Making a Home in the In-Between

An Exploration of the Ideas of Ivan Illich and John Turner through the History of Sudoeste del Besòs



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Abstract

This thesis explores the ideas of Ivan Illich and John Turner as a continuous development of a theory of anti-industrialism rooted in analysis of the divorce of production from consumption. For Illich and Turner, this divorce ultimately leads to planetary overreach, global inequality in access to resources, and loss of personal freedom. Both authors put forward an alternative framework to industrial productivity which emphasizes localism and individual control over the means of reproducing everyday life. Illich offers a more high-level analysis applicable to all sectors of society, whereas Turner applies Illich's philosophy to the production of housing. After exploring each author's thinking through a close reading of one text by each, this thesis will attempt to illustrate their critiques of industrialism through a historical and anecdotal account of the building of the Sudoeste del Besòs neighborhood in Barcelona and the experience of some of its first residents in the 1960s.

Keywords

Ivan Illich, John Turner, Anti-Industrialism, Anarchism, Localism, Conviviality, Resourcefulness, Self-Building, Sudoeste del Besòs, Public Housing, Housing by People, Tools for Conviviality

Contents

Introduction

Personal Motivation Preface Hypothesis Methodology

Ivan Illich

John Turner

Tools for Conviviality

Freedom

The Myth of the Machine and the Alienation of Production Non Convivial Tools and the Alienation of Consumption Inequality and Planetary Overreach Choosing Conviviality

Housing by People

Inequality and Planetary Overreach: *The Mirage of Development* Freedom: *Autonomy and Heteronomy* Mismatches and Use-Value Decentralization Autonomy Discussion

Sudoeste del Besòs: One Story of Industrialization

Urbanization is Industrialization Antecedents of *Barraquisme*: What Makes a Housing Crisis? *Barraquisme*: Building a Home Between Two Worlds Autarky and Internationalism The Poligon as Prison: Life at the Bottom of an Industrial Hierarchy

Conclusion

Bibliography

Introduction

Personal Motivation

A key theme of the MISMeC curriculum, and one of the reasons I was attracted to the program, is the metabolism of cities or groups of people. Framing questions of sustainability around metabolism mutually implicates city and territory, complicating the artificially simplistic dichotomy of urban and rural, human and nonhuman. One way of looking at metabolism is through the lens of production and consumption. How many people live in the city and what do they need to consume in order to stay healthy and maintain a certain quality of life? Where and how are these things produced and consumed, and by whom? Where does the relationship between production and consumption fall on the spectrum of circular to linear? What happens to the residues of consumption, and can they be re-used or used differently in order to support continued production?

I have been interested for several years in the metabolism of cities specifically related to the production and consumption of food, and the recycling of organic matter back into the same cycle. Before attending MISMeC, I worked at a nonprofit in Providence, Rhode Island, connecting urban consumers with local farmers, and then at an urban agriculture and composting operation in the same city. At MISMeC, this interest led me to focus on local food production and human waste recycling in several group projects. Clear material difficulties presented themselves, such as population density of an urban area like Sudoeste del Besòs in comparison to currently available open space that could be used for agriculture. At the same time, our proposals continued to run up against two pre-existing realities: the neighborhood population had very little access to what are normally recognized as resources in the post-industrial city (job, income, education, etc.), and although some tight nuclear circles existed within immigrant groups, there was very low overall social cohesion in the neighborhood and plenty of distrust between groups, reducing the potential for mutual aid to act as an alternative resource. Unless our proposals directly addressed these root issues, we realized, any intervention would produce only shallow, short term benefits. In order for any intervention to be effective, it would need to be taken up and reproduced by the community. If the neighbors did

not have the tools, time or permission to do so, any project we came up with would have little use beyond our own education.

At the same time, we were introduced to a lineage of anarchist geographers, planners and architects through our City and Society course. We learned how the ideas of geographers Elisée Reclus and Pyotr Kropotkin inspired regionalists Patrick Geddes and Lewis Mumford, who in turn influenced Colin Ward, an urban planner, and John Turner, an architect. The line of thought we traced through this lineage emphasized the relationship between people and territory and the importance of integration of city and countryside. Bringing people as close as possible to the resources needed for their metabolism would have not only material benefits in terms of resource cycling, but also social, endowing people with the "sentiment de la nature," in the words of Reclus, or, for Turner, "resourcefulness." For many of these authors, specifically Kropotkin, Ward and Turner, bottom-up control of resources was an indispensable ingredient in a just and harmonious society, and this went hand-in-hand with appropriate scale and proximity to resources. This lineage has been well documented in the work of José Luis Oyón and Marta Serra Permanyer, and in a master's thesis by Jere Kuzmanić entitled *Peter Kropotkin and Colin Ward: Two ideas of Ecological Urbanism*.

Simultaneously, I was introduced to the work of Ivan Illich in the Regenerate class. Later, while working on the final group project for Re-Inhabit, in which we focused on conviviality in public space, my group returned to Illich in search of a deeper understanding of the term and its implications. Illich's definition of conviviality, we learned, has at its heart a conception of the sovereignty of the individual in relation to the "tools" or resources she needs to reproduce her own life. The more common understanding of the term—that of harmonious social relations among individuals— follows naturally from this situation of personal sovereignty, according to Illich. In order to address the social dynamics of public space in an effective, long-term way, we realized it was important to focus first on individual needs and breaking down barriers for people to fulfill these in a sovereign manner.

Although Illich's argument emphasizes individual experience and the relationships between people, it also has clear implications for metabolism. The closer production and consumption draw together in a society, the more it makes sense to evaluate metabolism on an individual level, or on the level of a family or a small community. When this is the case, new possibilities emerge that are unimaginable on a larger scale. Illich, like his friend John Turner, who I will also

focus on in this thesis, is consistently critical of supply-side economics, the dominant economic theory of his time, which focuses exclusively on increasing production and lowering costs of products, assuming that consumers will purchase and use whatever is produced. For Illich, the costs of this approach are predominantly social, dispossessing individuals of influence over the basic elements of their own lives. For Turner, they are material, economic and ecological, creating wasteful mismatches between human needs and resources expended--natural, financial, and in terms of people's time and energy. I only began to read Turner later, in preparation for the thesis, and quickly realized that his work serves as a perfect complement to Illich's for my purposes, in that he makes explicit the material implications of Illich's argument, which remained only implied in *Tools for Conviviality*.

As I became more familiar with Illich's work, I noticed myself beginning to use it frequently as a lens that could be applied to almost everything we were learning. In particular, I was curious about how it could be applied to better understand the social and material conditions in Sudoeste del Besòs. In the second semester, Illich's ideas became central to my group's studio project, the outcome of which was a manual of "loose parts" interventions¹ that residents, local organizations and government could select and combine, depending on their needs and existing resources. The interventions were selected and designed in order to make best use of resources neighborhood residents might already have, such as community, skills and time, as opposed to money, official connections or certifications. In so doing, we hoped to circumvent existing institutional barriers to self-production and reproduction of everyday life.

Furthermore, Illich seemed to be in dialogue with the lineage of anarchist geographers we had studied in City and Society, although, as something of a deliberate institutional outlier, his work eluded easy categorization in relation to other thinkers. Although connected by a consistent anti-institutional and anti-industrial thread, the subjects Illich focused on —healthcare, mobility, the education system, the Catholic Church—were wide-ranging and on the surface level not as neatly classifiable in a lineage of geographers, architects and planners. However, my own proclivity to read the work of those in this lineage through the lens of Illich seemed to speak otherwise.

¹ Ivan Duarte Massetti, Tianjiao Hou, Paula Bisordi Hüwel, Nadia Mokhovikova, Katie Murphy, Manuela Portella, and Vanessa Vega: *Convivial City: A Manual for a more Sustainable and Resourceful Sudoeste del Besòs,* Unpublished, Studio work, MISMeC, June 2022

The goal of this thesis became twofold: To explore the mutual implications of the ideas of Ivan Illich and John Turner, and then to intertwine the ideas of these two thinkers in the context of the case study neighborhood, Sudoeste del Besòs. I hope the primary outcome of this second task will be to better illustrate the ideas of the two thinkers, and perhaps some useful light will also be shed on the situation of the neighborhood.

Preface

John Turner and Ivan Illich were contemporaries and friends who published their best known writing, including the two works analyzed in this thesis, in the 1970s. Although trained in very different disciplines--Illich was an academic and a priest, and Turner an architect-- the two authors came to similar conclusions about the nature of industrialism, informed in part by shared theoretical influences such as Patrick Geddes and Lewis Mumford, as well as by extensive travels each made in both industrial and industrializing nations.

Both Turner and Illich were also influenced by the time in which they both lived---in which industrialized nations were beginning to transition to service economies and global production was beginning to move to industrializing nations, such as Peru, where Turner worked as a planner interfacing with informal settlements outside cities, and Mexico, where Illich ran the Centro Intercultural de Documentación, a training center for Catholic missionaries on their way to South America and node of internal critique for the Catholic Church. Both Illich and Turner were critical of what they saw as an attempt by "first-world" nations to export the ideology of industrialization, and its inherent dangers, to countries where many people still fulfilled their daily needs in non-industrial ways, employing qualities Turner would refer to as "resourcefulness" and Illich as "conviviality." Both authors believed these qualities were precious and necessary for a functional society worth living in, and that these had already been mostly lost in "first-world" countries.

The period in which these two books were produced was also a time of global reckoning with the ideology of unlimited production and economic growth on a planet of finite resources. The Meadows report, *The Limits to Growth*, had been published in 1972, just a year before *Tools for Conviviality* and two years before *Housing by People*. The report outlined a stark contrast between the current trajectory of human population and resource use and the planet's forecasted capacity to supply these processes and absorb their waste. Both authors saw this situation as an inevitable effect of the industrial mode of production, and forecast that any "solution" to planetary overreach within an industrial mindset would necessarily involve the sacrifice of freedom and quality of life for a large percentage of human society.

For both Illich and Turner, industrialism is problematic primarily because of the spatial and social divorce of production from consumption within society. This leads to mismatches between goods and services produced and the needs they are supposed to serve, overuse of planetary resources and inequality in their distribution, and loss of personal freedom and quality of life as people are dispossessed of the ability to creatively maintain their own lives in relationship to the materials around them and the traditional ways of making use of them. In response, Illich and Turner each endorse a two-part philosophy emphasizing localism, which can be understood as a spectrum, and autonomy, which can be understood as a dichotomy. Any feasible solution to the problem of industrialism, for Illich and Turner, would have to fulfill both criteria.²

Hypothesis

The hypothesis of this paper is that the above stated trends in Illich and Turner's arguments can be illustrated in the story of Sudoeste del Besòs and its residents. The neighborhood was built on previously un-urbanized land in order to solve a "housing problem" created by rapid industrialization: as Barcelona grew into an industrial center and became increasingly connected to global networks of supply and consumption, it sucked resources from rural areas and caused the breakdown of networks of production and consumption everywhere except the urban core. The stories of the neighborhood's first residents, told through oral histories conducted by myself and classmate Ivan Duarte Massetti³, as well as those published in Barraques: La Barcelona Informal del Segle XX by Merce Tatjer et al, illustrate the transition to industrialism as experienced by the individual. Most of the first residents of Sudoeste del Besòs were migrants from rural areas of Spain or children of migrants, and lived in informal settlements on Barcelona's periphery before being rehoused in the neighborhood. Their stories reveal a shifting mosaic of pre- and post-industrial modes of living, in search of survival between the cracks of the two systems. The evolution of the difficulties faced by this first generation of Besòs residents, as well subsequent generations, and the means each has sought to solve them, describes an arc that trends from being left behind and shut out from industrialism, to being trapped in a deliberately marginalized position within it.

² This point is developed in the "discussion" at the end of the Turner section.

³ Ivan Duarte Massetti, "Learning from experience: A Social and Resource Comparison of the Barcelonian Informal Settlements during the Francoist Regime through Oral History," Master's Thesis, MISMeC, Escola Técnica Superior d'Arquitectura del Vallés, September 2022

<u>Methodology</u>

The methodology of this paper begins with a close reading of Ivan Illich's Tools for Conviviality and John Turner's Housing by People, supported by biographical research on each of the authors: their influences, the political and historical context of their lives, and their relationship with each other. For Illich, I gleaned biographical information from an article entitled "The People's Priest" published in American Conservative by Chase Madar, as well as obituaries of Illich written by Carl Mitcham for MIT Press and Pierce Wright for The Lancet. For Turner, I referred primarily to the profile "John F.C. Turner (1927-)" by Kathrin Golda-Pongratz. The two biographies appear in sequence in order to emphasize the relationship between these contemporaries and the time in which they lived, as well as the personal and professional relationship between the two. Analysis of each book is presented next. The most important ideas of each are deconstructed and laid out in parallel, differentiating between scales and methods of diagnosis and recommendations. In doing so, I attempt to demonstrate the ways in which Illich's more broad-based ideas are taken up by Turner and applied specifically to the housing sector, and to draw out the implications, limitations and potentials of the two approaches to diagnosis. I also deconstruct and compare the prescriptive aspects of each argument in order to map their potential applicability and point out potential pitfalls.

In the next section, related to the historical, economic and political antecedents of Sudoeste del Besòs, I have drawn on a collection of essays entitled Barragues: La Barcelona Informal del Segle XX, which was produced in connection with an exhibition entitled Barraques: La Ciutat Informal. For this section, I made particular use of information gleaned from the articles Les barraques i l'infrahabitatge en la construcció de Barcelona, 1914-1950 by José Luis Oyón i Borja Iglesias, and L'ocupació, la construcció i la vida a les barraques by Maximiliano Díaz Molinaro, both of which appear in the aforementioned collection. In this section, I also gleaned information from two undergraduate theses: one by Bartomeu Antich Garcia entitled El Polígon del Sudoeste del Besòs: Habitatge Social dels Anys 50, and another entitled La Barcelona d'en Porcioles: La Idea de Ciutat de L'Alcalde Josep Maria de Porcioles (1957-1973), by Neus Mateu Vico. This above information is also supplemented with oral histories published in Al Sudoeste del Rio Besòs by Matas Pericé, which describe the conditions of migrants' places of origin and their decision to leave. These sources formed the base material which I have attempted to examine through a lens informed by Illich and Turner, focusing in particular on industrialization as a root cause of immigration, and the "housing crisis" as evidence of a breakdown in the metabolic relationship between urban and rural, which was only eventually "solved" by a full

transition to an urban-industrial model which now exports its "externalities" to other areas of the world.

In the following section, which focuses on means of life-making in the barraques, I drew again from *L'ocupació, la Construcció i la Vida a les Barraques,* as well as from interviews with current residents of Sudoeste del Besòs and La Mina who lived in the informal neighborhoods of El Somorrostro, Camp de la Bota, and Can Tunis before moving to government-built flats in the Besòs sector. These interviews were conducted, transcribed and translated by myself and my classmate Ivan Duarte Massetti, and also appear in his thesis *Learning from experience: A Social and Resource Comparison of the Barcelonian Informal Settlements during the Francoist Regime through Oral History.*

The next section, which focuses on the first ten years of life in Sudoeste del Besòs, drew heavily on *Al Sudoeste del Rio Besòs*. Once again, I attempted to read the history presented in this book through a lens informed by Illich and Turner, focusing particularly on the shift from a struggle to provide for basic needs like shelter and water to a reckoning with industrially-produced modes of marginalization such as the withholding of education and transportation to centers of cultural power. The first residents of Besòs also found themselves with new needs produced by the industrial system, such as higher rents, utility bills and the mutually-reinforcing cycle of time-saving home appliances which had to be paid for by more labor hours. In this section, I also highlight the experience of women juggling pre-and post-industrial modes of labor as paradigmatic of the difficulties of transitioning between systems.

The thesis concludes with a presentation of selections from three interviews with current residents of Sudoeste del Besòs: we hear again from Anita Canillas about the present condition of the neighborhood, as well as Isa Redondo, director of the Martinet Solidari, a grassroots educational and social organization, and Mbaye Puy, the director of the Senegalese Association. I conclude by drawing parallels between the experiences of these current residents and their predecessors in the 1960s, and invoking the presences of Illich and Turner to comment on the situation and suggest a way forward.

Ivan Illich

Born in 1926, Ivan Illich was a Roman Catholic priest, philosopher and theologian of Austrian descent, although the circumstances of his life drew him from country to country and he often described himself as an errant pilgrim. Fittingly, he died while lecturing in Bremen, Germany in 2002 and was buried in a protestant cemetery by virtue of an exception to the rule banning Catholics and non-Germans, for those who died while traveling far from home.⁴

In life, Illich's investigations were wide-ranging and, from an outside perspective, seemingly disparate, although certainly connected by a thread that was obvious to him. He received undergraduate degrees in crystallography and histology (the study of the basic molecular structures of crystals and cells, respectively) from the University of Florence, studies which must have informed his lifelong interest in patterns of growth and questions of appropriate scale. In a 2003 tribute published by MIT, Carl Mitcham writes,

*"In the discovery of proper limits, Illich had been influenced by studies of organic morphology and natural design such as D'Arcy Wentworth Thompson's On Growth and Form, J.B.S. Haldane's On Being the Right Size, and especially Leopold Kohr's The Breakdown of Nations."*⁵

Later, Illich pursued a doctorate in medieval history from the University of Salzburg, and finally studied theology and philosophy at the Pontifical Gregorian University in Rome, after which he was ordained as a priest. Over the following decades, the priesthood would become the crucible in which Illich encountered the power of institutions to shape the structure of human relations, politics and the reproduction of life. The role was one which he held with considerable friction, but remained tied to in some manner throughout his life. The tension between his convictions and his placement within this system might seem unbearable to the biographer, but seems to have created a dynamism that remained useful to him. The priesthood was not the only institution against which Illich chafed, though. In an obituary published in *The Lancet* in 2003, Pierce Wright notes,

⁴ New Scare City, "Illich Final Resting Place," July 29, 2013.

http://backpalm.blogspot.com/2013/07/illich-resting-place.html

⁵ Carl Mitcham, "In Memoriam: Ivan Illich, Critic of Professionalized Design," *Massachusetts Institute of Technology*, 19, 4 (2003): 26.

"Illich scythed his way through numerous institutions he believed outmoded. He was a priest who thought there were too many priests, and a teacher of more than 50 years standing who maintained that children learnt best at home or in casual situations rather than through formal education^{*6}

After ordination in 1951, Illich worked as a parish priest in Washington Heights, New York City, for several years. At the time, it was one of the poorest districts in America, and home to a majority of recent immigrants from Puerto Rico. This was likely Illich's first encounter with the jagged edge between the so-called first- and third-world. In an article entitled "The People's Priest" published in the online journal American Conservative, Chase Madar writes,

"The experience of tending to immigrant parishioners as they got flash-fried in urban modernity left a lasting impression of the grotesque inadequacy of large-scale, rationally administrated institutions in dealing with basic human needs."⁷

The neighborhood was an epicenter of the opioid epidemic of that time, and the backdrop to the gang warfare that inspired the musical *West Side Story*. During this time, Illich attended a lecture by Paul Goodman, author of the 1947 publication *Communitas*, which reviewed urban planning projects from an anarchist perspective and was inspired by regionalists such as Patrick Geddes. At the time of the talk, *Communitas* had been published for a decade, but was only just beginning to gain popularity. Goodman's proposal to decriminalize drugs in New York was extremely controversial at the time, but struck a chord with Illich, who was beginning to see that a carceral approach to the drug trade was hurting, rather than helping the young people in his parish.In *Deschooling Society*, Illich wrote that Goodman's talk had challenged him to rethink his own ideas.

In 1956, Illich was appointed vice rector of the Catholic University of Puerto Rico, a position he held until 1960, when he was dismissed amid a dispute with two local bishops who had taken a stance against the territorial Governor at the time and formed their own political party. Illich spoke out against the church being involved in local politics and continued to dine with the Governor against the wishes of the bishops. In *Tools for Convivality*, published ten years later, Illich references the separation of church and state as an essential structure for maintaining

⁶ Pierce Wright, "Ivan Illich," *The Lancet* 361 (2003): 185

⁷ Chase Madar, "The People's Priest," American Conservative, February 1, 2010. https://www.theamericanconservative.com/the-peoples-priest/

individuals' ability to develop their own opinions and challenge existing norms: "Poetry, intuition, and theory can offer intimations of the advance of dogma against wit that may lead to a revolution in awareness. Only the separation of Church and State, of compulsory knowledge from political action, can redress the balance of learning... The law has protected societies against the exaggerated claims of its priests.⁸" Here, we can begin to see the development of Illich's understanding of the role of institutions in shaping (and, most frequently, reducing) the space available for individuals to engage in free, critical thought and discourse. Furthermore, we can see him beginning to explore the relationship between institutions and the common law, which he returns to in the final chapters of *Tools for Conviviality*. For Illich, formal legal procedures were liable to become compromised through entanglement with industrialized institutions,⁹ yet common law for Illich is the only conceivable defense against the proliferation of industrialism.

During his time at the Catholic University, Illich befriended his coworker Everett Reimer, and the two began to formulate a stance against formalized education, becoming critical of what they termed "schooling," an oppressive system of education which molded, rather than expanded, the mind of the student. It is easy to follow Illich's gaze here, as he began to experience firsthand the role parochial education played in maintaining and extending the power of the Church as an institution, along with its co-implicated ideologies and institutions. In his 1970 book *Deschooling Society*, Illich argues that schooling is not merely a metaphor for the industrial mode of control, but paradigmatic of it. "Deschool (insert sector here)" became a rallying cry in the global counterculture of the time, in a similar manner to the way "decolonize" is often used today.¹⁰

In 1959, Illich embarked on a bus and foot tour of Latin America, observing the ways in which the Catholic Church and other "first world" institutions used their influence to impose industrial development over local customs and modes of survival. Illich termed this a "war on subsistence" and became increasingly critical of both the church's role in Latin America and the unquestioned ideology of industrialism that he believed had decimated culture and society in the nations that had already passed through the industrial age.

⁸ Ivan Illich, *Tools for Conviviality* (London: Marion Boyars, 1972), 99

⁹ I.e. institutions with a stake in the industrialized system of production, thus, almost all.

¹⁰The question of metaphor vs. paradigm in regard to decolonization is taken up in the 2012 article "Decolonization is not a Metaphor" by Eve Tuck and K. Wayne Yang in a manner that provides an interesting parallel

This was the era of the Kennedy administration's Alliance for Progress, the Cold War, and Vietnam. Fidel Castro came to power in 1959, and, fearing communism in South America, the United States was doubling down its presence in the region and creating relationships of economic dependency with countries in the region.¹¹ In 1961, President Kennedy's Alliance for Progress was signed into force at an Inter-American conference in Uruguay. Among its stipulations were the raising of per capita income by 2.5% per year, the elimination of adult literacy by 1970, and the drawing up of comprehensive plans for national development, to be approved by an inter-American panel of experts.¹² Illich would certainly point out the relationship between literacy and coerced schooling, the power given to technocrats, and the erasure of ways of life-making not associated with earned income. The coercive nature of this plan was evident in its funding mechanism: the United States planned to provide \$20 billion over a decade, provided the Latin American countries contributed \$80 billion in the same time period.¹³

It does not require much digging to link these policies to the use of military force. In 1954, the United States backed a coup against the democratically elected leftist president of Guatemala, Jacobo Arbenz. Arbenz had recently introduced land reforms benefiting peasants and was in the process of nationalizing the United Fruit Company. Guatemala's new leader, Colonel Castillo Armas, reversed Arbenz's land reforms and made literacy a requirement for voting in elections. When guerilla groups began resisting the Armas regime in 1960, civil war broke out and lasted 36 years, during which time the United States continued to provide support and counter-insurgency training to the military. More than 200,000 people were killed over the course of the war, 83% of whom were Mayan. Of the human rights violations perpetrated during the war, 93% were carried out by state forces.¹⁴

Illich was not alone in his critique of US imperialism in the 1960s. As Madar argues, this may have contributed to the popularity of his otherwise unconventional ideas:

In the age of Robert McNamara and Walt Rostow, Third World economic development projects were frequently intermingled with brute force (McNamara, after serving as Kennedy and

¹¹ *The Columbia Encyclopedia, sixth edition* s.v. "Alliance for Progress," 2005, archived at https://web.archive.org/web/20070609120610/http://www.bartleby.com/65/al/AlliancPro.html ¹² ibid.

¹³ ibid.

¹⁴ PBS News Hour, "Timeline: Guatemala's Brutal Civil War" March 7, 2011.

https://www.pbs.org/newshour/health/latin_america-jan-june11-timeline_03-07

Johnson's secretary of defense, became head of the World Bank; Rostow, a development economist and Johnson's national security adviser, regarded the Vietnam War as an aid project until the end of his days). Intellectuals the world over saw what was happening in Southeast Asia, remembered the imperialist platitudes of Europe, and began to discern in the peddlers of "development" some rather violent, neocolonial tendencies...Their doubts found a forceful and erudite mouthpiece in Illich, whose critiques jolted many people awake.

After being dismissed from the Catholic University, Illich was reassigned to found and manage the Centro Intercultural de Documentación (CIDOC), which was ostensibly a training center for Catholic missionaries and volunteers from the Peace Corps and the Alliance for Progress on their way to assignment in Latin America, but which in actuality became a research institute documenting the role of the Catholic Church in "modernization" programs in these countries. His training programs taught would-be "modernizers" the local languages of their destination countries and emphasized non-imposition of industrial cultural values. In a 1968 talk for new volunteers at CIDOC, quoted in "The People's Priest," Illich remarked,

"You, like the values you carry, are the products of an American society of achievers and consumers, with its two-party system, its universal schooling, and its family-car affluence. You are ultimately—consciously or unconsciously—'salesmen' for a delusive ballet in the ideas of democracy, equal opportunity and free enterprise among people who haven't the possibility of profiting from these."¹⁵

Over the course of a decade, the CIDOC grew into a gathering place for intellectuals from across the Americas, and a center for theorizing alternatives to the industrial paradigm. It became an impressive example of internal institutional critique.

In the 1970s, Illich began publishing, and most of his best known work, including *Deschooling Society, Tools for Conviviality, Energy and Equity* and *Medical Nemesis,* was written during this period. At the same time, and likely not coincidentally, the CIDOC came into conflict with the local chapter of Opus Dei and became the subject of a CIA report. Illich was called to the Vatican for questioning, but was not punished and the organization was allowed to continue. However, at this time Illich chose to renounce active priesthood and in 1976 decided to close the CIDOC over fears that it was becoming too institutionalized.

¹⁵Ivan Illich, "Address to the Conference on Interamerican Student Projects" (speech, Cuernavaca, Mexico, 1968) quoted in Madar, "The People's Priest."

After closing CIDOC, Illich began an itinerant teaching career that took him from Penn State in the US to the Universities of Bremen and Hagen in Germany. He continued to publish, although his later work was not as well received as the four books from the early 70s. As Madar argues, times were changing, and Illich's ideas were just one more casualty of the neoliberal era:

"Illich's celebrity faded by the late 1970s, when it was no longer so easy to be a left-wing critic of economic and social development and all its ambiguous blessings. In the heyday of Illich's screeds, the welfare state was still steadily expanding; we were (almost) all Keynesians then, and professionals reliant on government monies could easily afford to nip the hand that funded them with some radical visions. But oil shocks, stagflation, the Third World debt crisis, and the ebbing of the welfare state since its high-water mark left many professionals scrambling for survival, leaving few resources and even less will for institutional rethinking. In France, Illich had commanded a huge following among the non-Communist Left, but the electoral victory of Mitterand and the Socialist-Communist bloc in 1981 lulled that nation's radical insurgency into a sleep from which it has still not fully woken up. All over the world, many Illichian critics of institutional power became institutionalized themselves."¹⁶

Although no longer an active member of the priesthood, Illich continued to consider himself a priest and occasionally performed private masses. For the last decade of his life, he lived with a mandibular tumor which, in Mitcham's words, *"he had chosen to treat as a difficult friend rather than an enemy."*¹⁷ Critical of what he saw as modern culture's inability to cope with the prospect of death and pain, he refused surgery which might have extended his life, but posed the risk of damaging his mental functions. He eventually succumbed to the tumor in 2002. His friend and contemporary John Turner has now outlived him by 20 years.

¹⁶ Madar, "The People's Priest."

¹⁷ Mitcham, "In Memoriam: Ivan Illich, Critic of Professionalized Design," 26.



