Pressure: a Dialogue

An Interpretation of the Theme of Pressure between Africa, **Europe and South America**

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> Ngillan Faal: Thank you for your time and for sharing your work with us to help us understand how we might be able to talk about pressure, specifically concerning urban environments. We chose the word "pressure" because it allows a confluence of factors and influences. It's fluid, but also mechanical and architectural, a discursive

JG: What's your definition of pressure? What are your ideas about pressure? From your points of view, which may be very different, how do you see this trans-

Philippa Tumubweinee: I am from Cape Town, South Africa. The urban population in Africa is expected to increase the next decade. In this context, pressure is about urban growth. And urban growth typically is about an expansion of the built environment, and an expansion of the built environment means an increase in buildings and building construction. The rate of urbanization that is required to accommodate a doubled population and the pressure on the built environment, asks that have to carefully think through how to create, recreate, imagine, and reimagine our urban environments. What do they look like? How do they impact on the aspirations of Africa and Africans? What are they made of? In a time of limited and diminishing resources, the last question is particularly important. The construction technologies and materials that we will need to exploit to be able to cope with a ballooning population is going to be fundamental in providing urban spaces that promote and multiple the wellbeing

I'll try explaining this using a specific example, my home city Cape Town. In the next

Jacopo Galli: In this dialogue, we hope to discuss a condition of many cities, a global condition, that manifests itself in a transformation of the city as it is pushed by an increasing series of extreme events that happen suddenly or continuously. We thought about new definitions for this phenomenon and settled on the idea of pressure, in relation to human, natural, social, economic and political issues. The launch of the OFFICINA* call is part of an exploration of thinking around this idea of pressure, a discussion from different points of view, from different parts of the world and different researchers.

frame to talk about what cities are facing now.

lating in our current urban environments?

and wellness of Africans in urban areas.

few years, Cape Town's population is predicted to explode. With a current estimated population of five million people, the projection is that within a generation, ten million people will call the Mother City, Cape Town, home. Cape Town is a geographically "small" city, sandwiched between the mountain and the sea. Where are the hundreds of thousands of people who migrate to Cape Town annually going to be housed? The pressure on the built fabric of the city is extreme. This extremity is a breeding ground for complexities that can be overwhelming, but if we focus on a simple metric like the construction materials we build with, we might be able to have a radical impact with small changes. If we adopt something within our control, materials and materiality, thus manageable pressure point, then we might be able to start to deal with the complexity of the larger pressure of heighten urban growth in the city.

Beatriz Moretti: Ailton Krenak, an indigenous leader and Brazilian writer, has used the term "war" to describe the relationship between indigenous peoples and nonindigenous society in Brazil. The war of taking over Brazil has not yet ended; it has been ongoing for over five hundred years and remains alive. Portuguese presence changed the territory and had a profound impact on indigenous peoples who were systematically removed from their ancestral lands. It is important to understand the negative impact of colonization on these populations, who suffered violence, slavery, and dispossession of their ancestral lands. Since then, the history of indigenous peoples has been marked by a series of important episodes, including resistance, the fight for rights and conflicts.

Indigenous peoples continuously face challenges in their struggle to preserve their lands: environmental conflicts resulting from the impact of the country's economic activities, including deforestation, wildfires and mining, as well as a lack of support and protection from government authorities. They often put up with constant violence and threats, resulting from illegal land invasions, conflicts with farmers, loggers, gold miners, and even violent attacks. This equates to a violent pressured environment for these communities.

It is important to mention here that Brazil is one of the countries with the highest urbanization rate in the world at approximately 86%, exacerbating socioeconomic inequalities related to access to education, medical care, and economic opportunities. An important case is the indigenous Guarani community in the Jaraguá territory, which is currently located within the urban area of the city of São Paulo.

Thiago Djekupe: In 1532, the pioneer Martim Afonso de Souza started the hunt for my people by building the village of São Vicente, located along the coast of the state of São Paulo. He was followed by a wave of extermination of indigenous communities, taking away women and children, and enslaving our families. In 1580, Afonso Sardinha renamed our sacred territory known in Guarani as Ita'ju Maraey to Jaraguá Hill, the highest point in the city of São Paulo. In 1987, our land was demarcated and ratified





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ricercatori.*

Pressione: un dibattito In questo dialogo,

sappiamo di discutere una condizione di

molte città, una condizione globale, che si

poiché è spinta da una serie crescente di eventi estremi che accadono improvvisa-

manifesta in una trasformazione della città

mente o continuamente. Abbiamo pensato

a nuove definizioni per questo fenomeno e

ci siamo concentrati sull'idea di pressione, in

relazione a questioni umane, naturali, sociali,

economiche e politiche. Il lancio della call di

pensiero attorno a questa idea di pressione:

