

Paper
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Food for Justice

Power, Politics
and Food Inequalities
in a Bioeconomy

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Food and urban politics in Belo Horizonte

Agroecology, activist coalitions,
and bottom-up technologies of
sustainable urbanization

Nicolas Goez



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FOOD FOR JUSTICE: POWER, POLITICS AND FOOD INEQUALITIES IN A BIOECONOMY

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Abstract

In this Working Paper, I aim to contribute to the emerging debate between food and urban studies by bringing to the fore the socio-political dimension of the food system and its urban context. Guided by the general research questions of the project “Food for Justice: Power, Politics, and Food Inequalities in a Bioeconomy”¹, this research is embedded in a case study on food politics in the city of Belo Horizonte. It deals with the social innovations of the agroecological and housing movements of the city and the dwellers of Izidora, inhabitants of a so-called “informal settlement”, whose engagement in the fight for housing and the right to the city has yielded remarkable achievements in building activist coalitions and re-signifying marginal urban spaces. Drawing on digital-ethnographic fieldwork I conducted between January and December 2020, I analyze the context, use, and reach of these social innovations as an instrument to transform urban development in the peripheries of Belo Horizonte.



KEYWORDS: Urbanization, Food Politics, Urban Politics, Agroecology, Social Movements

1. [i] What are the main justice claims against inequalities in the food system that mobilize citizens and consumers in different world regions? [ii] Which social innovations emerged from those concerns? [iii] How can successful social innovations influence public policies?

Short biography

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Introduction¹

Render Granja Werneck 2010 © Jaime Lerner Arquitetos Associados

In academic debates, urbanization and agriculture rarely appear in the same sentence as complementary. Despite the ecological relevance of their connection, the myriad of practices of food production in cities, and a growing mobilization around urban agriculture within food movements and urban movements, such convergence has not been taken up to the core of the interdisciplinary fields of urban studies and food studies. Urbanization and agriculture are rather shown as opposites, as different worlds – with urbanization being always on the negative side of the constellation, because it allegedly represents a challenge to a viable food supply, following the Malthusian logic: “how much food can we produce and how many mouths are there to feed?”

In today’s academic landscape, urban studies often neglect food-related issues in urbanization processes as if the food came from outside the boundaries of their research object [see also Brenner and Schmid 2012]. And on the other hand, food studies commonly engage with urbanization with concerns around overpopulation, as if the city was a mere final destination in the system [Battersby and Watson 2019: 1]. These two areas of study are talking past each other [Goodman, Dupuis, and Goodman 2012], leaving several linkages between the food system and urbanization in underexposure [see also Seto and Ramankutty 2016].

In this Working Paper, I aim to contribute to the emerging debate between food and urban studies by bringing to the fore the socio-political dimension of the food system and its urban context. Guided by the general research questions of the project “Food for Justice: Power, Politics, and Food Inequalities in a Bioeconomy”², this research is embedded in a case study on food politics in the city of Belo Horizonte. It deals with the social innovations of the agroecological and housing movements of the city and the dwellers of Izidora, inhabitants of a so-called “informal settle-

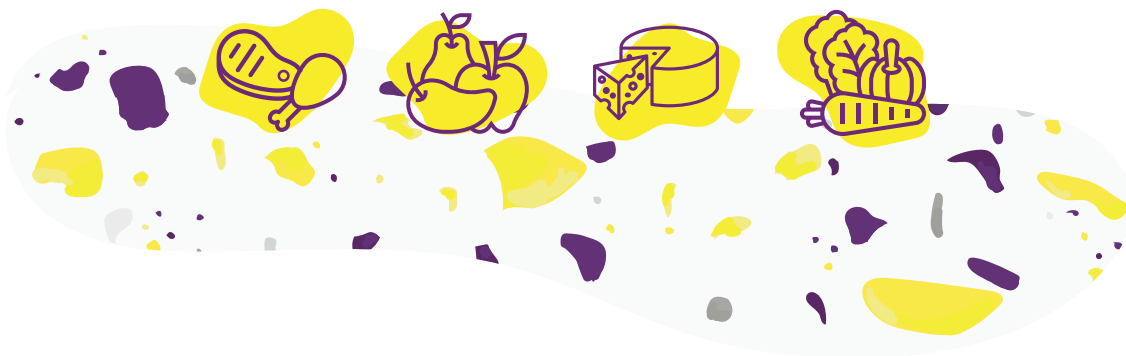


- 1 This Working Paper presents the research program of the Junior Research Group Food for Justice: Power, Politics and Food Inequalities in a Bioeconomy. The original research project that was submitted to the call for applications from the Bundesministerium für Bildung und Forschung (BMBF, German Ministry of Education and Research) in January 2018 was revised to incorporate suggestions made by the experts who participated at the selection committee in June 2018 as well as the preliminary findings and adaptations made since the beginning of the Research Group, in April 2019. Wherever the first results were published or presented at conferences, they will be quoted accordingly.
- 2 [i] What are the main justice claims against inequalities in the food system that mobilize citizens and consumers in different world regions? [ii] Which social innovations emerged from those concerns? [iii] How can successful social innovations influence public policies?

ment”, whose engagement in the fight for housing and the right to the city has yielded remarkable achievements in building activist coalitions and re-signifying marginal urban spaces.

Drawing on digital-ethnographic fieldwork I conducted between January and December 2020, I analyze the context, use, and reach of these social innovations as an instrument to transform urban development in the peripheries of Belo Horizonte. I argue that through activist coalitions, the joint work of agroecological movements and dwellers of urban peripheries in Belo Horizonte contributes to an alternative form of city-making by politicizing and adapting food practices to urban contexts and developing bottom-up technologies of sustainable urbanization that compete with institutional logics of urban planning. As a consequence, they produce new urban imaginaries and expose concrete potentials for social change that address different justice claims at the intersection of the food system and the city.

