Research Article

Theorizing the Normalization of Plantation Agriculture in Colombia

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In this research, I take the example of Hass avocado plantations in Colombia to present a comprehensive theoretical framework that helps to understand the conditions that lead to the success of plantations within a traditional agricultural landscape. Drawing from critical realism, insights from critical agrarian studies, and theories from cognition and implementation sciences, I emphasize that Hass avocado plantations flourish in such landscapes because they undergo a process of normalization. This normalization results from the dynamic interplay between social-ecological-agrarian structures and human agency in the realm of agriculture. This theoretical framework involves a stepwise approach, comprising three key stages to explain the normalization process: introduction, pushing-pulling, and sustaining of plantations. I elaborate on the concept of the morphogenetic approach and introduce what I refer to as "normalization cycles." I placed a critical focus on the structural conditioning imposed by the Plantationocene, the social interactions generated by agroextractivism, and the subsequent structural elaboration that ultimately reproduces and normalizes pre-existing structures.

1. Introduction

Plantations are considered a significant catalyst for agrarian change (Castellanos-Navarrete, de Castro, and Pacheco, 2021). Over the past two decades, with the globalization of neoliberal policies, including structural adjustment programs (Gerber & Veuthey, 2010; Veltmeyer & Lau, 2020), they have taken on a central role in shaping the wider political economies that drive agrarian change dynamics and development policies (Castellanos-Navarrete et al., 2021). For example, plantations have evolved into new initiatives within agrarian capitalism (Alonso-Fradejas, 2015), and these have been

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strategically leveraged by states (Nguyen & Kull, 2023) and as a worldwide strategy (Worlds Bank, 2007).

While there is a vast body of literature that analyzes and highlights the conditions under which plantations bring about agrarian changes, one aspect that remains to be explored in greater depth is why these plantations thrive in traditional agricultural landscapes. Some arguments emphasize, from a purely economic perspective, why a plantation is considered an appropriate production system. Hence, plantations, regarded as a particular form of agricultural business organization (Greaves, 1958; Pryor, 1982), thrive because of their capacity to operate efficiently (Hayami, 2010), benefit from economies of scale, and effectively address coordination challenges (Binswange & Rosenzweig, 1986).

However, these mainstream arguments do not explain why such a disruptive system as a plantation, which leads to significant social and environmental disruptions (Bissonnette & De Koninck, 2017; Suarez & Gwozdz, 2023; Tittor, 2017), persists as the preferred way to drive development in the agricultural sector (McMichael, 2009). In trying to address this gap, I find some hints in the literature. For example, Castellanos-Navarrete et al. (2021) state that smallholders are integrated into plantation value chains. On the other hand, Alonso-Fradejas (2015) emphasizes that land controlled by agribusinesses is officially titled by the state, making corporate acquisitions legally acceptable and establishing a patronage-based relationship rooted in a moral economy. An interesting characteristic highlighted by Manuschevich et al. (2020) is related to the absence of nostalgia for landscapes transformed by plantations, which results in a kind of indifference. Another aspect worth noting is that rural villages are increasingly benefiting from improved services and infrastructure (Nguyen & Kull, 2023). Furthermore, it is highlighted that the mechanisms of primary accumulation and dispossession serve as the driving forces that keep plantations afloat (Kröger, 2012). The International Panel of Experts on Sustainable Food Systems (IPES-FOOD, 2016) has emphasized eight significant factors that contribute to the entrenchment of plantations. Central to these factors is the concentration of power, but they also draw attention to path dependencies, export-focused strategies, pursuing cheap food, prevailing narratives, conventional measures of success, compartmentalized thinking, and short-term perspectives.

Despite the significant progress made in the literature that helps us understand the conditions under which plantations thrive, there is still a lack of clarity in comprehending how incorporating plantations as a development strategy manifests in local agricultural landscapes and what processes underpin their permanency. Thus, offering an additional perspective, this article explores an approach

that allows us to understand plantations and their maintenance over time from a theoretical standpoint.

Therefore, by analyzing Hass avocado plantation in Colombia, I address the question of why plantations thrive in a traditional agricultural landscape, despite their associated social and environmental implications (c.f. Budds, 2004, 2008; Denvir et al., 2021; Friedmann & McNair, 2009; Pérez-Llorente et al., 2019; Serrano & Brooks, 2019). To answer this question, I propose that the proliferation of Hass avocado plantations in traditional agricultural landscapes is because of their *Normalization*. I develop this argument by synthesizing insights from Critical Agrarian Studies (Akram-Lodhi et al., 2021) into a Realist Social Theory (Archer, 1995), and the theories of Normality in cognitive studies (Bear & Knobe, 2017) and implementation sciences (May et al., 2009). By incorporating elements from these fields, I place particular emphasis on the significance of social-agrarian-ecological (SEA) structures in shaping human agency and subsequently leading to the reproduction of these SEA structures. Initially, I delve into an analysis of how social structures can both limit human agency within agriculture and be influenced by it. Subsequently, I draw a connection between normalization and the aforementioned dynamic, followed by an exploration of a specific case study in northern Caldas, Colombia.

2. Theorizing Normalization

Science operates in two dimensions: the intransitive (real-world structures and mechanisms) and the transitive (knowledge about these realities). Critical realism distinguishes these dimensions and highlights the epistemic fallacy—confusing the two (Bhaskar, 2008b, 2014). Scientific knowledge aids our comprehension of the world (transitive) but does not equate to the real world (intransitive) (Bhaskar et al., 2017). The intransitive dimension exists independently of human beliefs or theories (Bhaskar, 2008). Thus, scientific ideas live in the transitive domain, evolving with scientific progress.

Critical realism guides this research, advocating realist ontology with a fallible epistemology because of the intransitive-transitive distinction (Bhaskar et al., 2017; Danemark et al., 2019). Realist ontology sees reality as multifaceted, encompassing experiences, events, and generative mechanisms beyond empirical data (Easton, 2010; Elder-Vass et al., 2023; Mingers & Standing, 2017). Critical realism also promotes a fallible, context-specific, explanatory approach, urging consideration of multiple generative mechanisms (Danemark et al., 2019; Wynn et al., 2012). These principles underpin the theorization process in the transitive dimension of normalization.

2.1. Morphogenetic Approach

I anchor this exercise within the meta-theoretical framework of the Morphogenetic Approach (Archer, 1995). This framework serves as the theoretical bedrock for the exploration of diverse social phenomena, prominently featuring the complex landscape of agrarian change. Within this approach, it is possible to discern social structures engaged in a perpetual dialectic with a human agency over distinct stages. These structures and agents, distinguished by their unique attributes and causal powers (Bhaskar, 2014; Elder-Vass, 2010), coalesce in a synergistic relationship (Archer, 1995).

