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SAINT JOAN OF THE STOCKYARDS MEETS THE CHICAGO SCHOOL: CHALLENGING THE DISCUSSION OF URBAN SPACE IN HUMAN ECOLOGY

SANTA JOANA DOS MATADOUROS AO ENCONTRO DA ESCOLA DE CHICAGO: IMPULSIONAR O DEBATE SOBRE ESPAÇO URBANO EM ECOLOGIA HUMANA

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Abstract

This paper uses Brecht's stage play *Saint Joan of the Stockyards* as scenery to critically analyze the Chicago School's approach towards human ecology which primarily targeted the environmental and temporal circumstances of human existence and engaged in a biologicistic and competitive view of social relations. In the context of Chicago during and after WWI and bearing on the relevance of the meatpacking industry, I argue that scholars like Park, Burgess and McKenzie and their referral to the 'laws of nature' informed (and were informed by) a reciprocal process between existing prejudices and beliefs and academic research, shaping an idea of urban space and the 'ghetto' that supports the segregation of black, indigenous and people of color up to the present day. In contrast, recent concepts in human ecology consider tackling the complexity of urban systems in all its dimensions within a framework of transdisciplinarity and post-normal science.

Keywords: Chicago School; urban space; human ecology; epic theatre

Resumo

Este artigo utiliza a peça de teatro de Brecht *Santa Joana dos Matadouros* como cenário para analisar criticamente a abordagem da ecologia humana pela Escola de Chicago que se caracterizava pelo foco nas condições ambientais e temporais da existência humana, dando primazia à uma visão biologista e competitiva das relações sociais. No contexto da cidade de Chicago durante e após a Primeira Guerra Mundial, e tendo em conta a importância contemporânea da indústria da transformação de carnes, alega que académicos como Park, Burgess e McKenzie, dando ênfase às "leis da natureza", informaram (e foram informados por) um processo recíproco entre preconceitos e crenças existentes e a investigação académica que acabou por moldar uma noção de espaço urbano e de 'gueto' onde a segregação de negros, indígenas e pessoas de cor acaba por se concretizar até hoje. Por outro lado, conceitos recentes em ecologia humana começam a abordar a complexidade das múltiplas dimensões do sistema urbano dentro de um quadro metodológico transdisciplinar e informado pela ciência pós-normal.

Palavras-chave: Escola de Chicago; espaço urbano, ecologia humana; teatro épico

Because the slums breed immorality, and immorality breeds revolution. But now let me ask you just this: Where are these people's morals to come from when they have nothing else? (Brecht, 1991, p. 38)¹

INTRODUCTION

Against the backdrop of increasing urbanization, the subject of urban ecosystems remains at the core of human ecology. Addressing the interaction of human behavior with the natural and constructed environment, urban human ecology attempts to integrate complex problems that escape the classical boundaries of either social sciences or natural sciences (Pickett et al., 2008) and thus must resort to new forms of interdisciplinary and transdisciplinary practices to embrace emergent outcomes of knowledge construction (de Melo & Caves, 2020). Returning to the origins of human ecology at the Chicago School of Sociology, I use Brecht's stage play *Saint Joan of the Stockyards* (Brecht, 1991), set at the time of the early days of the Chicago School, as both scenery and challenge to critically discuss an approach that tended to neglect socioeconomic dimensions and might have promoted a framework that reproduces inequality and supremacy. Drawing on the longstanding dialogue between (contemporary) fiction and scientific theory, which is able to reveal the "place of the human in a web of relations" (Engelhardt & Hoydis, 2019), Brecht's epic theatre seems particularly fit for this purpose as it gives "the natural [...] the momentum of the conspicuous" as "only in this way could the laws of cause and effect come to light" (Brecht, 1967, p. 265).

THE INCEPTION OF HUMAN ECOLOGY

The concept of ecology as a science that studies the relationship between organisms and their environment was developed in the second half of the 19th century. At the beginning of the 20th century, the acknowledgement of the role that human communities play within their environment laid the foundations of human ecology as an academic discipline (Adams, 1935; Lawrence, 2003). At the same time, human behavior within societies and the workings of societies as an organizational form of human communities started to generate interest among scholars in the new field of social sciences.