I divided the paper into three sections. In the following part, I raise some methodological reflections and introduce the case study of Izidora. After that, I discuss how Izidora’s activist coalitions formed and how agroecology and different alternative food practices played a central role in the process. In this section, I shed light on three interrelated processes that contributed to the construction of new alliances and the transformation of metropolitan peripheries: (1) the urban political process that led to the formation of activist coalitions; (2) the socio-spatial process in Belo Horizonte’s peripheries that enabled agroecological transformations; (3) and the food political process that fostered the incorporation and politicization of different alternative food practices in Izidora. Finally, in the last section, section, I draw some conclusions.



1 | Research methods and case study

Render Granja Werneck 2010 © Jaime Lerner Arquitetos Associados

1.1 Izidora, Belo Horizonte

The 10 square kilometers in the north of Belo Horizonte [see Figure 1], now called Izidora, are home to around 10.000 families who gradually started to occupy the land since 2011 [Indisciplinar n.d.]. There, the interests of different groups clash. Investors and profiteers of urban redevelopment projects, social activists, and dwellers meet in these peripheries.

The most recent owners before the occupations were the Wernecks, a wealthy family who owned the territory from the beginning of the 20th century until 2018 [Núcleo de Estudos de Populações Quilombolas e Tradicionais 2008]. In the past decade, they sought to execute a gigantic urban development project in Izidora which was supposed to be co-financed through a private-public partnership with the social housing program “*Minha Casa, Minha Vida*”³. The project – called Granja Werneck – envisioned a thorough transformation of the area, that would create a new central node in the northern bounds of the city and dock to other metropolitan ventures, such as the *Cidade Administrativa do Estado de Minas Gerais*, the Cristo

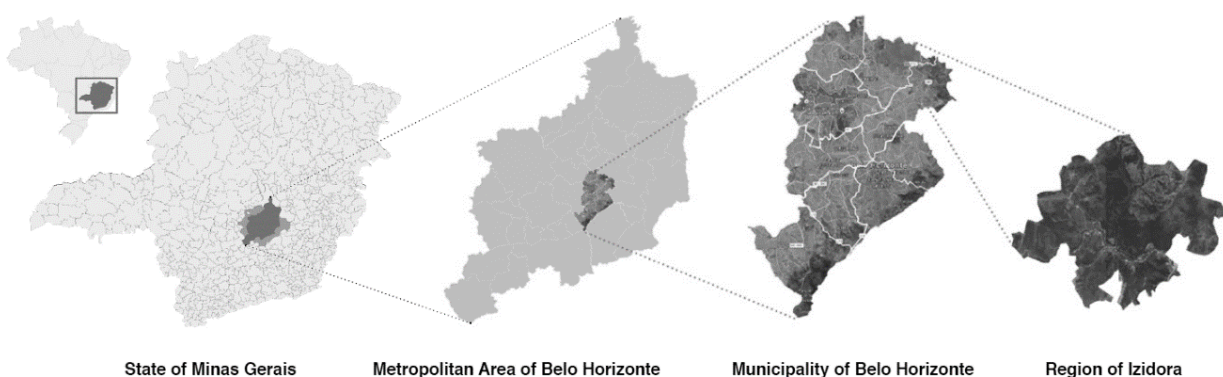


Figure 1 – Map of Brazil, Minas Gerais, Belo Horizonte, and Izidora

3 The work of Franzoni, Alves, and Faria [2018] shows how Granja Werneck sought to take advantage of tax exemptions of the social housing program and cooperated with other actors of the private sector to create an intricate financial plan with several irregularities. The plan raises many doubts about the legality of the enterprise. For a render and a short description of the urbanistic project, see also <https://www.jaimelerner.com/portfolio/granja-werneck>.

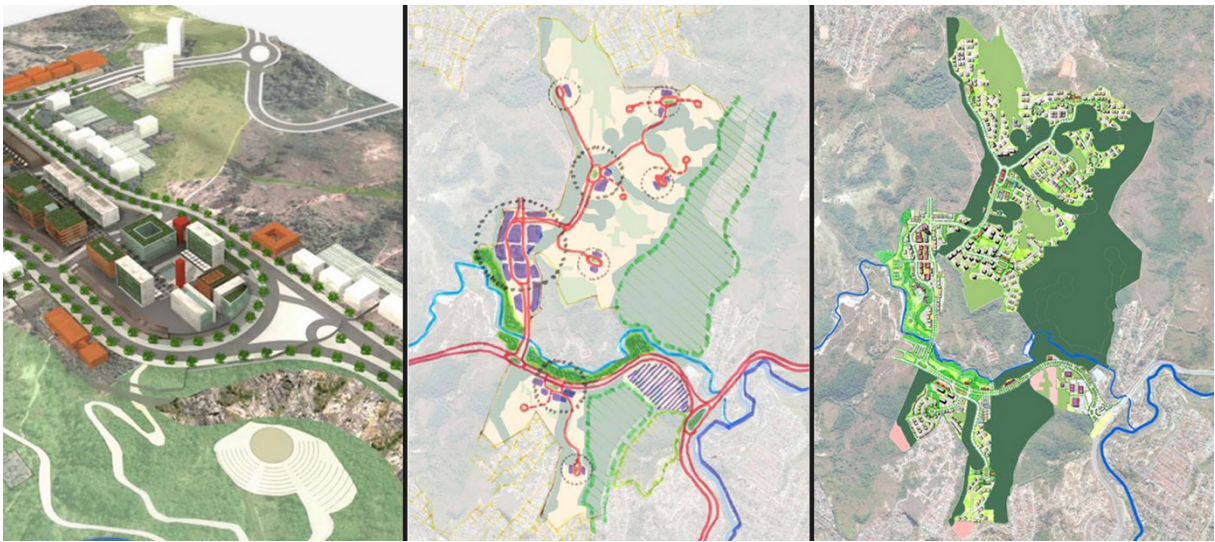


Figure 2 - Render Granja Werneck

Rei Cathedral, and major projects of urban transportation [Delze dos Santos 2017; Franzoni, Alves, and Faria 2018] [see Figure 2]⁴. However, the Granja Werneck was contested and blocked by a coalition of social movements and dwellers.