The Morphogenetic Approach, considering critical agrarian elements, introduces three analytical stages:

- T^1 - Structural Conditioning: In this initial phase, we consider the combined outcomes of previous actions, which form the basis for future progress. Within this context, it is possible to consider the global and local SEA structures that can either restrict or enable human agency within agricultural landscapes.
- T^2-T^3 - Social Interaction: Although structural conditioning certainly affects social interaction, it does not fully dictate it during these intermediate phases. Social-ecological-agrarian structures do not determine or prescribe human agency within agricultural landscapes; instead, they impose limitations on agency.
- T^4 - Structural Elaboration: This points out that when social interactions influenced by human agency occur, the previously social structures (T^1) are prone to transform into dynamic and flexible, leading to unexpected consequences.

Structural elaboration provides a dual perspective on society. The first lens is about preserving established interests, while the second lens focuses on dynamic social transformations, representing shifts and evolution (Archer, 1995). According to Danemark, Exstrom and Karlsson (2019), the existence of a social structure comes before any actions that aim to preserve or alter it. The structure must be in place before any attempts at change or maintenance can occur. The structural elaboration follows the actions that create it, meaning that the reproduction or transformation of a structure is the outcome of agents' activities, which is why these activities must come before the elaboration.

2.2. Normalization: What and How

As discussed by Bear and Knobe (2017), the traditional concept of "normal" has typically revolved around what is typical or average. However, the authors introduce the notion that prescriptive factors also play a significant role in shaping people's perceptions of normality. This means that normal is not only about what is standard in various contexts (i.e., descriptive considerations) but also involves judgments about the goodness or badness of those situations (i.e., prescriptive considerations). Normality lies then in port at the intersection of being on both the ideal side of the average and the average side of the "ideal" (Bear and Knobe, 2017).

The theory of normality posits that, in order for entities to be deemed "normal," it is crucial to consider a perspective involving "gradability" and "concept prototypes" (Bear and Knobe, 2017). Within this basis, the concept of gradability allows people to characterize an entity based on degrees along a scale, and when achieving a threshold, it is considered a standard. When delving into prototypes, they serve as the ideal examples of how an entity should be, encompassing both (a) the frequency of the entity's occurrence and (b) its inherent goodness or badness. The authors provide a picturesque example to explain these two sides:

> "Though a 35-year-old barista who has a daughter with children of her own meets the criterion for being a grandmother, there is a sense in which this woman is a worse example of a grandmother than a much older, retired grandmother. (p.3)"...[]... "Specifically, when people are assessing what is the prototypical grandmother, they are not just thinking about what is an average grandmother, but they are thinking about what is a normal grandmother. (p.3)" ...[]... "As a result, a completely average grandmother may actually be judged to be less prototypical than a slightly less average but more ideal grand-mother because the latter is considered more normal. (p.3)"

After understanding the concept of normalization (Bear & Knobe, 2017), the next step involves grasping how the process of normalization occurs. In this context, it is crucial to integrate concepts from the Normalization Process Theory (NPT) within the realm of implementation sciences (May et al., 2009; Murray et al., 2010). NPT offers valuable insights into understanding the social processes in which new practices are put into action, following a three-step analysis: implementation (turning practices into real world), embedding (incorporating practices into routines), and integration

(sustaining practices). This theory places significant emphasis on human agency and is based on the principles of action-network theory (May et al., 2009).

In this study, I adopt a meta-theoretical framework known as critical realism within the morphogenetic approach, which underscores the social ontology as the interplay between structure and agency (Archer, 1995; Bhaskar, 2014; Elder-Vass, 2010; Lawson, 2015). My intention is to complement the existing normalization theories with critical realist insights.

I intend to supplement both normalization theories with insights from critical realism, mainly emphasizing the relationship between structure and agency (Archer, 1995). When Bear and Knobe (2017) tested the theory across various case studies, they discovered that, sometimes, the interplay between the average and the ideal does not solely account for people's judgments of normality. Instead, there appear to be additional factors at play. As they conclude, it is plausible that people's assessments of normality are, in part, influenced by a factor that does not align with either descriptive or prescriptive considerations, but stems from an entirely distinct source (Bear & Knobe, 2017). This is where Archer's framework becomes important for offering additional insights such as the structural conditioning. Specifically, with Normalization Process Theory (NPT), I incorporate it into the morphogenetic approach to address criticisms pertaining to ontological and epistemological aspects. These criticisms revolve around voluntarist approaches that prioritize agency over structure, particularly within the context of action network theory (Elder-Vass, 2008).

2.3. Normalization in the Morphogenetic Approach

While this is not a study centered on cognition or implementation practices, I have found it valuable to apply the normalization approaches proposed by Bear and Knobe (2017) and May *et al.* (2009) within the framework of critical agrarian studies and the examination of SEA phenomena. It is essential to highlight that, within the present research, the element absent in the authors' work could be attributed to the causal powers of the social structures. In the analysis presented in this paper, I contend that the missing factor influencing what is "normal" is shaped by the diverse pressures exerted by SEA structures on human agency within agricultural landscapes. Social structures possess genuine causal efficacy (Bhaskar, 2014; Brock et al., 2017; Danemark et al., 2019). These social structures (SEA in this research) encompass the influential forces of social groups that engage in activities guided by various accepted norms (Elder-Vass, 2011). As Lawson (2015) highlights, individuals shape their behaviors under a shared social structure that permeates the entire

community. This process generates established ways of conducting activities that implicitly hold a collectively acknowledged status within the community (Lawson, 2015).

In this line, my core argument revolves around the concept and process of "Normalization" within the entire morphogenetic cycle, which I posit as an unforeseen and not a voluntary outcome (Figure 1). I contend that normalization is an ongoing result of the process of Social Structural Conditioning/Enablement. The idea of normalization encompasses two distinct dimensions. First, it emerges because of both the Structural Conditioning and the Social Interactions stages in the elaboration of SEA structures (SEA-based idealization). In this context, social interactions form the milieu in which normalization takes place, facilitating the practical application of the prospective ideas by adhering to the pre-established conditions set forth by SEA structures. The results of the morphogenetic cycle can lead to the judgment that SEA situations, which deviate from the average (descriptive), may be deemed less prototypical than those that are less than average but closer to the "ideal" (proscriptive) in SEA contexts (Following Bear and Knobe's argumentation). Structural Conditioning, being first in time, plays a significant role in the proscriptive aspect of the normalization process. Second, it functions as a process that characterizes the outcomes of the entire morphogenetic cycle as "normal."