A photo I took of Ivan Illich's grave in Bremen, Germany, summer 2022

John Turner

John F.C. Turner was born in England in 1927, a year after Illich. His first introduction to the lineage of anarchist geographers and regionalists came early, in the form of a school assignment to summarize a chapter of Lewis Mumford's *The Culture of Cities*. This led him to the works of Patrick Geddes, who had influenced Mumford. Geddes' *Cities in Evolution* focuses on the importance of citizen involvement in environmental governance, a theme Turner would expand upon throughout his life, applying it specifically to the question of housing.¹⁸

In 1944, Turner enrolled at the Architectural Association school of Architecture in London, but was almost immediately conscripted to serve in the British military for two years during World War 2. During this time, he found a copy of the anarchist periodical *Freedom* in his barracks and began reading works by Pyotr Kropotkin and Herbert Read. Kropotkin's idea of mutual aid made an impression on Turner, and would later inform his understanding of the community-built barriadas in Peru.¹⁹

Upon returning to architecture school, he studied with Jacqueline Tyrwhitt, a town planner, journalist and theorist who was engaged in developing applications of Geddes' ideas. Through Tyrwhitt, Turner's interest in Geddes and Mumford grew, and he began to publish writing related to Geddes' ideas. In 1949, he co-authored an appendix to a reprint of *Cities in Evolution* edited by Tyrwhitt, discussing Geddes' diagrams.²⁰ In Housing by People, Turner also makes extensive use of diagrams as a method of inquiry and communication of complex systems. At this time, he also began contributing to *Freedom* and met editor Colin Ward. His writings sought to contextualize Geddes' work within the lineage of anarchist thought.²¹

In 1952 Turner met Peruvian architect and planner Eduardo Neira, a fellow admirer of Geddes, at a CIAM summer school in Venice.²² Neira convinced Turner to come to work in Peru, and in 1957 Turner took his advice. At the time, Neira was the head of the planning department for the

²⁰ See "Appendix 1, part 2: The Geddes Diagrams: Their Contribution Towards a Synthetic Form of Thought" in *Cities in Evolution* (1949) edited by Jacqueline Tyrwhitt

¹⁸ Colin Ward, Introduction in Turner, *Housing by People*, 9

¹⁹ Kathrin Golda-Pongratz, "John F.C. Turner (1927-)" The Architectural Review, Reputations, January 11, 2021: https://www.architectural-review.com/essays/reputations/john-fc-turner-1927

²¹ See <u>"The Work of Patrick Geddes"</u> by John F.C. Turner, published in *Freedom*, 1948

²² Golda-Pongratz, "John F.C. Turner (1927-)"

Ministry of Development and Public Works in Arequipa, and was able to provide Turner a rare opportunity to experiment with an approach to urban planning rooted in the somewhat unconventional philosophy he had begun to develop in architecture school. In fact, Turner's time in Peru would be the defining moment of his career. Golda-Pongratz writes, "Borrowing from Ivan Illich, author of Deschooling Society and someone he also admired, Turner says he was 'deschooled as an architect' when working in Peru in 1957-65."

At the time, squatter settlements called *barriadas* were growing around cities in Peru, as people left rural life to move to cities. Observing the settlements, Turner began to recognize patterns of grassroots, community-driven development which echoed Kropotkin's concept of mutual aid. Gilda-Pongratz writes, "Recalling the ideas of anarchist geographer Pyotr Kropotkin, Turner merged them with the experience of the Andean concept of the *minka* as collective and reciprocal work practised in Peruvian communities to articulate his positions on aided self-help, bringing together self-generated community development and the principle of mutual aid."²³

In his work, Turner repeatedly insists on the fact that government does have a role to play in assisting the process of self-building. For Turner, who described himself as a "moderate anarchist,"²⁴ this was not so much an ideal as a realistic appraisal of existing power relations. Fascinated by systems theory, Turner saw self-help housing as a one gigantic housing system animated by innumerable nodes of dispersed decision-making--comparable in its goals to a centralized department of housing, but significantly more effective at achieving them.

Turner's theories developed side-by side with experiences in the field. His job initially involved surveying the land and interviewing and negotiating with settlers. He based his surveys on Geddes' precedent. The small interventions he suggested in the camps were based on Geddes' *conservative surgery* model. Turner and Neira worked to engineer a policy shift in regard to the relationship of the Peruvian state and Barriada residents, granting them rights to the land and providing basic services and some technical assistance for self builders.²⁵ Ward writes, "Far from being the threatening symptoms of social malaise, they were a triumph of self-help which, overcoming the culture of poverty, evolved over time into fully serviced suburbs, giving their occupants a foothold in the urban economy.²⁶ Putting aside the question of whether any one, or

²³ Golda-Pongratz, "John F.C. Turner (1927-)"

²⁴ ibid.

²⁵ Colin Ward, preface to *Housing by People* (London: Marion Boyars, 1976), 5

²⁶ Housing by People, introduction by Colin Ward. p. 9

several, real-life occurrences can prove a general theory, it is interesting to observe the evolution of the barriadas Turner worked with, during his time there and up to their present state. In 1964, Turner wrote the script for a documentary called *A Roof of my Own*, featuring footage of the process of building the barriadas. The film was originally intended to introduce the idea of self-building to a United States audience, but the film was censored and never made public. In 2019, a new documentary, entitled *City Unfinished--Voices of El Ermitaño*, and directed by Golda-Pongratz and Rodrigo Flores, was released, showing some original footage of *A Roof of my Own* as well as updated scenes of the el Ermitaño neighborhood in Lima today.



John Turner, Construction of El Ermitaño, Photograph, in Golda-Pongratz, "John F.C. Turner (1927-)"



Kathrin Golda-Pongratz, El Ermitaño in 2017, Golda-Pongratz, "John F.C. Turner (1927-)"

The policies developed by Turner and Neira carried an implicit critique, related to Illich's, of the involvement of industrialized countries in encouraging industrialization, often referred to as "development" in other nations. In his introduction to *Housing by People*, Ward writes, "For many years after the second world war, it was assumed that the rich countries had an immense contribution of technical and organizational wisdom to bestow on the 'under-developed' or 'developing' nations: a one-way trip of know-how and high technology. Aid became a cold-war weapon and a vehicle of economic and ideological imperialism."²⁷

Neira and Turner saw these settlements not as a problem to be solved, but as an opportunity to develop a new approach to urbanization, led by residents and supported by government. In his introduction to *Housing by People*, Colin Ward describes this realization: "Far from being the threatening symptoms of social malaise, they were a triumph of self-help which, overcoming the culture of poverty, evolved over time into fully serviced suburbs, giving their occupants a foothold in the urban economy."²⁸

²⁷ Colin Ward, preface to Housing by People, 4

²⁸ Ibid, 9

Over time, these observations and policy experiments led to the formulation of a new approach to urbanization, a practice which tends to run parallel to industrialization, in "developing" countries. In 1966, Turner presented a working paper called "Uncontrolled Urban Settlements: Problems and Policies" at the United Nations seminar on Uncontrolled Urban Settlements. This paper was extremely influential, and led to a policy shift by the United Nations and World Bank toward what came to be known as a *sites and services* approach.

Unfortunately, Turner had reservations about these policies, partially because they stemmed less from a critique of enforced industrialism and spoke more of a shift toward neoliberal policy on the part of these institutions. In the words of Mike Davis in *Planet of Slums*, "Praising the praxis of the poor became a smokescreen for reneging upon historic state commitments to relieve poverty and homelessness." In fact, sites and services programs often failed to provide some of the basic elements required from the state or agency in Turner's account, such as high-quality, affordable and appropriate materials and accessible financing.²⁹

In fact, during these years, the task of housing the poor of industrializing countries shifted largely from the governments of those countries to the World Bank and its related agencies, allowing these agencies, and the powerful industrialized countries they represented, to consolidate control in the "Third World" and impose their own ideas as a "worldwide urban policy orthodoxy"³⁰. Although the World Bank and IMF's embrace of his policies was initially helpful in Turner's early work in Lima-- Ward notes that "while the agencies normally accept this advice, the governments reject it"³¹-- the eventual result was further entrenchment of the power of industrialized nations in the policies of non-industrialized ones, and by extension, further codification of industrialism as a basic value.

In 1963, Monica Pidgeon, a chilean-born architect and journal editor, invited Turner to compile a special issue of Architectural Design called *Dwelling Resources in Latin America*, including some of his own work and that of like-minded architects and theorists interested in self-building in the region. In the acknowledgements section of *Housing by People*,³² Turner credits this project as beginning the line of thought that led to the book, and Pidgeon as providing the principle encouragement for him to compile his ideas about housing into published writing.

²⁹ Mike Davis, *Planet of Slums* (New York: Verso Books, 2017), 72

³⁰ Davis, *Planet of Slums*, 70

³¹ Ward, preface to *Housing by People*, 7

³² Turner, *Housing by People*, 1

In 1965, Turner moved to the United States and began working at MIT. He published most of his academic writing during this time. In 1970, he led a study on self-built housing in the US for the US Department of Housing and Urban Development under Donald Schon, who also taught at the Department of Urban Studies and Planning at MIT. Through this work, which became the basis for *Freedom to Build*, Turner began to build an understanding of, in his words, "common denominators of our first and third world experiences."³³ In the words of Colin Ward, "He was, perhaps to his surprise, expressing universal truths about housing."³⁴ Furthermore, as Ward notes, the poor of the rich countries often find themselves in a particularly difficult situation, in that they are deprived of the flexibility that in many pre-industrial and industrializing societies is the poor man's saving grace :"It is clear that the poor in some (though by no means all) of the exploding cities of the Third World, often have a freedom of maneuver which has been totally lost by the poor of the decaying cities of the rich world, who are deprived of the last shred of personal autonomy and human dignity, because they have nothing they can depend on apart from the machinery of welfare."³⁵

In 1976, Turner wrote *Housing by People* based on a study he carried out in Mexico with Tomasz Sudra, then a doctoral student at MIT. Much of the data presented in the book is based on work in Sudra's dissertation. In *Housing by People*, Turner writes that he hoped to continue to draw out the "cross-cultural comparisons and general principles" that began with *Freedom to Build*. As Turner began to create these generalized principles, he moved from the realm of culturally and historically specific documentation toward a more explicitly political theory of the relationship of the state to building projects, specifically housing. Here, Turner began to zero in on a category described by Illich: "industrial enterprises, each producing a service commodity, each organized as a public utility, and each defining its output as a basic necessity."³⁶

The relationship between Turner and Illich is well-documented. Turner and Ward both note that *Housing by People* would never have been written without Illich's encouragement³⁷, and Ward leaves no doubt about the ideological relationship between the two writers:

³³ Ibid, 3

³⁴ Ward, preface to Housing by People, 5

³⁵ Ward, preface to *Housing by People* 7

³⁶ Illich, *Tools for Conviviality*, 8

³⁷ Turner, Housing by People, 1 and Ward, preface to Housing by People, 5

"Some readers will perceive that the approach to housing outlined here, from a very rich fund of examples and case-histories, fits into a general framework of ideas...In the 1970s his analysis fits like a glove the climate of opinion moulded by such writers as Paul Goodman, Ivan Illich and Fritz Schumacher. We hardly need to ask what the author's opinions are on industry, work, leisure, agriculture or education."³⁸

In 1973, just before the publication of *Housing by People*, Turner returned to Britain and lectured at the Architectural Association and University College of London until 1983. He is currently 95.

³⁸ Ward, preface to Housing by People, 9

Tools for Conviviality

In Tools for Conviviality, Ivan Illich set out to write an "epilogue to the industrial age." In his view, history presented a particular opportunity in the post-war decades: so-called "first world" countries were transitioning to post-industrial economies based on consumption and services, while a new set of countries were beginning to industrialize, with plenty of encouragement from the former set, who were eager to outsource the "externalities" that had already been produced by the industrial pyramid scheme in their own countries. In Illich's view, the industrial age had come at great cost to the freedom and quality of life of people who had supposedly benefited from it, and the newly industrializing countries now faced the prospect of repeating these mistakes³⁹. The Limits to Growth had been published one year before, in 1972, and the specter of humankind's overconsumption of Earth's resources frames the outer edges of Illich's argument. However, to Illich, the revelation of a quantitative outer limit for human survival evidenced a deeper flaw in the present organization of human life. The logic of industrialism had transformed the DNA of human society, replacing striving for freedom, fairness and guality of life with the unquestioned goal of continuous growth. Planetary-scale overreach, extreme inequality and the suppression of creativity and freedom for all people, he argued, were mutually reinforcing consequences of industrialism carried to its logical conclusion.

I. Freedom

For Illich, the ultimate goal of any society should be to maximize the freedom of each individual up until the point at which it conflicts with that of another. To him, the great blunder of the industrial age was the attempt to fulfill this promise by replacing human labor with machines. For most of human history, the scale of human production was a factor of human scale: an individual could produce as much as his or her body was capable of, or as much as the bodies of all the humans he or she could coerce were capable of. Slavery maximized the freedom of some at the expense of others: production could be made more efficient with a labor force that was not paid

³⁹ Illich, *Tools for Conviviality*, 6.

Furthermore, the traditional externalities of industrialism would be compounded by the fact that many of the goods produced in second-wave industrial countries would be consumed by post-industrial countries. The larger a pyramid scheme grows, the less there is for those at the bottom.

and could be forced to consume very little. Thus, more goods could be produced and made more accessible to those who were free to purchase and consume them. However, morally heinous aspects of slavery aside, the efficiency of this model of production was still limited, as all working bodies needed to be fed and taken care of, and thus the scale of production was always tied to consumption and basic human needs to some degree.⁴⁰ The use of machines in production at first seemed to solve both problems at once: human slavery was no longer necessary, replaced by a labor force that did not consume what it produced.⁴¹ In the end, however, Illich insists, it was humans who became the slaves of machines.

In divorcing the site, scale and means of production from that of consumption, industrialism laid the groundwork for a new logic which, when followed to its conclusion, resulted in supply-side economics. As long as production is maximized and efficient, this logic follows, markets for its goods will emerge. Demand therefore follows supply, and the question of whose needs might be forgotten, or which might be over-fulfilled at the expense of the planet's capacity and the needs of others, are pushed to the side:

"The present industrial system is dynamically unstable. It is organized for indefinite expansion and the concurrent unlimited creation of new needs, which in an industrial environment soon become basic necessities."⁴²

The theme of need creation recurs in Illich's writing throughout the book, especially in relation to planetary overreach and the reproduction of poverty, although his focus is more on its effects than its mechanisms. This is a place where Illich's thinking is complemented well by John Turner, who directly analyzes the material failures of production-oriented economics.

For Illich, the more immediate effect of this divorce is the alienation⁴³ it creates between people and the goods they produce and consume, one which goes deeper than ownership of the means of production. At the workplace, people are forced to conform to the standards of machines that first replace their colleagues, then reframe the paradigm of production. At home, and in whatever space is left in between, consumers must choose between homogenous,

⁴⁰ Illich, *Tools for Conviviality*, 50.

 ⁴¹ In terms of food and goods, of course. The toll of what machines did consume--coal and oil, raw materials, land, etc.-- was not widely discussed until the time Illich was writing
⁴² Illich, *Tools for Convivality*, 76

⁴³ Illich does not employ the term "alienation," this is my choice, in order to draw out the comparison with Marx, which Illich does articulate, slightly differently, in the argument detailed in the next paragraph.

prepackaged building blocks from which to make a life. They must employ these tools with only the most basic understanding of their inner workings, for which they must be educated through instruction manuals and courses, which are designed to reform the user as a means to ensure a market for the tool. Finally, the set of possible lives to be assembled from these building blocks is significantly diminished, and thus are the possibilities for creative and new social arrangements and cultures.

I.1. The Myth of the Machine and the Alienation of Production

In chapter 2 of *Tools for Conviviality*, Illich provides a short history of the gradual integration of machines and mechanical power into the human productive capacity. At first, he writes, mechanical power served to improve the lives of workers. In the early Middle Ages, people began to make use of wind power through three-masted sailing ships and windmills, transforming the efficiency of production and transportation and making international trade possible. The building of canals opened the way for speedy and dependable transportation of goods in Europe, 1000 years after the same technology had been implemented in Southeast Asia. These technologies vastly increased the total energy available to humans, allowing more to be produced and transported with less expenditure of physical energy.^{44 45}

During the period from the High Middle Ages until the late Renaissance, writes Illich, new social tools such as the guild developed to protect the sovereignty of the worker, in response to the growing size and power of machines. While new technology benefited both town and worker by increasing yields and decreasing the amount of work input, the guild protected the worker from becoming the victim of dropping prices by giving him a monopoly over his trade.⁴⁶ However, everything changed with the advent of mining. Here, Illich quotes Lewis Mumford's *The Myth of the Machine:*

⁴⁴ Illich, *Tools for Conviviality*, 52-53.

⁴⁵ In "Wind powered factories: History (and Future) of Industrial Windmills," Kris De Decker notes that before grain mills, it took two hours a day to grind enough flour for the average family. Water mills significantly outnumbered windmills in Europe, and were advantageous for their regular output. However, some areas were not advantageous for windpower such as Spain (too dry) and the Netherlands (too flat). In 1300, there were 10,000-12,000 mills in the UK, although records do not distinguish between water and wind mills. In 1750, there were 6,000-8,000 windmills in the Netherlands and 9,000 in 1850. This is 5 times the number of wind turbines for electricity generation in the country today. France had 8,700 windmills and 37,000 watermills in 1847. In total, Europe had around 200,000 windmills and 500,000 watermills at its peak. They were distributed across both urban and rural areas, evidencing a relative diversity in sites of production.

⁴⁶ Illich, *Tools for Conviviality*, 52-53.

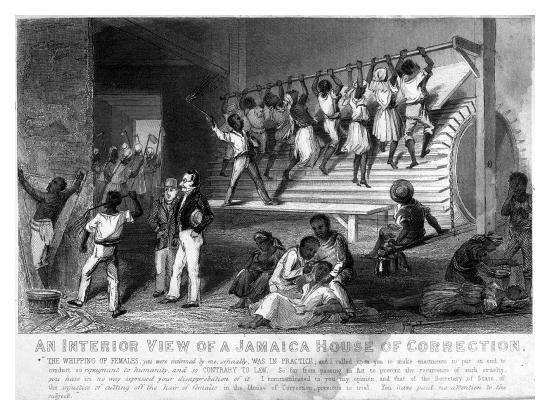
"(Mining) set the pattern for later modes of mechanization by its callous disregard for human factors, by its indifference to the pollution and destruction of the neighboring environment, by its concentration upon the physico-chemical process for obtaining the desired metal or fuel, and above all by its topographic and mental isolation from the organic world of the farmer and the craftsman...the destructive animus of mining and its punishing routine of work, along with its environmental poverty and disorder, were passed on to the new industries that used its products. These negative social results offset the mechanical gains.⁷⁴⁷

It is worth noting that Mumford identifies the new destructive character of mining with its physical and mental separation from the "organic⁴⁸ world of the farmer and craftsman," that is, the site of consumption. The separation of extraction from the needs it was conceived to fulfill sets the stage for the exploitation of workers and the environment in the name of a caricatured demand, now conceived as insatiable. Illich describes a changing paradigm, from "ritual regularity to mechanical regularity," in which time-keeping and spatial measurement began to mold the activities of people in the workplace to fit the regular intervals and outputs of the machines they worked with. Segments of time began to be valued as a function of the labor that could take place within them, and suddenly time became a currency that applied to everyone: something you could be short of, or that you could trade goods or money to acquire more of. And, for a particular period of time in which machines had already upended the paradigm of work, but had not yet fully replaced the human labor, people's bodies were evaluated in comparison to machines, in terms of how much physical exertion could be extracted from the average person engaged in a particular task during a certain interval. Illich refers to this relationship as a "new kind of slavery"--that of man to machine-- but it also coincides with a period in which the use of very literal slave labor and prison labor was massively scaled up around the world. Until the early 19th century, many factories derived mechanical power for machines from treadmills, large wheels on which prisoners could be made to walk, creating rotary power.⁴⁹ Even as they continued to be fueled by human power, Illich makes clear, machines had already redefined the paradigm of work, and it was not long before new types of power were found to replace the human body.

⁴⁷ Lewis Mumford, *The Myth of the Machine*, quoted in Ivan Illich, *Tools for Conviviality*, p. 53.

⁴⁸ Simultaneously, of course, he is drawing a distinction between the organic societies of the past and the mineral qualities of the new resource.

⁴⁹ Illich, *Tools for Conviviality*, 55



J. Snow, Prisoners on a treadmill in colonial Jamaica, Wikicommons



Prisoners in Rangoon Working on a Treadmill, Process print after Watts and Skeen. Wellcome Collection, Public Domain

Eventually, however, mineral fuels--notably also associated with mining--came to replace human bodies, wind and water as the main source of power for machines. For Illich, the end of slavery in the United States marks the fulfillment of the industrial revolution there, and the industrial transformations of various countries, which continue to occur on different timelines, can also be traced to a process of the entrance of machines into extraction of materials and production of goods--first, transforming the paradigm of work, and then replacing the human being almost entirely. The jobs left for humans in production involve the operation of machines, which, rather than marking the mastery of the worker over the apparatus, actually constitutes a deeper, more subtle entrenchment in the "new mode of slavery." The choices made by the operator of a machine, unlike the pre-industrial craftsman, are determined by the design of the machine--a predetermined ideal output, homogeneous in nature, which is facilitated by a set of ideal conditions that the operator is charged with maintaining.

As the supremacy of the machine over work becomes more entrenched, it also becomes less visible. In the modern "gig economy," for example, workers may be considered freelancers rather than employees, and often do not have another person they consider a "boss." However, their actions are monitored with real-time data which is then fed through an algorithm that delivers "nudges" in order to influence their behavior. In a New York Times opinion piece "When Your Boss is an Algorithm," Alex Rosenblat describes the interactions of Uber drivers with the network algorithm:

"The algorithmic manager seems to watch everything you do. Ride-hailing platforms track a variety of personalized statistics, including ride acceptance rates, cancellation rates, hours spent logged in to the app and trips completed. And they display selected statistics to individual drivers as motivating tools, like 'You're in the top 10 percent of partners!'...Uber uses the accelerometer in drivers' phones along with GPS and gyroscope to give them safe driving reports, tracking their performance in granular detail. One driver posted to a forum that a grade of 210 out of 247 'smooth accelerations' earned a 'Great work!' from the boss...Other tools, like the rating system, serve as automatic enforcers of the nudges made by algorithmic managers. In certain services on Uber's platform, if drivers fall below 4.6 stars on a 5-star rating system, they may be "deactivated" — never "fired." So some drivers tolerate bad passenger behavior rather than risk losing their livelihoods because of retaliatory reviews."⁵⁰

⁵⁰ Alex Rosenblat, "When Your Boss is an Algorithm," Sunday Opinion, The New York Times, October 12, 2018. <u>https://www.nytimes.com/2018/10/12/opinion/sunday/uber-driver-life.html</u>

Furthermore, Rosenblat points out, it is more difficult to hold an algorithm accountable for the experience of workers than a human boss. "When payments for trips are missing," he writes, "labor advocates might call it wage theft, but Uber says it's a glitch."

This most recent evolution of the machine-supremacy paradigm of work is particularly relevant to life in contemporary Sudoeste del Besòs, where many residents support themselves on this type of network-driven gig work. I will return to this point later in the paper. At this point, however, it is important to clarify Illich's objective in the discussion of machines and work: to redefine the industrial revolution in terms of the relationship between people and their tools, rather than the emergence of any particular invention. Although the experience of the "enslavement" of worker to tool has varied over time--from physical drudgery to a loss of creative control--the monopoly of the machine over the paradigm of work is the real indicator of industrialism, whether the machine is powered by wind, water, minerals or humans. In fact, as is evident from his description of the golden age of wind and water-powered mills, it is possible to both reduce human drudgery and expand production up to a point, as long as systems such as guilds are in place to safeguard the sovereignty of the worker in relation to the paradigm of the machine. However, the monopoly of the latter over systems of production has become so entrenched that it is impossible for most people to imagine a form of work that doesn't entail some form of "enslavement:"

"We have all grown up as children of our time, and therefore it is extremely difficult to envisage a postindustrial yet human type of "work." To reduce industrial tools seems equivalent to a return to the tortured labor of the mine and the factory, or to the labor of the U.S. farm hand who has to compete with his mechanical neighbor. The worker who had to dip a heavy tire into a solution of hot sulfur each time the machine asked for it was literally hooked onto his apparatus. Agricultural labor also ceased to be what it was for a slave or a farmer. For the slave it was labor at the service and behest of a master; for the peasant it was his own work which be could organize and shape in accordance with the demands of growing plants, hungry animals, and unpredictable weather. The modern farmhand in the United States today who is deprived of power tools is under a double pressure...he must measure up to performance standards set by farm hands elsewhere who use machines, and he is constantly aware that he is underprivileged, exploited, and abused because in an age of the megamachine he feels that he is used like a component. The prospect that moving toward a convivial society might imply a society with low power tools would seem to him like a return to the exploitation of manpower by inefficient industrial machines in the early periods of steam."⁵¹

³³

⁵¹ Illich, *Tools for Conviviality*, 56-57

As we will see, Illich envisions an alternative to the monopoly of the industrial mode of production, based on the continuous evaluation of tools and democratic participation in the setting of limits on their scale and power. First, however, we will leave the realm of centralized production and move to the household and the level of the individual, for whom a set of mass-marketed tools are both products in themselves and the means of reproduction of everyday life.

I.2. Non Convivial Tools and the Alienation of Consumption

For Illich, the alienation of the consumer from the goods that are produced for her by the industrial system is an even greater focus than the difficulties faced by the worker who produces them. Rather than focusing on *goods* produced by the industrial system, a framing which reinforces the dichotomy between production and consumption, Illich puts forward the idea of *tools*. In any society, even one that has passed as deeply into industrialism as our own, it is necessary for ordinary people to self-produce some aspects of their daily lives, from cooking food to caring for children and the elderly to choosing a route to school or work. The ways individuals provide for their own needs, and for each other, and thus the cultures they can produce collectively, are conditioned by the tools they employ. In industrialized societies, these tools are often prepackaged and over-designed, but still require some choice or recombination on the part of the user. Most tools are both produced and consumed, and often used to produce further tools or outcomes.

For example, an oven is produced in a factory and then consumed by my aunt Florence, who uses it to produce food for her family. In another society, aunt Florence might have built the oven herself, or with the help of family and friends, out of earth in the back of the house, or out of simple components bought at a hardware store that could be used to assemble many things other than an oven. More likely, however, is that Florence did not have the space, time or components available to be able to build her own oven, and likely cannot even repair it herself if it breaks, since it is not designed to be repaired easily by non-specialized technicians, and probably needs specific parts that are not compatible with any other oven. Because of this, Florence has very little agency or choice in the steps she must take in order to be able to cook for her family. If the oven needs to be fixed, she must pay for a licensed mechanic, probably one who has a contract with the oven manufacturer, to order the new part and install it. Or perhaps

the oven is broken in such a way that it is impossible to replace the part and a completely new oven must be purchased. If she wants to continue to cook, she must pay and wait for the new oven to be installed. Of course, she could choose a different brand of oven, but it will likely cost about the same amount and have similar restrictions on repair.

Illich chooses to evaluate tools based on a quality he terms *conviviality*: the extent to which the tool increases the freedom and creativity of the one who wields it, or by contrast, whether the requirements for use of the tool create restrictions which reduce the overall autonomy of its user. In the development of any tool, he argues, a balance must be reached between these two opposing tendencies. The example of the oven illustrates several common aspects of non convivial tools: nondetachable parts, designed difficulty of repair, and radical monopoly. The idea of nondetachable parts has many manifestations. In essence, it is the existence of tools within complex systems, in which the entire system must be used in order to access the function of one of its components. This can be seen at the physical scale of the oven: the parts included in it are manufactured for a single purpose and cannot be used to build any other tool. Furthermore, they are usually specific to the brand and model, and thus difficult to replace, or to use elements of a scrapped oven that still work as spare parts for another.

Furthermore, the oven exists as part of a larger, intangible system, in which repair by the user constitutes a breach of warranty, and specific technicians must be hired. Even without the warranty, the design of the oven is often specific enough that a general knowledge of the workings of ovens is not sufficient to repair it. Package deals, in which one good is much cheaper when purchased in tandem with another good that the user may not need or want, or that further constrains the user's freedom, are also examples of nondetachable parts. Illich uses the example of the conference hotel, where rooms are only purchasable as package deals with the plane ticket to travel to the conference. A conference-goer who wished to travel to the event via a different mode of transport would have trouble finding accommodation.

It is easy to imagine the alternative to such design, in the case of the oven. In fact, until relatively recently in the development of industrialism, and still in many places in the world, machines like ovens can be assembled from reproducible and intuitive assemblies of simple components. To repair the oven or add new functions, the user might simply have to rearrange the existing components or purchase a few additional ones. If the oven is no longer wanted at any point, it can be disassembled and the parts can be used for some other purpose, or sold to

a neighbor. If the user is not particularly mechanically inclined, some advice from a handy family member, neighbor or hardware store clerk should be sufficient to accomplish the task. This alternative design philosophy, coined "loose parts" by Simon Nicholson,⁵² is also a focus of John Turner's, and a topic I will return to in more depth in that section.