The first residents of Izidora started to settle around 2010 in the Neighborhood Helena Grego, and mid-2013, in Rosa Leão, Vitória, and Esperança [see Figure 3]. Rapidly, support from different social movements arrived and with joint efforts, they formed the network #Resistelizidora. This was a coalition of movements fighting for housing, articulating agroecology, sustainability, gender, racial, and social justice as well as the right to the city.

Between 2014 and 2018, they found the main articulation of activism in the urban territories produced in Belo Horizonte's peripheries. And similar patterns that occurred in Izidora were replicated in other occupations. The coalition expanded at the metropolitan level, having a tremendous impact on the politics of the city and setting legal precedents at the Federal Tribunal of Minas Gerais [Tribunal de Justiça de Minas Gerais 2018].



Figure 3 - A House in Izidora in 2013

4 See also: <http://oucjh.indisciplinar.com/>.

Struggles for urban land like this one have gained popularity in the Metropolitan Area of Belo Horizonte for more than a decade (Paolinelli and Canettieri 2019; Canettieri, Paolinelli, and Campos 2020), drawing increasing national and international attention. Housing movements have innovated with their organization schemes and their coalitions (Branco Lourenço 2014; Delze dos Santos 2017; Dias et al. 2017; Ferreira and Jayme 2019). They have adopted new forms of resistance, such as leisure, e.g., through the politicization of the carnival and other local celebrations (Galera 2019); they are addressing Blackness and housing issues (Silva 2018), the right to the city (Franzoni 2018), different spheres of activism and collective action (Grossi de Oliveira 2016), as well as agroecological knowledge production (Tonini 2020), urban gardening and micro-politics (Pundek Scapinelli 2018), among others. For this reason, Dias et al. (2019) refer to these housing struggles as “new urban occupations” and embed their actions in a broader process of “informal urbanization” (see Rocco and Ballegooijen 2019).

Against this background, the dwellers of Izidora and the activist coalitions of Belo Horizonte supporting them serve as a case in point to analyze a diversity of justice claims at the intersection of the food system and the city. It offers a prism to investigate some of the links between food politics and urban politics as well as an array of social innovations that appear between them. What happens, for example, when agroecology engages in struggles for housing? How do on-site alternative food practices contribute to the transformation of the neighborhoods?



Visita técnica ao Sítio Ibirité, Belo Horizonte
2017 © Renata Motta

1.2 Methods and research context

The research that underlies this Working Paper began shortly before the COVID-19 pandemic started. Formerly conceived as an ethnography of an urban territory [Streule 2018], I had to change my approach due to the challenges posed by the health contingency. Digital ethnography was a useful tool to overcome these difficulties and proved to be appropriated to researching Izidora. Two premises were key: [1] it is not possible to stringently separate the digital world from the analog and [2] it is possible to learn about the analog world while *being in* the digital one [see also Pink et al. 2016]. For today, the internet has become a central societal sphere. The digital world is now part of our lives.

Being in Izidora and Belo Horizonte via the internet was a new and confronting experience. I systematically explored satellite pictures, Facebook, Instagram, and Twitter profiles. But above all, I watched YouTube videos in which the characters of Izidora themselves narrate their stories. Pink, Horst, et al. [2016:134] sustain that these are new forms of “*being there*”. Ethnographic instruments change along with society and thus, the digital world opens a new world of possibilities [this discussion can, e.g., be reviewed here: Pink et al. 2016; Underberg-Goode 2020; Hanerz 2003; Hjorth et al. 2017; Pink, Ardèvol, and Lanzeni 2016]. This research was possible because of how our societies have incorporated the internet and social networks in daily life. Hence, having approached Izidora digitally was insightful for at least four reasons.

[1] Brazil is one of the countries with the most widespread use of smartphones. As of 2025, more than 70 per cent of the population are expected to be smartphone users [STATISTA 2021]. Regardless of class, cellphones have permeated the entire country. So, it should not be a surprise that also Izidora – as housing movement – strived to show its presence and activity via digital actions.

[2] The content uploaded by Izidora’s dwellers was part of their public strategy to connect with other social classes and activist movements, as well as condemn the eviction threats. #Resistelizidora – the hashtag of their campaign – includes hundreds of posts from activists, dwellers, politicians, and students with footage from past protests, testimonies, and many more. This functions as a sort of contemporary archive of events.

[3] Besides the widespread popularity of social networks and the political use of the internet, the digital approach allowed me to trace back the developments of the territory from previous years, given the availability of archives from past events. Through social media, I could see, for instance, how the occupation began and how the pandemic arrived.

[4] Furthermore, different aspects that could have posed challenges in analog fieldwork – such as getting entry, confidence, finding key informants – were relativized on the internet. Throughout the year, I had easy access to all social networks, which made my research field very reachable. I resorted thus to digital spaces, not seeking to compensate for the flaws of not being on-site but rather took on the

challenge of experimenting with alternative ways to studying socio-spatial phenomena and coping with the limits presented by the COVID-19 pandemic.

1.3 Data collection and analysis

After conducting a literature review of past research with Izidora, the procedure of the fieldwork was iterative (Aspers & Corte, 2019). I began watching the videos of the YouTube channel #Resistelizidora, as well as the posts under that hashtag on Instagram, Facebook, and Twitter. This helped me to find orientation in the timeline of the conflict and trace the principal actors around #Resistelizidora. Then, I compared these initial observations with the works of Bittencourt (2016), Canettieri, Paolinelli, and Campos (2020), and Grossi de Oliveira (2016) to seek commonalities and divergencies. This step introduced me to different actors involved in the occupation processes which I kept track of by creating vignettes with basic information and some relevant links. There, I wrote memos, reflections, and protocols of my fieldwork.