OFFICINA* fa parte di un'esplorazione del

una discussione da diversi punti di vista.

da diverse parti del mondo e da diversi

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Philippa Nyakato Tumubweinee, an associate professor in the department of Architecture, Planning & Geomatics (APG) at the University of Cape Town (UCT), is the convenor of the first year in the Bachelor of Architectural Studies at UCT, a researcher at the African Centre for Cities (ACC), the Curator and strategic support for the UCT University of the Futures Project, and a practicing architect at Stewart & Partners (S&P) based in Cape Town.

without proper study, to only 1.7 hectares, making it the smallest demarcated indigenous land in Brazil. In 1988, with the Brazilian Constitution and the recognition of indigenous rights, we expected that we would be respected and heard, but, on the other hand, the impacts of this violence have only gotten worse over the years. In 2015, our territory was finally legally recognized as Indigenous Land Jaraguá, covering an area of 532 hectares. This was followed in 2016 by the *Guarani Green Belt Bill* introduced to provide government support to indigenous actions. However, this bill was not implemented. Instead, in 2023, the *Temporary Landmark Bill* was introduced and approved by the Senate. It intended to establish 1988 as a deadline for the possible demarcation of indigenous lands and required indigenous peoples to prove that they were physically or legally fighting for their territories at that time, or risk losing them.

In addition to legislative measures, the communities are subjected to additional territorial contestations. These range from the expansion of transportation to the encroachment of gated communities, and the privatization of the State Park that overlaps Jaraguá. Our lives are put at risk for denouncing these actions, for saying "it's enough" to so much brutality. Pressures and risks are continuous in our lives. Despite all the violence imposed on our territories, we never gave up on dialogue, always remembering the lives and memories of our ancestors as part of the land, not as owners. Xexy'ete, the true mother, the body Yvy Guaxu, the planet Earth.

Elena Longhin: In my work, I've delved into pressure understood as a set of dynamics, actions, situations, conditions characterized by extremes and scarcity. Pressure in this context is not merely a singular force but a complex interplay of socio-environmental dynamics that hold significant importance at the territorial scale. It's crucial to acknowledge, recognize, dissect, and engage with these dynamics to comprehend their impact fully.

Consider metropolitan regions facing the looming threat of climate change, like deltas, where I am located, or areas exhausted by pollution and exploitation. These are manifestations of pressure, intertwined with the relentless pursuit of capital-driven productivity that fuels urban development, the production of carbon forms, often at the expense of natural resources. My research zooms in on resource exploitation driven by the energetic transition, such as the extraction of rare earth and critical raw materials. Through this work I aim to shed light on the impact of extractive activities on territories and the resulting operational landscapes engineered to sustain capital reproduction and urban processes. How are they transformed into operational grounds? Which more-than-urban landscapes are formed for the reproduction of capital and the production of urban (carbon) processes?

In this sense, I was very interested on hearing the testimonies from Beatriz, Thiago, and Philippa. They make clear the urgency of addressing rapid urbanization dynamics, especially driven by capital. The conditions they are describing add urgency as a state of pressure. How do we uncover, highlight, counter-act dynamics of pressure dictated by socio-economical forces, changes, altered natures, conditions of excess? These "operationalized" landscapes, where territories intersect with cities and their formations, hold clues to broader regional and even planetary scale implications.

When contemplating urban pressure, I believe it's important that we contextualize what it entails on larger scale territories, on nature, and therefore how altered natures form part of our urban landscapes. My focus lies in unravelling these interconnected pressures, although seemingly invisible, both on the urban and the territorial scale.

NF: To my mind, some themes are already emerging. One of these is growth as pressure: not just in terms of population pressure, but also in terms of different geographies and populations. The constraints in Cape Town are coming about as a reversal of original settler colonialism, where indigenous people are coming back to their original lands. And the pressure in São Paulo is the reverse, from a violent expansion of other rights to the detriment of indigenous land rights. These are linked to systemic impacts through extracting natural resources, fossil fuels, and the competing rights

of various actors within that system. And then within all of that, the idea of bigger systems, the planetary system as a pressure point and under pressure itself.

JG: Is there anything we can do? What is the strategy, the design approach that we can apply to this concept of pressure? And it's an open discussion that sits within a broader frame of how we imagine the city of the future because different models lead to different solutions. In this vein, I would like to ask Philippa, how you think we might intervene. What do you do when three times the population of Venice arrives in Cape Town every year?