Another quality of non convivial tools, perhaps most insidious, Illich terms radical monopoly. He explains, "I speak about radical monopoly when one industrial production process exercises an exclusive control over the satisfaction of a pressing need, and excludes nonindustrial activities from competition."⁵³ The example of the oven illustrates this phenomenon: although no one brand has a monopoly over producing ovens, Aunt Florence can only choose between options which all exhibit the same non convivial restrictions: difficulty of repair, brand and model-specific parts, warranty, etc. She does not have the option of purchasing the more convivial type of oven made using loose parts. The choice she does have is thus something of a false promise, without meaningful content.

Illich further illustrates radical monopoly with the example of funeral proceedings. A generation earlier, he writes, most aspects of a funeral in Mexico--the wake, the ceremony itself, the dinner intended to resolve quarrels over the will--were organized by everyday people in ways that varied from one region to another. The only professionals involved were the priest and the gravedigger. Recently, however, funeral homes had begun to pop up in some major cities, although at first most people were uninterested in paying for a service they were used to providing for themselves. Over the course of the sixties, however, funeral homes were able to establish control over cemeteries. To bury your dead in a cemetery owned by a funeral home, it was now necessary to purchase a package deal, including an embalming process, a coffin, and a service. At the moment of writing *Tools for Convivality*, Illich noted, legislation was being passed in Mexico to make it illegal to bury the dead without the help of an undertaker.⁷⁶⁴

Radical monopoly has reshaped not only cultural landscapes, but physical environments as well. The radical monopoly of cars,⁵⁵ for example, has made other modes of transportation such as walking or riding a bicycle unfeasible and even dangerous in many places in the world. As

36

⁵² Simon Nicholson, "Theory of Loose Parts: How to not Cheat Children," Landscape Architecture Vol 62, 1971, 30-34

⁵³ Illich, *Tools for Conviviality*, 85

⁵⁴ ibid, 86-87 ⁵⁵Ibid, 85

cities began to be planned around automobiles, distance between residential areas, shopping and places of work began to be considered acceptable, under the assumption that most people owned a car. Over time, these distances have become expensive, in terms of the carbon emissions necessary for large populations to cross them every day, the cost of the gas and car maintenance that has become a regular expense for most households,⁵⁶ the land that is devoted to roads and parking lots, and the social segregation that is made possible by suburban sprawl. "Bedroom communities" such as Sudoeste del Besòs developed on the peripheries of cities, necessitating long commutes into the city center for work. For those who could not afford a car, such as many of the early residents of SOB, commutes became arduous and in some cases almost impossible. I discuss the social effects of the "bedroom community" later, in the story of Sudoeste del Besòs in the 1960s.

In cities around the world, highway infrastructure has created barriers between neighborhoods, as the utility of the highway for those passing through from one distant place to another takes precedence over the needs of people who actually live in the place the highway has been constructed. One example of this occurred in the winter of 1968-69 in Sudoeste del Besòs. The neighborhood market had finally been completed earlier that year, but it was made almost inaccessible to residents that winter because of debris from the construction of an off-ramp from Gran Via. A section of Rambla Prim had become an impassable "mud bar" and one day after it had rained, the only navigable section of the street had been blocked by construction materials. One woman fell while attempting to cross the mud carrying her child and market bag and fell, prompting other women to start throwing rocks at the construction workers in protest of the lack of a path. Later, 600 women signed a letter to the mayor demanding better pedestrian infrastructure on Rambla Prim, and eventually two bridges were installed over the mud.⁵⁷

In addition to reducing the feasibility of other types of transportation, cars have also claimed a radical monopoly over any kind of activity that occurs on or near a street. Streets in areas with slow, sparse traffic are suitable for all types of social, recreational and metabolic activities, such as those in the barraques I describe later in this thesis. However, once the vehicles passing

⁵⁶ Americans, on average, spend 13% of their household expenditures on transportation, and 90% of that is related to personal vehicles. See "The High Cost of Transportation in the United States," Institute for Transportation and Development Policy, May 23, 2019,

https://www.itdp.org/2019/05/23/high-cost-transportation-united-states/

⁵⁷ Alfred Matas Pericé, *Al Sudoeste del Río Besós: Diez Años de la Vida de un Barrio Barcelonés, Edición Castellana,* Translated by María Lourdes Nonell (Barcelona: Editorial Pòrtic, 1971) Originally published in Catalan, 1970.

through them surpass a certain speed--in *Energy and Equity*,⁵⁸ Illich sets the maximum as the speed of a bicycle--streets become suitable for transportation only. A central objective of the Superblock philosophy developed by the Barcelona Department of Urban Ecology (BCNEcologia, now Barcelona Regional) is to reclaim streets as public space by counteracting the radical monopoly of the automobile. By removing the delineation between public space and streets and explicitly requiring cars to yield to other activities within the Superblock, the supremacy of the car can be effectively combatted.⁵⁹ This project is a rare example of Illich's proposal to individually evaluate and intervene to limit the supremacy of certain tools that have been deemed to limit human freedom.



Bragulí fotògrafs, Montjuic, 1920s Barraques: La barcelona Informal del Segle XX

⁵⁸ Ivan Illich, *Energy and Equity* (New York: Harper and Row, 1974).

⁵⁹ BCNEcologia: 20 Years of the Urban Ecology Agency of Barcelona, edited by Barcelona City Council, BCNEcologia and Barcelona Regional, 175-187



Xavier Miserachs, Montjuic. Photograph, 1962 Collecció MACBA.



Pepe Encinas, Tramuntana, el Carmel, Photograph, Axiu Pepe Encinas, 197



Kim Manresa, *La Roda de Dalt en construcció entra la Guineueta i Canyelles, Nou Barris,* Photograph, MUHBA



Plan showing the relationship between the construction of housing polygons and automobile road. Amador Ferrer i Aixalà, *Els Polígons de Barcelona : l'habitatge massiu i la formació de l'àrea metropolitana* (Barcelona: Edicions UPC, 1996)

The overall effect of non convivial tools is to infantilize users and deny them the possibility of creativity, learning, or of developing deeper relationships with the materials that are used to construct a life. Turner would refer to this phenomenon as a deprivation of *resourcefulness*. By promising to free people of the need to interface with these basic materials--soil, rocks, water, seeds, fibers, and even basic pre-constructed tools made by combining these materials--non convivial tools also deny people any real understanding of the environment in which they live. It becomes possible only to interface with the tools themselves, which are often designed in such a way to hide their inner workings from the user. Many tools even have a contrived "user interface" which provides an oversimplified, often incorrect representation of the process of the machine.

Illich writes,

"The city child⁶⁰ is born into an environment made up of systems that have a different meaning for their designers than for their clients. The inhabitant of the city is in touch with thousands of systems, but only peripherally with each. He knows how to operate the TV or the telephone, but their workings are hidden from him. Learning by primary experience is restricted to self-adjustment in the midst of packaged commodities."⁶¹

The result is a society of lonely, frustrated and creatively stunted individuals who can express themselves only through further consumption. However, even the ability to enjoy what is consumed is limited by an inability to understand the product. Furthermore, it is easy to see how difficult it might be to understand the finite nature of natural resources, or the importance of limiting consumption, in a world in which those resources have been hidden from view and consumption has become the sole vehicle of identity, relationality and self-expression.

In such a world, education takes on the critical role of enforcing the status quo by molding and re-molding individuals to the constantly changing landscape of tools. Learning, which for Illich means the experimental, self-guided building of relationships with the materials and tools of the surrounding environment, is replaced by schooling, in which people are taught correct and incorrect ways to interface with tools that have become too complex to merit intuitive relationships. These instructions are available not only through formal institutions, but woven into the cultural landscape of industrialism through media and the instructions built into the

⁶⁰ It is worth noting Illich's identification of this state of being with urban living. We will return later to the relationship between industrialization and urbanization.

⁶¹Illich, *Tools for Conviviality*, 96

products we consume. Like the "nudges" built into the app for Uber drivers, they are often subtle, sometimes as subtle as the associations provoked by shapes, colors and symbols that teach us the "correct" way to handle a product.⁶²

Here, we can begin to see how Illich's thinking related to schooling and education, developed in *Deschooling Society*, fits into the more comprehensive overview of industrial society given in *Tools for Conviviality.* For Illich, education is a mechanism for control, a corrective technology meant to continually guide people, who naturally seek convivial relations with materials and tools, back into alignment with a mechanically-generated status quo. If human society has become a machine whose single goal is economic and industrial growth, the fulfillment of this goal depends on containing the behavior of each individual within a range of predefined parameters.

The role of education as a means of standardizing behavior is perhaps most starkly apparent when it is used to "integrate" those who recently migrated from rural or less industrialized areas to city life. It is in these situations, in which adults who have grown up with more intimate relationships to materials, landscapes and tools are forced to give up these modes of living in favor of mass-produced products and services, that the violent nature of this type of education becomes most evident:

"Industrial society demands that some people be taught before they can drive a truck and that other people be taught before they can build a house. Others must be taught how to live in apartment buildings. Teachers, social workers, and policemen cooperate to keep people who have low-paying or occasional jobs in houses they may not build or change. To accommodate more people on less land, Venezuela and Brazil experimented with high-rise tenements. First, the police had to dislodge people from their "slums" and resettle them in apartments. Then the social workers had to socialize tenants who lacked sufficient schooling to understand that pigs may not be raised on eleventh-floor balconies nor beans cultivated in their bathtubs.²⁶³

When people who previously had the skills and resources to sustain themselves from local materials no longer have freedom to do so, and instead must learn to compete in an industrialized economy for access to basic necessities, including those products which were not

⁶² Illich, Tools for Conviviality, 96

⁶³ Illich, Tools for Conviviality, 102

previously necessities for them, we can begin to understand how industrialization creates and maintains inequalities and wasteful use of resources. We will return to this theme later in the discussion of Sudoeste del Besòs.



Pepe Encinas, La Mina, Photograph, 1978, Arxiu Pepe Encinas

II. Inequality and Planetary Overreach

For Illich, the erosion of personal freedom exists alongside designed inequality and the overuse of natural resources in a mutually reinforcing loop. All three are results of industrialism's embedded teleology of continuous growth. When people who otherwise are capable of providing for their own needs face institutionalized barriers to doing so, and are forced to jump through artificially complex obstacles to gain the right to consume, the social and environmental cost of meeting those needs grows. Barriers to consumption such as education level, employment status, income and access to transportation mean that basic needs are no longer as simple as food, water, shelter and community. Access to schools, public transportation, industrialized healthcare, and regular income are now seen as basic necessities in industrialized economies, driven by radical monopolies that leave no room for alternative paths of subsistence. As these monopolies proliferate and new basic needs are created, individuals must continuously contort themselves to maintain a foothold on a ladder in which the bottom rungs continue to disappear. In such a society, social mobility is a matter not of improvement, but of survival. When the economy strives for constant growth--and industrialization, urbanization, and everything that goes with it-- individuals must do so as well, or risk being left behind.

"Basic satisfactions become scarce when the social environment is transformed in such a manner that basic needs can no longer be met by abundant competence. The establishment of radical monopoly happens when people give up their native ability to do what they can do for themselves and for each other, in exchange for something "better" that can be done for them only by a major tool. Radical monopoly reflects the industrial institutionalization of values. It substitutes the standard package for the personal response. It introduces new classes of scarcity and a new device to classify people according to the level of their consumption. This redefinition raises the unit cost of valuable service, differentially rations privilege, restricts access to resources, and makes people dependent. Above all, by depriving people of the ability to satisfy personal needs in a personal manner, radical monopoly creates radical scarcity of personal--as opposed to institutional--service.⁷⁶⁴

Furthermore, just "keeping up" with industrialization is often not enough. In rapidly industrializing countries, the cost of basic staples often rises more quickly than wages for "unskilled" labor, and once the producers of these staples have established a radical monopoly, people who were

⁶⁴ Illich, *Tools for Conviviality*, 88

previously able to provide for themselves through subsistence farming find that their new wages, although likely higher than their previous income, are not enough to pay for the staples they once produced for themselves. We will see this paradox of rising income illustrated in the story of the first residents of Sudoeste del Besòs in the 1960s. Illich further notes that these inequalities reproduce themselves on every level of income: poor citizens of industrialized countries may make ten times the income of the subsistence farmer-turned worker, but have similar difficulty meeting their basic needs because of a higher cost of living.⁶⁵ The definition of a "subsistence wage" is therefore constantly changing and far from straightforward. I will return to this question in the discussion of *Housing by People*, in which John Turner attempts to create a blueprint for evaluating subsistence in industrializing countries like Mexico, which often involves a patchwork of self-production, wage labor and consumption of industrial products.

The effects of continued industrialization and economic growth are not evenly distributed. However, the world's rich and poor are both entrenched in the system, the poor for reasons of survival, and the rich because continually increasing consumption has come to define their understanding of their relationships to others, their place in the world and their self-expression. Illich notes that a 3% increase in the standard of living in the United States costs 25 times more than a similar increase for the entire population of India, despite the fact that the population of India is much larger.⁶⁶ Such a benefit for the poor would require the rich to reduce their own rate of improvement, which, although a seemingly small price to pay, would upend the organizing principles of society in wealthy countries, a fact which is terrifying for the rich. Thus, the imperative of continued growth for the wealthy "makes murderous demands on the resources of the poor, yet the rich pretend that by exploiting the poor nations they will become rich enough to create a hyperindustrial abundance for all.⁷⁶⁷ The tug-of-war for access to resources only serves to accelerate overall consumption and widen inequality in access. However, both sides continue to demand further industrialization.

Furthermore, centralization of production creates inherent inequalities, not just in terms of income and resources, but decision-making power. In the post-industrial world, energy conversion has come to greatly exceed the body power of all living people. At the time of writing, Illich calculated the ratio of manpower to mechanical power to be 1:15 in China and

⁶⁵ Ibid, 111-112

⁶⁶ Ibid, 110-112

⁶⁷ Ibid.

1:300 in the United States.⁶⁸ Control over this power is concentrated in central switchboards, and while the citizen of the United States may feel she wields more power than the average Chinese citizen on a daily basis, she is much more dependent on the whim of a centralized power than her Chinese counterpart. This danger is exemplified by the 2019 Canarsie power shut-off in New York City, in which the electricity provider Con-Ed shut off power to a majority-Black neighborhood during a heat wave, in order to prevent shutoffs in other areas.⁶⁹

Decreasing the wage gap, Illich concedes, would "obviate the surface effects" of industrially created inequality, allowing industrial goods and services to be more universally accessible. However, the "power gap" described above illustrates the fact that industrialism creates inequality on multiple fronts. Another important gap is related to the value of one's time. In a society in which people spend most of their time at work-- and in which people are differentially valued at the workplace based on their level of education-- power, time and choice can be differentially apportioned, creating inequalities even in a society of full income equality. The most glaring example of this for Illich is the culture of meritocracy in the Soviet Union, in which high-speed transportation is reserved for scientists and government officials whose time is believed to be more valuable.⁷⁰

"The concentration of privileges on a few is in the nature of industrial dominance...As tools get bigger, the number of potential operators declines. There are always fewer operators of cranes than of wheelbarrows. As tools become more efficient, more scarce resources are put at the service of the operator. On a Guatemalan construction site, only the engineer gets air conditioning in his trailer. He is also the only one whose time is deemed so precious that he must be flown to the capital, and whose decisions seem so important that they are transmitted by shortwave radio. He has of course earned his privileges by cornering the largest amount of tax money and using it to acquire a university degree. The Indio who works on the gang does not notice the relative increase in privilege between him and his Ladino gang boss, but the geometricians and draftsmen who also went to school, but did not graduate, feel the heat and

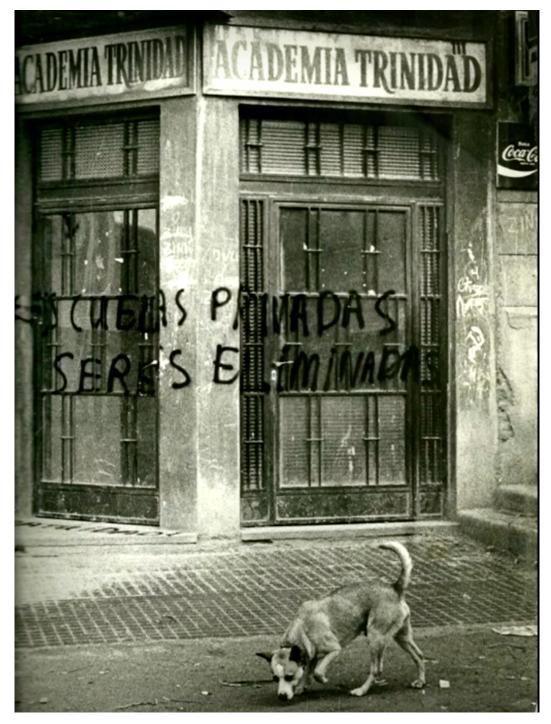
⁶⁸ Illich, *Tools for Conviviality*, 106. Of course, this has changed dramatically since 1972. This contrast seems a bit funny in retrospect, now that dependence on centralized power has increased dramatically in China, coupled with a regime which has proven itself quite willing to abuse this power.
⁶⁹ Aldana-Cohen, "Eco-Apartheid is Real," The Nation, July 26, 2019.

https://www.thenation.com/article/archive/green-new-deal-housing-climate-change/ ⁷⁰ Illich, *Tools for Conviviality*, 114 the distance from their families in a new and acute way. Their relative poverty has been aggravated by their bosses' claim to greater efficiency.⁷⁷¹

At the risk of redundancy, I think it is important to point out the role education plays in Illich's explanation of the differential rationing of privilege, which in turn rationalizes continual growth in industrial production. Since there are few opportunities to become an operator of a large tool or the manager of a centralized institution, it becomes necessary in a society dependent on these things to create a system for the orderly rationing of these privileges. Knowledge capital thus becomes a sort of basic currency. "The most prestigious way to measure a person's productivity," Illich notes, "is by the price tag on his education consumption."⁷² Thus, campaigns for fairer access to education, while making real improvements in the lives of some, maintain the overall structure of power. As we will see later, education, or lack thereof, has continuously been a main cause of unequal access to resources in Sudoeste del Besòs.

⁷¹ Illich, *Tools for Conviviality*, 113-114

⁷² Ibid, 115



Kim Manresa, Lluita per l'Escola pública, Nou Barris, Photograph, 1973, AHRNB

III. Choosing Conviviality

"The barriers beyond which destruction looms are of a different nature from the boundaries within which a society freely constrains its tools. The former establish the realm of possible survival; the latter determine the shape of a culturally preferred environment. The former define the conditions for uniform regimentation; the latter set the conditions of convivial justice. The boundaries of doom are constitutive requirements common to all postindustrial societies. Statutory characteristics setting more narrow bounds than those absolutely necessary are the result of joint options made in a commonweal, as a result of its members' defining their lifestyle and their level of liberty."⁷³

Fifty years since Illich wrote this, we find ourselves negotiating the boundaries of doom. The most powerful countries in the world now meet yearly to hear predictions of how much devastation can be expected at each degree of atmospheric warming, and to weigh the economic and environmental costs and benefits of various speeds of transformation. The gap between the conditions necessary to ensure the survival of the most vulnerable and those that will allow the most powerful to live in relative comfort is wide enough that some populations have already been sacrificed while the COP member parties negotiate. Daniel Aldana Cohen refers to this default consensus as "eco-apartheid," a worldwide regime of slow violence, in which the boundaries of acceptable use of resources are defined somewhere between survival and comfort of the global elite, whose access to technology and power buy them time for negotiating that others do not have.

Aldana Cohen writes, "Eco-apartheid doesn't result from elites' cruel intentions, but from their ad hoc measures to maintain their privileges, at whatever cost, in a context of concentrated affluence and climate-worsened scarcity. The tight time of crisis favors the slide toward eco-apartheid."⁷⁴

It can also manifest more obviously in decisions made by those in power in times of crisis. As mentioned earlier, New York City electricity provider Con-Ed intentionally cut off power to the

⁷³ Ibid, 125

⁷⁴ Daniel Aldana Cohen, "Water Crisis and Eco-Apartheid in São Paolo: Beyond Naive Optimism about Climate-Linked Disasters," International Journal of Urban and Regional Research, 2018 <u>https://www.ijurr.org/spotlight-on/parched-cities-parched-citizens/water-crisis-and-eco-apartheid-in-sao-paulo-beyond-naive-optimism-about-climate-linked-disasters/</u>

majority-black neighborhood of Canarsie during a heat wave in 2019, in order to avoid the risk of blackouts in other neighborhoods. During a two-year drought in São Paolo from 2013-2015, the water utility SABESP implemented a secret rationing regime at the orders of state government, in which taps periodically ran dry in the city's poorest neighborhoods, causing a spike in dysentery and dengue fever.⁷⁵ It is difficult to imagine a better illustration of Illich's point about the centralization of power: "Switches concentrate control more effectively than whips ever could."⁷⁶

Even in the most industrialized countries, widespread access to heating and cooling appliances does not guarantee equal ability to use them. The phenomenon of energy poverty speaks to this: in Barcelona, more than 80% of households in the greatest degrees of financial precarity spend more than a fifth of their income on energy bills. Even so, 60% are unable to keep their home at an adequate temperature during cold months.⁷⁷ In the United States, low-income households pay 25 percent more for heating and cooling⁷⁸ than wealthy households. This occurs because cheaper housing stock is often not sufficiently insulated or designed for passive temperature regulation, and cheaper appliances are not as efficient. This means more utility shut-offs for inability to pay; increased risk of death from extreme temperatures, especially among the elderly and sick; and frequently, the choice between paying for food or temperature regulation. Temperature related deaths are not equally apportioned. During a heat wave in Chicago in 1995, for example, 475 people died. The death rate for black residents was 150% that of whites.⁷⁹

Eco-apartheid is upheld by eco-technocracy. In 1972, Illich wrote,

"The bureaucratic management of human survival is unacceptable on both ethical and political grounds...This does not, of course, mean that a majority might not at first submit to it. People could be so frightened by the increasing evidence of growing population and dwindling resources that they would voluntarily put their destiny into the hands of Big Brothers.

⁷⁵Ibid.

⁷⁶ Illich, *Tools for Conviviality*, 106.

⁷⁷ Sergio Tirado Herrero, *Indicadors municipals de pobresa energètica a la ciutat de Barcelona*, RMIT Europe and Ajuntament de Barcelona, January 2018, 38.

⁷⁸ Ariel Drehobl and Lauren Ross, *Lifting the Energy Burden in America's Largest Cities: How Energy Efficiency Can Improve Low-Income and Underserved Communities,* American Coucil for an Energy-Efficient Economy, April 2016,

[&]quot;https://www.aceee.org/sites/default/files/publications/researchreports/u1602.pdf

⁷⁹ "Dying Alone: An Interview with Eric Klinenberg," University of Chicago Press, 2002, https://press.uchicago.edu/Misc/Chicago/443213in.html

Technocratic caretakers could be mandated to set limits on growth in every dimension, and to set them just at the point beyond which further production would mean utter destruction. Such a kakotopia could maintain the industrial age at the highest endurable level of output.⁸⁰

In a similar vein, Aldana Cohen wrote the following in response to the water crisis in São Paolo in 2018:

"From above, political elites maintain their legitimacy by containing crisis. Elites' priority is the return to physical normality, through modestly tweaked infrastructural restoration, and securing water access (or other environmental goods) for the affluent and relatively powerful...In walled, violent cities with scarce water, and structural barriers to broad multi-class alliances, all that's required for the drift to eco-apartheid is that elites consolidate and hold power, thinking only of avoiding short-term disruption."⁸¹

Taking into account the needs of the planet's most vulnerable would require proactive measures put into place long before the most powerful actors feel themselves to be personally threatened. It would be important to determine, through both research and deliberation, the appropriate scale of individual tools.

"Counterfoil research is not a new branch of science, nor is it some interdisciplinary project. It is the dimensional analysis of the relationship of man to his tools. It seems obvious that each person lives in several concentric social environments. To each social environment there corresponds a set of natural scales. This is true for the primary group, for the production unit, for the city, the state, and the organization of men on the globe. To each of these social environments there correspond certain characteristic distances, periods, populations, energy sources, and energy sinks. In each of these dimensions tools that require time periods or spaces or energies much beyond the order of corresponding natural scales are dysfunctional. They upset the homeostasis which renders the particular environment viable. At present we tend to define human needs in terms of abstract goals and treat these as problems to which technocrats can apply escalating solutions. What we need is rational research on the dimensions without frustrating equivalent aspirations by others."⁸²

This description of "counterfoil research" seems to echo Illich's own studies in crystallography and histology during his undergraduate degree at the University of Florence, mentioned earlier

⁸² Ibid, 118

⁸⁰ Illich, Tools for Conviviality, 159

⁸¹Aldana-Cohen, "Water Crisis and Eco Apartheid in São Paolo"

in the biography section. The idea that universal laws of appropriate scale can be gleaned from observing the growth patterns of organic and mineral structures certainly points to an untapped direction of research. However, just as important--likely more important--than research into appropriate scales would be the creation of ongoing forums for deliberation on these topics, which are by no means straightforward, and whose implications are inherently political. Such an undertaking would require a dialectic approach to decision-making in which all parties recognize the mutually constitutive vulnerability of differently-privileged populations (and dare we say species), and risks and benefits of potential paths are evaluated from the perspective of the most vulnerable. "The alternative to managerial fascism," Illich writes, "is a political process by which people decide how much of any scarce resource is the most any member of society can claim; a process in which they agree to keep limits relatively stationary over a long time."⁸³ This kind of democratically-managed degrowth is not just a corrective measure, but a new type of management that would continuously assess the apportioning of resources and the scale of technologies. Wide, active participation would be necessary to keep up this method of governance, because, as Illich warns, "Managers will always re-emerge to increase institutional productivity and capture public support for the better service they promise."84

Illich concedes that many progressives have lost faith in the democratic process as a means of protecting the rights of non-elites. Furthermore, in most industrialized countries, the legal system has become a means of enshrining the value of industrial growth, as productivity of knowledge, goods and services has come to be seen as a basic societal ethic. The fact that courts occasionally uphold the rights of individuals over corporations, as in some class-action lawsuits, is, for many critics, little more than an alibi which allows the judicial system to go on serving the capitalist class, or more in line with Illich's thinking, the industrial prerogative.⁸⁵

However, Illich maintains, this outcome is not inherent in the structural precedent of common law in western societies.⁸⁶ Rather, law is a process, which, through interpretation and the setting of precedent, comes to embody ideology in a self-reinforcing loop. Illich writes, *"*How (lawmakers) experience the ideology inherent in a culture becomes established mythology in the laws they make and apply. The body of laws that regulates an industrial society inevitably

⁸³ Illich, *Tools for Conviviality*, 159

⁸⁴ Ibid, 148-149

⁸⁵ Ibid, 147

⁸⁶ Although Illich focuses on systems based on English common law, he notes that a similar process of recovering basic legal mechanisms could take place in other cultures with different legal structures.

reflects and reinforces its ideology, social character, and class structure." ⁸⁷ Thus, this process can go both ways, and although the industrial values embedded in the current legal system have considerable inertia, it is possible to reverse the current.

Of course, another problem with the legal system in most countries is the form it takes. Like other institutions plagued with centralization and technocracy, the judicial system suffers from expensive, cumbersome procedures, in which only a few of the many possible interested parties have the time or funds to bring a case. Court dates are delayed by bureaucracy, and decisions are often delayed to the point where their political and practical relevance is lost. One is unlikely to win a case without the help of a professional lawyer, since the law is apparently too complicated for the average person to understand or make use of to defend herself. And, in order to win a case, "role-playing is encouraged, and this often creates tensions between artificial groups. In going out of the way to create structures so that adversary processes may be used, decisions are made scarce."⁶⁸ Furthermore, the outcomes of these decisions, insofar as they reify "tensions between artificial groups" that may not have previously existed, may cause more social harm through the creation of "mythical majorities",⁸⁹ than good for the defendants.