Table 1:
Researched Online Actors Ordered by Activist Cause

Activist Cause	Actor
Housing Activism	"Movimento de Luta nos Bairros, Vilas e Favelas" (YouTube) "Brigadas Populares" (YouTube) "Frei Gilvander Luta pela terra e por Direitos" (YouTube) "#Resistelizidora" (YouTube) "@luhdepaulaoficial" (Instagram) "@charlenecristiane2012" (Instagram)
Academic Activism	"Indisciplinar - UFMG" (YouTube & Website) "AUÊ! Estudos em Agricultura Urbana - UFMG" (Website)
Agroecological Activism	"Agroecologia Na Periferia" (Facebook) "IV Encontro Nacional de Agroecologia Belo Horizonte" (Website)
Overlapping Causes	"Projeto Derivas" (YouTube) "@bellagoncalves_bh" (Instagram)

Due to the overwhelming quantity of information on the internet about Izidora, I focused my observations on central actors which I categorized in three general areas that were most salient on the internet: housing activism, academic activism, and agroecological activism [see Table 1]. I analyzed more than 72 hours of video footage and around 1000 posts on Instagram and Facebook. Once I began filtering the main actors, I left Twitter out of the analysis since I preferred audio-visual over written material. After having reviewed the data, I selected four hours of video footage, 33 photo albums of Facebook, and five websites of academic activism for further analysis⁵. These data were the best in audio-visual quality as well as information richness. With the help of MAXQDA, I coded the data in two steps: first, inductively, looking for general patterns and themes; and second, axially, analyzing convergences between the initial codes.

1.4 Limitations

Although researching Izidora through the internet was fruitful, there were also limitations. Two were especially challenging:

A staged public sphere

The first limitation is the difficulty of discerning between staged and non-staged online content. Usually, before uploading something to the internet we go through a decision-making process; we take, for example, more than one picture to see which one is better. We read and re-read our posts before publishing them or even edit them after they are online. We also decide who can see them and who cannot. This allows us, users, to present our content exactly as we want to or make it disappear whenever we feel like making a change. This posed certain limitations to my approach. Due to the staged character of social networks, it was difficult, for example, to perceive tensions between social movements. The internet delivered such a positive picture of the alliances and the cooperation between the different activists that inter-group politics do not play a role in this analysis.

Different use of the internet

While trying to understand the broad characteristics of the conflict in Izidora, it was a challenge to find online sources from non-activist stakeholders, such as the municipality or potential investors for the squatted area. At the beginning, I thought that their internet presence was not as strong as that of social movements. Afterwards, I realized that rather the use of the internet was different. While social movements use the web as a place to do politics, to network, and make public statements, the municipality uses it to represent its entire state services, going thus far beyond localized issues like Izidora. And on the other hand, potential

⁵ I thank Claudia Maciel who helped me with the transcriptions and the meanings of some expression that were new to me. Her support was key to prepare the data.

investors, use the web to present a portfolio of their entrepreneurialism which does not address any conflicts [see, for example, <https://vimeo.com/24849676>]. These different uses of the internet were a limitation to gain insights into the perspectives of the private sector, as well as municipal authorities. Therefore, this project focuses mainly on the perspective of the social movements.

In the following section, I introduce the social innovations brought by these movements as well as three interrelated processes that made them possible.

Caravana Marcha das Margaridas, Belo Horizonte 2018 © Renata Motta



2 | Urban and food politics in urbanizing peripheries

Render Granja Werneck 2010 © Jaime Lerner Arquitetos Associados

The residents of Izidora have constructed a neighborhood beyond institutional regulations. Therefore, they built and resorted to alternative logics of urban development without a top-down urban planning strategy. This required inventive practices which they found partly in agroecology.

According to Victor Toledo (2019:85), “*Agroecology is an emerging field of knowledge that offers solutions to the serious environmental and food production problems caused by modern or industrialized agriculture and agribusiness in the entire world*”. It is an activist endeavor that combines techniques from the social and natural sciences to tackle environmental and social issues related to agriculture. It is grounded on the construction of networks between praxis, knowledge and social movements, offering a holistic perspective of agriculture [see Méndez, Bacon, and Cohen 2013]. This holistic understanding offered the tools to produce other kinds of space which one of the activists called “*technologies of sustainable urbanization*” [BG Instagram Live - Fieldwork 2020].

The residents of Izidora have deployed these, paving the way for an agroecological approach to city-making. In this regard, the innovations are based on alternative logics of urban planning that fuse rurality and urbanity in peripheral areas of Belo Horizonte. Agroecological practices were key in their struggle. In Izidora, the residents and activists showed the blurriness of urban-rural boundaries. New representations of the urban emerged through the adaptation of agricultural practices and the peripheral territories of Belo Horizonte were transformed through an array of material and immaterial innovations derived from agroecology.



Material innovations:

The agroecological technologies used by the dwellers accelerated the transformation of the first shacks to more durable houses, as well as the construction of infrastructure for the management of residual water and daily waste. In general terms, they shaped the planning practices and guided the modes of inhabiting the territory. The holistic understanding of agroecology offered the tools to produce other kinds of space which one of the activists called “*technologies of sustainable urbanization*” (BG Instagram Live - Fieldwork 2020). They comprised techniques of composting, cultivating, managing resources, and constructing sustainably. One of the most fundamental aspects was water and waste-water management. This was not only because of the relevance of water for every-day life but also because it created a key infrastructure for the neighborhood. Take, for example, the evapotranspiration tank.