PT: I am not certain that there is a singular answer. However, what we can offer as architects are tactics that aim to deal with large macro conditions at a micro level. In Cape Town, we have an urban growth challenge, an economic challenge, a social challenge, and so it goes on. In Brazil, it's the very lives of citizens that are at stake. In both instances that is pressure. Whether it is a way of living that's at stake, or an environment as an architect, you should be able to develop a framework from which you can start to creatively think through pathways for transition at a various scales. To be able with some level of certainty speculate about where we want to go, using the conditions of where we are now (which is not desirable) as a starting point. To be able to plot out a pathway that could allow for and foster a holistic approach to wellbeing and wellness. Along that pathway, you could start to have micro-interventions, that create radical change. I believe that it is through small radical changes, you can have incremental shifts in a system.

When we view radical shifts as a result of small incremental changes, we can see where the place of opportunity lies in this state of pressure. This is an approach that I am embracing in my practise. When we frame pressure as a hot-bed of opportunity, we allow for ourselves to intelligently engage with the conditions that bring about that pressure. To foster the ground for speculative and creative thinking.

For example, if 400,000 people come to Cape Town, we need new buildings. Because we need new buildings, the city of Cape Town can be open to discussion and engagements around how to creatively provide building stock required to answer this need. If the city of Cape Town is open to discussion, I can introduce alternative ways of construction. I can then have micro-interventions as a proof of concept that can have broader policy implications on larger infrastructural projects nationally or at the provincial level. Being able to design and test a transition reimagines or reconfigures on a social, communal, institutional, and to some point, political level.

BM: There are many urgent issues in the context of indigenous communities throughout Brazil and Latin America. We, as a non-indigenous society, have a historical debt to the indigenous peoples that can never be repaid. Because of this significant backlog, I believe that the first step we should take is a genuine approach to reconnecting indigenous and non-indigenous societies, recognizing and revealing the true history we have in Brazil: acknowledging, mapping, systematizing, and disseminating the presence of indigenous societies and their importance for environmental preservation and quality of life, both for the inhabitants and the planet, which, as we have learned, are interconnected.

Indigenous achievements in Brazil include territorial rights, education, health, and political representation. While indigenous peoples still face significant challenges, there have been important advancements. In recent years, indigenous causes have been at the forefront of educational and cultural policies around the country. Brazil's leading museums are updating their collections to include Brazilian artists of African and indigenous descent. In São Paulo, several initiatives have been taken in this direction: in 2020, the Museum of Indigenous Cultures was inaugurated; in 2022, Sebastião Salgado, an important Brazilian photographer, showed one of the largest exhibitions at Sesc Pompéia, designed by Lina Bo Bardi, focused on the theme Amazon; the Museum of Ipiranga, a traditional museum showing the colonization of Brazil, reopened its



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Thiago Djekupe is an important Guarani leader from the Tekoá Yvy Porã – Sacred Land – village on Pico do Jaraguá, in São Paulo. A student of Architecture and Urbanism at Escola da Cidade, he is also a counselor at the Museum of Indigenous Cultures.

doors in 2022 with one of its exhibits addressing *Territories in Dispute*; the São Paulo Museum of Art (MASP), one of the world's leading museums, also designed by Lina Bo Bardi, is undergoing one of the most significant renewals of its collection, known as *Collection in Transformation*.

The Escola da Cidade University is very involved in this movement, with the arrival of Guaraní indigenous students in basic and undergraduate education, providing many lectures on the topic, with the presence of Ailton Krenak, Sonia Guajajara, Maurício and Sérgio Yanomami, among many others. They are also involved in activities on indigenous territories, such as the construction of a library in the Jaraguá Territory in São Paulo, and the development of the *Kamaiurá Indigenous Construction Manual*, which won the International Architecture Award in 2022. A new generation of indigenous leaders is taking up a direct role in national and international politics, such as Thiago Djekupe, and Txai Surui, Thiago's partner, who delivered an important speech at COP 26 in Glasgow and is currently one of the most influential indigenous figures in the world.

TD: It took years of struggle by our community to minimize the imposed situations and ensure the survival of our new generations. We reclaimed the land and restored the river springs, preserving the ancestral importance of our location. Through agroforestry actions, we managed to keep the memory of ecological ancestral constructions alive; we restored the soil, and we started the ecological sewage treatment. We created collective spaces, a bank of traditional seeds, ensuring our community's future in terms of food stock and the protection of nine species of indigenous bees. Our population preserves and keeps alive the culture and memory of this "Yvyrupa" to the world. Today, our territory plays a crucial role in community education and tourism. We are looking for a closer relationship with the city. Our communities continue our mission to open the eyes of non-indigenous societies as part of this collective body, seeing ourselves as a part of nature.