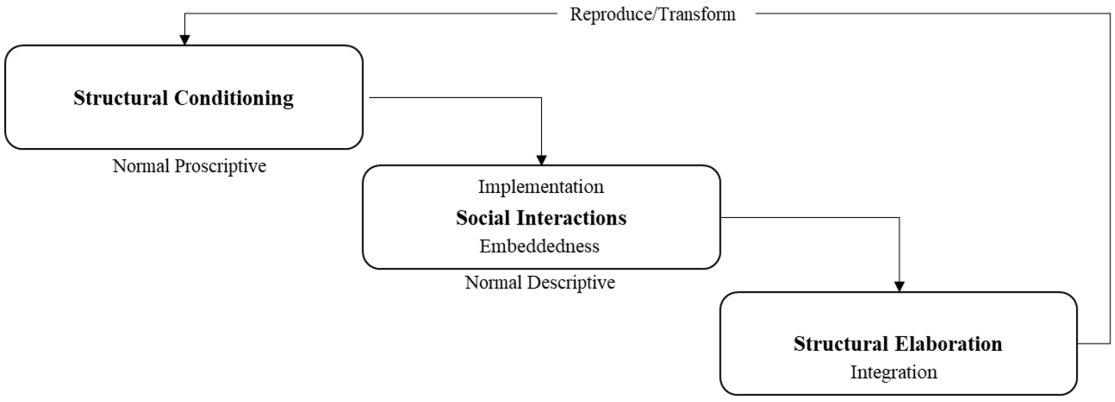

Figure 1. Normalization in the Morphogenetic cycle. Constructed from Archer (1995), Murray et al. (2010), and Bear and Knobe (2017).

In the present proposition, the structural conditioning stage offers the foundational elements that define the "ideal" or proscriptive dimension within the normalization process. In the second phase of the morphogenetic approach, we encounter the elements proposed by NPT (implementation,

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embeddedness, and integration), as this is where social interactions unfold. Importantly, in this context, implementation is not solely a deliberate, voluntarist action aimed at consciously introducing something. Instead, it can also emerge as a response to the constraints and opportunities set forth in the initial phase.

2.4. Normalization in the Agrarian Dynamics Produced by Plantations Agriculture

Following the example by Bear and Knobe (2017) on the normal grandmother, I contend that while a small-scale, biodiverse, and locally focused farming approach may technically fulfill the criteria of an accurate production system (Wolford, 2021), there is a nuanced perspective to consider. In some contexts, this small-scale model may be perceived as a less ideal exemplar of a production system compared to a larger-scale, globally oriented agribusiness model. The distinction lies because when people evaluate what makes up a prototype production system, they are not merely assessing what is average (small-scale farming); they are contemplating what qualifies as normal. A production system that is less average but aligns more closely with the "ideal" may be deemed more prototypical because it is normal. This is the case for plantations led by corporations, which represent the new agriculture (McMichael, 2009). Therefore, I explore the conditions that assign the grade of ideality to the more prototypical plantation option.

I delve into the Morphogenetic approach and the process of *Normalization* by weaving together high-level analytical concepts such as the Plantationocene (Chao et al., 2023) and the prevailing Corporate Food Regime (Kelinsky-Jones et al., 2023; McMichael, 2021), which serves as the backdrop for normalization. Plantations Food Regime serves as a catalyst for Structural Conditions, ultimately influencing how SEA interactions as agroextractivism manifest within local landscapes, particularly large-scale plantations. These interactions play a pivotal role in shaping the way the Structure develops, primarily by perpetuating agroextractivism and, thus, reinforcing the Corporate Food Regime within the era of the Plantationocene (Figure 2). Another aspect to consider is the progression through different stages of normalization. At the outset, structural conditioning is established as normal (N^0), leading to social interactions being perceived as normal (N^1), and eventually, they also imbued structural elaboration with the status of normality (N^2). Consequently, the cycle reinforces N^3 as an unintended consequence, resulting in the reproduction of T^1.

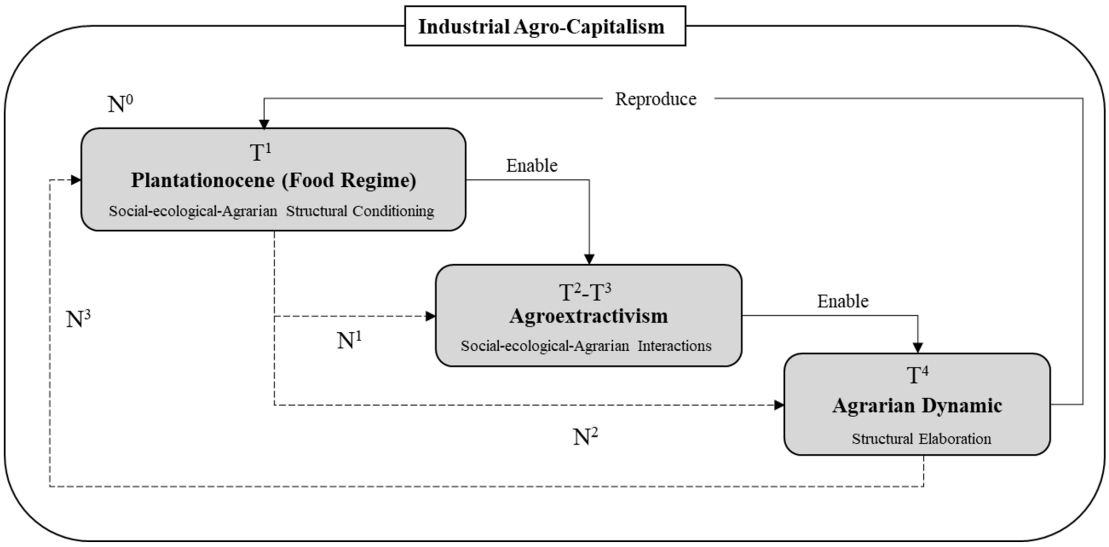


Figure 2. Process of Normalization. T: morphogenetic stages, N: normalization stages.

2.4.1. Structural Conditioning

The Plantationocene, beyond simply representing a specific production system (large-scale monocrops), serves as a conceptual framework that aids in interpreting the developmental histories spanning local to global scales and sheds light on the contemporary influence of plantation logics on agrarian landscapes and livelihoods (Wsang and Xu, 2022; Chao *et al.*, 2023). When considering the Plantationocene, Wolford (2021) suggests this concept embodies three distinct dimensions: it functions as a social system, an imperative, and as an ideal. Allow me to delve into these three facets as articulated by the author. Plantations have left an indelible mark on rural livelihoods, relationships, and communities across the globe. They have influenced and, sometimes, subsumed other productive forms (e.g., small-scale farming and peasantry) into the plantation food regime. Plantations contribute to large-scale production by providing cost-effective labor and commodities, often through contractual arrangements, and by fostering a demand for cheap food (León Araya, 2023; Moore, 2010).