Initial attempts to define the singularity of human ecology as an approach towards the understanding of human behavior within its surroundings, whether social or environmental, focused on the "Investigation of Human Behavior in the City Environment" (Park, 1915, p. 612):

Because of the opportunity it offers, particularly to the exceptional and abnormal types of man, a great city tends to spread out and lay

bare to the public view in a massive manner all the characters and traits which are ordinarily obscured and suppressed in smaller communities. The city, in short, shows the good and evil in human nature in excess. It is this fact, perhaps, more than any other which justifies the view that would make of the city a laboratory or clinic, in which human nature and social processes may be most conveniently and profitably studied.

Notably, in the description of his research project, Park resorts explicitly to the moral categories of 'good' and 'bad', which frames the cultural context of his status as a social scientist and underscores how embedded he was in the ethical concepts of his time.

Together with Ernest W. Burgess, and Roderick D. McKenzie, also members of the University of Chicago Department of Sociology that had been founded in 1892, Park began to appropriate the concept of human ecology in a broader sense, applying it to the investigation of urban territories, developing what can be described as "a theory of community based on ecological metaphors" (Wahl-Jorgensen, 2016, p. 10). *The City* (Park et al., 1925), probably the best-known work of the Chicago School, aggregates a set of previously published articles. It brought about a new understanding of human ecology as the "study of the spatial and temporal relations of human beings as affected by the selective, distributive, and accommodative forces of the environment" where the "growth or decline of a given community is a function of its relative strength in the larger competitive process" (McKenzie, 1924, pp. 287-288). Thus, the Chicago School promoted a biologicistic view of human society which characterized communities as being "in constant competition with one another, and any advantage in location, resources, or market organization [...] forthwith reflected in differential growth" (McKenzie, 1924, p. 287). Following Rogers' discussion of "Darwinism and Social Darwinism" (1972), one can argue that Darwinist theory regarding natural selection and the utilization of other properties of flora and fauna serve herein to underpin the legitimacy of the Chicago School's social thought and their concept of human ecology, concealing its origins in thinkers like Malthus or Spencer. Furthermore, a theory that borrows its notions from nature and upholds that dominance and succession prevail in a serial and predetermined order until they reach an equilibrium in a circumscribed habitat with "a free and natural economy, based on a natural division of labor" (Park, 1936, p. 15), readily becomes a self-explanatory exercise where 'natural' does not require any further clarification.

Inherent logical and conceptual flaws of the Chicago School's human ecology were acknowledged by Robert Park in his revision of Milla Alihan's *Social Ecology*, which delivers a fierce and demolishing criticism of the concept (Hart, 1941; Park, 1939).

Following Gettys (1940), it failed to formulate a comprehensive, theoretical framework which would require solid data collection and a logical, theoretical system, leading therefore to inconsistent and biased conjectures about the essence of its object. Hence, human ecology as a scientific discipline should leverage a critical analysis of its definitions and its scope, “free[ing] itself from its primary dependence upon organic ecology, thus obviating (...) the fantastic theoretical implications and claims with which it is now burdened” (Getty, 1940, p. 474). On the other hand, the relationship of the Chicago School’s concept of human ecology to the broader field of ecology was considered blurred or as existing in name only, while the instruments and theoretical concepts of sociology were abandoned (Hawley, 1944). Thus, as much as the narrowing of human ecology towards a biologicistic and competitive view precluded the understanding of social relations and collective agency in a social and environmental framework, the research method itself relied mostly on the rating of measurable incidents like criminal offences, violence, alcoholism or mental disorders and their spatial correlation with the urban fabric, substituting for the ontological and epistemological substance of the discipline itself.

Revisiting the history of the Chicago School at the end of the 20th century, Abbott (1997) emphasized its contribution to social theory by acknowledging the importance of spatial and temporal contextuality and pattern, even though, “to the reader of today, the work of the Chicago School reads more like social survey literature” (Abbott, 1997, p. 1160). Yet, human ecologists like Roderick McKenzie and his pupil Amos Hawley were not oblivious to the questions of social conflict or power relations, even if their writings on these topics remained marginal to the legacy of the Chicago School as a whole (Smith, 1995). However, the Chicago School’s research must also be read within the historical context of accelerated urban growth and the role of migration as a driving force for the transformation of urban space. Hence, while it might still provide a useful framework for modern urban ecology through an ecosystem approach, this would require transcending the girdle of an explanatory model that builds on natural laws and purposeful intent alone to accommodate the dynamics of complex systems (Vasishth & Sloane, 2002). Regardless, the Chicago School exerted a decisive influence on the concept of American cities and the segregation of their inhabitants, according to social class, origin, and perceived phenotypical characteristics, still virulent in today’s debate and political argument, having laid the scientific groundwork for current social reality (Hwang & McDaniel, 2022).