A more convivial judicial system would have to be decentralized and deprofessionalized. Illich does not spend much time describing what this could look like, but I imagine local governance of local resources, in a bioregionalist vein, in which governance of a commons involves all people who make use of or inhabit it, and the size of that commons is defined at a manageable scale in which all participants live close together and share obvious stakes. Here, Elinor Ostrom's principles for governing a commons work well with Illich's description of a convivial society. The main task of a commons, according to Ostrom, is the definition of limits to consumption through due process involving all stakeholders.⁹⁰ This same process, Illich argues, could be used to define limits to the growth of various technologies. The question of the optimum degree of development of any given tool, though, is far from universal. Limits will have to be developed through experimentation and debate, hence the importance of the dialectic approach to defining them. "Conflict," Illich writes, "does not have to be a competition for scarce

⁸⁷ Illich, Tools for Conviviality, 150

⁸⁸ Illich, Tools for Conviviality, 154

⁸⁹ lbid, 151-152

⁹⁰ Elinor Ostrom et al. "Revisiting the Commons: Local Lessons, Global Challenges" Science, Vol. 284, April 9, 1999, 278-282

commodities. It could also manifest disagreement about which conditions would best remove restraints on autonomous action."91

I think it is important to note here something which Illich did not address, perhaps because he thought it too obvious, but, fifty years after the publication of his book seems more relevant. Not all disagreement is dialectic. In governing a commons, there will always be conflicts which constitute, in Illich's words, "a competition for shared resources." These can, and should, exist alongside dialectic disagreement that constitutes a shared striving for truth. Problems arise when one or the other of these types of conflict is erased. The erasure of the possibility for dialectics happens in situations of extreme political polarization and identity politics, in which the supposed stakes of a certain set of identifiers supersede the wisdom, experiences and choices of the subjects to which they are attached. The other extreme, in which the fetishization of consensus erases the very real possibility that the interests of different parties may not be reconcilable without compromise, in fact constitutes a violent weapon whereby the interests of the least powerful tend to be covered up by the insistence that everyone has been made happy.

Chantal Mouffe, in an interview with Markus Miessen, makes this point, although she is less optimistic about the possibility of dialectics than Illich or I:

*"I insist that the dimension of the political is something linked to the dimension of conflict that exists in human societies, the ever-present possibility of antagonism: an antagonism that is ineradicable. This means that a consensus without exclusion--a form of consensus beyond hegemony, beyond sovereignty, will always be unavailable."*⁹²

The misuse of "participatory decision-making" has in the past few decades become a vehicle for the less powerful to participate in the erasure of their own interests, insidiously coercing compliance through cognitive dissonance-- "you helped create this policy, therefore it must be in your interest to abide by it."

Mouffe writes:

"In many cases, participation consists simply in people exploiting themselves. They do not just accept things the way they are, but actively contribute to the consensus;but they accept the

⁹¹ Illich, *Tools for Conviviality*, 144

⁹²Chantal Mouffe, Interview by Markus Miessen in *The Nightmare of Participation* (Boston: MIT Press, 2011) 107

consensus. And this is why I find your (speaking to Miessen) notion of the 'violence of participation' very interesting."⁹³

Returning to Illich, with this word of caution in account, we can begin to imagine with him what a "convivial society" might look like.

"To formulate a theory about a future society both very modern and not dominated by industry, it will be necessary to recognize natural scales and limits...Once these limits are recognized, it becomes possible to articulate the triadic relationship between persons, tools, and a new collectivity. Such a society, in which modern technologies serve politically interrelated individuals rather than managers, I will call "convivial.⁹⁴

Illich intends the term as a partial neologism, building on the meaning of the Spanish cognate *convivencia*, which literally means "living together." If we assume living to imply living with maximum freedom, we can read in this etymology an illustration of Illich's ideal of maximizing the freedom of each individual while safeguarding that of others. The term has been used predominantly to refer to a historically debated period in which people of different religious faiths lived together in peace before the Spanish Inquisition After the end of the dictatorship in Spain, the term became a political buzzword in Catalonia that was used to describe policies aimed at healing social divides caused by the war and integrating immigrants. Today, it can refer to a range of practices such as conflict mediation, public participation, language policies and grassroots initiatives.⁹⁵

The older, French, sense of the word, "convivialité," comes from Brillat-Savarin's *Physiologie du Gout*, in which the word is used to describe the type of socialization that can only occur over a good meal. Both uses of the word emphasize the relationship between two of the three points of the triad Illich refers to: when the needs and freedoms of the individual are safeguarded, a new collective culture becomes possible.

In a society of appropriately scaled tools and democratically appointed limits to resource consumption and the power of institutions, Illich believed individuals would be free to build skills and develop more intimate, meaningful relationships to the materials and processes in their

⁹³ Ibid, 120

⁹⁴ Illich, *Tools for Conviviality*, 10.

⁹⁵ "Convivència, Diversitat i Cicle de Vida" Diputació de Barcelona, https://www.diba.cat/en/web/convivencia/

immediate surroundings. This would be reflected in more interesting, creative means of survival and more meaningful relationships between individuals.



Pepe Encinas, Excursió critica pel Barri, Placa Prim. Photograph, 1974, Arxiu Pepe Encinas

Housing by People

Like Illich, John Turner is a critic of the industrial mode of production, specifically its emphasis on output rather than use-value for people. His most high-level critique, like Illich's, points to three inevitable effects of industrialism: planetary overreach, inequality and loss of freedom for individuals. Like Illich, he believes that self production, or at least user control, is the best method to reunite the site of production with that of consumption.

However, whereas Illich's critique cuts across all sectors of society, Turner focuses on housing as a window into a more holistic view of the reproduction of life. For Turner, the home--not just its material qualities but its proximity to employment and resources, or in more industrialized communities, transportation; its facilitation of community; its security or flexibility of tenure--can be seen as the central tool for survival.⁹⁶ Thus, Turner's argument is more singularly focused than Illich's, but still avoids falling into the trap, inherent to industrialized thinking, of separating out human needs as if in a vacuum, and defining "deficits" based on them, thus opening the way to characterizing a population's quality of life as a factor of industrial output.

Secondly, whereas Illich's writing paints a dichotomy between convivial and industrial societies, in which a shift from one to another is only possible by means of a complex unfolding of crisis and political response,⁹⁷ Turner chooses to ground his analysis in case studies of people living on the peripheries of cities in contemporary (1970s) Mexico, based on field work he conducted with Tomasz Sudra. The subjects of Turner's case studies reproduce their daily lives by making use of a mixture of industrial and non-industrial tools, goods and services. The phenomenon of the informal urban periphery in itself speaks to a population partially entwined with an industrial system of production and consumption. People migrate from rural areas to peripheries in response to a growing demand for labor in industrial production. However, while they may support the productive capacity of the system, their consumption needs are rarely immediately fulfilled by it, and must be supplemented by non-industrial forms of production. Often, industrial

⁹⁶In industrialized countries, some services and goods are consumed entirely outside the home, such as food at restaurants or leisure activities such as movies at movie theaters. However, many industrially-produced goods that relate to the reproduction of everyday life still are consumed in the home

or have to be prepared there.

⁹⁷ The final chapters of *Tools for Conviviality* go into detail about what this process could look like. However, for the purposes of this paper it did not seem particularly relevant, so I chose to leave out a detailed analysis.

and non-industrial means of survival are used together in a system, such as using scraps of industrially-produced and discarded materials to self-build a dwelling. The needs Turner evaluates in his case study analyses are not physical necessities such as food, water and thermal comfort, but secondary needs, such as income, employment, fixed and liquid assets, and tenure, which are means to fulfilling basic needs in a quasi-industrial system. Illich would describe these as new basic needs created by the industrial system.

In this way, Turner's analysis takes the contemporary (1970s) world as its point of departure, allowing for an analysis of the spectrum from pre- to post-industrial in all its complexities and overlaps. By grounding his analysis in the lives of real people, Turner opens the floor for a debate not so much on the merits of two opposing systems, as Illich does, but on how best to improve the lives of existing people. To this end, most of his suggestions, such as the philosophy of locating the point of decision making *as close as possible* to the point of use, involve scales, spectrums and general principles that can be interpreted according to context. Furthermore, Turner's account takes as its point of departure the existing distribution of power, acknowledging that some tasks in the current economic and political environment are best performed by central government, such as the provision of land, and ensuring the availability of basic construction materials and accessible financial credit:

"The partially unsolved problem is to identify the practical and necessary limits to heteronomy and its opposite, autonomy. In this and following chapters it is argued that housing and, by implication, all other personal and locally specific services, must be autonomous. It is also argued that this autonomy is far from absolute - for it depends on access to essential resources. In housing, for instance, local autonomy and direct or indirect dweller- control depend on the availability of appropriate tools and materials (or technology), of land and finance. In general, the accessibility of these basic resources is a function of law and its administration, and these, in turn, are functions of central authority."⁹⁸

I will begin by presenting Turner's analysis of the problems associated with industrialism which he explains in a manner quite similar to Illich, focusing on individual freedom, planetary overreach, and inequality. To this, he adds the idea of mismatch between the needs and preferences of users and the industrially produced objects which often fail to provide them.

⁹⁸ Turner, *Housing by People*, 17

Through the presentation of several example case studies from Mexico, Turner illustrates various ways in which mismatch can manifest in housing situations, and formulates an argument for decentralization and self-help housing as a solution to mismatch. Finally, I will present some common critiques of Turner's argument and add a few comments of my own.

I. Planetary Overreach and Inequality: The Mirage of Development

Housing by People was published in 1976, three years after *Tools for Conviviality* and four years after *The Limits to Growth*. Turner, like Illich, grounds his argument in the mutually-reinforcing realities of inequality and overconsumption of planetary resources under the industrial model. Like Illich, he discusses several possible, futures: planetary collapse and the extinction of humans and other species; eco-apartheid⁹⁹ in which the rich set limits based on their own comfort, leaving the poor no room to survive; and equitable degrowth, in which wealthy nations reduce their consumption significantly, to the point at which the people of all countries have equal access to a limited degree of consumption. The second scenario--similar to Aldana-Cohen's concept of eco-apartheid--is the most likely outcome of society's current trajectory, argues Turner. Wealthy nations are likely to "level off their growth - but at a very high level and, implicitly, at the expense of the majority for whom there is no room at the feast and who must be kept at a much lower level to supply the others."

Turner argues that the third solution, which he sees as the only acceptable outcome, is "politically inconceivable" if it is to be carried out "pyramidal structures and centralizing technologies"--as llich would put it, overgrown tools and the bureaucracies that support them. Worldwide rationing schemes for basic staples and services, he argues, would be inherently unfair, even if they were politically possible:

"Only a rich minority can be supplied in these centrally administered ways using centralizing technologies, and then only at the expense of an impoverished majority and the rapid exhaustion or poisoning of the planet's resources. This 'supreme political issue of our time',... is the choice between heteronomy (other-determined) and autonomy (self-determined) in personal and local matters."¹⁰⁰

However, the possibility of autonomy, Turner warns, is obstructed by technocracy, which he sees as a successor to feudalism. He points to the common assumption that the ordinary citizen or "layman" is dependent on the "professional" in almost every area of life. As the legal system begins to back up this cultural bias, the professional is able to consolidate a monopoly over his

⁹⁹Once again, my application of Daniel Aldana Cohen's term backwards in time, with the intention of showing that Illich and Turner's predictions continue to be relevant.

¹⁰⁰ Turner, *Housing by People*, 13

or her trade and extort laypeople with high fees for tasks they were previously highly capable of doing themselves in the manner of their liking.¹⁰¹ This pattern reproduces itself on an international scale, as wealthy countries coerce poorer ones into new industrial processes over which they have a knowledge and technology monopoly. In this process, traditional, place-based modes of social reproduction in the "global south" are lost, along with the knowledge and techniques involved in them. This makes economically vulnerable countries more physically vulnerable in the face of natural disasters and supply chain shortages--and, of course, more reliant on aid from wealthier countries. One example of this, which we saw earlier, is the Alliance for Progress, a set of policies geared toward industrialization which the Kennedy Administration coerced South American countries to adopt, through the promise of financial aid and with the subtle threat always implicit in unequal power dynamics on the international stage. The "inter-American panel of experts" which reviewed all proposed projects exemplifies international technocracy.

"This exploitation of people and resources has been reciprocated by an equally hypocritical, and sometimes deliberately subversive exporting of urban-industrial expertise to low income countries. And one would have to be blind not to see how quickly the chickens roost in these poor and inflationary economies. The absurdity of excessively costly, centrally administered supply systems for personal services becomes monstrous in countries where earnings are low and controlled by foreign powers. The fates of Uruguay, Chile, and Argentina - the wealthiest South American countries that were quick to copy European socialized service systems - are alarming precedents. What happens when a population becomes dependent on an institutionalized supply system that can no longer be maintained?"¹⁰²

A 2021 article, "It's Time to Knock the Toilet off its Pedestal"¹⁰³ by Chelsea Wald illustrates this point. It is a well-known fact that a large portion of the world's population does not have access to clean drinking water, and that many illnesses in "developing" countries are related to improperly treated sewage. These facts are usually cited as justification for expanding sewage system coverage and pouring more money into industrialized treatment systems. In the article, Wald points out another side to the story: before sewage systems were implemented in these countries, often at the behest of international agencies, people were using dry sewage treatment systems. Even if badly managed, the contained nature of dry toilets mean that their

¹⁰¹ Turner, *Housing by People*, 22

¹⁰² Ibid

¹⁰³ Ward, Chelsea, "It's Time to Knock the Toilet off its Pedestal," Bloomberg, April 15, 2021:

https://www.bloomberg.com/news/articles/2021-04-15/toilet-and-sewer-technology-need-a-fresh-start

ability to spread disease is exponentially lower than a water-based system in which all the sewage from a given area is combined together and transported across a long distance to a centralized treatment facility. In such a system, the stakes of pipe leakage or malfunction in the treatment system are extremely high. Furthermore, these malfunctions are extremely common in countries where power failures are frequent, supporting infrastructure is fragile, and economic fluctuations result in spotty maintenance. Wald notes that, according to a 2019 study by WaterAid, 95% of the studied wastewater treatment plants in Mexico and 80% in Ghana were not functioning properly.

This trend applies, of course, to housing as well as sewer systems. In Britain, Turner notes, rental fees paid by occupants are often not enough to even fully cover the cost of regular maintenance of their dwelling, let alone the interest owed by the government on money borrowed to build it in the first place. Given this troubling outlook, he concludes, "it seems highly unlikely that housing can continue to be supplied as a public service." This is in a relatively wealthy, post-industrial country. If "developing" economies mimic these subsidy rates in their public housing schemes, such the Nonoalco Tlatelolco project in Mexico City, which, like its British counterparts, offers a 60% subsidy, it does not take much imagination to foresee the result.

"All this has gone on," Turner continues, *"while real demands have been almost completely ignored or misinterpreted by heteronomous systems impervious and blind to the plentiful resources available."¹⁰⁴*

As dark as the economic and material prospects of the current system are, argues Turner, relatively simple solutions lie all around, and they begin with paying attention to the needs of real people, rather than algorithms and projections designed to simplify and translate them into numbers palatable to industrial production. As we will see, though, Turner believes that giving proper attention to the real needs of people, without distorting algorithms, is impossible in a centralized housing system. The only way to do so is to give people the permission and resources they need to respond to their own needs:

¹⁰⁴ Turner, *Housing by People*, 37

"Good housing, like plentiful food, is more common where it is locally produced through network structures and decentralizing technologies. The thesis in this book is that these are the only ways and means through which satisfactory goods and services can be obtained, and that they are vital for a stable planet."¹⁰⁵



Pepe Encinas, Fums al Barri del Poblenou, Photograph, 1970s, Arxiu Pepe Encinas



Pepe Encinas, Excursió Critica pel Barri, La Mar Bella, Photograph, 1974, Arxiu Pepe Encinas

¹⁰⁵ Turner, *Housing by People*, 13-14

II. Freedom: Autonomy and Heteronomy

The central issue of Housing by People, Turner writes, is the question of "Who decides what, and for whom?"¹⁰⁶ Too often, he argues, society is concerned with the "what" and "how much," rather than the "how" of human survival. Turner is more concerned with verbs than nouns, and sees the shift in language toward object rather than process-oriented thinking as indicative of a culture of industrial consumption. In a nod to Illich, he describes how "learning" has come to be associated with years of school completed, (or, in the case of Sudoeste del Besòs, the overall knowledge of a population of people with the number of public school places available in the area), and good health has come to mean access to industrialized health services and hospitals. Likewise, housing has come to mean the stock of a certain type of mass-produced housing available in a country, or the ability of that country's national housing department to produce more, rather than all the experiences, everyday practices, skills and techniques that the individual would traditionally associate with the idea of home. A great deal is lost, Turner writes, in the transition from verb to noun. Quoting Edward Sapir, Turner refers to this process as the "alienation of everyday life," in which we are deprived of

"any but an insignificant and culturally abortive share in the satisfaction of the immediate wants of mankind, so that we are further deprived of both opportunity and stimulation to share in the production of new utilitarian values. Part of the time we are drayhorses; the rest of the time we are listless consumers of goods which have received no least impress of our personality."¹⁰⁷

In this statement, posed in the first chapter of *Housing by People*, Turner leaves no doubt that he agrees with Illich about the psychological effects of the divorce of production from consumption. Industrial production of housing is one of many examples in which the consumers of a product are equally alienated in their consumption of it as its producers are from their labor:

"The difficulties and therefore rarity of the participation of users or even local institutions in the planning, construction and management of public housing programmes, needs no further emphasis. The consequences of this lack of participation provide the material for an increasing

¹⁰⁶ Turner, *Housing by People*, 11

¹⁰⁷ Edward Sapir, quoted in Turner, *Housing by People*, 12

literature on the alienation experienced by modern housing users. The growth of building organizations and local government - management - and the growth of production

systems for housing have an increasing similarity to modern factory and office conditions, where the alienation in work is increasing along with the alienation of use. Although many on the political left are curiously reluctant to admit or discuss the alienation of labour, Marx's observations of the mid-nineteenth century are equally pertinent today.⁷¹⁰⁸

The alienation of residents of public housing from their industrially-produced environments is perhaps one of the most brutal and extensive examples of alienation produced by a single industrial product, both because of the large amount of time typically spent in the home and the related share of daily acts of reproduction that occur there. The psychological effects of this alienation are apparent in resident disengagement: spending as little time as possible at home, when given a choice, and especially in the public spaces provided by the complex; lack of interest in material upkeep of the dwelling and public spaces; and lack of interest in building or maintaining social networks with neighbors. Lack of strong social networks cedes public space to those who would use it for antisocial activities, especially to the young, unemployed and hopeless, who form gangs as a substitute for social networks and express their alienation from the social environment through vandalism of the property, which they see as the site and vector of their unhappiness. This is the sequence of events that explains the destruction of expensive, high material-quality housing projects 20 or 40 years after their construction.¹⁰⁹ Turner illustrates this with the example of the *superbloque* housing development in Caracas, built by the Jimenez regime in the 1950s, which was very narrowly saved from demolition:

"If it had not been for the very costly programme of community development carried out after the fall of the regime, perhaps all 115 of these monstrous 14-storey buildings would also have had to be pulled down. Before the development of an adequate community infrastructure, they had become scenarios for pitched battles between armed gangs that had taken over the buildings and armoured army units. While these are extreme cases, they indicate the risks and trends when central authority is weakened, and they highlight the well-known problems of management and maintenance of large schemes, structurally sound but where so many residents have become alienated. The life of dwelling structures has more to do with human institutions than building technologies."¹¹⁰

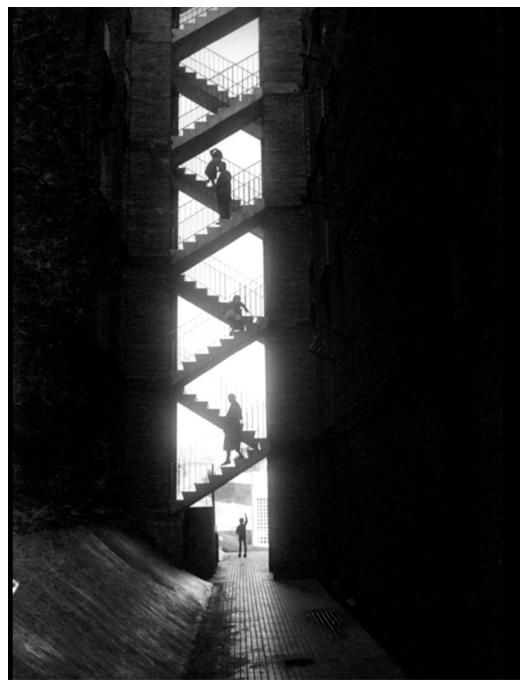
¹⁰⁸ Turner, *Housing by People*, 42

¹⁰⁹Turner, *Housing by People*, 47

¹¹⁰Turner, Housing by People, 46-47

Although Turner's example may be an "extreme case," it is certainly not a rare one. The presence of gang activity in public housing across the world, along with related violence and weapons-related death, has been persistent and well-documented, as has vandalism and expressed dissatisfaction with the environment and social disengagement on the part of residents. As I will return to in the following chapter, all of these have occurred, and continue to occur, in Sudoeste del Besòs.

Insofar as the above mentioned sequence of events tends to result in the demolition of relatively new, expensively built housing, it constitutes one vector of Turner's argument for decentralization of housing production, on the basis of waste of government funds and material resources. The second vector unfolds from the perspective of the individual inhabitant. Parallel to the psychological alienation of the heteronomously produced living environment, Turner argues, runs the much more immediate question of whether the proposed dwelling offers all the necessary characteristics for the reproduction of life.



Oriol Maspons, La Trinitat, Photograph, 1960, Arxiu Històric del COAC

III. Mismatches and Use-Value

Insofar as the home can be seen as a provider not only of shelter and thermal comfort, but also as a tool which allows for the reproduction of a diverse set of potential activities--the cooking and perhaps growing of food, washing and repair of clothing, a site of commerce, a workshop for personal repairs or production of goods to be sold, a place to raise livestock, etc.-- a true evaluation of whether it helps or hinders the lives of its inhabitants must be undertaken with respect to *use value* rather than material value, Turner argues. Use value can be defined as how well a home facilitates the priorities of its inhabitants. These priorities are complex and can be difficult to predict. Aside from income, priorities can vary depending on the age of household members, physical health, the arrival of a new child or older family member, the presence or absence of a close relationship with neighbors, etc. All of these factors shift over time, and some shifts can happen quickly. Furthermore, two households facing similar challenges may choose to deal with them in completely different ways. Ingenuity is definitionally variable from person to person, and even the poorest have preferences that they will choose to act on whenever they are afforded the opportunity.

In order to illustrate a range of matches and mismatches between the priorities of households and the opportunities provided by their homes, Turner refers to a survey he conducted with Tomasz Sudra, a PhD candidate at MIT, in Mexico beginning in 1971. The survey took stock of the housing situations of moderate and low-income residents in metropolitan areas, from which 25 case studies were selected to represent the *"common range of social situations and physical environments."* Mexico was chosen as the location of the study because of its status as an industrializing country and the fact that its residents were, on average, *"neither exceptionally rich nor very poor"* in comparison to global extremes.¹¹¹

In summarizing the findings of the study, Turner writes, "Some of the poorest dwellings, materially speaking, were clearly the best, socially speaking, and some, but not all, of the highest standard dwellings were the most socially oppressive."¹¹² He illustrates this point by selecting two paradigmatic cases: the car painter's family's shack and the mason's family's government-built house.

¹¹¹ Turner, *Housing by People*, 52

¹¹²Ibid.

As a result of several consecutive unusually rainy seasons in Mexico, the young car painter's job had proved temporarily unviable, as the paint took too long to dry and limited turnover. Unable to continue their previous lifestyle, he and his family moved in with a "godmother," an older woman who made a living scavenging and reselling materials from the local dump. She had been relocated to a new house by the government, which had a sizable private backyard, where she allowed the car painter's family to build a shack made of scraps from the dump, and live indefinitely for free. Although the shack did not have water or electricity, the godmother's house did, and the family was allowed to use its facilities as long as they contributed their share of payment for utilities. The godmother helped broker access to the dump for the car painter, allowing him to make a modest income selling scraps. From this, he was able to pay for utilities, food and fuel to cook it, and to save some money. The material quality of the shack was very low, but it provided sufficient thermal comfort and protection from rain and wind in the relatively mild climate. The house was well-located, allowing easy access to work (the dump), schools for the children, and shops to buy food. Security of tenure was derived from the strength of the relationship between the car painter and the godmother, which was unlikely to change. Thus, all of the family's basic needs were met for the foreseeable future, which put them in a good position to take advantage of any opportunities that might arise, such as a more profitable job. This, in addition to the fact that they were already saving money, points to an optimistic future.¹¹³

In comparison, the mason's family's situation is very grim. The family, consisting of the elderly mason, his under-employed wife, and their student son, had previously lived in a shack in an informal settlement, from which they ran a small shop. The income derived from this shop and the mason's irregular employment was about three times subsistence income,¹¹⁴ and allowed them to feed themselves adequately to remain in good health. Other expenses, such as transportation, were quite low, and they were able to save a large percent of their income. After the informal settlement was cleared by the government, the family was offered the chance to live in a government-built house on a rent-to-buy basis. The material standard of the new house was vastly higher than their previous circumstances, and included modern utilities and conveniences. However, between utilities and rental payments, the family was forced to spend

¹¹³ Turner, *Housing by People*, 54-56

¹¹⁴ Turner defines subsistence income as one where 80-90 percent of income must be spent on food and fuel. the cost of buying food and fuel to cook it. Based on experience and studies in Peru and Mexico, he argues, the poorest households can often avoid paying for other essentials--housing can be free through squatting or living with relatives, for example, and the journey to work can be made on foot. See p. 54.

55 percent of its reduced income (without the shop) on housing-related services. Furthermore, the new house was farther from the various family members' work locations, and an additional 5 percent was required for transportation. Thus, 60% of the family's income was spent on housing and transportation alone, whereas they had previously spent 5% of a smaller income on these areas. As a result, Turner predicts they will have to cut their minimum food budget by 60%. Their situation is unstable and something will have to shift soon. Likely, they will default on their payments and either successfully squat or be evicted.¹¹⁵

Turner writes,

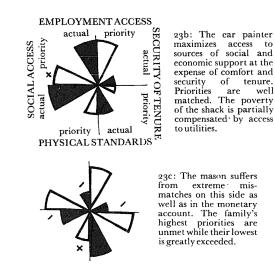
"This family's situation would not be quite so bad if, in addition to the dramatic rise of their expenditure, they had not also suffered a substantial reduction of their income through the loss of the vending business which is forbidden in their new location. This double loss is typical of 'housing improvement' programmes for low and very low-income people. In spite of the anxieties created by overspending (sometimes on household goods which they feel are appropriate to their new surrounds) or the risks of eviction for rent arrears, people appreciate the comforts of higher standard homes...But it also confirms that the price paid is often disproportionately high and that much damage is done by dislocating people, by disrupting their economies, and by greatly reducing their social and economic security - far more than by allowing them to remain in materially poor surroundings."¹¹⁶

As we will see, many aspects of this situation are echoed in stories of relocation from Barcelona's informal settlements to the government-built housing in Sudoeste del Besòs in the 1960s. Anita's family, for example, was delighted with their new house but struggled to pay the new rent and utility costs, while Salvador's family was forced to give up the shop they had previously operated out of their house. Informal skill-swapping networks and barter economies broke down with the physical separation of old neighbors and the loss of relationship between dwellings and common spaces in the new high rises.

As these examples illustrate, material quality is just one of many factors which influence the use-value of a dwelling for its inhabitants. In fact, the importance of this one factor is so dwarfed in relation to the others that it cannot be said to have a measurable relationship to the overall use-value at all.

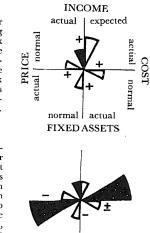
¹¹⁵ Turner, *Housing by People*, 56-57

¹¹⁶ Ibid, 58



22b: The car painter minimizes costs by living temporarily in a shack in order to maximize savings and future opportunities to realize expectations. The lack of fixed assets ensures mobility and is therefore positive in this case.

22c: The mason relocated from a squatter settlement to a project suffers the consequences of an extreme mismatch of price and cost with income. There is no compensation in the form of equity although, as he and his wife are elderly, the security of a fixed asset is important.