JG: Our position is perhaps less clear because those of us here in the "old world" are facing different issues and our design responses often feel less strong or urgent, and lacking in impact. Nevertheless, interventions are required as is new thinking on these issues. Elena, as you were saying, does the transformation of territories in light of the process of extraction and urban metamorphosis, require different and new approaches?

EL: What we have seen, especially from your presentations Thiago and Beatriz, is that there are certain agencies, certain modes of thinking, certain processes, that keep on repeating, isn't it? Even though we acknowledge conflict, climatic problems, and social struggles, we have kept ensuring that what modernity somehow produced is still present. Modernity is not gone. It's still with us. What I would like to keep on the table here is the question of which kind of forms we decide to keep. And I think that within this thinking, what we should try to work more on is trying to form new practices of care. As we try to envision things, objects, devices, and policies that retain a certain degree of flexibility for the future, we realize that they are outcomes that are quite different from those emerged from the modern attitude, meaning the way of thinking, the ideologies and the approaches that we inherited.

For instance, my doctoral research has been dedicated to water exploitation (for hydro-power production) deployed in a specific Italian region, the Veneto, across the most engineered hydro basin in Europe (e.n. the Piave River), and I realized that at the end of the day, the problem I was dealing with is on knowledge. The preservation, loss and construction of knowledge systems, is an apparatus that allow us to make effective decisions and decide what we can do for the future. As we attempt to reconstruct knowledge, to address certain histories belonging to specific agencies, we struggle to reconcile that reality. Nevertheless, we find ourselves in need to move forward and therefore to take design decisions. So, what I see as achievable is the cultivation of flexibility in design and the capacity to articulate and construct knowledge. This

involves also, of course, the imperative to challenge and deconstruct Western notions, knowledge and perspectives of the world.

NF: Philippa referred to pressure as a generative condition, as fertile ground, and the idea of a series of small actions that can be done by design professions that could potentially translate into a systemic change. We often don't think we can affect change, but perhaps we could. There is a way that architects think that is both systemic and particular and we're able to absorb a broad range of conditions – the construction of knowledge. Beatriz, you and Thiago spoke about the role of designers in collecting, mapping, networking, disseminating, and producing narratives that may have been silenced. That's the construction of knowledge as a form of design activism.

BM: Thiago and I have known each other for about two years, we are from very different cultures but are learning from each other. And this partnership is important. It's late to do this, it's very, very late. But I think education can offer opportunities to approximate and transform the world. What is going on in the Amazon is very serious. This is the most important forest in the world and impacts everybody and the climate. It's a challenge, and it's very important to speak a lot about this and to transform it. We now have a federal government in Brazil that has an interest in these themes. It's open to think.

TD: We live in a visible climate emergency as many cities, and many countries are taken over by heavy rains, floods, wind, and sandstorms. We have the rivers drying up, in the Amazon we have the rare species dying. We, indigenous peoples, for over 500 years, have suffered from the attempt to colonize. We live with the non-indigenous society, we know its architecture, its urban planning, we know its worldwide thinking, we know its intentions, but we don't agree with living this way, in having possession over the land when we are part of the land, we are part of all creation. For example, when I decided to study architecture and urbanism, I was looking for the opportunity to be heard, for the non-indigenous to understand that I was here seeking an exchange, meaning that my people also know architecture, that my people also know territorial occupation. By bringing together indigenous and non-indigenous thought systems and evaluating the positive and negative impacts, I'm sure we will have a lot to offer and bring hope for the future. The time is now. If we don't do something now, it's the children who will be subjected to all the pressure of climate violence and that is the responsibility of society, of the human being.

JG: The different issues that impact us in our varied conditions and our vision of pressure in various parts of the world are not wholly negative or necessarily apocalyptic. There is a real chance because our ongoing and upcoming pressures will require more creativity, more design thinking, and more solutions. The imperative is to reinterpret what we do today and do it differently in the future.

NF: Thank you all for your contributions and the discussion today. I am sitting in Johannesburg, a metropolis that's rapidly urbanizing but is still an active mining site. There is still mining activity in the central parts of the city, together with issues of land rights, and pollution of water systems and water basins. All of the pressures discussed today are a live contextual experience of being and working in Johannesburg, forming the basis of my research unit that looks at risk and uncertainty and underpinning a lot of the work at the Graduate School of Architecture. I am taking away from this discussion Thiago's reflection on the importance of exchange, the understanding of the knowledge that needs to be exchanged or constructed, exchanges between indigenous or overlooked knowledge systems and the orthodoxy, and exchange amongst colleagues like we're doing now. The OFFICINA* issue forms part of these exchanges as we present thoughts on the idea of pressure, and hope that as a result, some further dialogues and exchanges happen that can lead to micro, and then systemic changes.*



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