SOCIOECONOMIC DIMENSIONS OF HUMAN LIFE: THE CASE OF THE MEATPACKING INDUSTRY

(...)

And today again they’ve posted a notice, saying:

Anyone who isn’t satisfied with The wages here can leave.

Okay, let’s leave, the whole lot of us, and fuck Their daily shrinking wages.

Silence

This work has long filled us with loathing This plant has been a hell to us and only The cold terrors of Chicago

Have kept us here.

(...)

(Brecht, 1991, p. 5)

Chicago’s urban reality during the prime of the Chicago School must be analyzed together with the role of the meatpacking industry and its socioeconomic relevance. Before World War II, Chicago was the largest meatpacking center in the United States of America and was unsettled by frequent labor struggles and strikes, accentuated in the wake of the New York Stock Exchange crash in 1929 and the Great Depression that followed. Notwithstanding, the scholars of the Chicago School disregarded the political-economic context and the social conflict that was unfolding in the same temporal and spatial environment that they proposed to study within the framework of human ecology.

During the Meat Packing Investigation (1917-1919), conducted by the Federal Trade Commission to investigate wartime profiteering during World War I, the young accountant Stuart Chase had exposed a cartel of the five largest meatpackers in Chicago that had little respect for public health or workers’ rights. Their joint efforts targeted mainly the simultaneous reduction in wages and expenditure on animals to increase profits unreasonably, circumventing the restrictions imposed by the Government by using accounting artifices (Bradley & Merino, 1994).

(...) I’ll clean up the premises

And oil my knives and put in some of those new Processing machines that save a pretty penny

In wages. New contraption. Pretty fancy. The pig rides up on a conveyor belt

Of wire netting to the topmost floor

And there the butchering begins. The pig Plunges almost unaided, landing on

The knives Not bad, eh? See, the pig

Butchers itself, converts itself to sausage.(...)

(Brecht, 1991, p. 16)

As in other parts of economic activity during the process of industrialization and the rise of

corporative capitalism, skilled craftsmen were progressively substituted by unskilled workers through the increasing division of labor and the use of the assembly line in the meatpacking business, driven by technical innovation like the refrigerated freight wagon (Barrett, 1984). While allowing the machine and its owners to determine the rhythm of work, this transformation also decreased the autonomy and the negotiating capability of the individual worker, who became a replaceable piece in a bigger mechanism. However, on the other hand, the massification of mostly unskilled work without the implementation of robust labor rights laid the ground for the collective organization of workers.

This setting not only accelerated the rise of the packing house labor movement but also caught the attention of fictional writers like the American author and confessed socialist, Upton Sinclair, who exposed the hideous working conditions and lack of sanitary control in his famous novel, *The Jungle* (Sinclair, 1906), initially published in installments by the newspaper *Appeal to Reason* and based on a seven-week investigation into the Chicago stockyards. However, instead of leading to an improvement in labor conditions as intended, the book foremostly contributed to the implementation of food quality regulation (Kantor, 1976). In 1931, supposedly with knowledge of Sinclair's novel, the German author Berthold Brecht published his stage play *Saint Joan of the Stockyards* (Brecht, 1991). Brecht had a keen interest in the laws of the capitalist market economy and used Marxist theory to understand the mechanisms and social forces that underlie the struggles of the working classes, using his "epic theatre" to unmask speculative capitalism, the role of the trade unions and the media (Giovanni, 2020). By using the technique of *Verfremdung* (estrangement), Brecht's theatre invites the audience to critically question the conditions of social existence (Brask & Loewen, 1988). Hence, Brecht unfurls the plot of *Saint Joan of the Stockyards* as a vehicle to capture the suffering of workers at the meatpacking plants during an economic crisis set against the background of their interrelation with the self-interest of labor unions, the role of the media and the machinations of the meatpacking plants' owners who were concerned, above all, with cost reduction and profit increase.

(...) Vile Mauler has struck you. Irresistibly The monster rises,
making merchandise
Of nature itself, selling the air we breathe.
That man could sell us the food we ate for dinner Squeeze rent
from houses that caved in long ago Coin money from rotten meat,
and if you stoned him I'll wager he would turn your stones into
gold. (...)