John Turner, Use Value Diagrams, Housing by People

Unfortunately, Turner continues, this is how value tends to be measured, and this, in turn, influences housing policy. The fatal flaw of centralized departments of housing is their focus on the idea of a "housing deficit"--a simple ratio between the number of households in a given area and the number of dwellings above a certain material quality occupied at an acceptable density. The solution which logically follows from this assumption is to replace "substandard" housing with standard or above-standard, often coercing those living in the "substandard" dwellings to move to the new ones, without a thought to other use values, such as proximity to work or affordability, which may be lost.¹¹⁷ Thus, the identification of housing value with material quality is shown to be the mechanism which perpetuates the growth of the industrial production of housing, and simultaneously deprives a growing number of people of security of tenure and the means to build and maintain a life. Here, we see an echo, in small scale, of Turner and Illich's argument that worldwide industrial growth also grows inequality. He concludes,

"The vast majority of officials and professionals keep recommending the destruction of people's homes in order to solve those same people's 'housing problems' by providing them with alternatives either they or society cannot afford. In a world of grossly maldistributed resources and injustice, this is a huge, but very black joke."¹¹⁸

¹¹⁷ Turner, *Housing by People*, 60

¹¹⁸ Ibid, 61

IV. <u>Decentralization</u>

Several lessons can be learned from Turner's case studies, such as the aforementioned lack of relationship between material value and use value. They also point to several factors which tend to play important roles in use value. Security of tenure, for example, was the factor that allowed all of the other helpful aspects of the car painter's housing to coalesce into readiness to take advantage of future opportunities. Similarly, the mason's family would likely have chosen to stay in their previous dwelling, with its attendant advantages, had they not been forced to leave. Later, Turner uses the example of the factory worker's family, who, based on confidence in tenure on their squatted land, build their own house and continue to improve it throughout the years. The resulting house has a much higher market value than the mason's government-built house, which was built at much greater expense and requires higher inputs (in the form of rent) to maintain tenure.¹¹⁹ A point Turner makes several times throughout the book is that, given security of tenure, people tend to vastly improve the material quality of their self-built houses throughout the years. Thus, by extension, the rough quality often associated with self-building can be seen to a certain extent as a factor of insecurity of tenure. We will see the effect of security of tenure demonstrated later, in the comparison between the informal settlements along Barcelona's coast in the 1950s, where residents were constantly forced to move and rebuild their homes in new neighborhoods with new neighbors, and those farther from the city center, such as Carmel, where some residents were able to stay in the same house for almost thirty years, building strong bonds of community with their neighbors and improving the material guality of their homes little by little.

However, Turner insists that no one factor can be seen as a reliable indicator of use-value on its own, since the relative importance of various use values varies depending on the situation of the person in question. Inability to travel to work, or lack of income to pay for food, for example, might negate the benefits of secure tenure. Any kind of wide survey of use value, even an extremely fine-grained one with well-thought out questions, cannot produce aggregate information that is useful.¹²⁰ And, since it is impossible to collect useful information at a large

¹¹⁹ Turner, *Housing by People*, p. 81

¹²⁰ Turner, *Housing by People*, 68-69. Of course, such a survey can be useful in proving the subjective nature of use-value, as Turner and Sudra's does, but as an indicator about how to build large amounts of housing.

scale, he argues, any large-scale housing project cannot possibly be well informed about the needs of its users.

Centralized housing provision, in Turner's eyes, is a kind of pyramid scheme. "Mismatches between housing supply and demand," he writes, "will be directly proportional to the degree of heteronomy in the system." The larger the scope of a housing provider, the greater the gap between the needs of the people it seeks to serve and the product they actually receive. This will happen very quickly in low-income countries, and eventually in wealthier ones as well.¹²¹ And, as we have seen in the case of the mason, and will see again in Sudoeste del Besòs, housing mismatches can catalyze all sorts of other problems for the people they affect. For the mason, paying too much for housing meant nutritional problems for the family. For residents of Sudoeste del Besòs, high housing bills led to extra hours at work, which, combined with a longer commute than most had been used to, meant very little time spent in the neighborhood and with friends and family, which led to social problems, especially for the children of absent parents.

It is important to pause here to identify what I see as two threads in Turner's argument, which he tends to use interchangeably but I believe need to be separated in order to evaluate proposed methods of housing provision according to his criteria: that of localism, which can operate as a spectrum, and that of user control, which constitutes a more black-and-white dichotomy. The first can facilitate the second, and in fact user control exists definitionally at one extreme of the spectrum of localism, but there are many versions of localism that do not fit the criteria of user control.

Production and regulation can exist on a spectrum from largest and most centralized to regional and local governance and production of various scales, the most local of which is self-production and self-governance. Most of Turner's arguments until this point can be interpreted according to such a spectrum. Simply put, the larger the scale on which a product is produced, the less likely it is to fit the needs and preferences of a given individual, since variety of needs grows in proportion to population size.

¹²¹ Turner, Housing by People, 39-40

"Though generally overlooked, it is self-evident that personal scale and local variety are natural and even inevitable functions of local and personal decisions. Centralized decision-making systems, however, are bound to generate standardized products on a large scale. Of course it is expensive for top-down structures to accommodate bottom-up decisions, or even to copy the forms they generate, and it is equally extravagant for local decision-makers to copy the products of large organizations. What must be recognized here, is that pyramidal structures are impervious to personal and local inputs in proportion to their size.

The reasons hardly need explanation. The larger the organization, the greater the distance of the managers from the shop floor or its equivalent. And even where the workers actually making or delivering the goods can be reached by the users, they are unable to modify what they do without disorganizing the system. There are only two ways of reducing scale and increasing variety and 'personalization' of centrally administered products (and this includes housing) and both demand extra production time - a kind of time that costs a lot of money. Either a larger variety of standard products must be made, stocked, and delivered, or some decisions must be left to those at the lower or lowest levels which, being unpredictable or requiring additional controls, tend to slow the process and "anyway demand more administration."¹²²

From this example, we can extract two axioms framed as spectrums:

- 1. The closer the point of decision-making to the user, the less likelihood of potential mismatch between need and product.
- 2. The smaller-scale the organization, the more cost (and resource) -effective it is to locate the point of decision-making close to the user.

These axioms resonate with the philosophy of bioregionalism, the 0 km movement, la via campesina, and various other contemporary groups advocating for increased localism for reasons of sustainability, equality and preservation of culture and diversity. In many circles today, this application of Turner's argument would not be controversial.

Autonomy and heteronomy, however, constitute a dichotomy.

¹²²Turner, *Housing by People*, 40

V. <u>Autonomy</u>

Turner's point about the impossibility of gathering quantitative data on use value is not just that large organizations are incapable of putting it to good use. His point is that the gathering of such data is pointless for an organization of any size, because no organization, regardless of the scale or quality of its data, can effectively make heterogenous decisions for individuals.

To make this point, Turner employs *Ashby's Principle of Requisite Variety*, a theory formulated by John Ashby, a 1950s cybernetician who studied the ability of systems, particularly biological systems, to maintain stability in changing circumstances--for example, the regulation of body temperature. The theory states,

If stability (of a system) is to be attained, the variety of the controlling system must be at least as great as the variety of the system to be controlled.

If the system to be controlled is housing in general (which I mean, as Turner intended, as a verb--the process by which a given population accesses and maintains homes), the only possible controlling system with equal variety is all of the users.

As proof of instability in centrally administered housing systems, Turner points to the financial insolvency of most national housing departments, as a result of the high cost of housing production and maintenance, the short lives of expensively produced housing, and the spiraling interest owed to financial institutions as a result of the above situation coupled with a high rate of subsidization.¹²³ He also points to the literal structural instability of housing complexes caused by lack of appropriate maintenance, and the social collapse that tends to occur within the communities who live there.¹²⁴ I do not feel entirely confident following Turner's logic here, since the assumption that housing departments must be independently financially stable seems unnecessary¹²⁵ and the relationship between structural stability, social stability and system-level

¹²³ Turner, *Housing by People*, 29-30

¹²⁴ Turner, *Housing by People*, 34

¹²⁵ An argument that clearly assumes a state housing department needs to be financially self-sufficient, which is by no means the attitude of many housing departments today--for example, the city of Vienna's municipal housing department assumes an investment of 5 million euros annually in production and maintenance of housing, without the assumption that this sum can be recouped. Many departments of housing today operate similarly, and funds are generated either through taxes or other areas of government.

stability does not seem clear. However, if *stability* is interpreted in terms of match vs. mismatch--i.e. a dynamic condition of overall match between needs and provision for a given population--this seems logically sufficient to interpret Ashby's law as Turner does:

*"If decision and control systems governing the supply and use of personal services such as housing must be the primary responsibility of the users in order to generate the 'requisite variety' demanded by Ashby's law then housing economy and equity can only be achieved if householders and their local community are responsible for what is built and how it is used and maintained."*¹²⁶

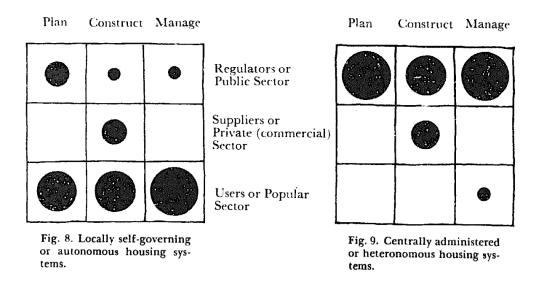
However, it is worth noting that Turner's only examples of so-called *instability* are large, centrally produced housing systems. If Ashby's Law is to be taken literally, any heteronomous system, including extremely local ones, would be unstable. I will return to this distinction later, in the discussion.

Gaps in the critique of heteronomy aside, however, Turner makes a compelling case for the advantages of an autonomous system. In his analysis of the results of the case studies, which included a representative sample of individuals living in heteronomously produced housing (such as the mason's family) as well as self-built (such as the car painter and factory worker's families), Turner draws the following conclusion:

"As anticipated in the first two chapters, the bureaucratic heteronomous system produces things of a high standard, at great cost, and of dubious value, while the autonomous system produces things of extremely varied standard, but at low cost, and of high use-value. In the longer run, the productivity of centrally administered systems diminishes as it consumes capital resources, while the productivity of locally self-governing systems increases as it generates capital through the investment of income"¹²⁷

¹²⁶ Turner, *Housing by People*, 35

¹²⁷Turner, *Housing by People*, 87



John Turner, Governance Diagrams, Housing by People

However, given the fact that most resources needed for building (material as well as financial and legal) are controlled by either the government or private corporations, it is unfeasible to suggest that all central governments need to do is get out of the way. In fact, Turner argues, it should be the responsibility of governments to ensure access to appropriate and affordable materials, land tenure, credit and appropriate technology (akin, of course, to Illich's idea of convivial tools). Under these circumstances, and with the option of paying a skilled builder to help with construction, users have the freedom to plan and update their home in relation to their evolving needs, minimizing mismatch. Furthermore, self-building is a solution for the many psychological malaises caused by a heterogeneously-produced dwelling, and the associated physical cost to the dwelling caused by user disengagement:

"The viability of any housing system depends, in the long run, on the efforts of the users and therefore on their will to invest those efforts, and not just on their capacity to do so. If that will depends in turn on the level of satisfaction with the service received or expected, then the matching of housing services with their users' priority needs is clearly critical."¹²⁸

¹²⁸Turner, Housing by People, . 39

Furthermore, whereas people's standards for housing that has been designed for them by someone else tend to be extremely high, they tend to be quite tolerant of flaws when they are the result of their own work:

*"While people tend to intolerantly look a centrally administered gift horse in the mouth¹²⁹, they show a surprising facility for multiplying the blessings of something they have done for themselves."*¹³⁰

Even beyond these considerations, however, Turner argues the construction process itself tends to make more efficient use of resources when it is autonomously led. Self-builders, even when they do hire others to do the actual building¹³¹, save plenty of money just by acting as their own general contractors. To the extent they do take part in building, any tasks they can do without hiring specialists will reduce building time, since the main cause of delays in building usually involves waiting for one specialist to finish a task before another can begin.

Self-builders also tend to make better use of small-scale technologies, locally available materials and local knowledge and skills. While all of these resources are technically available to large building companies, it is often cheaper for them to use large, fossil-fuel powered machines, imported and prefabricated materials, and technocratic "experts" rather than dipping into the existing local knowledge, acquired over generations, about how to build in a particular place.

"Personal and local resources are imagination, initiative, commitment and responsibility, skill and muscle-power; the capability for using specific and often irregular areas of land or locally available materials and tools; the ability to organize enterprises and local institutions; constructive competitiveness and the capacity to co-operate. None of these resources can be used by exogenous or supra-local powers against the will of the people."¹³²

Turner also makes the point that a good percent of the existing land for building in Mexico is scattered across small parcels, usually in already built-up areas, but these plots are often too small or too complicated to be considered options for industrially produced public housing. The

¹²⁹ An idiom in English meaning to find flaws in a gift

¹³⁰ Turner, *Housing by People*, p. 41

¹³¹ Which is the case most of the time, with those who can afford it.

¹³² Turner, *Housing by People*, p. 48

plot on which the factory worker is progressively building his house, for example, would have been deemed unusable by big developers. Turner also cites a study by Alice Coleman, a researcher at Kings College, London, which shows that there was enough land within the already built-up area of London in 1945 to have accommodated all postwar growth.¹³³

Turner sums up this argument with a question:

"The issue of housing economy is very simple and straightforward: is it a function of the productivity of large organizations or is it a matter of resourcefulness, whatever the scale or kind of organization?"

Thus, Turner presents the concept of resourcefulness as an alternative basic value to productivity, similar to Illich's use of *convivality*. Whereas productivity focuses on the end-point of industrial production, neglecting the extraction of material resources as well as the experience of the user and end of the product's life, resourcefulness foregrounds the relationship of the producer, who in the best case scenario is also the user, to the materials he or she makes use of. In English, resourcefulness tends to imply frugality--making the most of a small resource, or repurposing something that has been discarded. Taken more literally, it seems to point to a quality of attention that can only be possible when the individual user-producer has developed an intimate relationship with the resource and the process of shaping it into a product for him or herself, or for very local clients. This is a quality of relationship that industrial consumers, divorced from the materials and processes that produce the building blocks of their lives, are deprived of, as we have already heard from Illich. For Turner, the loss is also a collective one, of a material basis. By relying on industrial production, we lose the resourcefulness offered by local and self-producers, a quality which is necessary to ensure there is enough to go around, and that the outcomes of production actually fit real needs.

¹³³ Study by Alice Coleman, cited in Housing by People, p. 85

VI. Discussion

Turner's analysis of the problems associated with industrial production are clearly rooted in an understanding built on Illich's psychological and social diagnosis. To this, Turner adds a strong material case with the concept of mismatch and the idea that the closer production comes to consumption, the more the process can make use of individual resourcefulness and produce housing that can reflect the needs of its users. The result is less wasteful of materials and thus ensures greater equality of access to fulfilling basic needs. This is a strong case for localism in the production of housing as well as other products, illustrated by the axioms I outlined earlier, which are my interpretation of Turner's argument:

- 1. The closer the point of decision-making to the user, the less likelihood of potential mismatch between need and product.
- 2. The smaller-scale the organization, the more cost (and resource) -effective it is to locate the point of decision-making close to the user.

Turner generally writes about large, centralized providers of housing, such as national housing departments, and contrasts these with self-built housing, such as the car painter and the factory worker's houses. It seems safe to say that, at the time he was writing, this dichotomy was the general norm. The logic of industrial production actually supports this: as urban-industrialism consolidates production power, self-production will at first grow alongside it, as the industrial production machine does not account for the needs of its workers and a shadow supply system is necessary to support them. Thus, the rise of industrially-produced cities surrounded by a ring of informally-produced neighborhoods. His critiques do not account for the possibility of more localized housing providers, which would place the site of production much closer to that of consumption, thus greatly improving upon many of the problems associated with centralization, but not heteronomy.

Fifty years later, several examples of local and regional housing departments come to mind that break this dichotomy. The municipal public housing department of Vienna, for example, houses about 50% of the city's population to the general satisfaction of most recipients and reports high rates of social cohesion, even in the most ethnically diverse developments.¹³⁴ Vienna invests

¹³⁴ *Housing in Vienna: Annual Report, 2016* (Vienna: Geschäftsgruppe Wohnen, 2016)

roughly 500 million euros per year in the maintenance of existing social housing and the creation of new buildings, with no expectation of recouping this money¹³⁵, contradicting Turner's assumption that housing departments must be financially self-sufficient to remain "stable."

In April of this year (2022), students in the MISMeC program visited six housing projects, one completed and five under construction, administered by IBAVI, the regional housing authority of the Balearic Islands. These projects were each of relatively small size (between 6 and 20 dwellings), on small parcels of land, and built using a majority of locally produced materials such as mud bricks and sandstone quarried on the island. The department is engaged in recovering traditional building techniques specific to the islands, such as building vaults from sandstone and using posidonia seagrass as insulation. Because of its regional nature, IBAVI has the capacity to utilize what Turner would deem local resourcefulness. All of this is accomplished, however, with heterogeneous design. I would be curious to see what Turner would make of these practices--whether he would be satisfied with the localized nature of the process, or claim that the gap between such practices and user control of the process remains too wide.

One could argue that the more local the housing provider, the more possibilities for user control of some aspects of the design process. At several points in the book, Turner points out the futility of attempts by governments, already occurring in the 1970s, to incorporate user feedback into the production of public housing.¹³⁶ These attempts, Turner writes, tend to be mostly symbolic and the most thorough come at great expense, making them difficult to replicate. At the worst, these attempts can mask a program of manufacturing consent.¹³⁷ Furthermore, dweller-led design can only improve use value for the resident who took part in the design process, making it more compatible with ownership-based systems. The system can also be useful for long-term tenants, but any succeeding tenants will definitionally arrive at a house designed for someone else.

Several contemporary examples exist of dweller-developer collaboration in the design of public housing, such as a recent program in Vienna and the *CommunityFirst!* neighborhood project for

https://ec.europa.eu/futurium/en/system/files/ged/housing_in_vienna_annual_report_2016.pdf ¹³⁵ "Municipal Housing in Vienna: History, Facts and Figures," (Vienna: City of Vienna--Wiener Wohnen, August 2021) https://www.wienerwohnen.at/wiener-gemeindebau/municipal-housing-in-vienna.html ¹³⁶Turner, *Housing by People*, 10

¹³⁷ I have elaborated this point in more detail, drawing on an interview with Chantal Mouffe, in the earlier section on Illich

formerly homeless individuals in Austin, Texas.¹³⁸ In each of these projects, future residents were assigned plots and worked with architects and builders to design their own homes, much like a traditional client-architect relationship, with the difference that the entire design and construction process was subsidized by the presiding organization---in the first case, the city of Vienna's public housing provider, and in the latter the nonprofit *CommunityFirst!*. In the case of *CommunityFirst!*, current residents are understandably satisfied with the homes built to their specifications. However, the houses are rented, and the dweller-led design scheme was intended as a one-time intervention, with the assumption that designing to the needs of a few specific residents was at least better than attempting to design housing that would fit anyone, and therefore no one's needs. Turner would likely argue that use values are subjective enough to invalidate this approach.

A recent housing policy employed by the Barcelona public housing agency IMHAB presents another approach to dweller-designed housing more in line with Turner's recommendations. The agency opens a competition for housing designs for specific plots in the city, to be submitted by co-operative associations of potential residents, who hire specialists such as architects and engineers to design the buildings to their specifications. If the design is selected, the association receives a low-interest loan through IMHAB for construction, to be paid off through a fee structure decided on by the members of the cooperative. The residents have security of tenure ensured through usufruct, meaning they can remain in their homes as long as they continue to abide by the rules of the cooperative, but cannot realize capital gains through appreciation of the value of the dwelling. This allows housing-related fees to remain stable and relatively low in relation to market rents.¹³⁹ This policy was initiated largely through the activsm of the residents of the first such cooperative, La Borda, who worked with IMHAB to develop the policy. Since, several such projects have been developed or are in development. A common criticism of this approach on the part of public agencies is that the barriers of entry to formation of cooperatives, retaining architectural and engineering firms, and entering the competition reduce the chance

¹³⁸Megan Kimble, "Austin's Fix for Homelessness: Tiny Houses, and lots of Neighbors" Bloomberg Citylab, November 12, 2018:

https://www.bloomberg.com/news/articles/2018-11-12/austin-s-community-first-village-tackles-homelessn ess

¹³⁹ "Les cooperatives en model de cessió d'ús: una forma alternativa d'accés a l'habitatge" <u>Habitatge</u>, <u>Urbanisme i Activitats</u>, Newsletter 90, Diputació de Barcelona, April 2018

https://www.diba.cat/web/hua/-/les-cooperatives-en-model-de-cessio-d-us-una-forma-alternativa-d-accesa-l-habitatge

that the city's neediest residents will be able to benefit from the program. Instead, opponents argue, the cooperative model can be useful only for housing the middle class. Some proponents of this model agree, but point out the fact that the affordability of housing is a problem for the middle class as well in the current state of real estate speculation in cities like Barcelona, and, as in the case of Vienna, public housing can support the middle class as well. Other activists, such as the *Coopolis* incubator at Can Batllo, next to La Borda as well as a second cooperative housing building in development, are working to break down barriers of accessibility to the cooperative model.¹⁴⁰

It is worth noting that the experiences which led Turner to the conclusions expressed in Freedom to Build and Housing by People took place in Peru, Mexico and the United States, places where the relatively plentiful supply of land has traditionally resulted in land use policies encouraging lower density settlements. In most of Europe, however, and particularly the Mediterranean, where buildable land is more scarce (and thus more expensive) and population density is higher, people have traditionally lived in multi-story buildings whose height is determined by the limits of local building materials. The construction of single-story buildings lends itself more easily to self-building because architects are not required to ensure structural stability and less shared infrastructure means simpler governance. In a five-story building in Barcelona, for example, the "staircase community" -- a governing body involving all the owners of apartments sharing a staircase--must agree before any maintenance or changes to shared facilities can occur. Any maintenance to an individual household that might affect neighbors must also be approved by the community. Thus, we can see the mechanisms that make it necessary for people wishing to self-build in Barcelona with the help of the government to form a cooperative governance structure and hire specialists such as architects and engineers. Although Turner believed his suggestions to be universally applicable, this might constitute an important difference between Peru and Barcelona, stemming more from land use tradition than degree of industrialization of the economy.

¹⁴⁰ Coòpolis, l'Ateneu Cooperatiu de Barcelona https://www.bcn.coop/

Sudoeste del Besòs: One Story of Industrialization

The MISMeC cohort of Fall 2021- Spring 2022 spent the year studying a neighborhood of Barcelona, Sudoeste del Besòs, as a case study or lens through which to understand the themes of the course: urban metabolism, resource flows such as energy and water, and the co-constitutive relationship between society and the character of the space it takes as its stage. Although Illich and Turner's characterizations of industrialism could be illustrated, albeit with different results, by a neighborhood anywhere in the world, I have chosen Sud Oest del Besòs since it is fresh in my mind after a year of study. Furthermore, because of the coincidence in time of my study of the neighborhood and of the works of Turner and Illich, I naturally came to understand each through the lens of the other.

In this section, I will begin by describing the entwined histories of the physical neighborhood (its planning and execution) and of the people who came to live there, contextualized within the political and economic conditions of the time that brought the two stories together. The stories of individuals are taken from the essay "L'ocupació, la Construcció i la Vida a les Barraques" by Maximiliano Diaz-Mollinaro, as well as a series of interviews done by myself and Ivan Duarte Massetti with three current residents of Sudoeste del Besòs and La Mina. The interviewed residents were Anita Canillas, who moved from El Somorrostro to Sudoeste del Besòs in 1961, Salvador Garcia, who moved from Can Tunis to Sudoeste del Besòs the year before, and Ana Zamora Asensio, who moved from Camp de la Bota to La Mina in 1975. I will attempt to frame this story as Illich and Turner would read it: as one of many stories of a group of people reproducing their daily lives as best they could amid rapid industrialization--by interfacing with the growing industrial model as both producers and consumers, scrapping what they could from the refuse of that system, and filling in what gaps were left with pre-industrial modes of survival they carried with them as cultural heritage.

I. Urbanization is Industrialization

The term "urbanization" can be used to refer to two different phenomena whose meanings are nevertheless so closely related that it is often unnecessary to differentiate between them. The first of these tends to imply the transformation of the physical environment in order to increase its capacity to house a dense population of people. Usually, this implies the use of industrial technologies such as pavement and electrical grids, top-down government processes such as new urban plans, and industrial-scale hygiene measures such as sewers and mass vaccination.¹⁴¹ The other sense of the word refers to the trend of populations to concentrate rather than disperse. In the process of urbanization, a shifting economy creates increasingly favorable conditions for life in cities, and increasingly few options for survival in the countryside and small towns.

Generally, pre-industrial patterns of urban metabolism involve concentrations of people--towns and small cities-- which rely on a surrounding belt of agricultural and forest land for provisioning. This is what Elisée Reclus termed the *proche milieu*.¹⁴² This land is more sparsely populated than the cities and towns, but a stable metabolic balance can be maintained as long as the population of the city remains within a certain ratio in relation to the capacity of the natural resources surrounding it, the distance to points of provision, and the population of the rural areas which must maintain and harvest resources for the city in addition to providing for their own needs. Rural and urban areas are connected in a complex set of overlapping supply networks which are sufficient to support the possibility of a decent life in either.

In the process of industrialization, supply networks are transformed as the production of goods and extraction of materials begins to become more centralized and less diffuse. Self-production is reduced in favor of industrially produced goods, and then consumption of those goods becomes a factor of where they are distributed. The less people are able to self-produce, the more they become dependent on wage labor in order to purchase goods. Wages are available at the centralized locations of production, and thus it becomes increasingly necessary to relocate to these centers. Thus, the processes of urbanization and industrialization are inherently linked. In fact, in *Housing by People,* Turner never refers to these phenomena separately, opting instead for the term *urban-industrialization*.¹⁴³

¹⁴¹ In *Against the Grain*, James Scott points out that early cities were extremely dangerous places to live before mass availability of vaccination. It does not seem to be a coincidence that the hygienist movement coincided with the industrial revolution. Unprecedented density called for ways to remove waste more quickly, ensure the quality of drinking water more dependably, and to stamp out disease more completely and preempt it whenever possible.

 ¹⁴² José Luis Oyon and Marta Serra Permanyer, "Las Casas de Reclus: Hacia la Fusión Naturaleza-Ciudad, 1830-1871" Scripta Nova: Revista Electrónica de Geografía y Ciencias Sociales, XVI, 421, December 1, 2012. <u>http://www.ub.edu/geocrit/sn/sn-421.htm</u>

¹⁴³ John Turner, Housing by People

In the late 1800s, migrants from other areas of Catalunya began to arrive in Barcelona to work in the factories of Poblenou, then the largest manufacturing district in the Western Mediterranean, and in the massive construction projects associated with a feverishly growing city. By the 1920s, Barcelona's pull had reached a national scale, and migrants from other areas of Spain began to arrive as well, failing to find a viable means of living in cities closer to home. By 1930, Barcelona's population had doubled from 1900 numbers, mostly as a result of migration.¹⁴⁴ The civil war of the 1930s, and the physical devastation and political oppression that followed, caused another wave of immigration into Barcelona in the 1940s and 50s after which the rate remained steady for decades. The city's resources were stretched to a breaking point by the influx of bodies to house and mouths to feed, to the extent that some existing residents began to call for the use of force to limit immigration. In 1949, two years after the end of the civil war, the *Diario de Barcelona* published the following anonymous letter, entitled "Shut Down Immigration!":

"One of the fundamental causes of the problem represented by the housing shortage is brought to Barcelona by those who arrive from other Spanish regions. This has been said many times; but now authorized voices are demanding that the City Council radically cut illegal immigration. The award-winning architects in the project competition, organized by the College of Those professionals, in order to solve the housing issue, believe that those who come here to try their luck should be prohibited from entering the capital, as our ancestors once went to America, if they really want to face the housing problem. The closure of immigration is, therefore, the necessary premise to solve it, and only in this way, with an accelerated rate of construction in addition, will we be able to reach the saturation of housing in about ten years and, therefore, the extermination of the barracks, in which, as is known, about forty thousand people are crowded, that is, more than those who live in many third category provincial capitals."¹⁴⁵

The letter, although clearly motivated by prejudice and devoid of any reference to the needs of migrants, indicates an awareness of the stakes of such rapid and high-volume immigration for a metabolically overburdened city. The author does not seem to be of the illusion, as so many technocrats then and since have been, that urbanization ad infinitum can solve its own problems. However, what the author fails, or doesn't care to acknowledge, is that the migrants arriving in Barcelona had nowhere else to go.

¹⁴⁴ Garcia, El Poligon de Sudoeste del Besòs, 3

¹⁴⁵ Unknown author "¡Que se cierre la inmigración!", Diario de Barcelona (October 23, 1949), p. 4, cited in Maximiliano Díaz Molinaro "L'ocupació, la construcció i la vida a les barraques" in *Barraques: La Barcelona Informal,* edited by Merce Tatjer and Cristina Larrea, 83. Barcelona: Museu de Historia de Barcelona, Institut de Cultura, Ajuntament de Barcelona, 2010.