An evapotranspiration tank is a biological system to treat and reuse the nutrients in residual water. This system is widely implemented in permaculture and a cheap functional irrigation solution since it does not need electric power (da Costa Pereira Leal 2014). An activist in Izidora defined it as:

“[...] a big ecological filter. We use tires, construction material, gravel, sand... And on top of this structure, this box, you plant species like taioba, banana, yam, these crops that demand a lot of water. This way, you can solve the sanitation problem with the productive alternative.” [Agricultura em Izidora – Fieldwork 2020].

The system relies on the climatic evaporation and the transpiration of the plants to reuse the residual water (see also da Costa Pereira Leal 2014). In Izidora, the residents implemented this technique to meet their infrastructural sewage needs and attain higher agricultural produce (see Figures 4 - 6). Together with members of the agroecological movements, they constructed the tanks in different parts of Izidora, shaping thus the space in the new neighborhood.



Figure 4 - Construction of the Evapotranspiration Tanks



Figure 5 - Construction of the Evapotranspiration Tanks



Figure 6 - Evapotranspiration Tank Workshop and Agroecological Sewage System Workshop

Immaterial innovations:

Besides the agricultural technologies that served to meet the infrastructural needs of Izidora's residents, immaterial innovations derived from agroecology's principles, such as circularity, human-nature conviviality, and social-ecological justice. These principles were discursively relevant for the transformations in Izidora. One of the activists in Izidora puts it this way:

"Is it possible to think of coexistence between nature and the people in the community? Is it possible to think of a form of ecological sanitation near the areas where there are creeks, where there are rivers? [the municipality] doesn't propose that, do they? It is always the same model for the whole city, and this is something that we are questioning a lot." (Projeto Derivas 1 – Fieldwork 2020)

This quote reveals a great deal about how agroecological principles have been mobilized by dwellers and activists in Izidora. The technologies of sustainable urbanization are being deployed to question common conceptions of urban planning, picture new imaginaries, propose a different urbanization, and make another city. The aim of Izidora as a social movement is hence not just legalizing houses and asphaltting streets. They are rather contesting social inequalities, claiming citizenship, building resilient communities, and consolidating solidarity networks. And the new narrative the dwellers used for this was supported on agroecology. The immaterial innovations lay on the way how agricultural practices became a means of protest and contestation. Farming in the peripheries, whether in a community garden or in the own, was a way to urbanize peripheries and appropriate space (see Figure 7).



Figure 7 - Workshop of Agricultural Knowledge Exchange in Community Gardens

In Izidora, agroecology helped politicize agriculture and transform related practices into political expressions to claim fundamental rights. These were made possible due to three simultaneous processes taking place in Izidora and Belo Horizonte: *an urban political process, a socio-spatial process, and a food-political process*. In the following section, I will introduce them and show how they were central for the transformations in Izidora, the construction of coalitions and the adaptation of agroecology as a sustainable technology of urbanization.

◆ 2.1 The urban political process

The entire mobilization in Izidora cannot be understood without taking into account a larger political process whose development can be traced back to the 1990's. This helped shape not only the formation of new urban territories in the peripheries of Belo Horizonte but was also determinant for the emergence of new political subjectivities and alternative ways of making politics at the municipal, state, and federal levels. According to Laís Grossi de Oliveira (2016), this led to the construction of new alliances through the encounter of two forms of urban activism.

On one hand, there were the already established activist groups that emerged during the democratization period in Brazil, during and after the endorsement of the 1988 constitution (ibid.: 35). Back in the 1990's, these groups consolidated a strong movement that helped incorporate a great number of activists into the institutional networks, cooperating with progressive politicians such as Patrus Ananias (ibid.). In 1993, these cooperations were, e.g., key for his victory in the municipal elections.

And on the other hand, the construction of new alliances was possible due to the convergence with emergent movements. The established movements encountered new political expressions and initiatives, which Laís Grossi de Oliveira (2016:37) calls "new urban activisms". That is, non-institutional actors who stand out due to the novelty of their strategies, articulations, and actions. They seek to influence institutional spheres as well as appropriate public spaces. The main differences between the established and the new urban activisms lay in the movements' relation to space, the use of the internet, and the spread of information (ibid.:15). The impact of these new activisms was far-reaching. This generation of activism drove the restructuring of existing constellations among the social movements in the metropolitan area (ibid.).

Thus, the struggles taking place in Izidora merged with a variety of established and novel movements which created different nodes of urban politics. This convergence embraced both institutionalized and non-institutionalized forms of politi-

cal expressions, of which *Gabinetona*⁶ and *Assembleia Popular Horizontal de Belo Horizonte*⁷ stand out. In the former, the institutional mandates of the local deputies Áurea Carolina, Bella Gonçalves, and Cida Falabella were collectivized through workshops and round tables with social movements. And the latter functioned as a coalitional platform for different social movements and progressive politicians.

For Izidora, this meant diversification of allies, the distribution of tasks with partners acting at judicial and political levels, and a bridge to social groups that would otherwise not be primarily concerned with peripheral neighborhoods, such as the upper-class students' movements of the Pontifical Catholic University of Minas Gerais [see Figure 8].