(Brecht, 1991, p. 15)

Joan Dark, lieutenant of the Black Straw Hats, a pastiche of the Salvation Army, tries to convince the workers at the stockyards to live by the faith of God to improve their fate. While doing her charitable work and providing food to the poor, she meets Pierpont Mauler, the meat king, and ventures to show him the misery of the workers, aggravated during a speculative crisis, hoping that he may change his attitude. But Mauler, even if apparently touched by the suffering of the workers and their families and the violence of the meatpacking business itself, just proceeds with his search for business and profits, in competition with the other meatpackers, who he sets up in an insidious plot. Fearing an uprising by the locked-out workers, hungry and cold in the winter snow, and their association with the Black Straw Hats, some meatpackers propose funding the charity, which is in financial distress, to the approval of their major, Paul Snyder, who readily accepts the shift of earthly responsibilities for the calamity towards heavenly futures. Joan's successful attempt to avoid this arrangement is followed by her expulsion from the organization. With nowhere to go, she turns to Mauler, who she sees as different from the other meatpackers. She asks for help and financial support, which Mauler readily promises if the Black Straw Hats "play the game" and devote themselves to heavenly salvation. Joan, however, is not convinced and wants to stand in solidarity with the workers' struggle. A general strike is being devised but Joan undermines it because of her innocent belief in virtue and her fear of violence. The strike is eventually dismantled and only part of the workforce is readmitted. Wages go down, prices and profits go up.

Having failed in her mission and totally exhausted, Joan dies in the refurbished quarters of the Black Straw Hats that gracefully accepted the packers' money to relocate justice where it belongs: in Heaven. While declaring Joan a martyr in the service of God, it is necessary to shout down her feverish last words:

And those preachers who tell the people they can rise in spirit
Even if their bodies are stuck in the mud, they should have their heads Bashed
against the sidewalk. The truth is that
Where force rules only force can help and in the human world only humans can
help.

(Brecht, 1991, p. 108)

Brecht's stage play encompasses a human and social reality that was largely left out of early human ecology. Thus, it not only feeds into our cognitive acknowledgement of the meatpacking ecosystem, its labor conflicts, and the machinations of the meatpacking industry owners, but also touches the emotional threads of our existence, without which everything else remains pale and lifeless.

THE HETEROGENEOUS WORKING CLASS

In one of his early works, though without referring to actual labor conflicts and their context, Park (1915) hinted at the dynamics of mass struggles and the capacity of labor organizations to resort to the method of strikes, using the manipulation of crowds, a technique also employed by the Salvation Army. Focusing on the manipulation of "sensations and emotional reactions of individuals who participate in these mass movements" (Parks, 1915, p. 592), he ended up dismissing the objective social and economic circumstances of labor struggles and power relations whose riddance was characteristic of the 'Golden Age' of the Chicago School.

Another issue that was largely ignored by the Chicago School and also not addressed by Brecht, possibly because there were few or no black, indigenous or people of color (BIPOC) in Germany's working class in the 1920s and 30s, concerns the friction between white and BIPOC workers. The ensuing antagonism increased due to the hiring of migrants from the Deep South who were not yet organized in labor unions and had recently arrived at the stockyards, before and during the labor conflicts of the 1920s. This gave origin to the 'Great Migration' which was sustained by the socioeconomic situation and racial discrimination in the South after the abolishment of slavery and which was encouraged by the meatpackers that needed to increase their workforce, particularly during and in the aftermath of WWI (Street, 1996).

According to Barrett (1984), multiple groups of industrial workers must be distinguished in early 20th century Chicago: native-born or immigrants already settled and socialized with a 'working-class identity' (foremostly of German, Irish or British origin) and a second generation that comprised workers from rural Eastern Europe and Black internal migrants without any such identification. Herein, racial prejudice reinforced a situation where the black workforce performed the dirtiest and least well-paid jobs in the meatpacking plant hierarchy and made them the first to be fired during the crisis of the Great Depression (Street, 1996, 2000).