The notion of plantations as an imperative suggests that it is deemed the only viable mode of expansion, exploitation, and management that has shaped the contemporary world system (Moore, 2015). What is even more disconcerting, as presented by Wolford, is the existence of a discursive ideal of modernity, efficiency, and economic growth associated with plantations. This idea strikes at the core of Western conceptions regarding the organization of nature, economy, and society (León Araya,

2023; Wolford, 2021). I argue the Plantationocene shapes a food regime closely aligned with industrial capitalism (prescriptive), which is intricately woven into cross-scale agrarian transformations (McMichael, 2021).

2.4.2. Social Interactions

The comprehensive food value chain comprises various stakeholders, including corporate producers, small-scale farmers, and peasants, along with the processing industry, sellers, consumers, governments, and regulatory agencies, all of which play integral roles in overseeing the entire process (Ferranti, 2018). Food systems exist at the intersection of critical factors, such as food security, nutrition, human health, environmental sustainability, climate change, and social justice (Caron et al., 2018). In this intricate chain, Social Interactions (T^2-T^3) take center stage, serving as the backdrop for significant exchanges. This is where the privatization of companies and property rights, market liberalization, and economic integration into global food systems have unfolded, leading to profound changes (Swinnen & Maertens, 2007), and then implementing a particular way to address agricultural development.

Following the previously outlined process (Figure 2), the conditions set by the plantation food regime exert a global influence on the entire food chain. The Plantationocene underscores a prevailing normative approach to practices, significantly shaping the production and consumption of food (McMichael, 2021). Notably, when we examine the production-related process, these practices exhibit substantial distinctions between the global South and North. Worldwide alterations in forests, farmlands, and water resources are being primarily propelled by the necessity of providing for the needs of an increasing population (Foley et al., 2005). However, in regions of the global South, particularly those lacking oil and natural gas reserves, agricultural land emerges as the most vital source of natural wealth (Barbier, 2004). These economies are witnessing a rapid expansion of their agricultural land base, achieved through the conversion of forests, wetlands, and other natural habitats (Barbier, 2004). For example, in the global North, the agricultural land area decreased by over 412 million ha (34%) between 1995 and 2007, whereas global South countries saw increases of nearly 400 million ha (17%) (Gibbs et al., 2010).

Particularly in Latin America, this phenomenon is characterized as agroextractivism, which is implemented through large-scale plantations that deplete environmental fertility and biodiversity (McKay et al., 2021; Veltmeyer & Ezquerro-Cañete, 2023). This system relies heavily on intensive

industrial inputs, such as modified seeds, agrochemicals, mechanization, and landscape transformation (Gudynas, 2010; Petras, 2020). Its introduction into traditional land use can disrupt power dynamics, ecosystem health, and land ownership (McKay, Alonso-Fradejas, and Ezquerro-Cañete, 2021). The shift from family farming oriented toward local consumption to large-scale production for global markets characterizes this transformation (McKay, 2017). The growing agroextractivism has mainly focused on flex crops like palm oil, sugarcane, and soybeans, highlighting concerns about environmental degradation, power imbalances, and inequality (McKay et al., 2021). This field has interactions expanded to include various crops such as agave, onions, potatoes, pineapples, forestry or Hass avocado (Tetreault, McCulligh and Lucio, 2021; Blake, Chohan and Escobar, 2023; Araya, 2021; Kröger and Ehrnström-Fuentes, 2021; Suarez et al., n.d).

What stands out in these interactions generated as agroextractivism are the various struggles and processes aimed at addressing the implications of this phenomenon (Alonso-Fradejas, 2015; McKay et al., 2021). Plantations often result from fiercely contested land conflicts (Borras & Franco, 2023). Nonetheless, the political-economic system centered on plantations imposes constraints that shape the degree to which the local population, particularly the peasantry, can take part in political struggles. This applies to both their engagement within the existing system and their potential opposition to the plantation model. These constraints, in turn, facilitate the integration and routine adoption of plantation-based practices (e.g., large-scale landscape transformations, the proletarianization of peasants, agronomic practices, etc.). Then, I assume that normalization occurs given the confluence of structural conditionings and the outcomes of human agency in the next dimensions:

- Corporate production extracting and depleting through plantations
- Rural inhabitants integrating the mechanisms of agroextractivism as labor
- Political actors and policies supporting agroextractivism
- Configuration of institutional arrangements that dictate what is or what is not accurate under T^1 (An average agricultural is less normal than a prototype landscape)
- Consumers that push for commodities
- Conflicted spaces that push and pull in the agricultural landscape

2.4.3. Structural Elaboration

As the social interactions develop in the frame of the imperative and ideal of the Plantationocene, the process that follows is the reproduction and integration of the SAE structures. Hence, the constraints introduced in T^1 make it difficult to accomplish transformations in the subsequent phase of Structural Elaboration (T^4), where the particular agrarian dynamic occurs, inadvertently perpetuating the Structural Conditionings once more (i.e., Plantationocene).

3. Normalization in the Agrarian Dynamic Produced by Hass Avocado Plantations

In this section, I will delve into how the establishment and flourishing of Hass avocado plantations have led to a process of normalization within a traditional agricultural landscape in Colombia. I will begin by introducing the case and explaining its characteristics. Next, I explore the process of introduction, growth, and normalization of Hass plantations to substantiate the process depicted in Figure 2. The data I present is drawn from in-field observations, secondary sources of information, contextual insights, and in-depth interviews, complemented by a reflective analysis drawing from Suarez et al. (n.d.) and Suarez (n.d).

3.1. A Case Study

Salamina, a small municipality in northern Caldas, Colombia (Figure 3), has a history of peasant agriculture predominantly focused on coffee and plantain production for the past century. Families with higher economic status have often concentrated land ownership, including large pasturelands. In this dynamic, peasants primarily used family labor for coffee and plantain production (less than five ha), while pasture owners engaged in dairy and beef cattle farming, providing scattered employment opportunities in the municipality. The coffee-oriented background in Salamina's recent past significantly contributed to UNESCO's designation of the Coffee Cultural Landscape in 2011. This landscape represents a longstanding practice of coffee cultivation on picturesque steep terrains and non-mechanized agricultural methods.