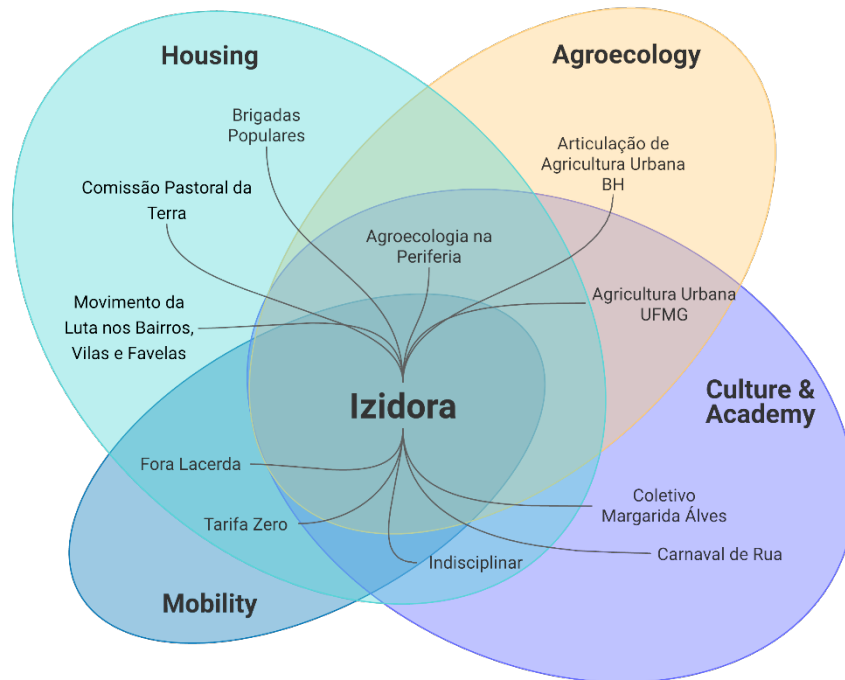


Figure 8 - The Convergence of Selected Activisms in Izidora

What all these groups had in common was an alternative way of seeing the city. This convergence was the fertile ground to build a solid support network. Bella Gonçalves – activist and politician – put it in the following words:

“We always fought not only for the right to housing but for the right to the city. The right to the city implies a possibility for us to imagine and construct cities that are oriented toward the ‘bem viver’” (BG Instagram Live – Fieldwork 2020).

6 See <http://gabinetona.org/site/> - last accessed: February 22, 2021.

7 See <http://aph-bh.wikidot.com/sobre> - last accessed February 2021.

And in this sense, it was agroecology the real amplifier of the coalition building processes around the right to the city. She continues:

“If we don’t think about food security, the balance between the urban environment and nature, we are going to live in cities that are increasingly sick, increasingly susceptible to flooding, landslides, hunger...so, building cities for bem viver requires that we go through [...] a transition of sustainability and agroecology [...]” (BG Instagram Live – Fieldwork 2020).

This idea expanded to diverse social movements, art collectives, unions, feminist associations, etc. A considerable part of the video materials about the struggles in Izidora involved actions around agroecology and urban agriculture. In the different community gardens, activists from diverse backgrounds met and organized. Movements against racism, pro-feminism, fighting for housing, ecological, and LGBTQ* rights gathered there, as an alliance of urban politics, to re-think and re-make the city. Thus, spaces of urban agriculture became places of politics and collective encounter, a pattern that has been studied in other cases as well (e.g., Tornaghi and Certomà 2018).

And through agroecology, the dwellers of Izidora and the activist networks sought to tackle a broad array of inequalities: unequal access to housing, infrastructure, and state services, environmental and food inequalities as well as racial and gender inequalities. Izidora became thus a space of political convergence.

◆ 2.2 The socio-spatial process

The transformation of Izidora into a space of political convergence was possible due to a socio-spatial process that was changing Belo Horizonte’s peripheries: a *peripheral urbanization*, as proposed by Teresa Caldeira (2017). I lean on her concept to analyze the socio-spatial transformations in Izidora in relation to the agroecological innovations as it delivers a tool to address the political process that occur in the spatial production in urban peripheries:

“[Peripheral urbanization] refers to modes of the production of urban space that (a) operate with a specific form of agency and temporality [found in urban “informal” settlements], (b) engage transversally with official logics, (c) generate new modes of politics through practices that produce new kinds of citizens, claims, circuits, and contestations, and (d) create highly unequal and heterogeneous cities.” (Caldeira, 2017:4).

I argue that such a process of peripheral urbanization in Izidora enabled the formation of coalitions and the adoption of agroecological technologies in at least three dimensions.

[1] Place and space as a resource:

Izidora’s social movements and residents transformed their environment and produced new spaces. They built enough buildings to house more than 10.000 families, turned key locations into community gardens or cultural centers, and constructed

public infrastructures such as roads, a sanitation system as well as diverse local supply centers [see Figures 9-11]. These spatial transformations were translated into material resources that residents and activist used to encounter and articulate their political agendas and agroecology was a central driver for this. Galera, D'Agosto, and Fonseca [2019] show, e.g., the relevance of the Fourth Encounter of the National Articulation of Agroecology with other social movements in a community garden in Izidora.

[2] Complex interactions with the state:

Since 2011, Izidora's social movements and residents developed and consolidated a variety of political subjectivities through which they "engaged transversally with official logics" [Caldeira 2019:4]. Activist groups – established and new –, for example, were able to act within institutional frames. The most notable cases are the cooperations with the Undersecretariat for Food and Nutrition Security [executive power within the municipality] and the Gabinetona [representing three local parliament members at municipal and state level].

The former worked with agroecological activists and funded workshops, meetings, and courses for Izidora and other neighborhoods to introduce and spread agroecological practices [see <https://t1p.de/trilha-agroecologica>]. The Gabinetona, for its part, introduced the so-called "mandato popular" [people's mandate] which included activist groups in the parliamentary work of the elected representatives Bella Gonçalves, Andréia de Jesús, Áurea Carolina, and Cida Falabella [see <https://gabinetona.org>]. Through the People's Mandate, several interests of Izidora are advocated for at local and state level.

In this sense, the interactions with official logics are not only reduced to a reaction by judicial rulings and police forced evictions as it is often the case when there are informal settings and when their dwellers' actions are transformed into illegally. Rather, they are characterized by a complex network of relations, interest, and strategic convergences. Hence, through the socio-spatial process taking place in the peripheries of Belo Horizonte, the activist coalitions in place created new channels of action and communication with the State. These channels revolved most of the time around housing and infrastructural issues and were hinged by agriculture and agroecology. This fostered a new mode of politics.