In a 1968 piece for the publication El Ciervo entitled "Radiografía de los Desheredados," the journalist Agustí Pons transcribed the story of an anonymous resident of Sudoeste del Besòs.¹⁴⁶

"My town had the shape of a pair of pants. It is almost the last in the province of Seville, bordering Malaga. It is called El Saucejo and it is one hundred and ten kilometers from the capital! How many inhabitants does it have? So, when I was born, in 1937, between ten and twelve thousand. Now there must be about four thousand five hundred. They are all leaving. We had a farmhouse of fourteen fanegas of land, one of the best in town. Four were olive groves and others of wheat, barley and manzanilla olives that are the size of a cherry. Some of them we left fallow and in them we planted peas and chickpeas, which did not spoil the land. Next to a well we grew peppers, chestnuts, watermelons, tomatoes, cucumbers, garlic and onions for our own consumption.

The situation becomes difficult, but before taking the decisive step of emigrating, all resources are exhausted, all possibilities are burned so as not to have to leave. It is the story always repeated in many individuals, in many families...

The smuggling began when the store my father set up no longer sold anything. With the transfer money we bought a bicycle and a few kilos of coffee. It went from the town to Almarjen and from there to Osuna. In all, he traveled seventy kilometers daily, with forty kilos of coffee that he sold to the smugglers on the one o'clock train. One day I had a problem with the civil guard. I was returning from Osuna with a shipment of coffee and when we reached a stop they were waiting for us. My father took the contraband from me."

And everything reaches its limit. One can no longer stand it. Leaving is the only viable way out. Barcelona, the chosen target.

«We sold the house at a loss and they immediately gave us only half of what was agreed. The other half I went to look for her when my family was already two kilometers from the town. The new master wanted to make sure that we were definitely gone. And we came to Barcelona.

It is that no one leaves their land on a whim. Perhaps some younger and more determined emigrated driven by the lure of adventure, but most have been forced to change their address. They have left their parents, the bread and the olives, the ones they picked and the ones they

¹⁴⁶ The interview testimony appears interspersed with commentary, either from Matas-Pericé or Pons. The former is more likely, as it is consistent with the style of commentary interspersed in other interviews elsewhere in the book. I have attempted to distinguish the commentary by not italicizing it.

ate. A whole inner mechanism of contradictions has piled up inside them. A brain ignorant of letters and numbers has to make a terrible decision: leave, flee...^{*n*147}

In "L'Occupació, la Construcció i la Vida a les Barraques," Maximiliano Diaz Molinaro presents several accounts that tell a similar story, such as that of Ernesto Agudo, who was born in Torres in 1942. His family came to live in the barraques of Montjuic when he was a child:

"I am from Torres, a town in the province of Jaén. My father worked in a cortijo and my mother with three children —me and two more brothers— Well, it turns out there wasn't enough to eat. In town my father could eat, but his wife and his children suffered calamities. My mother had a first cousin here in Barcelona, so they wrote to each other. And she told him that if the situation was bad, then they should come to Barcelona. That's how my father decided to come. We sold the little house we had in town and came to Barcelona."¹⁴⁸

In the post-war years, the breakdown of the rural metabolic system was intensified by a new oppressive political order which forcefully barred some from participation in the remaining modes of life-making. Agudo describes his uncle's reasons for coming to Barcelona:

Then a brother of my father with whom he was writing said that there was room for him, that it was bad there in the town, that they did not give him a job because of the political situation that had been experienced before. In the towns, I don't know if you know, but the workers were chosen by hand. You went to the square and they said: «You, you and you come to work, and you and you, there is no work». and he was a person that for his ideas he had sold the Workers' World in his time and they didn't give him a job. So it was that he told my father to see if he could make a place for him there in the barracks.¹⁴⁹

Many who had opposed or fought against the Franco regime during the war became fugitives during the post-war period, an existence which precluded staying in any place for long enough to find a job or become part of a network of provision. For many of these individuals, the relative anonymity of the big city represented the only feasible way to settle down in one place. The testimony of Concepción Garcia, who was born in Extremadura in 1949, illustrates this point:

¹⁴⁷ Agusti Pons, "Radiografia de los Desheredados" El Ciervo, 172. June 1968, Barcelona. Reprinted in Alfred Matas-Pericé, *Al Sudoeste del Río Besós: Diez años de la vida de un barrio Barcelonés, Edicion Castellano* (Barcelona: Editorial Pórtic, 1971) 86-89

¹⁴⁸Diaz Molinaro, "L'Occupació, la Construcció i la Vida a les Barraques," 87.

¹⁴⁹ Diaz Molinaro, "L'Occupació, la Construcció i la Vida a les Barraques," 93

"My father fought on the republican side and had to face a death sentence when he was arrested by the nationals...They condemned him to death, but the day before he was executed he escaped from prison. Of course, when he escaped he had to hide in the mountains until the war ended. We had to move and we were in Portugal, then in Ciudad Real [...]. Then we went to Badajoz, where I was born. We always had to move and not be in one place for a long time...My parents were not married because my father could not maintain his real name. Then, in 1955, they married legally and recognized all their children. And then we came here to Barcelona in 1957. But of course, here, at the Francia station, if they caught you, they would take you to Misiones and take you back to your land. The emigration was so great that they had to remove someone. They didn't want so much emigration here...Because there were trains and trains and trains... My aunt, as she already knew, came to Sitges to pick us up and from there we took a taxi and got to Montjuïc [...]. In 1964 my father wanted to get his passport to go to France, and when he went to pick it up they arrested him [...]. The death penalty had expired, but he was convicted as a fugitive and had to serve a year and a half of his sentence in the same prison in Extremadura from which he had escaped."¹⁵⁰

It is worth noting that the role of the Spanish Civil War in relation to migration into Barcelona was one of acceleration of a pre-existing trend and does not invalidate the argument that migration was primarily an effect of industrialization. Furthermore, although the scope of this paper does not allow for more than a brief mention of this, both Illich and Turner would certainly point to the relationship between industrialization and the use of force on the part of a centralized state to control the means of life-making of ordinary people. In comparison to the liberal governments Illich and Turner critiqued, however, the example of fascist use of force in relation to industrialization is not so clear-cut. Attempting to ban immigration into Barcelona is an inherently conservative measure which seeks to maintain an evaporating status quo rather than accelerate change, and making it difficult for leftists to acquire jobs or maintain a life in rural areas was merely a means of political control, not a deliberate strategy to send these individuals to cities. I will return to the complicated relationship between industrialization and fascist policy in the discussion of autarchy in the following section.

This section has focused on contextualizing the phenomenon of immigration in terms of regional and national metabolic flows, and I have argued that urbanization and industrialization are linked. Many accounts of migration begin with the assertion that those moving from rural areas

¹⁵⁰ Diaz Molinaro, "L'Occupació, la Construcció i la Vida a les Barraques," 91

to the city come in search of "better opportunities" or fleeing some vague "hardship," but fail to investigate the root causes of what seems to me a systemic breakdown of networks of survival in rural areas. As goods stop being produced or transported to certain areas, shops close, train lines are rerouted, and providing for oneself becomes more difficult, a self-perpetuating exodus begins. As the city grows and industrializes, it makes greater demands of the territory around it in terms of agriculture, water and the raw materials used for industrial processes. The growing of food and extraction of materials requires human labor, but with very few remaining social and supply networks, life in such places has become close to untenable. Thus, in advanced urban-industrial societies, agriculture and resource extraction is increasingly outsourced to more marginalized areas of the globe, echoing the process of eco-apartheid described earlier. The following sections will discuss the experience of rural newcomers on the periphery of the urban-industrial world, and chart the process of these people and their descendents beginning to fulfill their needs through means provided by urbanization and industrialization. In time, many of the unmet needs of those living in the barragues and the first dwellers of Besòs were rectified by the extension of participation in urban and industrial systems such as rented flats, utilities, public schools, etc. It is important to remember, however, that urban-industrialization always has a cost, though it may be displaced to other countries where it is easier to ignore.

II. Antecedents of Barraquisme: What makes a housing crisis?

In his introduction to *Barraques: La Barcelona Informal del Segle XX*, Joan Roca i Albert begins thus:

"Cities, whose commercial drive led to the dawn of modernity in the late Middle Ages, once again played a decisive role in shaping the industrial world. In some cases, industrialization created new cities. In many others, it enlarged cities that already existed, such as Barcelona, in a way previously unimaginable. In all cases, however, the difficulties to deal with moments of rapid and intense growth have represented a fundamental issue over time."¹⁵¹

By the time Ildefons Cerdá drafted the Pla Eixample in 1860, Barcelona's urban infrastructure had already been pushed to a breaking point. Life within the walls of the old city was extremely crowded, and the exigencies of daily life for so many within such a small space made it difficult to ensure the availability of clean water or sanitary disposal of waste. There were four separate outbreaks of cholera between 1821 and 1865, each with more than 3000 deaths.¹⁵² Similar patterns were occuring in cities across the industrializing world, and the Pla Eixample was a pioneering attempt to adapt the scale of the city to its burgeoning population. As Roca i Albert notes, it was "the most elaborate proposal for urban planning and management on the continent" and constituted "the multiplication by ten of the urban surface of the city."¹⁵³ This was an attempt at a state-driven response to the need for the expansion of the urbanized area, because, as Roca i Albert notes, "sub-housing had accompanied the Industrial Revolution from its beginnings and Cerdà started from the realization of this fact."¹⁵⁴ If the government did not provide new urbanized areas, people would do it themselves.

Unfortunately, however, actual development of new housing within the area indicated by the Cerdá plan failed to manifest as projected. This can be partially explained by failure of the "invisible hand" of the housing market to properly respond to existing demand. Barcelona's population increase--as mentioned in the previous section, the population of the city doubled from 1900 to 1930--was mostly due to migration from rural areas. Although we can assume

¹⁵¹ Joan Roca i Albert, "La Ciutat Informal" in *Barraques: La Barcelona Informal del Segle XX, 11.*

¹⁵² Lluís Permanyer *L'Eixample, 150 anys d'Història* (Barcelona: Viena Edicions i Ajuntament de Barcelona, 2008)

¹⁵³ Joan Roca i Albert, "La Ciutat Informal" 11.

¹⁵⁴ ibid.

these people had been highly qualified to live the lives they had come from--as farmers, livestock herders, and skilled tradesmen in maintaining rural infrastructure and tools--these skills did not serve them in the industrial city. The jobs available now were in factories, services and construction--there was plenty of work, but it was "unskilled" labor, and wages were very low. As lllich would point out, one of the functions of industrialization is to create ever more complicated mechanisms for differentially grading the value of individuals' labor. As technology changes, people's skills must also adapt in order to compete for higher wages, and thus greater choice and opportunity for survival in a world where basic needs are commodified.

We can point to this moment in the transition to industrialization as one in which an outsize percentage of the population of the city had very few resources which were legible as having value in the city's economy. More simply put, housing had to be paid for with money, which, at this particular time in Barcelona's history, most people didn't have. The private sector continued to develop housing for those who did, but there was already more than enough of that. Thus, a "dual market" developed, in which a glut of housing was available in the upper echelons of the market, with relatively low demand, while very little low-cost housing existed, for which demand skyrocketed.

In "Les barraques i l'infrahabitatge en la construcció de Barcelona, 1914-1950," José Luis Oyón and Borja Iglesias describe this phenomenon:

"On the one hand, there was an excessive supply of apartments in the upper ranges, the rent of which could only be paid by the white-collar class or, in any case, by the most qualified workers, and, on the other hand, there was a overpressured market, monopolized by the demand in the lower bands. This dual process in which a saturation of relatively high-quality housing coexisted with a persistent housing crisis among the poorest workers was... one of the defining features of the housing market in interwar Barcelona"¹⁵⁵

Thus, we can see that at this time at least, market mechanisms alone were unable to adequately respond to existing demand, because most of the people who needed housing weren't actually able to participate in the market. Unfortunately, this was not an isolated incident.

¹⁵⁵ José Luis Oyón and Borja Iglesias, "Les barraques i l'infrahabitatge en la construcció de Barcelona, 1914-1950" in *Barraques: La Barcelona Informal del Segle XX,* 23-24.

We will see this theme echoed later, in the discussion of the lives of recent immigrants in present-day Sud Oest del Besòs, who are often barred from participating in industrial "markets" because their skills and resources are not legible.

When the private market fails to provide for a large portion of the population's needs, the traditional liberal response is to expect the government to cover the gap. As we will see, both the pre-1936 republican government and the Franco regime failed to provide a significant state response to the housing crisis until the mid-1950s, when the situation had become extreme. The result of this inaction on behalf of both the public and private sectors can be illustrated by the following ratios of increased population to new building from before the civil war:

From 1910-1920, 18,604 houses were built for an influx of 124,194 migrants. From 1920-1930, 71,695 houses were built for an influx of 321,980 migrants.¹⁵⁶

This statistic does not differentiate between low- and high-rent housing, so we can imagine that the ratio would be much more extreme, if only low-rent housing were counted. As we know from Turner, ratios such as this, although valuable, tell a very limited story. What they do tell us is that the vast majority of migrants were not housed in legal, single-household dwellings. In the absence of market and state mechanisms, the solution to the housing problem came from the popular sector.

Until the 1950s, most of the increased need for housing in Barcelona was absorbed by various modes of sub-housing¹⁵⁷, which took two main forms: multiple families living together in one house, and the building and exchange of illegal dwellings. Until the 1940s, the vast majority of working-class housing was achieved through the first of these tactics, while barraquisme, or shack-dwelling, began as a marginal solution and only became widespread in the 1940s, when the housing crisis had reached extreme levels.

For those with construction skills, building one's own house in an informal settlement was a way to leverage a knowledge resource that was not highly valued in the urban economy. In other

¹⁵⁶ Antich Garcia, "El Polígon del Sud Oest del Besòs: Habitatge Social dels anys 50," 3.

¹⁵⁷ Translated from "infrahabitatge"-- the various authors in *Barraques* use this term to refer to informal housing solutions, in terms of physical or use modifications to existing housing stock or creation of new housing stock outside of formal processes. Barraques are one type of sub-housing, but as the authors point out, less common than subdivision or sharing a house among multiple families.

words, construction wages wouldn't pay the rent, but construction skills could provide a house. Arturo Domiguez grew up in a rented flat, but moved to La Perona, an informal neighborhood on land owned by the RENFE train company, when he was married. He built his shack onto the side of one owned by his in-laws:

"I couldn't live any longer in my house with my sister and my brother. We only had two rooms, and I said: 'Well, I'd rather live in La Perona.' My father was a mason, and my father-in-law worked in construction, so in one night-- how it was typically done--they built the house. We went to live where they lived, but in a room that they had made, which... that was wall to wall, but it was a room that could only fit one bed and nothing else"¹⁵⁸

Although some groups of self-built houses began to appear as early as the late 1800s outside the urbanized areas of the city, these "barracas" did not constitute a significant contribution to housing Barcelona's population until the 1940s. The *Anuari Estadístic de Barcelona* counted 1,218 shacks citywide with 4,950 inhabitants in 1914, most in the Montjuïc area and along the coast, including El Somorrostro and Péquin. In six years, this number tripled, reaching 3,859 shacks and 19,984 inhabitants in 1922, based on a study conducted by the municipal doctors Pons and Martino. Oyon and Iglesias estimate that the number of shacks reached 6,500 in 1929, which coincided with the highest rents of the interwar years and the closing of the decade with the highest documented migration into the city--the first and second decades of the century had seen 133,559 and 124,194 new migrants, respectively, whereas the third saw 321,980, including the first wave of migrants from outside Catalunya.¹⁵⁹

As we can see, the number of shacks, although increasing, was relatively small in relation to the influx of immigrants, who generally found other housing solutions. The number of households who achieved shelter through barraques still only constituted about 1% by 1930.¹⁶⁰ Of those who lived in the shacks, most were newly arrived immigrants. 31% had lived in the city for less than two years and nearly 70% less than ten.¹⁶¹ What we can read in these figures is an increase in demand for low-cost housing, particularly in the decade from 1920-1930, without an increase in supply. As the number of people capable of being absorbed by other types of sub-housing (subletting, sharing space with other families, etc.) began to reach its physical limit,

¹⁵⁸ Diaz-Molinaro, "L'Occupació, la Construcció i la Vida a les Barraques," 100

¹⁵⁹ Antich Garcia, "El Poligon de Sudoeste del Besòs," 3

¹⁶⁰ Oyon and Iglesias, "Les barraques i l'infrahabitatge en la construcció de Barcelona, 1914-1950" 26. ¹⁶¹ ibid, 30.

the most precarious households began to move to barraques. Although rent for barraques tended to be the cheapest in the city, it reflected the general trend in the city during those years, escalating from 15-20 pesetas per month in 1922 to 30 pesetas in the 1930s, compared with an average rent of 55.2 pesetas for working-class housing in the city. The barraques, like housing in the rest of the city, was also becoming more crowded--the average occupancy of a 20 m2, 2 room shack went from 5.2 occupants in 1922 to 5.9 in 1930.¹⁶²

Although barraquisme had remained a marginal phenomenon until 1930, in the aftermath of the war it took on a new importance in the city as a result of continued migration¹⁶³, destruction of some housing stock during the war,¹⁶⁴ and the economic ravages caused by the Francoist regime's policy of autarchy. Oyón and Iglesias write,

"Despite everything, the trend seems sufficiently solid to reasonably suspect the great loss that the crossing of the harsh post-war desert represented for housing in the city. The sample of 5% of the 1950 census in the 1st and 2nd districts confirms, indeed, the sudden rise of the barracista phenomenon during the decade of autarchy. In the first of these districts, shacks went from representing only 0.31% of all households in 1940 to 2.82% in 1950, when there were around 900 shacks in the Barceloneta neighborhood."¹⁶⁵

In the second census district, the percentage of households living in shacks jumped from 1.71% in the 1940 census to 10.49% ten years later.¹⁶⁶ In the fifth district, which housed the informal coastal settlement of *El Gas*, the number of shacks increased from 42 in 1940 to 300 in 1950, representing 23% of the inhabited households in that district. Of these, shacks housing more than 6 people (usually multiple families living together) rose from 16.8% in 1940 to more than 30% in 1950, with some huts registered as having more than 15 people living inside. Oyón and Iglesias note that this type of arrangement was particularly prevalent in households headed by a woman. In the years after the war, female-headed households increased, as many men had died in the war. In the first district female heads of household increased from 19% to 25% before

¹⁶² Ibid, 29.

¹⁶³ Antich Garcia notes that there is no conclusive data on migration into the city during the war, but between 1940 and 1950, the city received another 165,000 immigrants, a rate lower than 1920-1930, but slightly higher than the earlier decades (p. 3)

¹⁶⁴ Antich Garcia, "El Poligon de Sudoeste del Besòs," p. 3

¹⁶⁵ Ibid, 31.

¹⁶⁶ ibid, 33

and after the war, and in the second district 20% to 22%. In both 1940 and 1950, between 26% and 36% of all female-headed households declared that they had taken in renters.¹⁶⁷ Many more were likely undeclared, and noted instead as "large households." For women, who were less likely to take jobs in factories, taking in renters or moving in with another family could help solve the cost of rent without formal income. This is the first of several examples in which we see women in particular providing for their families through means outside the formal economy. I'll return to this theme in the following section.

The cohabitation figures noted above are only in reference to *barraques*, but Oyón and Iglesias emphasize that this type of solution was widespread across housing types in working-class Barcelona, and worsened significantly in the post-war years:

"Approximately two out of every three families of unskilled workers in Barcelona would be affected by this type of total cohabitation (it must be remembered that in 1930 "only" four out of ten working families in Barcelona cohabited), a percentage that would easily exceed 70% if we talk about day laborers from the last immigrant wave. Obviously, the data only refer to two districts of the city and do not yet allow us to draw certain conclusions, but at the moment the feeling is of an enormous worsening of the housing problem." ¹⁶⁸

¹⁶⁷ Oyón and Iglesias, "Les barraques i l'infrahabitatge en la construcció de Barcelona, 1914-1950," 34

¹⁶⁸ Oyon and Iglesias, "Les barraques i l'infrahabitatge en la construcció de Barcelona, 1914-1950," 35



Aerial view of Somorrostro, 1950s, Barraques: La Barcelona Informal del Segle XX



Aerial view of Can Tunis,1970s, Barraques: La Barcelona Informal del Segle XX

III. Barraquisme: Building a Home Between Two Worlds

Beginning in the 1940s, the practice of *barraquisme* began to play a significant role in housing the working-class population of Barcelona. By this point, nuclei of shacks were already well-established on the slopes of Montjuic, which, according to the 1940 census had 4000 shacks and multiple neighborhoods, the most populous of which was Can Valero, and along the coast, including El Somorrostro and El Gas, located parallel to Barceloneta and Poblenou, and Pequin, farther down the coast, near the area that would eventually become Sudoeste del Besòs and La Mina. With the exception of Pequin, the first main nuclei generally developed close to the populated core of Barcelona. One can infer that these areas were chosen for their proximity to the city center, where most dwellers worked and, to varying extents, purchased goods. The coastal settlements were particularly well-suited to those who made a living from the sea, such as Anita Canillas' father:

"My parents came to Barcelona in '43. My father came first. He was a fisherman and he came to Barceloneta and rented a room in an apartment. The owners lived with us in that little apartment. Another couple and us. Imagine how it went. And then my mother came alone with two children, a six-year-old boy and a three-year-old girl and she was pregnant with me. So when my mother comes and sees the situation, she tells my father we don't fit here. That we are not going to live here. With three children. And then my father bought a shack from the Gas that is next door, next to the Hospital del Mar...If you go to Hospital del Mar, you can see a gas boiler. That's why they called it that...So my father, my grandfather and my uncle built a house. And that little house was blue. . My grandmother lived just next to it and my aunt as well."¹⁶⁹

In Anita's testimony, we see the first instance of a theme that occurs repeatedly in the accounts of those who moved to informal settlements: conditions of intolerable crowding in the rental apartment the family occupied previously. Asunción Claverias describes a similar situation:

"My parents, as a result of some illness problems that I had and the post-war situation, began to have financial problems. So we decided to emigrate from Granada. We had some acquaintances in Barcelona who invited us to come here. We arrived in Barcelona in November 1947...Some friends we had here had rented us a flat. They had made a contract for a house and, when we went to occupy that house, it turned out that they had rented it to four or five more families. Then

¹⁶⁹ Anita Canillas is a current resident of Sudoeste del Besòs, and grew up in the barraques of El Gas and El Somorrostro. She was interviewed by myself and Ivan Duarte Massetti in May 2022.

we found that we had nowhere to go, and we stayed to live in the house of these friends, who we did not know lived in a shack. When we arrived at his house, we found that it was a shack in the Ramón Casellas area, one of the clusters of shacks that were starting to form at that time."¹⁷⁰

For others, especially female-headed households without wages, the move to a shack was simply the only affordable option. Facundo Losada tells how his single mother acquired a shack in the Los Cañones area of Carmel when he was away:

"While I was in the military, my mother was advised to talk to the priest of El Carmelo, Father Eduardo, since this man could help get permission to build a hut...It was for this reason that they decided to leave the flat to live in a shack: As my wages were missing at home, which was the main [source of income]."

In some areas, particularly in Montjuic and La Perona, residents acquired land to build shacks through illegal sale or renting of areas that were intended for agriculture. There was a long tradition of peri-urban gardening on the slopes of Montjuic, and many Barcelona residents owned plots there where they spent time on weekends. As the demand for cheap housing rose, these gardeners saw an opportunity to make extra income by allowing people to build shacks and live in the garden area. Agustina Sanchez describes how her brother-in-law Remedios Torres, rented such a plot:

"He leased the land from the lady next door. Because that lady had a summer tower, which were those summer huts that people used to water the little garden, to spend Sundays. It was a little house, one of those domingueros, as we called it. Well, that lady had a lot of land and she rented it to Remedios, a fairly large piece [...] The lady was from Barcelona and only went up on Sundays."¹⁷¹

Land ownership on the mountain was split between the city council, the national military, which owned the area around the castle, and a company called Fomento de Obras y Construcciones which managed quarries on the mountain, and later a dump. This company leased its land to gardeners until it was sold to the Board of the International Exposition in 1929. Many gardeners continued to garden there and rent to barracks-dwellers after the change of ownership, even though they themselves no longer had any legal right to the land. This meant that gardens and

¹⁷⁰ Diaz-Molinaro, "L'Occupació, la Construcció i la Vida a les Barraques," 88

¹⁷¹ Diaz-Molinaro, "L'Occupació, la Construcció i la Vida a les Barraques," 96

the barracks located there were occasionally demolished without warning, as the construction for the International Exposition proceeded, but many gardens and barracks were able to remain on the slopes for many years.

In most cases, the land continued to be used to grow food as well as providing shelter, as is evidenced in photos of families sitting outside their huts with the garden in the background. Although many of these plots likely continued to be used exclusively by the owner, there are also accounts of residents growing their own food in Montjuic and the more distant nuclei such as Carmel.

The neighborhood of La Perona was another example of a settlement whose existence was based on the illegal sale of non-residential land by those who did not own it. The area was owned by the RENFE train company, and workers granted access to the area by the side of the train tracks to those who would pay for it. Javier Lopez, who arrived in La Perona in 1947, describes the process by which his father acquired the land where they lived for 30 years:

"My father ... with other companions ...learned that there was a place ...where they sold orchards next to the train tracks and at the height of the Espronceda bridge. Between the three they bought a very large piece of land and made three partitions; thus, each one paid 300 pesetas to the RENFE workers. Then my father, on his piece of land, built a wooden house. In 1947, the rest of the family arrived with the whole house on their backs: trunks, sacks full of clothes, pans... everything we could bring."¹⁷²



Garden barraques in Montjuic, 1915, Barraques, La Barcelona Informal del Segle XX



Jacques Léonard, Jacques, Rosario i Familia Amaya al Jardí de l'oncle Antonio, Photograph, 1960, AFB



Photograph from the family album of Marisa Cerrato, Montjuic early 1960s, Barraques, La Barcelona Informal del Segle XX

In 1949, the same year as the anonymous letter calling for an end to immigration was published in *Diario de Barcelona*, the Barcelona City Council issued a ban on new barracks and created the Barracks Eradication Service, headed by Jaume Mensa, to oversee the control and reduction of existing barracks and to stop new barracks from being built. The ban denounced the practice of renting agricultural land for residential uses, and created a system of number-plating, under which all existing barracks needed to register and receive a plate to be displayed outside the shack, without which it could be torn down without warning.¹⁷³ After 1949, obtaining and retaining a shack became much more difficult, particularly in the nuclei closer to the city center, and thus more in the public eye. Anita Canillas, whose family arrived in 1943, describes being forced to move farther and farther down the beach as the Paséo Maritimo, the new seaside promenade, was constructed:

"So, from El Gas we went to Somorrostro. I was 12 years old then...Well, here we lived. 12. 13. 14. 15, 16. About five years. When the Paseo Maritimo arrived, well, we were in the way. They had to remove the house. But there is also an anecdote out there that they say they took us down in 24 hours. That is not true. Somorrostro took 7 or 8 years to disappear, because they were doing it in stages. First was El Gas. Then here, because the Paséo had to continue. Then the same thing happens. The people who live here leave, they go to Hospitalet, La Trinitat. They only left the fishermen. They came one day with a letter and that said, 'look, you have to get out of here because we are making the promenade and you are in the way. Now you can go there, to such and such a place, to the same neighborhood, but further afield, more to Bogatell.""

In the 1950s, new nuclei farther from the city center began to grow in population, such as the Carmel area where Facundo Losada's widowed mother obtained a shack with the help of a priest. Likely, these areas became more popular at this time because distance from the city center offered some degree of protection from the barracks eradication service, and thus greater security of tenure. This came at the cost of a longer commute to work in the city center and lack of some basic services, like running water, which the city provided to barraques close to the city center. Anita attests to a water tap in both El Gas and El Somorrostro, and an electrical connection in the latter.

Losada's family retained the shack in the Carmel settlement for 30 years, before moving to the Raimon Casellas apartment complex in the same neighborhood, which was built specifically for

¹⁷³ Diaz-Molinaro, "L'Occupació, la Construcció i la Vida a les Barraques," 98

(and designed in conversation with) residents of that settlement. This state-sponsored housing was achieved through an impressive mobilization of neighborhood solidarity over many years. I'll return later to evaluate the work and successes of this neighborhood association in comparison with similar efforts in Sudoeste del Besòs.