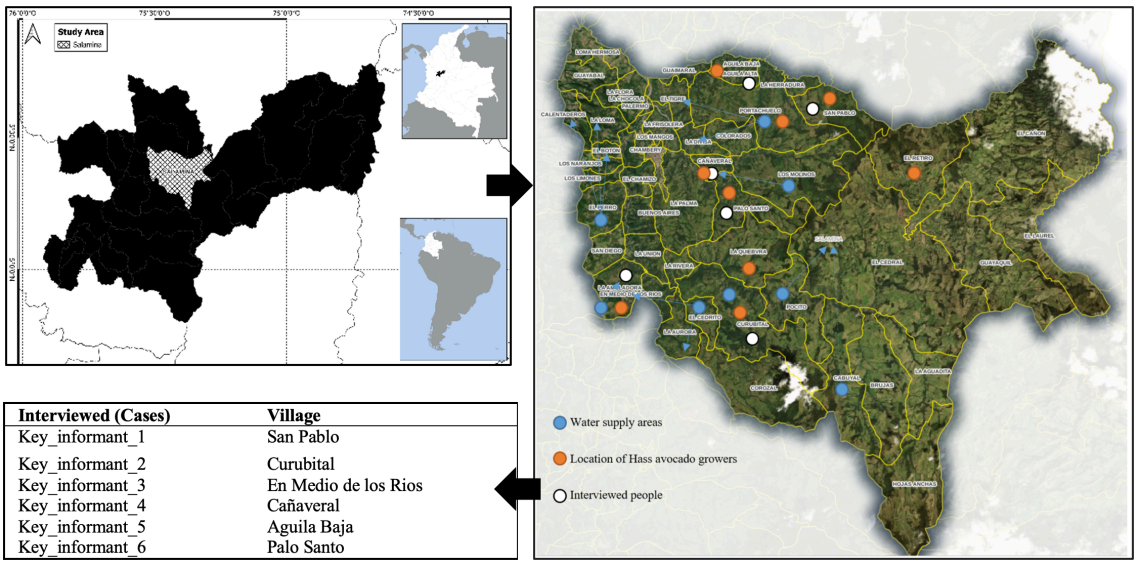
Considering the current implications of corporations having Hass plantations, I conducted an explanatory qualitative research, employing a cross-sectional explanatory case study approach. Accorfding to Yin (2013, 2018):

a. A case study served as the empirical framework,

b. Focusing on a contemporary case,

c. With the contextual backdrop playing a significant role,

d. Aimed at elucidating causal links within real-world interventions



Interviewed (Cases)	Village
Key_informant_1	San Pablo
Key_informant_2	Curubital
Key_informant_3	En Medio de los Rios
Key_informant_4	Cañaveral
Key_informant_5	Aguila Baja
Key_informant_6	Palo Santo

Figure 3. Study Area. Corporate growers have long possessed and controlled regions with potential water resources for rural citizens and farmers.

Regarding the methods employed, I conducted a literature review, engaged in on-site observations, and conducted in-depth semi-structured interviews to gain insight into the dynamics related to Hass plantations. For the in-depth interviews, I adopted a theoretically driven process for selecting cases (sampling units), aligning with the principles of realist sampling (Emmel, 2014). The selection of cases in this research, as per Emmel, "is not akin to an analytic inductive strategy aimed at representing a population. Instead, it is focused on unveiling mechanisms, refining theories that explain social processes." Here, I aimed to explore how and why agroextractivism becomes normal in a local traditional agricultural landscape. The case selection followed a purposeful sampling approach, employing a snowball-network strategy to identify farmers meeting specific characteristics:

1. People living in rural areas next to Hass plantations.
2. Peasants who have competing claims regarding large-scale avocado growers (day-to-day exposition to plantations).

3. Peasants who are spread out in different areas of Salamina's sural region (related to different Hass plantations over the municipality).
4. Peasants who are knowledgeable about the historical dynamics of their living villages.

Finally, I selected six cases (Figure 3). I carried out the interviews between November 2022 and March 2023 by visiting the area five times. I received written and informed consent from the participants regarding our research and data handling procedures. I conducted a second round of discussions with the interviewees, presenting the outcomes of the transcription and a general conclusion derived from the earlier interviews, a practice commonly referred to as interview member validation (Maxwell, 2022). My home university approved my research with its Ethical Committee.

3.2. A Traditional Agricultural Landscape Faces the Plantationocene

Traditionally, land ownership in the municipality is categorized into two main groups: first, the ownership of large pastures held by affluent individuals, and second, peasant-oriented farming systems primarily focused on coffee and plantain cultivation in hilly areas characterized by limited technological and financial resources. However, in 2018, a significant shift occurred with the introduction of large-scale cultivation of Hass avocados. While the Hass avocado cultivar had been cultivated in small farms in the region for some years, the entry of corporations, primarily from Chile and Peru, brought about a disruptive transformation in the local agricultural landscape.

Recent developments in Salamina have seen a notable influx of corporate investments, characterized by substantial land acquisitions dedicated to the cultivation of Hass avocados. In parallel, there has been a gradual decline in coffee cultivation areas and livestock units (Suarez et al., n.d). Corporate investments involve the takeover and accumulation of extensive land parcels that were previously in the possession of cattle ranchers, resulting in a transformation of over 2,000 hectares in just six years.

A significant shift in avocado production practices is clear, particularly in recent years. Municipal data shows that, until 2010, the town primarily engaged in small-scale cooperative production of various avocado varieties for the national and local markets, covering an average of 44 hectares from 2010 to 2018. However, the commercial surge of the Hass avocado cultivar triggered two noteworthy phenomena. First, there was a substantial decline in the cultivation of non-Hass varieties between 2019 and 2022, plummeting from 211 hectares to just 5.4 hectares. Second, there was a large-scale influx of the Hass variety, with corporations mainly from Peru and Chile establishing plantations. In

2019, these plantations added slightly over 2,000 hectares to the municipal total, and by 2022, they had expanded to encompass 2,500 hectares (Suarez et al., n.d.).

A crucial outcome of this transition in land ownership is that Hass avocado growers have gained control over substantial areas linked to water supply, resulting in social unrest primarily because of the loss and water pollution (Suarez et al., 2022). This discontent stems from Salamina's recent history of water shortages, particularly in meeting the needs of urban residents. Consequently, the ability of local peasants to derive benefits from their landscape is hampered by this unequal access to essential resources (Suarez et al., n.d). The aforementioned disruptions have instigated rapid transformations in the traditional agricultural landscape, providing corporate growers with the opportunity to gain both legal and illegal control over water and soil resources. This has resulted in a notable imbalance, particularly affecting the local peasant communities. The regional environmental authority, along with affected peasants, has reported and taken punitive measures against environmental degradation, primarily associated with water pollution and deforestation (Suarez et al., n.d). However, these measures have proven insufficient in mitigating the impacts of plantations.