[3] Other modes of politics:

In Izidora, the construction of alliances and the formulation of agroecological innovations was embedded in an assertion for political empowerment and citizenship. This assertion runs through political actions, struggles for food and environmental justice, housing, mobility, access to state's services and infrastructure. It is a form of "insurgent citizenship" [Holston 2009] in the peripheries of Belo Horizonte. Resistance practices were key in this and based on them, these insurgent citizens propose other modes of politics that are possible within the process of peripheral urbanization: *resistance as a reaffirmation of dignity* and *resistance as civil disobedience*.

While civil disobedience appears as a reaction to concrete threats, such as eviction

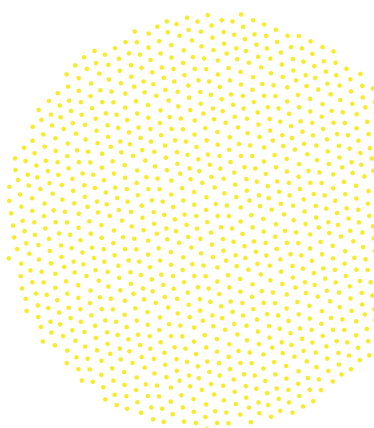




Figure 9 - Community Garden in Izidora



Figure 10 - Cultural Center Zoca in Izidora



Figure 11 - Aerial View of Izidora

attempts [see Figure 12], the *reaffirmation of dignity* permeates the daily life of Izidora’s residents. It manifests in “everyday politics” (Beveridge and Koch 2018) through activities such as agriculture or events such as the carnival. The formation of Izidora as a space is a political statement itself and agroecology one of the most powerful tools to it.



Figure 12 - Barricade against evictions

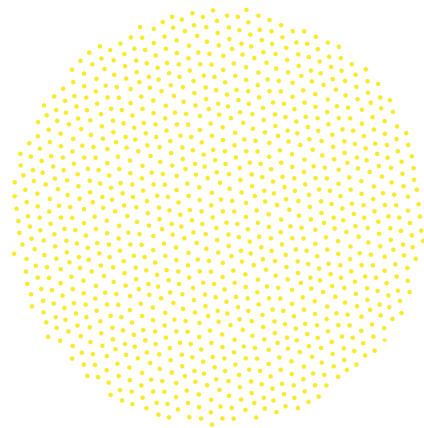
2.3 The food-political process

The food-political process that eased the incorporation of agroecological innovations in Izidora can also be traced back to a convergence of federal and local programs, policies, and activisms at the turn of the past century.

At the local level, Belo Horizonte has been in the spotlight since the early 1990’s due to its social programs fighting hunger. The initiatives of Mayor Patrus Ananias’ government (1993-1997) were especially prominent and later replicated at federal level. During his period as mayor, the Secretariat for Food Policy and Supply (Secretaria Municipal Adjunta de Abastecimento—SMAAB) was created and a broad array of policies that sought to fight hunger was endorsed (Rocha and Lessa 2009). Belo Horizonte became a role model in terms of food politics. In this context, the FAO recognized the efforts of Belo Horizonte as Best Practices (Rocha and Lessa 2009; FAO 2018; Giordano et al. 2018).

Most notably at federal level stand out the National Food and Nutrition Policy, endorsed in 1999 [Decree°710, Health Ministry of Brazil], and the program Fome Zero, after the election of Luiz Inácio da Silva in 2002 (da Silva, Del Grossi, and de França 2011). During his government (2003-2011) and the subsequent period of Dilma Rousseff (2011-2016), the fight against hunger acquired another character at national level.

Food security became one of the main goals of this period and was enshrined in



the legal apparatus, e.g., through the Organic Law for Food Security and Nutrition which recognized the access to food as a fundamental right [Law nº 11.326, 2006]. As a result, Brazil gained international recognition in food-political matters and achieved unprecedented levels of food security [77,4 per cent of all Brazilian households] [Instituto Brasileiro de Geografia e Estatística 2013]. Nation-wide, this fostered a favorable climate for food-related struggles and political engagement.

Against this background, historically strong social movements related to the agrarian question in Brazil could position their agendas. One of their strategies was the strengthening of their presence in urban centers. The Movimento dos Trabalhadores Rurais Sem Terra [MST] is exemplary for this. During the 1990's, they began to cooperate with myriads of movements in cities as part of their strategy, thus establishing as one of the most relevant actors in the country [Maçano Fernandes 2012]. In Izidora, such extension of food and agrarian struggles to urban context also eased the cooperation between social movements.

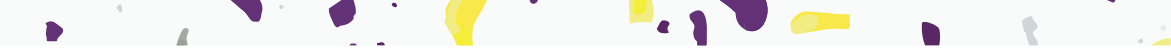
In Izidora, the work of the Secretariat for Food Policy and Supply – since 2017 the Undersecretariat for Food and Nutrition Security [SUSAN] – was a crucial hinge between the food-political process and the peripheral urbanization that was underway. The cooperation between food activists and this municipal organ was central for the permeation of agroecological innovations in Izidora.

As I showed at the beginning of this section, activists and residents of Izidora articulated their innovations through agroecological technologies such as the evapotranspiration tank, circular waste management, and the community gardens. All that would have not been possible, if it was not for the institutional setting and the work of social movements that facilitated food-related politics since the 1990's.

In Belo Horizonte, the most recent dynamics of this food-political process are related to the work of agroecological movements. The Articulação Nacional de Agroecologia, acting as a network at federal level, has been key, among others, due to the National Encounter of Agroecology [ENA]. The fourth edition of this event, which took place in 2018, was central for fostering coalitions and expanding activist networks in Izidora. There, food movements from all over Brazil met to discuss issues around agroecology and exchange perspectives. The agroecological transformations in Izidora are described in the following quote of the official publication of the 1v ENA:

„The voices of the territories heard in our Meeting showed how agroecology has been built [...], in forms of creative resistance put into practice by our organizations and networks. [...] these experiences showed how the territorial networks of agroecology are decisive in the construction of the just, egalitarian, and sustainable society for which we fight.“ [Encontro Nacional de Agroecologia 2018:59 - translation by the author].