Despite a similar "workplace experience of exploitation, interdependence, and resistance" (Street, 2000, p. 20), it took years for these new arrivals to integrate into unions in great numbers, most importantly into the Packinghouse Workers Organizing Committee (PWOC) which was founded in 1937. The role of BIPOC workers as strikebreakers during the large meatpacking strike in 1921 (as happened during smaller strikes in 1894 and 1904) also affected their standing with the largely white-dominated unions (Street, 1996). The integration of BIPOC workers into the labor movement was also undermined deliberately by the packers who tried

to counter this process by funding civic ventures within the Black community, like churches, sports events or other similar activities, thereby creating a dependency on their patronage that influenced community leaders (Barrett, 1984). Yet, taking advantage of their superior dominance of the English language compared to immigrants from Eastern Europe, who represented a significant share of the white workforce, the Black community was able to assume a prominent role in Chicago's meatpacking labor organizations during the 1930s.

Black migrants from the Deep South of the United States who arrived during World War I settled in the industrial neighborhoods of the South Side. Overall, the workforce in Chicago's stockyards was diverse and included more than 40 nationalities, even before the war, but workers lived in separate communities according to their origin, clustering recent arrivals from Eastern Europe in Packingtown, while Black workers were crammed together in the deteriorating and ghettoized Black Belt, separated by barriers in the urban landscape such as elevated train lines, railroad tracks or industrial facilities which hindered social contact outside the workplace (Barrett, 1984).

Although early works of the Chicago School addressed the issue of assimilation and segregation of a black community that became evermore self-affirming (Park, 1914), the opportunity of reinforcement, further development and integration of this subject into the boundaries of Human Ecology was not pursued.

THE CREATION OF ZONING AND THE CONCEPT OF URBAN SPACE

(...) Now how will I finish paying for the cute little damp cottage
Where twelve of us live? Seventeen Installments I've paid and the
last is due.
They will throw us out on the street and never again
We will see the trampled ground with the parched yellow grass on
it And never again will we breathe
The familiar contaminated air.

(Brecht, 1991, p. 11)

The creation of 'zoning' to organize urban space had become official policy of city planners and elected officials since 1919 when Mayor William Hale Thompson announced his support for it at the Citizens' Zone Plan Conference. Purportedly, zoning would protect residential property, in particular single-family homes. It would also encourage economic and industrial development that had been limited due to nuisance laws. A zoning ordinance under public control was implemented in 1923 (Lewis, 2013). As such, the political decision to create zoning was intertwined with the underlying assumptions about time and spatiality of urban life that guided

the research of the Chicago School. I therefore argue that the scientific approach of scholars like Park, Burgess and McKenzie and their application of the 'laws of nature' to sociological analysis was both subject and object of the political and societal beliefs of the time. This reciprocal process between existing prejudices and beliefs and academic research in the early 20th century influenced the concept of urban space and the idea of the 'ghetto' in American politics that maintains the segregation of black, indigenous and people of color up to the present day. This was ultimately reinforced by the double role of *describing* and *prescribing* urban reality. This allowed the sociologists of the Chicago School to ultimately shape the social structure of the city and its division into exclusive geographic spaces (Venkatesh, 2001).

To support my argument, I recall the deliberate exclusion of non-white experience and epistemology (Go, 2020) from the 1904 International Congress of Arts and Science in St. Louis, Missouri, which can be considered the founding congress of academic sociology in the United States. Henceforth, the framework used by scholars of the Chicago School to conceive of their field could be considered as the application of "deterministic, natural science theories to social phenomena and racist social practices to its own formation" (Korver-Glenn et al., 2021, p. 4). Thus, the theory of concentric urban zones, proposed by the academics of the Chicago School in their *opus primus* 'The City' (Park et al., 1925), that structures neighborhoods "in a series of hierarchical zones – where the least desirable places were closest to the urban core, while the most desirable were the farthest away" (Korver-Glenn et al., 2021, p. 4), typifies a (pseudo-) scientific rationale for social prejudice and discrimination that is not based on genuine research practice and unbiased observation. In this context, zoning of urban space in Chicago or other cities of the North cannot be understood in isolation from the history of racial zoning in the South that openly aimed to create and consolidate residential boundaries between White and BIPOC populations (Lens, 2022).

Although the individuality of decisions contributes to the status hierarchy between residential areas that reinforces the segregation of populations, the link between places where people live (or are forced to live) and their access to public services, employment, education etc., has to be emphasized, as this interrelatedness has profound impacts on their current and future prospects and reinforces existing disparities, creating a positive feedback loop (Logan, 1978). These processes do not occur in a vacuum but are embedded in a political context in which they are the subject of disputes between communities over scarce public resources and in which geography and status or class intersect.