Hence, within Salamina, there exists a significant asymmetry where both peasant agriculture (A) and large-scale Hass avocado producers (B) reap advantages from the landscape of Salamina. This inequality is not the outcome of a fairly competitive process between A and B; rather, it has arisen from a disadvantaged context for A. The following propositions warrant detailed analysis:

a. Supremacy in land access: B enjoys a higher supremacy in accessing and using land compared to A. This inequitable access to land is a key driver of the observed disparities.
b. Exploitative extent and transformation: B engages in a more extensive exploitation of Salamina´s landscape, resulting in broader and more significant transformations of the local landscape. This disproportionate impact has far-reaching ecological consequences.
c. Diverse purposes of resource use: B deploys Salamina´s landscape for purposes that diverge significantly from those of A. These differing objectives in resource utilization have substantial implications for land use patterns and ecosystem functioning.
d. Policy and organization's support disparity: B receives considerably more support and favorable policies for land and landscape utilization compared to A. This bias further exacerbates existing inequality (Suarez n.d).
e. Benefit discrepancy: B reaps substantially greater benefits from Salamina´s landscape compared to A. As a result, there is a glaring disparity in the access to and benefits derived from the local

landscape, with B benefiting at the expense of A.

3.2.1. Understanding Normalization in the Field

Following in-field observations, a review of secondary sources of information and performing semi-structured interviews, I present how the normalization of plantations and their agroextractive dynamics occurs. First, I will list an overview of the general conditions that have allowed avocado plantations in Salamina.

- Hass plantations comprise several contributory processes, such as the global North demand for Hass avocado as a driver of agriculture production (Suarez et al., n.d.).
- The plantations reflect an economic rationality where agro-capitalism focuses on specialization, which simplifies ecosystems and follows market signals that led to an especially profitable single species being produced (Giraldo, 2019).
- A set of environmental characteristics in Salamina that has allowed the Hass avocado to grow with optimum conditions, such as topographical, hydrological and soil properties (Suarez n.d.).
- An absence of state support for local farmers and small-scale producers, which has produced dynamics of rural disenchantment and abandonment in the Colombian coffee region (Muñoz-Rios et al., 2020).
- In addition, two conflicting perspectives: the first one related to the fact that there is an inter-organizational complementarity to promote Hass avocado, but also the institutional weakness in facing the implications of the plantations (Suarez et al., n.d.).

3.2.2. Structural Enablement

The structural conditions in the area provide a favorable environment for the emergence of a plantation-based economy and the development of agroextractivism given that:

1. Historical land accumulation (Table 1A): The presence of past land-use strategies, such as large pastures that concentrated land ownership in a few hands.
2. Legacy of armed conflict (Table 1B): A history of armed conflicts has transformed land occupation dynamics, fostering a perception of challenging rural life.
3. Absence of clear land use regulations (Table 1C): The absence of well-defined rules regarding land use appropriation creates conditions for land grabbing.

4. Expansive land use regulations (Table 1D): On the contrary, land use regulations that allow expanding productive areas can exacerbate agroextractivism.
5. Top-Down rural development policies (Table 1E): Policies focused on rural development often prioritize strategies without local approval or involvement, which can intensify agroextractivism.
6. Capital-centric economic system (Table 1F): An economic system centered on capital accumulation fosters a new dynamic of large-scale land occupation and promotes extractive land use practices.

Item	Experience
A	Well, the big avocado growers arrived, well, first, because of the desire of the farm owners to sell land. Because there were some very large cattle lands over there. Then the owners, well, when they received offers for their land and they sold. [Key_informant_2]
B	When the avocado plantations arrived after a time of armed conflict that displaced the people of the village, the avocado growers bought those farms. These lands had forests and vegetation that needed to be preserved, but buyers came and established crops in these highlands. [Key_informant_1]
C	I do not know if there are any regulations, or the authorities are also very permissive in front of the disproportionate expansion of these issues and the truth is that there is no regulation for the accumulation of land in Colombia. [Key_informant_2]
D	The topic was the socialization of the environmental subtraction of Law 2, which they are requesting before the national environmental ministry in order to carry out new infrastructure works [for avocado growing]. [Key_informant_2]
E	Well, for me, as for us, as soon as October of last year, they entered the village. Even I was getting angry as a community leader. Because they should not have gone without an invitation to me, that they were going to go into the trail; as if to say, that is like violating the autonomy; how they were going to get to the trail. [Key_informant_5]
F	They [corporate growers] did not recognize the value of the land as that spirit apart, that spirit, that tradition, that culture, the magic it harbors, just to produce. [Key_informant_6]

Table 1. Structural Enablement for Agroextractivism in Salamina.

Law 2nd 1959 defines conservation strategies around Colombia. Permission from the national environmental authority is required to use these areas for purposes other than conservation.

3.2.3. Implementation, Embeddedness and Integration

I have identified various influential actors in Salamina who possess both political influence and financial resources. Observing the increasing prevalence of Hass avocado cultivation in neighboring municipalities, they actively advocated for introducing this activity into rural Salamina (Table 2A). Subsequently, I identified another dynamic related to Hass plantation adoption, which I refer to as "actor-based embeddedness." In this context, rural landowners willingly sold their lands, not under duress from corporate growers, but for their own immediate financial gain (Table 2B). Some traditional coffee growers transitioned from landowners to paid workers, facilitating the material consolidation of corporate growers on the land. A third element emerged, characterized by the influence exerted by the corporations in the area. For example, the most prominent influence observed was in the realm of employment generation. Building upon these elements, corporate growers expanded their influence further, fostering a process of recognition and projection that reinforced the consolidation of Hass plantations in the region.

Within this process of consolidation, a significant relationship with the landscape comes to the forefront. This consolidation encompasses the initial conditions that corporate growers encountered upon their arrival in Salamina. For instance, they had to navigate various environmental regulations, alongside the substantial land acquisitions. Despite these challenges, they proceeded with the establishment of their plantations as planned. After addressing the aspects related to land and legal compliance, corporate growers engaged with the landscape in alignment with the requirements of large-scale plantations (Table 2C). Within this dynamic, they triggered various environmental impacts, primarily affecting the land (Table 2D) and water resources (Table 2E).

These processes of landscape degradation have generated repercussions that extend beyond the plantations, placing pressure on the wellbeing of the local population. As locals contend with the degradation of the landscape and its associated consequences, a complex and contentious process unfolds.