These so-called agroecological experiences happened in Izidora due to the engagement of local movements such as Agroecologia na Periferia and the Articulação Metropolitana de Agricultura Urbana. Their presence in Izidora has been



central and a manifestation of the food-political process taking place at different scales. By politicizing and adapting food practices to urban contexts, the residents and activists in Izidora have developed bottom-up technologies of sustainable urbanization to transform the peripheries of Belo Horizonte. These technologies compete with institutional logics of urban planning and, thus, agroecology – often associated with a purely rural alternative – is being rethought and translated to the city.



Conclusions

In this paper, I argued that through activist coalitions, in particular with agroecological movements, the dwellers of Izidora contribute to an alternative form of city-making. These movements politicize and adapt food practices to urban contexts, thus, developing bottom-up technologies of sustainable urbanization that compete with institutional logics of urban planning. As a consequence, they produce new urban imaginaries and expose concrete potentials for food practices as promoters of *social change* (Motta 2021a:7; 2021b) that addresses different justice claims at the intersection of the food system and the city.

From this standpoint, Izidora is part of a local dynamic of urbanization that is producing new spaces and contesting urban and food inequalities (see also Indisciplinar n.d.; Motta 2021b). The coalitions around this neighborhood propose a shift of perspective based on agriculture and agroecology, towards bottom-up sustainable urban transformations, and the hope of affordable housing.

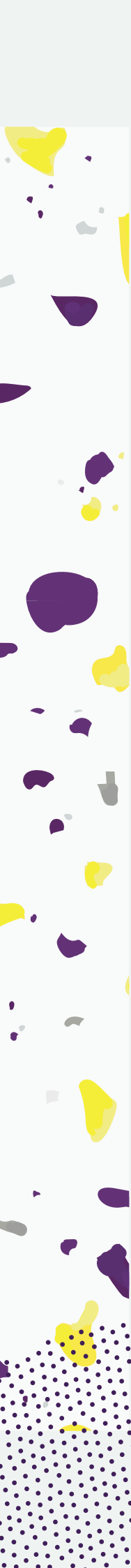
This has been enabled by three processes that have taken place at metropolitan level: (1) the urban political process that led to the formation of activist coalitions; (2) the socio-spatial process in Belo Horizonte's peripheries that enabled agroecological transformations; (3) and the food political process that fostered the incorporation and politicization of different alternative food practices in Izidora.

Thus, agroecology has had a transformative impact on the peripheries of the Metropolitan area, as well as offering new imaginations of the city. It functioned as a hinge between the material composition of Izidora and the political articulation of the activism therein. Through the holistic approach of agroecological practices, the dwellers of Izidora successfully met some of their basic infrastructural needs – most remarkably the sewage infrastructure and reuse of greywater, but also the waste management through optimized composting methods and self-constructed water rams.

The logics of agroecology permeated the way space was produced and inhabited. Innumerable gardens emerged and residents developed relationships of care with the environment. In return, these new spaces thrived as political places. Beyond the political articulation and material composition, agroecology was also a powerful tool to think of cities differently and foster human-nature conviviality. The technologies of sustainable urbanization deployed in Izidora carried an idea that conceives cities beyond institutional logics of urban planning.

Izidora offers thus new imaginations of the city and also new concepts to make sense of the different phenomena we find there. In practice, the dwellers of this territory advocate for an ecosystemic approach to read our cities. And that, to my eyes, is an innovative vision concerning the future of food in the city.

I began this working paper arguing that there are linkages between the food



system and urbanization that merit closer look. I believe these results to be one of the underexposed linkages that could offer us a heterodox perspective to analyze the transformation of cities in relation to the food system and toward a sustainable future. It is precisely at the intersection of urban politics and food politics that this link is best seen, since both the city and the food system are not only “habitational” and “nourishing” worlds, but also arenas of political contestation, social encounter, and social inequalities. They are both product and stage of society. Food and urban spaces are interrelated and in constant interaction, beyond conventional rural-urban divisions.

Other (In)Conclusions

On the 9th of November of 2018, the Federal Tribunal of Minas Gerais rendered a verdict in favor of the dwellers of Izidora. A long process of negotiations in the court and on the streets came to an end on that day. At the same time, a new process began. The agreement between the parties stipulated the compensation for the previous owners of the property and the legalization of the settlements. The Habitational Company of Minas Gerais (Cohab Minas) bartered a property of theirs for the title of Izidora, through which the land passed into the hands of the state. The agreement further compelled Cohab Minas to start the administrative process of Land Regularization of Social Interest (Reurb-S) to grant the dwellers of the new neighborhoods the appropriate deeds, working closely with the neighbor’s associations and the social movements on site (Tribunal de Justiça de Minas Gerais 2018). According to the legal document, the regularization of the land is subject to the guidelines of the State Plan of Housing and the conditions set by Cohab Minas. So, although the litigation was settled, the political articulation in Izidora continues.

Since 2020, the challenges that the dwellers of Izidora face have changed. With heavy rains in 2020 and 2021, infrastructural deficits gain more visibility and although Cohab Minas and the Urbanizing Company of Belo Horizonte (URBEL) committed to providing the proper infrastructure, landslides have been a recurring problem and street lights have not been installed (as of September 2022). The pandemic has also brought difficulties for the residents of peripheral neighborhoods. Thanks to agroecology, food insecurity in the territory has been contained to a certain extent. But it is not enough. Many of the residents lost their jobs during the first year of the pandemic, have reduced access to the health system, and are most affected by the dynamics of the food system in Brazil (see Galindo et al. 2021). Under current circumstances, the asymmetries in Brazilian Society take a different form for the dwellers and the struggle in Izidora transform, too. After the legalization of their homes has been secured, the guarantee for other rights is yet to come.

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