationship with the world and with other people is possible. There is firewood harvesting for domestic use, and dry trees are managed, decreasing the risk of fires. By pruning trees and leaving branches and fallen leaves on the ground, they apply the principles of agroforestry cultivation, increasing
soil fertility. At Campina, for example, there is a central collective kitchen, with a wood stove, where people eat meals made from material collected by the members.

An old production input (firewood) coexists with a contemporary resource (gas), although as a complement. Would world’s firewood be sufficient to ensure the lifestyle, energy demand, and the survival of the entire global population, or even of Brazil? Within the current paradigm, possibly not. Other fuels gradually replaced firewood, developed and produced in larger amounts and at lower costs. If the gain in scale is evident, the environmental cost is, at least, questionable. The problem is not in the product itself, but how it is produced, as we highlighted earlier (Marx, 2013).

Another issue regards energy sources. At Campina, there are rules for not using electricity from the grid, due to its environmental impact. They chose other sources, such as solar energy. Everything is thought to be coherent in daily actions, as a campineira mentioned: “Although the electricity grid is nearby, we prefer not to use it. The impact on the environment is very high for the generation and transmission of this energy. We have solar panels here, we know that nothing is perfect, but we educate ourselves to rationalize energy use.” Such an orientation from the collective is remarkable, but we cannot solve a global problem with a particular decision. The range, in this case, is limited, including market denial, since large companies are those that produce solar panels. These are real contradictions to take into account, when facing the dehumanizing logic of life’s capitalist production.

Individual actions regarding energy consumption do not consider that:

(a) Most of the energy generated is consumed by capitalists in industries, so that domestic consumption has a lower impact;

(b) A significant part of the population has no access to a source of energy other than that supplied by monopolistic companies; therefore, the change in consumption of a small group has little contribution to the extended degradation;

(c) Solar energy, as mentioned above, is produced by large companies, and has been expanded and exploited by banks that offer “special” or even “green” interest rates for those who acquire it. Hence, it is the least harmful option for the environment, although a choice with limited range in terms of overall impact.

Hence, we should consider ecovillages:

(i) Under a political-institutional bias, from contradictions in practices and in the notion of self-sufficiency, only ideally free of market relations;

(ii) Under a technical-organizational view, as experiments and possibilities of overcoming impedes to alienation through practices of isonomy among members (Ramos, 1981), and plural economic relations (Polanyi, 2013).

Ecovillage ideals are in harmony with building an emancipated world, but limited in range, since their political impact has not affected class disputes between capitalists and workers yet. Actions focused on the surroundings do not stop the advance of capitalist relations of production—and that is not the collectives’ purpose. However, there are elements in ecovillages that indicate organizational possibilities, based on ecological purposes of biodiversity regeneration, self-management, self-sufficiency, and plural economic practices, with the potential for reproducing life in a counter-hegemonic pattern, as discussed and summarized in Table 2. In other words, what can we learn from ecovillages?

Final Remarks

In ecovillages people share world visions and utopias oriented to the social reproduction of life, through what we call communal labor. Our findings show that ecovillages establish labor routines focused on social reproduction and collective appropriation of work results. Communal labor generates surplus and, consequently, monetary income, even if this result is not intended to accumulate and expand capital.

The collective character of land use makes communal labor possible, although, formally, land ownership can be considered as private property. Hence, if in the future the owners so wish, they can claim the right of exclusive use. Such a situation occurred at Source Temple, in June 2021. The collective disclosed that the original owner had required the property. After deliberation, they decided to waive all rights and investments done. Source Temple members are looking for a new space where they can be together again, and have started a crowdfunding campaign. The question is: what kind of organization will emerge from this new experience, and what measures will be necessary to protect the collective from potential legal conflicts in the future? From an organizational point of view, the trend will be to establish a statute to formalize application criteria and returns on future investments by the partners.

One of the limitations of this research is that we do not address any legal aspects of land use and associative relations of labor, although exists, in Brazil, legislation to cooperativism and formal solidarity enterprises under the form of associations. Instead of formal aspects, we chose to
emphasize experiences that reveal management systems of mutual organizations and sustainable alternatives for work and associated life. Our approach is not a global perspective, but, smaller spaces of aggregation, coexistence and symbolic construction of the world that provide identity to subjects through technologies of survival and recreation of the place where they live. Like Dowbor (1995, p. 8), we endorse that "the humanization of development, or its re-humanization, involves the reconstitution of community spaces."

Self-sufficiency sought in ecovillages presents many contradictions between the logic of value found in social relations, and the possibility of producing useful items for human life, in a regime of labor autonomy not regulated by the market. The technical-organizational, political-institutional, and socio-environmental elements that we mentioned are permeated by such contradictions. Therefore, in a society where everything can become a commodity, solidarity is a social value (Wellen, 2008). In our study, ecovillages do not hover in the air, neither are “outside” capitalist relations, but rather (re)exist despite it—both through the intention of searching a lifestyle different from the hegemonic form, and through original/traditional knowledge, experiences, and technologies that still depend on society, such as money, medicine, religion, art, media, and work instruments. This is the dialectical relationship, which requires overcoming alienation, and can only occur through understanding and facing contradictions, as we show in this article.

The implications of communal labor go beyond the environmental agenda. The collective appropriation of the fruits of labor (technical-productive orientation) is a counter-hegemonic component that deserves emphasis. Communal labor connects residents to the ecosystem, thus enabling symbiosis. Such alternatives are relevant to organizational studies in order to qualify life in private non-profit organizations.

The research showed that ecovillages seek to experiment with forms of daily labor oriented to social reproduction, and the environmental component is a decisive criterion. We emphasize, on the one hand, the possibility of collective appropriation of labor products, and, as a horizon, the non-predatory reproduction of the natural world. The range of action is limited, given its restricted expression in social terms, and the absence of political interventions to fight capitalist production.

If a new, emancipated, class-conscious subjectivity can emerge in these environments, the natural environment is a fundamental actor. Future studies can deepen direct relationships with the land, and show how this would reflect on building a renewed subjectivity, on different grounds from those of the hegemonic society. The multiple potential approaches for studies in specific communities can include subjects regarding education, spirituality, and plural economic relations in inter-community, local, and territorial articulations. In addition, alternative movements that intersect and feed each other, such as agroecology and permaculture, are important to understand the general picture of this emerging rurality.

Declarations

**Human and Animal Rights** All human participants of this study were aware of the research and that their identities would be preserved.
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