Item	Experience
A	The commission merchants who earned the money were heavily involved in this affair. They became immensely rich. Yes, they had a lot to do with these matters and other people out there that I don't know their names, but if I found out, they also had a lot to do with it. [Key_informant_6]
B	Because people get very excited about money. [Key_informant_3]
C	And the truth is that Curubital has not disappeared as a village because this company, in the end, as I said, is very limited in its working capital. It does not have the potential of these other companies that from the very first moment they arrive, one sees the movement of machinery, they break roads everywhere. [Key_informant_2]
D	So, they make deep holes and then, through those ditches, at this moment a downpour falls, washes all that poison and all that drainage goes to the source of the gully that serves as our source. [Key_informant_3]
E	They, they [corporations] don't care about that [water]. The water is polluted. The chemicals they spread in the environment are supremely strong. [Key_informant_4]
F	They showed Hass avocado as an alternative for agriculture and it is not bad. The bad thing is to monopolize this type of industry. [Key_informant_1]
G	We were very impacted by something external, besides, at that time, we heard about the water problem in Chile because of the Hass avocado monoculture and the concern was increased because the owners of these avocado plantations were Chilean and one company that arrived here was a subsidiary of those from Chile. [Key_informant_1]
H	I submitted a complaint [to environmental authority], because the avalanche that came down from the road [made by corporate growers] damaged the sand traps tanks [for water consumption]. [Key_informant_5]
I	So, I have been preparing myself especially in terms of legal advice, legal what can I do, however, how to defend myself against them [corporate growers]. [Key_informant_2]
J	They first have to respect and find out how things on the village and respect the local organization. [Key_informant_5]
K	And we also have to understand that there are other people in the community who have good jobs in the avocado industry. So, they keep muted too, because that was an opportunity for many young people. [Key_informant_6]

doi.org/10.32388/K9L7LU

Item	Experience
L	Because we get a lifestyle that the people are already used to, because the people were not like that. The salaries of the people were not, no, they were not normal [before corporate growers]. [Key_informant_6]

Table 2. Implementation and embeddedness of Hass plantations in Salamina

I also discovered a pivotal element concerning empowerment and reflexivity. This entails recognizing both the positive and negative effects of Hass plantations (Table 2F). For instance, the environmental consequences, both within the local context and on an international scale (e.g., in Chile), prompt reflections on the implications of Hass plantations (Table 2G). This process encompasses formal complaints against the consequences of plantations (Table 2H) and the acknowledgment of the necessity to prepare for legal challenges arising from the effects of them (Table 2I). Additionally, there exists empowerment related to the recognition of the importance of involving local people in the project's introduction to the area (Table 2J).

Despite the initial conflicting and conscious reactions experienced by people, the upheaval eventually slows down through various interactions with corporate growers. This is a crucial observation, as it underscores a duality in the area. On the one hand, there is exposure to negative impacts on the community, but on the other hand, people derive benefits from plantations, such as employment opportunities (Table 2K) and the adoption of a new lifestyle that provides the possibility of earning wages (Table 2L). Corporate growers have also implemented social responsibility strategies, as highlighted by Key Informant 5, which include recreational activities, gifts, games, and initiatives aimed at fostering social integration within the villages. These efforts have further endeared the corporate entities to the local communities.

As mentioned by Key Informant 2, "*Like everything else, as I said, this ended up becoming embedded in people's DNA. Nobody cares anymore. I don't care if they break the mountain or not.*" This sentiment reflects the complex process of adaptation and acceptance that has transpired in the area.

3.3. A Normalization Process

As previously shown, the Hass plantations have elicited concerns because of their extensive scale and the nature of plantation-based production activities. This apprehension encompasses the various levels of worry experienced by local residents as the Hass exploitation unfolds (Figure 4). I have categorized the normalization of agroextractivism through Hass plantations in Salamina into three distinct sequential stages:

1. Introduction of the Plantations (Implementation): This marks the initial phase in the normalization process, with a focus on reinforcing Hass plantations. This phase is driven by a combination of structural conditioning and agential forces, including various actors actively working to consolidate Hass avocado plantations in the region.
2. Push-Pull Dynamics (Embeddedness): A dynamic interplay between pushing and pulling forces characterizes the second stage. It involves active participation and reflection on the implications of Hass plantations. Pulling agency represents an effort to mitigate the negative consequences of agroextractivism, potentially mobilizing against these impacts.
3. Sustaining (Integration): The final stage pertains to the ongoing existence of Hass avocado plantations. At this point, there is a gradual reduction in apprehension regarding corporations, reinforcing the *status quo* of agroextractivism and, unintentionally, the plantation Food Regime.

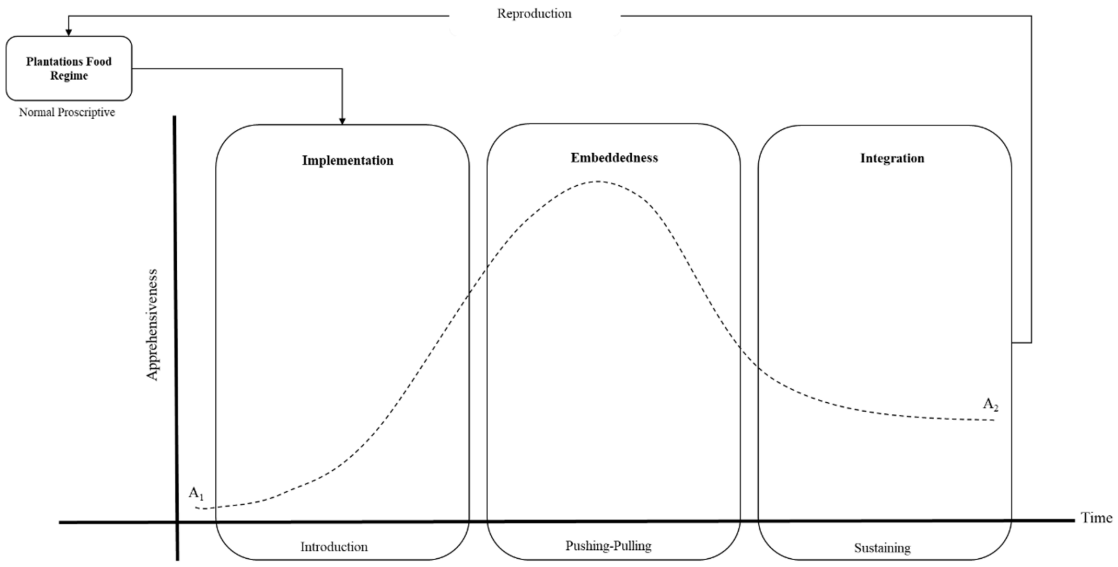


Figure 4. Normalization process in Salamina. A_1: first moment of less apprehension given the novelty of the change, A_2: second moment of more apprehension after the normalization process with space for agency (e.g., struggles, complaints etc.).

I would like to emphasize the pivotal role of human agency in this context. The normalization process, as described, does not signify the end of agrarian struggles, where communities simply accept the new dynamics brought about by plantations (Borras, 2009; Borras & Franco, 2023). Instead, as illustrated in Figure 4, there is a transition from a prior A_1 state to a subsequent A_2 state. This transition involves the strengthening of capacities among those engaged in the struggle. For example, some individuals may take proactive steps like preparing for legal action or filing complaints with environmental authorities (Table 2H and I). These actions contribute to the consolidation of a corporate agency that holds the potential for structural elaboration toward instigating change (M. Archer, 1995; Danemark et al., 2019).