Earlier, in the section of this paper devoted to John Turner, we discussed the importance of security of tenure as a crucial element of the use-value of a dwelling--often a basic value that was necessary for the actualization of other use values, such as the process of the improvement of dwellings described by Diaz-Molinaro: "Over time, these constructions evolved and experienced improvements in structure and equipment in accordance with the skill of the barrackers and their desire to improve conditions of life, given that the stay in the hut could be extended longer than they had planned."¹⁷⁴

As we have seen, security of tenure in Barcelona's informal settlements varied substantially from one nucleus to another, and over time, as eradication policy was enforced to varying degrees. In his introduction to *Barraques: La Barcelona Informal,* Joan Roca i Albert distinguishes between two types of informal urbanization, based on security of tenure:

"Here is the fundamental difference between shantytowns, considered a temporary situation by their inhabitants, and self-construction, which was also a very important form of growth—especially in the municipalities of the metropolitan periphery—but which was characterized by its will to permanence for the via urban regularization and the progressive improvement of housing. Thus, the metropolitan growth of Barcelona in the 20th century cannot be explained without including, along with the formal city, a true—albeit much smaller—"informal city". And one cannot fail to consider this informal city as a key phenomenon of contemporary urban history, with a remarkable capacity of its protagonists to self-organize and to design with rationality and economy of means, depending on the materials available, spaces of housing and street. This will soon be seen in the MUHBA Turó de la Rovira heritage site, where, from the reoccupation of the spaces and structures of the anti-aircraft defense battery, a post-war settlement culturally linked to urban forms was formed typical of the south of Spain, known as Los Cañones neighborhood, whose base has been recovered thanks to recent archaeological work. The well-organized inhabitants of Turó de la Rovira and other shantytowns in Carmel rejected several proposals for rehousing and preferred to hold out for more years in situ, with the aim of getting new homes near the old shantytowns. They finally got it. Radically different was, for those same dates of the late eighties, the situation in some other shanty towns that were also living

¹⁷⁴ Diaz Molinaro, "L'Occupació, la Construcció i la Vida a les Barraques," 95.

their last days at the time, such as Camp de la Bota and La Perona, where there was a marginalized population coming in many cases from other shantytowns, which not only required accommodation but also intensive measures of social assistance.³⁷⁷⁵

The spatial characteristics of the barraques--primarily ground-floor, built close together, often with shared walls, and frequently including patios open to public "streets"-- facilitated a kind of neighborhood life that was rare in urban Barcelona. Diaz Molinaro writes, "outside the shack, one of the positive aspects presented by the shack dwellers interviewed is life on the street or, as we described above, in an environment that could reproduce life in the village of origin. The proximity between neighbors allowed bonds of solidarity to emerge." José Alonso Bermúdez, who arrived in Carmel in 1947 at the age of twelve, speaks of being struck by the similarity of the settlement to his own place of origin, echoing Roca's description of Los Cañones: "Well, it was a village. You come from a town and then you encounter another town, urbanized in a different way."

Although, as we have seen, security of tenure often facilitated the development of neighborhood bonds in settlements like Carmel, vibrant public life and community solidarity was by no means absent in the coastal settlements, where security was less certain. Salvador Garcia, who arrived in Barcelona in 1950 and spent his childhood in Can Tunis, recalls, "We were all family there. Lots of family and everyone helped each other a lot. I had a neighbor who was giving birth and a Galician midwife was called, and since she didn't come they called Mrs. Maria, who was my mother, who was the oldest, and she and another neighbor had to act as midwife to help her."¹⁷⁶

All of the interviewees attested to a strong community support network within the barraques, which was at least partially facilitated by their spatial character and informal governance. During the warm months, the space in between the houses was often converted into a communal workspace for women. Anita Canillas, former resident or El Gas and El Somorrostro and Ana Zamora Asensio, who lived in Camp de la Bota, both described fabrics being stretched between dwellings to create shade, and women bringing out chairs into the street to work and socialize. Ana remembers,

¹⁷⁵ Roca i Albert, "La Ciutat Informal," 12.

¹⁷⁶ Salvador Garcia, interviewed by Ivan Duarte Massetti, May 2022

*"In the summertime the women would sit outside the houses and do some sewing, listening to soap operas, knitting. Everything happened in the street. They set up the chairs in a circle and drank coffee, and in the summer they drank sangria."*¹⁷⁷

In this way, common spaces became a more public extension of the house, where socialization and the reproduction of life were entwined. With such cramped indoor quarters, it's easy to imagine the importance of such spaces in the life of the neighborhood.



Party in the quarry, Montjuic, 1945, Barraques: La Barcelona Informal del Segle XX

Another important quality of the barraques was the fact that houses often doubled as productive spaces. This was facilitated by the fact that shacks were generally a single story, and, being self-built, were customizable to accommodate various production and trade activities. Ana describes how her family would fold up their mattresses in the morning and convert their shack into a store, which was operated by her mother. The store produced the majority of the family's

¹⁷⁷ Interview with Ana Zamora Asensio, conducted by Ivan Duarte Massetti, May 2022

income, greater than the portion derived from the father's waged labor at a glass factory.¹⁷⁸ Salvador's family also ran a shop out of their house, and even had a section of the shack devoted to producing their own canned goods, such as cooked beans in a jar, to sell to other families from the neighborhoods. Shops like these operated on credit and sometimes barter, which was essential for collective survival in a community of unstably employed, low-wage workers. Salvador also recalled using credit and barter at shops in Can Tunis:

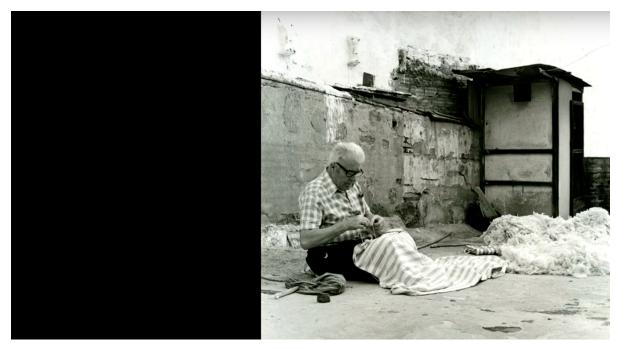
"They didn't sell you everything. But the good thing was that you went and they gave you credit. I arrived and said, 'Hey, give me something and I'll pay you tomorrow.' They said, 'Don't worry. Get the list.' Or sometimes my mother told me that she should give me, for example, a kilo of lentils. A kilo of butter. But she has not given me money and she told me it is worth the same."¹⁷⁹

People with specialized skills often bartered their services for those of others. Anita's mother, for example, was a skilled seamstress, and although she never received wages for the work, she was able to support the family to a significant extent by trading sewing and mending for goods and services in the neighborhood.¹⁸⁰ All three interviewees' mothers helped support their families through informal economies based in the settlements, whereas the fathers all worked in factories, or, in Anita's father's case, as a fisherman on a commercial boat. In the case of Ana's family, the income and goods derived from the informal economy actually exceeded the father's salary in value. We can observe a pattern here, which we will see echoed in the story of women in Sudoeste del Besòs, in which families continued to rely on both formal, waged income and informal, non-waged means of survival, with the latter being accomplished mostly by women. As the exigencies of life in the industrial world began to require two incomes, women often provided both types of labor. In order for women to transition fully into waged work, many industrial services such as daycare for children and grandparents, public schools and home appliances became necessities.

¹⁷⁸ Ana Zamora Asensio, interviewed by Ivan Duarte Massetti, May 2022

¹⁷⁹ Salvador Garcia, interviewed by Ivan Duarte Massetti, May 2022

¹⁸⁰ Interview with Anita Canillas by Katie Murphy and Ivan Duarte Massetti



Marta Matalasser, Mattress Maker, 1970s, Photograph, POVO, AFB



J.M. Huertas, Venda Ambulant, Camp de la Bota, Photograph, 1970s, Arxiu J.M. Huertas Claveria

In terms of use value, the barraques offered a wide range of tradeoffs for their residents. What they had in common was affordability, flexibility and a small-town sense of community. By keeping rent low and bartering goods and services whenever possible, families were able to survive on very low incomes. The settlements closer to the city center, such as El Somorrostro and El Gas, provided easy access to jobs and stores in the city center, at the risk of having to vacate the shack and rebuild somewhere else at a moment's notice. These settlements also had access to more services provided by the city, such as water taps, communal clothes washing areas, medical dispensaries, school barracks, and religious services. Anita considered herself a resident of Barceloneta, since it provided most of the resources her family needed to survive:

"In Barceloneta there were public laundries, there was a coal shop...Barceloneta 60 years ago was like now, now it's newer, now it's more modern, but it was ours. For me, Barceloneta was my neighborhood. I still say that Barceloneta is my town. Because I have gone to school there...There are a lot of people my age who haven't been to school. I've been to Barceloneta and I've been to a convent school, and when we went to school my mother told us to use the bathroom there because we had none at home. We paid five pesetas and we stayed to eat."

The more distant settlements like Carmel didn't enjoy the same degree of connection to the city center, and workers had to commute longer distances. People relied to a greater degree on their natural surroundings. M. Custodio Moreno, a long-time resident of Carmel and one of the activists who worked to secure government housing writes, "Most of the huts were built with materials taken from the land itself: stone, mud... The mud was kneaded with straw, inserted into wooden molds, left to harden for a day and turned into an adobe that replaced the brick, which had to be bought."¹⁸¹ In contrast, Antich Garcia notes that residents of the coastal Barraques often built their houses using carbide, a waste product from the nearby factories, mixed with sand.¹⁸²

¹⁸¹ M. Custodio Moreno, "Les lluites veïnals: el barri del Carmel," in *Barraques: La Barecelona Informal del Segle XX,* 168.

¹⁸² Garcia, "El Poligon de Sudoeste del Besòs," 6



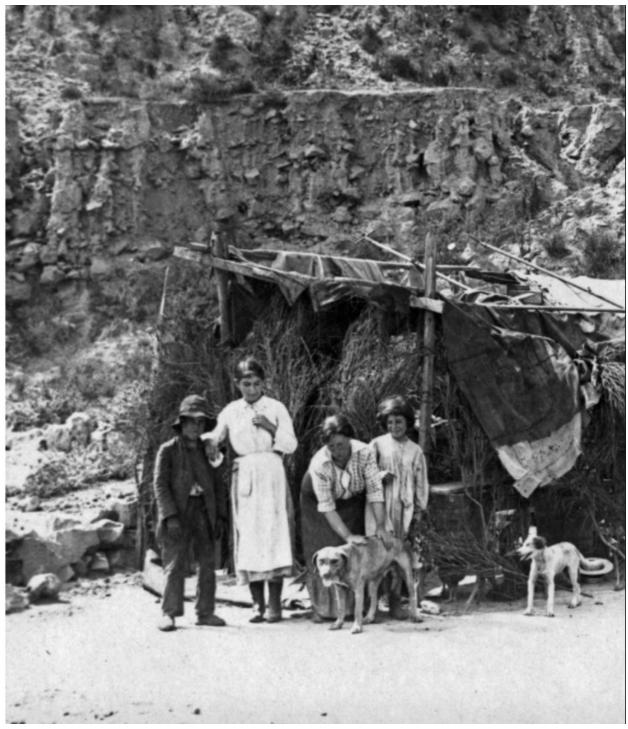
Barraque in Carmel, 1960s Barraques: La Barcelona Informal del Segle XX



Pau Barceló, "Repairman showing the contractual conditions of his work, 1967" *Barraques: La Barcelona Informal del Segle XX*



Bangulí fotògrafs, Fishermen and their barraques, Beach of Somorrostro 1915, Barraques: La Barcelona Informal del Segle XX



Josep M. Sagarra i Plana, Family of stonemasons of Montjuic, Photograph, 1915 Barraques: La Barcelona Informal del Segle XX

Whereas the coastal settlements were provided water taps by the municipality, and these were relatively accessible to all the dwellings, many residents of settlements of Montjuic and Carmel either had to walk long distances to find a tap or take water from streams. Teresa Sastre, who arrived in Carmel at the age of 8, describes the difficulty of acquiring water:

"There was only one fountain in Calle Mariano Labernia, behind the Tatachín bar; there they only gave water a few hours a night. Then we had to go there, take the pots we had and get in line. If you were called at five o'clock in the morning and you got water, perfect. And, if not, there was an hour in the morning when they cut it. And meanwhile, what do we do? You can go down to collect water at the Sanllehy square, at the Fargas fountain, at the Mulassa fountain. All these springs were at the foot of the mountain, over there in Horta, or Nuestra Señora de Coll or up to Calle Camelias. We went down to Calle Camelias! Some with buckets, others with crystal bottles... I don't know how we didn't kill ourselves. We were looking for water everywhere, everywhere [...], and look, it was years ago, but still, still some nights I dream that I'm taking water from the spring."¹⁸³

Disposal of waste was a particular problem for the coastal settlements, where the sand made burial unfeasible and the ocean became quickly contaminated and waves brought anything dumped back up to shore. Anita remembers,

"Many women washed the dishes and threw the water into the street. Then my mother scolded the neighbors, saying, 'You shouldn't throw the water into the street because the flies come. My mother threw the water into the sea. We didn't have a toilet. We did things in a chamber pot. We went inside the house and did it there...My mother made us a chamber pot from a bucket and went to the sea because we were very close to the sea. She went to the sea, she threw it and brought the bucket back full of water. You couldn't swim on those beaches because they were full of poop. The entire beach of Barceloneta de Somorrostro."¹⁸⁴

In Carmel, the natural landscape made it easier to dispose of waste in a sanitary manner. Moreno writes, "Physiological needs were made in a bucket inside the hut or often directly on the mountain. This waste, as well as the rest of the rubbish, was emptied into a trench that the

¹⁸³ Diaz-Molinaro, "L'Occupació, la Construcció i la Vida a les Barraques," 124

¹⁸⁴ Anita Canillas, interview with Katie Murphy and Ivan Duarte Massetti, May 2022

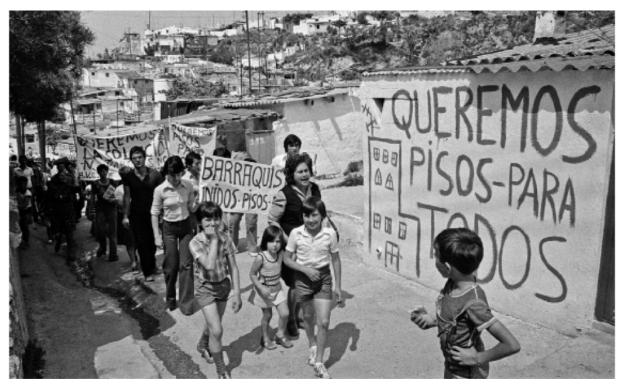
residents themselves built as far away from the shacks as possible, and when it was full, they covered it with earth, made another one, and so on."¹⁸⁵

For all of the barracks-dwellers, informal settlements provided access to both pre- and post-industrial modes of survival. The former included non-cash economies, mutual aid networks and, in some cases, land to grow food, natural building materials, spring water, and space for waste disposal. The latter included access to waged jobs, commercially produced goods, and, in some cases, city-provided services such as water, electricity, dispensaries and schools. Generally, settlements closer to the city center provided a life closer to the industrial end of the spectrum, and those living there were more reliant on commercial goods and city-provided services and generally more enmeshed in the economic life of the city. The majority of the first residents of Sudoeste del Besòs came from the coastal settlements, particularly El Somorrostro, and we will continue to follow their journey toward full industrial participation in the following sections.

¹⁸⁵ M. Custodio Moreno, "Les lluites veïnals: el barri del Carmel," 168



Ginés Cuesta, Els Safareigs de les Cases del Governador, Nou Barris, Photograph, 1973, AHRNB



Protest for public housing, Carmel, 1976 Barraques: La Barcelona Informal del Segle XX

	El Somorrostro	El Gas	La Perona	Camp de la Bota	Can Tunis	Montjuic	Carmel
Affordability							
Security of Tenure							
Access to work							
Access to Stores							
Space to grow food							
Access to water tap							
Strong community							
Sanitary waste disposal							

A rough diagram showing comparative use values of six informal settlements, based on information gleaned from interviews and *Barraques, La Barcelona Informal del Segle XX*. It should be taken as an illustrative comparison rather than a definitive set of "scores" for each neighborhood, since the information that went into its creation is limited, and, as Turner would remind us, the relative valuation of each aspect of use value is specific to the individual resident.

IV. Autarky and Internationalism

As soon as the new levels of immigration into Barcelona began to be counted and remarked upon, these numbers began to be associated with a "housing deficit" in the media and government discourse. This deficit, as discussed earlier, was calculated as a ratio between increase in population and new housing built during the same period. The Patronat de l'Habitació de Barcelona, the first municipal housing board, was created in 1926 with the intent of building affordable housing for the residents of the Montjuic barragues who would be displaced by the 1929 construction of the Universal Exposition. The ambition of this intervention, it should be noted, was to facilitate the construction of the Exposition, rather than to begin to tackle the crisis of affordable housing at the scale at which it existed in the city at that time. The Patronat de l'Habitació did manage to construct 2,229 "cheap houses" distributed in four groups of 300-800 houses across the city.¹⁸⁶ Each of these nuclei, with the exception of Eduard Aunós, which was built on the far side of Montjuic, were extremely far away from both the city center and from the barraques residents' original homes, however, they were notable for their spatial characteristics, with short buildings facing the street, which mimicked the layout of the barraques discussed earlier, and facilitated a vibrant street life. Unfortunately, the achievements of the PHB ended here, for the most part, and the majority of its efforts following the war involved maintaining and renovating these buildings, which, built extremely cheaply, guickly fell into disrepair.¹⁸⁷ The PHB was eventually dissolved in 1945 after decades of inaction, and replaced by the Instituto Municipal de la Vivienda, which managed to build a total 2376 homes distributed in five clusters, the largest of which were Torre Llobeta, begun in 1949 with 737 dwellings, and La Verneda two years later, just north of Sudoeste del Besòs and next to the barraque of La Perona, with 656. Turó Trinitat, with 162 dwellings, was the eventual destination of some of the first Somorrostro residents to be relocated from the path of the Passeig Maritím.¹⁸⁸ These projects notwithstanding, neither the PHB nor the IMV were able to produce affordable housing at a scale anywhere near that demanded by the city's housing crisis. It was not until the late 1950s, after the Patronat Municipal de la Vivienda (PMV) had replaced the IMV, that this began to change.

It is worth noting that the eventual government-mandated, industrially-executed response to the "housing problem" in Barcelona coincided with the end of autarky in the Spanish economy and

¹⁸⁶ Antich Garcia "El Poligon de Sudoeste del Besòs" 17

¹⁸⁷ ibid.

¹⁸⁸ Ibid, 17-18

the political reopening of the country to international relationships and a globalizing world. After the end of the civil war, Francisco Franco instituted a policy of economic protectionism, limiting trade with foreign nations. This type of protectionism ensures the availability of materials and goods extracted and produced in the country to be consumed there; however, it also meant materials and goods that were previously imported became unavailable. This policy, argues Antich Garcia, limited the ability of the government to respond to the housing crisis with new construction, since materials became difficult to access, and funding was scarce in the context of a national economy suffering from lack of international trade.¹⁸⁹ It's worth noting that "autarky" is a term that is only relevant in a post-industrial, globalized economy, and the fact that this policy was a contributing factor to the housing crisis in Barcelona is an indication that the city had fully transitioned to industrialism at this point. It is large-scale projects reliant on industrial equipment and materials which are impossible during autarky. Small-scale building projects, as Turner argues, are able to make better use of personal and local resources--local materials, smaller plots, human power rather than large machines and fuel to power them, etc. It was impossible for the government to produce large amounts of industrial-scale housing during the period of autarky, but the fact that individuals were able to make use of their immediate surroundings to do so speaks to the capabilities of a decentralized, autonomous system. If the government had been able to pursue a policy similar to Turner's suggestions, making land, materials, credit and technical support available to individuals, these autonomous efforts might have been able to produce higher-quality housing, more suited to individual needs. How this imagined housing might compare to the industrially-produced dwellings that were eventually built in Sudoeste del Besòs is difficult to evaluate,¹⁹⁰ but it seems evident that it would have surpassed the guality of the barragues people were able to build without such support. And, since autarky made the alternative of industrial building impossible for several decades, such policy could have been a welcome alternative during that time. As Turner argued, self-built housing 'an achievement whose existence is self-justifying'.¹⁹¹

The eventual mobilization of state resources toward the production of affordable housing in Barcelona can be correlated quite clearly with an embrace of the industrial mode of production in relation to housing. In 1953, Franco's policy of economic protectionism ended with the

¹⁸⁹ Antich-Garcia, "El Polígon de Sudoeste del Besòs," 13

¹⁹⁰ The closest we can get is a comparison of use-value and neighborhood conviviality in Carmel, the settlement which seems to have been the least interfered with by the city, in comparison to these same measures over the years in Sudoeste del Besòs.

¹⁹¹John Turner, quoted in Kathrin Golda-Pongratz: "John F.C. Turner (1927-)"

acceptance of American aid and the reopening of international trade and diplomacy.¹⁹² Franco's trade union plan increased financing for the Obra Sidical del Hogar, the national building company entrusted with executing the dwellings planned by the Instituto Nacional de la Vivienda, the national department of housing. In 1954 the Llei d'Habitatges de Renda limitada created incentives for private companies to build low-cost housing. Exemptions and tax credits this type of construction, preferential were offered for access to "intervened materials"--government subsidized building materials--and interest-free advances and complementary loans through the Instituto Nacional de la Vivienda.¹⁹³ All of these efforts run parallel to Turner's suggestions about the role that the central government should play in supporting self-building, except in the case of 1950s Spain, the assistance was for private companies rather than individuals.

On the municipal level, this was also a time in which the Patronat Municipal de l'Habitatge, the Barcelona housing department, underwent changes in leadership and focus. In 1957, José Mariá de Porcioles became mayor, and in 1958 he appointed Santiago de Cruylles as chief of the Patronat. Whereas the patronat had previously produced smaller, scattered housing projects of around 100-150 homes at most, under de Cruylles, the housing board began to plan centralized housing projects of a much larger scale. The Barrio de Viver project, built from 1956-59) marks a point of transition with 450 dwellings, followed by Montbau and Sudoeste del Besòs, which are of a much larger scale.¹⁹⁴

In 1960, the Patronat published a bulletin describing its new approach to building.¹⁹⁵ First, all new dwellings would be built in large estates to avoid the costs associated with building in small, dispersed plots. The first of these would be the "poligons"¹⁹⁶ of Montbau and Sudoeste del Besòs, which would be planned at the neighborhood scale, and built outside the existing urbanized area of the city. One might ask, as Alice Coleman did in regard to post-war growth in London,¹⁹⁷ if all of these dwellings could have been accommodated within existing scattered plots throughout the already built-up area of the city, or within the existing urban plan. As it was,

¹⁹² ibid.

¹⁹³ Bartomeo Antich-Garcia, *El Polígon de Sudoeste del Besòs*,, 13

¹⁹⁴ *ibid*, 17

¹⁹⁵ *ibid*, . 18

¹⁹⁶ A term which does not have an exact parallel in English, but which refers to both industrial parks and large housing estates. I don't know the origins of this term, but it seems relevant that none of the previous government-built housing was referred to this way. Whether the term was new, or just newly applied to housing, it seems to point to a shift toward industrial-scale practices in the production of housing.

¹⁹⁷ Study by Alice Coleman, cited in John Turner, *Housing by People*, 85

the new estates had to be planned in conjunction with the new Pla Comarcal, which significantly reduced the area originally intended in the Cerdá and Jauselly plans to be developed as a natural park buffering the built city from the Besòs River. This area, which had not been previously intended as a residential area, was then developed according to the new Pla Parcial Sudoeste del Besòs, which constituted a significant divergence from the Eixample model in planning philosophy and typology of built areas. At the time, development within the Eixample zone had not yet reached its border with the new Besòs neighborhood, and thus the new public housing nucleus was isolated for a time. When the Cerda-style development eventually reached its intended border, the difference between the two philosophies of planning stood out sharply to residents of both sides, and came to represent both literally and symbolically the stigmatization and designed peripherality of the state-built neighborhood.

The fact that the land on which Sud Oest del Besòs was built was not already urbanized meant that a significant portion of the project's cost was related to urbanization. The land, previously used for agriculture and well suited to its function, was composed of a patchwork of fields lying an average of 2 m below the elevation of the Riera d'Horta, a stream which was used to irrigate the land. In order to prevent flooding, the entire area had to be raised by 1 meter. The land, previously of varied topography, was graded and flattened in order to be built, and tributaries of the Riera were blinded. This made the area extremely vulnerable to flooding, as came to pass tragically for new residents in the floods of September 1962.¹⁹⁸ Furthermore, the high level of the water table and unstable character of the soils, although ideal for agriculture, were not well suited for building, as has been demonstrated by consistently apparent structural pathologies in the buildings that were constructed there. Thus, we can see how the industrial philosophy of production, which is only financially feasible through centralized, large-scale projects, necessitated the redefinition of the limits of the built area of the city onto land which was ideal for other uses, and problematic as a site of dense residential development. Furthermore, it required the construction of an entirely new neighborhood, including new services and connections to the rest of the city, a promise which was expensive and complicated to keep follow through on. In fact, it took decades for the city to fulfill many of these promises, setting the stage for an isolated, marginalized community which faced significant barriers of entry to the industrialized system of production and consumption.

¹⁹⁸ Antich Garcia, "El Polígon del Sudoeste del Besòs," 23

Finally, the new philosophy of the PMV included an approach to financing which required the residents of state-built housing to assume a larger share of the cost of construction, to be paid in installments over time.¹⁹⁹ This cost of housing dwarfed what most shack-dwellers had paid to access and maintain their dwellings in the informal settlements. As we will see, the exigencies of the housing bill would be the first trigger in a string of changes that would bring the new residents of Sudoeste del Besòs fully into participation in the industrial economy.

¹⁹⁹ Antich Garcia, "El Polígon del Sudoeste del Besòs," 23



J.M. Huertas, Cases Barates, Baro de Viver, Photograph, 1970s, Arxiu J.M. Huertas Claveria



Oriol Maspons, Montbau, 1960s, Arxiu Históric del COAC



Sudoeste del Besòs, 1971, Barraques, La Barcelona Informal del Segle XX

V. The Poligon as Prison: Life at the Bottom of the Industrial Hierarchy

Anita's family first heard about Sudoeste del Besos at church.

"During the sermon, the priest said, 'they are building some flats in a neighborhood that is going to be called Besòs. If someone wants an application, have them wait at the door or come another day and I will give it to you. You have to give 15,000 pesetas.' 60 years ago, 15,000 pesetas was a lot of money. Because the men earned 500 a week...But then my parents and a lot of people went to church. They got the request form. And they had to go to Via Laietana. To the pension house. They had to go to take the request for the flat and the 15,000 pesetas. And then, four or five months later, the houses are already built. At that time I was 18 years old. We had to go to Plaza Buensuceso, which is along the Rambla. And there were the offices of the Housing Board. From there they gave us the key to it and without even telling us where it was...

It was the end of the world. How were we going to live there, if there are no trams and there is no metro, if there is no bus, there is nothing? It was the end of the world. Well, when they gave us the flats, on September 6, 1961, my mother came to clean the house, and we didn't have water. Because it took several days from when you requested electricity and water until they brought you the contract. But well, since we had been living without water or a toilet it didn't matter to us because we had a flat. We had to wait three, four or five days after they gave us the application. So my mother went to ask for water and electricity and after three or four days they came to give us water and light. It was an argument."²⁰⁰

This first difficulty obtaining water and electricity, seemingly trivial in comparison to an entire childhood lived without these services available in the home, foreshadows a theme that would manifest on a much larger scale for the new residents of Sudoeste del Besòs. Since Anita's shack in Somorrostro hadn't had running water, her family had built a lifestyle around acquiring water from the public tap, which, although not as convenient as having it in the home, did not present a significant obstacle to daily life. In the new high-rise buildings, however, running water was essential. The buildings had been designed with the assumption that their residents would be able to pay their water bills--the designers had not considered how one might live if the taps stopped running. This situation echoes Illich's observation that industrial life creates new basic needs through radical monopoly. By providing one way of fulfilling a need to the exclusion of

²⁰⁰ Anita Canillas, interview with Ivan Duarte Massetti and Katie Murphy, May 2022

others, everything else that forms the context of one's ability to use that technology becomes necessary for survival.

We can see the industrially-built flat as a tool with a radical monopoly. As we have seen, the calculation of housing deficits using industrially-produced homes as a benchmark went hand-in-hand with the criminalization of self-built housing in the 1950s. Anita's family was shocked by the price of the new flats--just the down payment cost the same as 30 weeks of her father's wages. But the Paseig Maritím was advancing and before long, they would have had to leave. With the tightening of control over the number of shacks in each settlement, it would have been difficult to acquire a shack somewhere else. They did not have much of a choice. Although the family was certainly delighted at the obvious material upgrades of the new flat, with all their symbolic and social implications, the bills associated with this new lifestyle would become a burden which required a full transformation of the means of survival, beginning with the penetration of waged labor into all areas of family life. For men, overtime wages would become a basic necessity, while women added new work outside the home to the labor they had always done within it. In many cases, wage labor even came for children.