Spatial differentiation does in practice imply inequalities among places, and thereby advantages and disadvantages to the persons and organizations whose fortunes are linked to specific places. The more powerful of these actors typically established political structures which reinforce the stratification of places to their own advantage (Logan, 1978, p. 414).

Consequently, the intersection of non-white existence and place cannot go unnoticed and is part of the dialectical tension between structure and agency, without any well-defined line of division (Hunter & Robinson, 2016).

Notwithstanding the inherent dynamics in the (auto-) regulation of urban space, segregation has been actively promoted through political acts such as zoning ordinances that are not only informed by personal and economic interests but also harness racial prejudice for their purposes. Thus, regarding the zoning ordinance implemented in Chicago in the 1920s, areas with a high percentage of black or first-generation immigrants were more often zoned for higher population density and mixed use, including manufacturing and industrial use, with effects lasting for several decades (Shertzer et al., 2016).

Other forms of racial segregation have included the refusal of mortgages to BIPOC households by the Federal Housing Administration and/or lending practices that excluded ethnic communities from certain areas, purportedly to avoid white residents moving out if a certain number of BIPOC residents is exceeded, a process described as "tipping". Following the argument of García (2019), this concept derives directly from biologicistic ecological theory that claims that social groups follow the principle of succession, framing the moving of BIPOC populations to formerly "white" neighborhoods as invasions. Recent phenomena, such as gentrification, follow the same logic of ecological theory developed by the Chicago School in the early 20th century, ignoring the economic motives of speculative investment that support the substitution of one (poorer) population by another, wealthier population (García, 2019, p. 10). In a broader context, the process of exclusionary zoning and segregation that leads to dispossession and displacement, together with the dynamics of gentrification, can be subsumed as part of the modalities of racial capitalism (Dantzer, 2021). The far-reaching consequences of this process were observed during the recent COVID-19 pandemic, where Black and Latinx communities suffered the most and sustained the highest mortality rates (Pierce et al., 2021; Scannell Bryan et al., 2021). Yet, it is not only the pandemic. The structural racism entrenched in the urban space has repercussions that transcend the question of health and healthcare and creates a heterogenous ecosystem that benefits the white and the wealthy (Schell et al., 2020).

TACKLING INCREASING COMPLEXITY

Brecht's *Saint Joan of the Stockyards* shed light on dismal social situations, labor struggles and the dynamics of speculative capitalism that were disregarded by the biologicistic and deterministic reasoning that characterized the approach of the Chicago School. However, the discussion of persisting, urban racial segregation, inequality, and the idea of an inner-city ghetto further illustrates how the reproduction of contemporary prejudice permeates current social and political struggles. At present, rapid urbanization, planetary overshoot and the forthcoming Anthropocene pose new problems to human ecology that increase complexity and might require a new understanding of the city as a self-organizing, socio ecological system (Alberti et al., 2018). This entails emergent properties that call for a transdisciplinary approach within the framework of post-normal science (Ávila-Pires, 2007; Funtowicz & Ravetz, 1994). Furthermore, Toor, Tater and Chandra (2023), in a systematic literature review on urban planning and ecology, emphasized the need for inter-disciplinarity to conceive sustainable strategies for the development of urban spaces. Following Schell et al. (2020), this will have to address structures of wealth and power that reproduce racial discrimination and oppression to promote environmental justice in the urban space.

Understanding the ascent of *homo sapiens* as a collective and cooperative endeavor that is based on common narratives that we tell each other (Harari, 2015), the uncertainties that human ecology is facing might not only demand its establishment as an "operational post-normal science" (Dyball, 2017, p. 13) but will also require forms of participative deliberation, like 'extended peer communities' (Funtowicz & Ravetz, 1993), or other forms of democratic citizenship (Stein, 2021; Wildschut, 2017). This might lead to new meta-narratives that interweave isolated or fragmented local experiences to create a new regenerative, ecological framework that surpasses the divide between human and nature to achieve lasting sustainability for human societies (Young, 2016).

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Author contributions

The author is solely responsible for the conception and writing of the manuscript.

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- ¹ Throughout the text I used the English translation by Ralph Manheim, based on the 1955 version that served as a template for the world premiere at Deutsches Schauspielhaus in Hamburg, in 1959.

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