4. Discussion and Conclusions

4.1. Agrarian Change and Normalization

In Colombia, the normal-*descriptive* (74%) of the agricultural sector comprises small-scale production units, each covering less than 5 hectares. These units occupy only 2.0% of the rural area identified in the Colombian agricultural census. Production units larger than 100 hectares account for

only 2.4% (DANE & Ministerio de Agricultura y Desarrollo Rural, 2014). No matter this *descriptive* normal, the *prescriptive* influence of the plantation food regime marginalizes small-scale and peasant agriculture and consistently creates a narrative that portrays smallholders and peasants as lacking in agricultural capacity and productivity. This narrative serves the purpose of land accumulation and asserting control over resources (Hasudungan & Neilson, 2020), because corporations and agribusinesses often equate plantations with job creation and local development (Antonio Castellanos-Navarrete et al., 2019). For instance, in the Colombian palm oil sector, it is estimated that 72% of the national oil palm area is found in large-scale plantations (Castellanos-Navarrete et al., 2021).

The case of Salamina is interesting since it depicts a fast transition from a traditional land use and related labor dynamics based on coffee, plantain and pastures, towards the incursion of a plantation-based system. Hence, the dynamics, as depicted in the case study, reveal a decrease in traditional avocado varieties, with corporations assuming control of Hass cultivation on extensive plantations spanning 2,500 hectares. Here, as suggested by Wolford (2021), Plantationocene performing through Hass avocado plantations has become a social system, an imperative and an ideal in Salamina. These aspects have produced an important agrarian change that could be understood as the next expression adapted from Lawson (2015):

Given Y_0*, in C, if X then* Y_1

In the context of the Plantationocene, which imposes structural conditioning (Y_0) as an imperative, representing both an ideal and a social system (Wolford, 2021), and within the broader framework of the political economy characterized by re-primarization, as often seen in Latin America (Veltmeyer & Lau, 2020), a significant transformation unfolds. This transformation occurs in traditional agricultural landscapes (C) that have lacked a plantation-based economy. It begins with introducing agroextractivist strategies, exemplified by large-scale commodity production (McKay et al., 2021). This strategic shift triggers a profound process of agrarian change (X). This agrarian change encompasses various facets, including shifts in land use, agricultural practices, labor dynamics, and economic structures. The outcome of this transformative process is the establishment and normalization of what we term the Plantationocene (Y_1), and produces cycles of normalization again in C and X (Figure 3).

4.2. Normalization of Plantationocene and other forms of Normalization

The approach I present here is groundbreaking because it introduces additional analytical components to comprehend the normalization process. While existing approaches such as landscape amnesia and creeping normalcy have highlighted how individuals adapt to gradual environmental changes (Diamond, 2011), they often stress that significant transformations are perceived as normal when, in reality, they unfold gradually through small, sometimes imperceptible increments (Kadykalo et al., 2022). These incremental changes are often attributed to the cumulative, conventional actions of individuals, ultimately leading to unsustainable environmental losses (Dearing et al., 2019).

In this paper, I present three distinct points. First, it is important to note that achieving a state of normality does not demand extended periods of gradual change. It is possible to analyze normality in rapid agricultural landscape changes, as I showed in Salamina with the incursion of Hass plantations. Second, normalization is not solely contingent on the voluntary acceptance of individuals. Rather, it is a process influenced by structural conditionings operating through a morphogenetic process (Figure 3). This notion aligns with the idea that fundamental structural tendencies within the global food system establish the prevailing normality of global capitalist agriculture today (Bernstein, 2010; Brunori et al., 2016). As emphasized by Giménez and Shattuck (2011), the global food crisis is an integral component of the normality of the corporate food regime. Finally, while the approaches mentioned earlier focus on the "what," I take a step further and establish the sketch for comprehending the process of normalization within the context of agrarian change (Figure 4).

4.3. Normalization: Some Limitations

In the debate surrounding the dualism of structure and agency (Archer, 2010), there have been notable advancements that introduce various dimensions to this spectrum. One such concept is the proposition of the "four-planar social being," where social events unfold across four distinct planes: human transactions with nature, interactions between individuals, the realm of inner being, and the dimension of social structures (Bhaskar, 2008a, 2020).

In the approach outlined in this paper, my primary focus has been on the process of normalization within the domain of social structures through the Morphogenetic approach. While I provided a general overview of human agency and transactions with nature, it is important to recognize that a substantial body of literature exists concerning material and non-material transactions with nature in the Plantationocene. This existing knowledge base provides a valuable foundation to build upon a

further understanding of normalization within traditional landscapes. Looking ahead, it is imperative to deepen into the normalization of the Plantationocene by addressing the following pivotal questions:

1. Why and how do interactions between people become normal in agroextractivist endeavors? This inquiry should explore the normalization of relationships, such as master-servant or patronage dynamics.
2. What Occurs at the level of individual psychology that facilitates the normalization of specific ways of thinking and behaving in the Plantationocene? This aspect demands attention from a psychological perspective to gain a comprehensive understanding.

There are additional limitations to this approach worth noting. First, the focus of this normalization process has primarily revolved around understanding agrarian and landscape changes within a Global South context, such as Colombia. To gain a more comprehensive view, further research should apply the normalization lens to a different and nuanced context. Second, it is essential to acknowledge that the approach presented here predominantly considers situations where traditional landscapes have been rapidly altered by introducing new land uses, like plantations. However, it does not account for the trajectories of change in regions with an established history of plantation-based economies. Finally, the approach focuses on the process of reproducing SEA, but it does not delve into the aspect of transformation and how a transition toward sustainability can be addressed. Further research should explore this dimension.

4.4. Final Remarks

The approach put forward here represents a significant step forward in our ability to grasp why plantations thrive in traditional agricultural settings. It transcends conventional economic reasoning by considering more structural factors. In doing so, I have presented a robust framework for comprehending the normalization process by amalgamating theoretical insights from cognitive sciences, implementation sciences, critical agrarian studies, and sociology. However, it is essential to acknowledge the epistemological foundation of this research, which is rooted in the recognition of the limitations of knowledge within the domain of transitive science. This perspective underscores the necessity of investigating the normalization process across diverse contexts, involving a range of knowledge systems and employing more advanced methodologies to fathom the intricacies within the

intransitive domain of science. Embracing this expansive outlook enables a more comprehensive understanding of the complexities inherent in the normalization of agrarian landscapes.

While we might perceive normalization as a process in which affected individuals succumb and merely replicate the existing social-agrarian-ecological (SEA) structures, it is crucial to recognize that human agency remains a significant factor. As shown in this paper, the agency keeps a space for fostering reflection and sustaining various forms of resistance and counterbalances, especially in the face of a system that exerts considerable pressure.

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