Alfred Matas Pericé, whose book *Al Sudoeste del Rio Besòs* chronicles the first ten years of life in the neighborhoods, describes the transition to this new lifestyle:

"Most women who work do so for the simple reason that it is necessary to earn a living. Very logical thing. The families of the neighborhood are usually young, and the children bring more expenses and concerns. And besides, there are many other factors that make it necessary: to own the flat, you have to pay a certain amount "up front", and the money that is lent is usually obtained in rather large loans. The flats being built in the Sant Adria area, for example, are sold for four hundred and fifty thousand pesetas. The entrance is marked at about a hundred and fifty thousand,... and the monthly installments up to four thousand pesetas. But the prices, in the same building, oscillate grotesquely depending on how much sun shines on the flat...

As if that were not enough, the incipient rise in consumption is also having repercussions at home. The amount of bills accumulated by artificial spending aggravates the difficult family economic problem. Bills due to the purchase of electrical appliances, whose advantages sometimes cannot be "enjoyed" due to lack of time.²⁰¹

As for those electrical appliances, writes Matas Pericé,

²⁰¹ Matas Pericé, Al Sudoeste del Río Besós, 100

"It all starts with the television. It is the most desirable apparatus. And sales experts know it. The following story is often repeated: Three impeccably dressed men appear. One of them, the main charlatan, with an easy and convoluted word, has a mission to «bring the device into your house» without allowing anyone else to open his mouth. The two companions limit themselves to leaving the television set in the appropriate place, without saying a peep..."Mrs! At his feet! Ma'am, we want to help you with her housework. Ma'am, we just want to make you happy...You don't have to pay us anything. We just want you to enjoy what all your neighbors already have as soon as possible. Allow us, madam, to leave you this gift." And with magnificent bows, the three «salesmen» leave. And after two or three months, the first letter falls. No one expected it... And they can't afford it. For the second time comes another letter, with threats of embargo. There is only one way out: pay. And work to pay. After television, on an uninterrupted network, everything else will come."²⁰²

The first purchase on credit leads to others. The symbolic value, and practical value for households in which both adults work outside the home, of the appliances begins to acquire their own inertia.

"...they receive the numbing influence that feeds and forms a characteristic hope. The one with a "maximum electrical appliance" flat: with a fridge on installments, a washing machine on installments, and a television on installments. Furniture stores appear in some of these neighborhoods. It is that people want furniture at low prices because there is no money, but that they are grandiloquent, overloaded, that have a presence. They also wait in the random quinielista, in the daily raffle of the blind, in the fool's lottery."²⁰³

According to a study by the group CEDEC, reprinted by Matas Pericé, 35% of adult men in the neighborhood were considered unskilled workers, for whom the average wage in 1970 was 1600 pesetas per week²⁰⁴. Although the other 65% were considered more qualified, Matas Pericé tells us, they likely did not make considerably more. "In the entire Sector," he writes, "there is no one who practices law, say, or medicine." His point is twofold: not only were high

²⁰² ibid,100- 101

²⁰³ O. Domingo A. C. "Serra D'Or", quoted in Matas-Pericé 93

²⁰⁴ About 3 times the amount cited by Anita, in 1960. If both statistics are to be believed, average wages tripled in a decade. Perhaps this can be attributed to inflation, an improved situation for workers in the urban economy, or simply to men working more hours as a result of higher bills. Likely, it is a combination of the three. It's also worth noting that the down payment on the flats in Sant Adria--450,000 pesetas--is much more than three times that described by Anita for her family's flat in SOB--15,000 pesetas. If we take these numbers to be accurate (which of course is a huge assumption, given that one set is based on testimony from a single person), we can see a huge jump in the cost of living over ten years alongside a comparatively small increase in average wages.

salary earners missing from the neighborhood, but these same careers represented services that were much needed: "Logically, the neighbors are poorly served in their basic needs. And we take the opportunity to say that there is only one Municipal Dispensary, to 'care' for the entire area. There is only one private Medical Office where there is a doctor on duty at night."²⁰⁵

Low wages and a rising cost of living meant more hours at work. Every morning, men waited before dawn for buses that would take them to manufacturing areas and the city center, along circuitous routes with many transfers, because no direct lines connected the neighborhood to other parts of the city. Most men worked overtime, returning home exhausted, late at night. If camaraderie had existed between workers in years prior, it was disappearing in the face of exhaustion:

"The buses, some as long as caterpillars, are small, in the morning, to take so many people to the other part of the city. The looks are sad and dull inside the bus. The journey becomes long and boring. There is no talk of football. Each one goes to "their own". The suffocating silence is broken, from time to time, by any word without rhyme or reason...²⁰⁶

The result of all this work was that men barely lived in the neighborhood. Many worked Saturdays, which left one day a week for rest and socialization. One worker, quoted by Matas Pericé said, "On Sunday morning I took a walk around the neighborhood. I was surprised to see it during the day. I discovered many things that until now I had not seen (...). Do you know why? Well, because I only knew the neighborhood at night, in the dark..."²⁰⁷ Another told a similar story: "I am waiting all week for a holiday to see my children. When I leave in the morning, they are still sleeping. And when I come back, at night, they are already in bed lying down. It scares me to think that they hardly even know me..."

The great many public squares intended by the neighborhood's planners as recreation areas were barely used, at least by men. As we will see, they were not used much by women, either.

According to Matas, 22% of women in Sudoeste del Besòs worked outside the home as of 1970, and 50% did paid work at home, such as sewing.²⁰⁸ In total, 72% participated in the wage

²⁰⁵ Matas Perice, Al Sudoeste del Río Besós, 95.

²⁰⁶ Ibid, 95.

²⁰⁷ Ibid.

²⁰⁸ Matas Pericé, *Al Sudoeste del Río Besós*, 99.

economy in addition to doing housework. Pointless as it is to theorize about "who had it worse," it seems clear that this brand of drudgery is at least comparable to that experienced by men working overtime at factories. While some men had Saturdays off, Matas Pericé points out, this was the day most women spent cleaning the house, leaving only Sunday for rest. And even on Sundays, children needed to be taken care of.

"The monotonous and exhausting life of a woman in a working-class neighborhood does not present exactly many incentives or attractions. Long hours of work, perhaps surrounded by children and also solitude -sometimes- for those who stay at home. And those who also work outside the home feel, more than once, the intimate desire to return home as late as possible, thinking about the "extra" work that awaits them before going to sleep."²⁰⁹

The suggestion that some women experienced solitude in Sudoeste del Besòs is striking. Life in the barragues presented plenty of difficulties, but it seems unlikely that social isolation was one of them. The various testimonies recorded in the previous section speak to a vibrant social life among women in the settlements, and although housework was difficult--certainly more physically difficult, without electricity and running water--none of the accounts of women's day to day life contain the tinge of bitterness evident in the description above and the letter reproduced below. Perhaps the social character of daily work--sewing outside in the street, drinking coffee, chatting--made life bearable in a way that evaporated once women moved to the new flats. Perhaps this can be attributed to the breakup of communities, as neighbors and extended family were distributed randomly across the neighborhood, or perhaps to the loss of relationship between the dwelling and the street.²¹⁰ Certainly, many of the activities which had previously formed the bridge between life-making and socializing were no longer possible--the corner of the shack that became a store or a workshop did not translate to the fifth floor apartment. It is difficult to know whether, and for how long, networks or barter or the mutual exchange of skills continued to exist in the neighborhood. Perhaps the "paid work at home" that 50% of women engaged in was the first step in the dissolution of the women's economies that were so clearly documented in the barraques. The impact of the loss of these networks is difficult to quantify, but must have been significant, in an economic sense as well as social. These networks had allowed women to survive and support their families to a certain degree without taking on

²⁰⁹ Ibid, 104.

²¹⁰This was not the case in the two-story houses with gardens, nicknamed *torrecitas*, which were considered the most desirable.

industrial work outside the home. As non-money economies evaporated, it became increasingly necessary to take on paid work.

In June 1968, *El Besòs*, the periodical of the Centro Social del Besòs, published the following letter written by an unnamed woman from the neighborhood, a mother of four:

"The woman still believes she was born only and solely to sew and scrub, give children to the world and be queen of the pans; has always believed that a man, outside of his ten or twelve hour work day, should come home and rest while she takes on herself not only the housework, but in many cases she also works outside of it, and this work, far from making her more aware of the problems of others, each day causes her to hide more in her problems and she becomes a machine, without being aware of her contribution to the world with her work or what she contributes to herself, rather: an extra salary, a greater mechanization of her family and a means of obtaining material well-being that makes her forget that little by little she is bending her personality and becoming an instrument of society. Every day she is further away from the much vaunted promotion."²¹¹

The echoes of Illich's theory of the mechanization of life through industrialization could not be more clear. Perhaps women, whose dual roles as caregivers and wage laborers placed them uniquely at the intersection of pre- and post-industrial modes of work, were primed to see the implications of the industrial transition the most clearly. As Alyssa Battistoni notes in "Living, Not Just Surviving," a 2017 opinion piece that appeared in Jacobin magazine, "pink-collar work"--that is, work traditionally done by women--has been historically undervalued by the industrial economy, and often erased completely from it, even as it forms its foundation. This type of "care work" is associated with social reproduction--the non-value-added work such as caring for children and the elderly, that allows everyday life to continue but does not necessarily contribute directly to economic growth. It is essentially pre-industrial, although certain elements of it have become waged--such as performing housework for others or working in a day care--or reframed as value-added industries, such as education. Battistoni argues that, although green economy will be one in which most people perform various types of care work. ²¹²

²¹¹ Unknown author, "¿La promoción de la mujer ...?" *El Besos*, June 1968, reprinted in Matas Pericé, *Al Sudoeste del Río Besós*, 99.

²¹² Alyssa Battistoni, "Living, Not Just Surviving," *Jacobin*, 2017. <u>https://jacobin.com/2017/08/living-not-just-surviving</u>

The aforementioned letter continues, calling on men to recognize women's labor issues as a matter of working class solidarity:

"Do any of us have a vacation from mopping? Can we forget about being women, wives and mothers 24 hours a day? Do we have vacations that allow us to forget about washing the dishes and doing the laundry for the children?...A situation is created, for which man is also largely responsible, among other things because he does not want to come down from his pedestal. And in this way the woman has to remain locked up in «her woman's work » of her as the only vital horizon...man has not yet discovered that the "other" is equal to him; he does not admit the "other" -in this case the woman as she is- because he wants to model her at will. And up to this point it continues as it did centuries: the exploitation of man by man (...). There are still, as before, lords and vassals.²¹³

But what might this solidarity have looked like, had it emerged in Sudoeste del Besòs in the 1960s? Three possible options come to mind. First, men and women could have agreed to take equal shares of housework and waged labor. But fairly shared drudgery is drudgery nonetheless. An interesting alternative example is the International Wages for Housework campaign, which was briefly quite popular in the 1970s, and advocated for paying women fair hourly wages for work done at home. A 2020 Oxfam report, entitled "Time to Care: Unpaid and Underpaid Care Work and the Global Inequality Crisis" estimated the value of unpaid care work at almost \$11 billion per year globally--an amount that constitutes a colossal subsidy to the capitalist economy, and would render the current system unviable if it were actually paid.²¹⁴ The goal of this approach, of course, is not a world in which housework is waged, but one in which systemic change is brought about by the unmasking of the fact that capitalism cannot exist without inequality.

However, neither of these possible futures came to be. What did happen was the gradual replacement of care jobs with heteronomous, industrially produced facsimiles--state-sponsored or paid daycare and eldercare; schools, which completely aside from any educational benefit for children were essentially also a form of daycare; and home appliances such as laundry machines, vacuum cleaners and dishwashers that made housework faster and easier. Although women still ended up responsible for housework, these industrial tools made it more efficient, and freed women up to spend more time in waged labor, which became all the more necessary

²¹³ Unknown author, "¿La promoción de la mujer ...?"

²¹⁴ Oxfam, "Time to Care:Unpaid and underpaid care work and the global inequality crisis" January 19, 2020 <u>https://www.oxfamamerica.org/explore/research-publications/time-care/</u>

in order to pay for the various goods and services that made housework easier. And while it was undoubtedly liberating for some women to leave the confines of the home for the working world, they did not, in the end, have a real choice. As Illich would point out, participation in the industrial economy is a slippery slope, a self-perpetuating cycle in which each new tool or role requires three more. While new tools may make us feel more free in some ways, they often reduce our overall choices more than they expand them.

However, the process described above did not happen overnight, and, in fact, many of the industrial goods and services that facilitated women's entry into the workforce had to be fought for tooth and nail.



Xavier Miserachs, Treballadors de la Hispano Olivetti, Photograph, 1962, Colleció MACBA



F. Català-Roca, *Treballadores de la Fàbrica Pirelli, Cornelià*, Photograph, 1960s, Arxiu Històric del COAC



Xavier Miserachs, Tramvia en un Barri de la Periferia, Photograph, 1962, Colleció MACBA

In September 1960, the same month that Anita and her family arrived to claim their flat, a ceremony was held to commemorate the official opening of the neighborhood. The mayor of Barcelona, Josep Maria de Porcioles, and the director of the Patronat Municipal de la Vivienda, Santiago Cruylles, both gave speeches. In the midst of praising the design of the new neighborhood, Cruylles added something of a disclaimer: "... in spite of everything, ladies and gentlemen beneficiaries, you will not cease to have some difficulties in your adaptation..." Later, Porcioles added, "...not all services are urbanized, since there is an order of preference (...). About 50,000 people will live in the village of Sudoeste del Besós and, therefore, all the problems that arise will be solved little by little..."

By 1967, the Besòs sector²¹⁵ had 100,000 inhabitants and only one "tiny" dispensary and a police station.²¹⁶ The first school and the neighborhood market would arrive the following year. This ratio of services to inhabitants was even lower than what had been available to residents of El Somorrostro, whose population of 20,000 had been served by 2 dispensaries and 300 school places as of 1960.²¹⁷ The neighborhood lacked almost everything, it seemed. But of all the missing services, the one which caused the greatest difficulties for the first generation of residents was the lack of schools.

The first promise of schools was made in May 1960, several months before the first residents would move to the neighborhood. At a press conference, Santiago Cruylles stated, "Everything is planned. Within the neighborhood project, schools are planned for some 2,500 children." ²¹⁸ Nothing more was heard on the subject for the next two years. Then, in 1962, in a report on the visit of the civil governor to the offices of the Patronat Municipal de la Vivienda, the press published the announcement that three schools had been approved. Promises about these schools continued to be made. In 1963, residents who visited an exhibition put on by the city found plans and models of the projected schools, and were delighted by the apparent quality. In November of that year, the ministry of education approved a budget for the construction of the three schools, for a total of 26,491,079 pesetas. Porcioles and the minister of education

²¹⁵ A term Matas Pericé uses to encompass SOB, Maresme, Camp de la Bota, COBASA and La Catalana ²¹⁶ Agustí Pons, article in El Noticiero Universal, October 23, 1967, reprinted in Matas Perice, *Al Sudoeste del Río Besós* 26

²¹⁷ J.Fabre, J.M.Huertas Claveria, *Tots els barris de Barcelona Volum VII els poligons (2) i el districte V.* reprinted in Antich Garcia, 6

²¹⁸ Santiago Cruylles, quoted in La Vanguardia Española, May 7, 1960. Reprinted in Matas Pericé, *Al Sudoeste del Río Besós,* 47.

announced that construction would begin shortly. In December, the press published the following description:

"According to the recently signed agreement, 'shortly the construction of three school groups will start in the S.O. del Besós. The first of these will be located on Cristóbal de Maura street, and will have a capacity for 600 students; the second, in Bernat Metge street, also for 600 students; and the third, in Jaime Huguet street with capacity for 700 students. The three buildings will be built in accordance with the most modern standards and their installation will not only cover a pressing need in that populous neighborhood, but will embellish its prospects, as they are three premises with graceful lines and a sober and elegant construction."²¹⁹

In the following months, the announcements that construction would begin immediately continued, until the word "immediate" began to lose its meaning. In April 1964, Montserrat Tey, the new minister of education, announced that the schools would be built over the course of the next six years. As a provisional measure (after 4 years without any provisional measures at all), six barracks that had been used to house construction workers during the building of the neighborhood, were repurposed to be used as schools. In 1965, the press announced that the budget for the schools had been reduced by almost half and that there were now only plans to build two schools. After this, delays were blamed on the new budget not having been approved by the national government in Madrid.

By 1966, the children of Sudoeste del Besòs had been without school for five years. Government officials began to use the term "education deficit" to talk about the ratio of school-age children to school places. The comparison to the idea of a housing deficit is worth noting--implicit in each is the assumption that a certain need can only be fulfilled by an industrial-scale service. Needless to say, the parents of the school-less children agreed with this assessment. Private schools began to pop up in flats around the neighborhood, run by residents. This was no mutual aid solution, however-- the schools were expensive and few could afford to send their children there.²²⁰ People were beginning to lose patience with the city government's promises.

The most immediate consequence of the lack of schools, as mentioned earlier, was the lack of a place for children and teenagers to go during the day. The population of the Besòs sector was

²¹⁹ Matas Pericé, *Al Sudoeste del Río Besós* 50.

²²⁰ Matas Pericé, Al Sudoest del Río Besós, 53-54

skewed toward the very young--according to the CEDEC study cited earlier, 37 percent was under twenty years old and 15 percent was between six and thirteen as of 1968.²²¹ There were very few grandparents in the neighborhood, who might in other contexts have helped to look after children in families where both parents worked. Because of this, many children ended up caring for their younger siblings while their parents worked, working for wages themselves, or wandering aimlessly around the neighborhood.

The following accounts from neighborhood youth, describing their first experiences upon arrival were recovered from the archive of the Centre Social Besòs.

"Seeing so many houses left me with my mouth open. In the town where I come from (in Almería) there were only low houses. Here everything is very big. All the world is in a hurry. I do not know what to do. I spend the day bored at home because I have to take care of José, who is only three years old and his mother works like a father. For me, Sunday is the saddest day, because I have freedom but I can't do anything. No one listens to me and I don't know where to go. I go round and round. At first I was lost. Not now, because I know everything. The two friends I have are B and M. The three of us get together to get bored...⁷²²² -P. 14 years old

"The first thing I did when I arrived was to go from one part to another, to be able to see everything. It didn't take me long to do it. Here one feels confined. There is nothing here. Nothing can be done. I've met with C, M, R and V. We don't know what to do. The only thing we can do is go to the movies outside the neighborhood. Little by little we have been getting to know each other and setting ourselves up in theaters. First we started by smoking in theaters, then breaking seats. For months we settled for this. But then we got into teasing girls, after we were in the movies and in it."²²³

-R. 13 years old

Another survey asked the respondents to describe what they had done the day before, which had been a Saturday. One youth answered the following:

²²¹CEDEC Study, cited in Matas-Pericé, *Al Sudoeste del Río Besós,* 110. The study cites 26% under 20 and 10% between 6 and 13 as overall statistics for Barcelona.

²²² Signed P., from the archives of the Centro Social Besòs, reprinted in Matas Pericé *Al Sudoeste del Río Besós*, 120

²²³ Signed P., from the archives of the Centro Social Besòs, reprinted in Matas Pericé *Al Sudoeste del Río Besós*, 120

"Yesterday afternoon, in the tunnel of Pedro IV street, all of us from the gang met up. We made a martyr of "S", because he is a queer and tells everything. Afterwards we had a big party and smoked ...²²⁴

-J.C. 12 years old

By 1970, gangs were well established in the neighborhood, and several young people had been killed as a result of squabbles between factions. These incidents were written up in the press, and the neighborhood was beginning to acquire a reputation for crime. The violence hadn't begun right away, however. Matas Pericé writes,

"With useless freedom, isolated, without being able to do anything, is how that youthful generation found itself. Outdoor adventures were the only way to fill leisure time. These adventures required a minimum of vital organization, especially for their own defense against other organizations. Thus it was easy to reach a point where the forces of one and the other were balanced. Thus the gangs were born. They often engaged in childish games: they searched for treasures, conquered embankments or half-built houses, collected bunches of straight sticks... There was camaraderie, except on rare occasions. Members helped each other, and in practice "private property" ceased to exist between them. Everything was shared: tobacco, money, experiences of all kinds."²²⁵

One day in 1964, a 17 year old named Luis hit his head after being pushed in a fight and was killed.²²⁶ Three boys, ages 16, 18 and 19, were arrested in conjunction with his death. It was an accident, but foreshadowed more violent incidents. In May 1967, a 17 year old was killed in a gang dispute, and in October of the same year, a young waiter was found stabbed behind the movie theater.²²⁷ In June 1969, a 14 year old was killed by another boy of the same age by the banks of the Besòs river. ²²⁸

Another factor in the evolution from gangs of friends to gang violence, according to Matas Pericé, was the increasing role of illegal drugs in the neighborhood. As we saw in J.C.'s description of his Saturday afternoon, drugs quickly became entwined in the culture of young people in the neighborhood--a sort of sacrament of membership within a group and a release from the expectations and oppressive horizons of everyday life. Matas Pericé writes,

²²⁴ Signed J.C., ibid, 121

²²⁵ Matas Pericé, Al Sudoeste del Río Besós, 122

²²⁶ ibid.

²²⁷ Ibid, 23-24

²²⁸ Ibid, 28.

"Others start out of curiosity, so as not to make a fool of themselves among their peers. It can even be motivated by the desire to discover new sensations, or to forget about this «dog world», as someone said. Or because of excessively tiring work, because of the lack of work, because... «Because before others destroy me, I prefer to do it myself, in my own way»...²²⁹

Addiction to drugs leads to slowness and carelessness at work, and eventually the frequent drug user becomes unable to hold a job. And this, writes Matas Pericé, leads to the necessity to join a new kind of gang:

"The drug addict who loses his job cannot fend for himself, he needs others. The band will help you. Groups are formed that rob stores and cars. The need for the drug provokes the need for money. And, in a group, scruples and initial fear easily disappear. These gangs, strictly speaking, are not the gangs we were talking about before. They have peculiar characteristics: their fondness for drugs and other aspects that border or penetrate the field of what is known as delinquency. Little by little, imperceptibly, the young drug addict is marginalized from the established legality."²³⁰

Looking back, Matas Pericé sees the development of gang violence in the neighborhood as the inevitable conclusion of years of neglect on the part of the city government--a direct result of the slow deployment of services in the neighborhood:

"The «breeding ground» that facilitates these savage reactions could be, for example, the total absence of cultural, social, educational, recreational services... Many gangs today are the product of time lost years ago; of time without school. The damage is already done. For now, the only solution that has been adopted to try to alleviate this evil has been harsh retaliation by the police."²³¹

²²⁹ Ibid, 137.

²³⁰ Matas Pericé, Al Sudoeste del Río Besós, 138

²³¹ 124



J.M. Huertas Clavería, Sant Adrià de Besòs, Photograph, 1969, Arxiu J.M. Huertas Clavería

On the surface level, Matas Pericé's correlation between gang violence and lack of formal schooling seems to contradict Illich's critique of the latter. Why should state-sponsored schools, which, according to Illich, condition students for complacent industrial consumption and squash their capacity for creativity and authentic participation in culture, be necessary to keep young people from killing one another in gang disputes? And why should wandering the streets of one's neighborhood unattended by adults, an activity which Colin Ward defends as formative for children, be a problem either?

I believe Illich would explain that, like many other examples in this case study, and in our post-industrial world, the network of industrial production and consumption is deeply self-reinforcing. As I explained in the section about wage labor and industrial appliances, one step in the direction of industrial participation necessitates three more. And when an entire neighborhood is built from scratch in a year and offered to marginalized consumers as one large industrially-produced package, it becomes a prison of interrelated radical monopolies. With so few options for reproduction of life outside provided services and low-wage labor, residents were

stuck in chains of enforced consumption that did not leave many choices about how to spend one's time. In his discussion of gangs and drugs, Matas Pericé focuses on the "lack of culture" in the neighborhood-- "the total absence of cultural, social, educational, recreational services." He is referring, at least partially, to industrially provided services, but it is worth remembering that culture, social life, recreation, even a certain type of education, have all existed throughout human history and have not always been provided by the government. However, the relational infrastructures that make these things possible need time to develop-- time in the sense of generational heritage, but also in terms of sovereignty of individuals over their own time. This first type of time was missing for the original residents in that they had been uprooted from their rural villages, and then continuously uprooted from various temporary settlements in Barcelona, and dropped into a neighborhood of high-rise buildings and empty plazas with thousands of new neighbors they didn't know. Matas-Pericé even points out that there was a notably low rate of new marriages in the neighborhood's first decade, because the young people arriving in the neighborhood didn't know each other, and without established venues to get to know one another, they remained in small groups of friends and didn't mix.²³² The second point relates to sovereignty over one's own time--one of many types of sovereignty missing for those stuck at the bottom of the pyramid of industrial participation. Low hourly wages and the rising cost of imposed consumption led to more time at work and less time for building social networks, discovering one's place in the neighborhood, and making it one's own. This lack of sovereignty is also spatial. As I mentioned in the Turner section, vandalism--the deliberate destruction of the industrially produced product one has been required to consume--is a clear articulation that the consumer knows the product is a prison. The youth of the neighborhood so quickly resorted to the breaking of movie theater chairs and streetlights because it was the only thing that seemed remotely interesting. Perhaps it felt like the only possible expression of one's own sovereignty.

Interestingly, it was the same youth who had previously entertained themselves by breaking things around the neighborhood, who eventually created the Centre Social de Besòs, the first association of neighborhood residents to acquire any real power in relation to the city government. Among the many accomplishments of the organization were the creation of a monthly periodical called *El Besòs*, from the archives of which Matas Pericé culled many of the stories included in his book; the holding of many successful cultural events such as the quincena de juventud in 1970²³³ and the festival de cancó the same year, attended by 600

²³² Matas-Pericé, Al Sudoest del Río Besós, 125.

²³³ Ibid, 197

people²³⁴; and the writing of a letter, signed by 4000 people and published in La Vanguardia, which finally forced the mayor's hand to begin the construction of schools in 1968.²³⁵ Organizing to fight for state-provided services, it seems, was another means of discovering one's sovereignty in the face of the neighborhood-as-prison, and perhaps more satisfying than breaking streetlights. Matas Pericé describes the formation of the the Centre in 1964:

"Some young people did not agree with what they had lived through and became aware of their situation, of the time they lost not knowing what to do, where to go, study or have fun... They found themselves practically alone in the face of so much injustice, since nobody had time to think about them. It was they, then, who had to respond to everything they experienced. And some -a few- knew how to react positively. Let's see how the same protagonists tell it:

'Until 1964, we had no place to meet. In February of that year, we met for the first time, members of different gangs, and we talked man to man, even between enemies. They left us a place, on Argentina street. We were about thirty but the main leaders were there. We have already begun to carry out surveys and projects were requested to form what would be the first statute of the "Youth Center."²³⁶

They now had what was essential to do something; meeting and dialogue. If until then there had been many enmities between the same young people, it was because they were all restless and had not discovered that the common enemy was the same and they had to fight together on the same front.²³⁷

In 1966, the same year that it began to publish the periodical *El Besòs*, the Centre de Juventud incorporated as an official legal entity, becoming the Centre Social del Besòs, and acquired its own premises in Sant Adria, offering a library and a space for talks and conferences, as well as activities such as a cinema-forum, "legal and social advice", sports groups, and children's camps.²³⁸ According to its statutes, the Center was apolitical and secular.

²³⁴ Ibid, 199

²³⁵ Ibid, 62.

²³⁶ Unnamed youth, quoted in article by Agustí Pons, *El Noticiero Universal,* February 2, 1967, reprinted in Matas Pericé, 185-186

²³⁷ Matas Pericé, 185-186. The words of the youth quoted by Matas Pericé appear in italics, whereas the author's do not, to distinguish the two voices.

²³⁸ Matas Pericé, 191.

In July 1967, a social worker described the role of the Center in an article in El Besòs:

"It is an undeniable fact that at present, our C. S. Besós occupies the maximum attention of a large part of the youth and adults of the Barrio, and with everything, we can say that we wish many more people would pay attention to it....The Social Centers are organizations that try to solve local problems through their own neighbors. They put at your free disposal to respond to the needs of the Sector, a set of services and achievements, collective, of an educational, social and recreational nature, to achieve an elevation of human values."²³⁹

It is worth noting the social worker's framing of the center as providing tools for neighborhood residents to leverage the resources they already possess--"their own neighbors"-- in order to solve local problems, rather than relying on services provided from the outside. Social networks are among those Turner would have identified as grassroots resources, available to networks of sovereign individuals, which large-scale, industrial projects are unable to take advantage of. As we have already seen, social activities not immediately related to survival were also a focus of the center. By holding folk festivals, cinema forums, and social gatherings, the center was working to build the kind of "authentic culture" just discussed, despite and in opposition to the forces of compulsory industrial consumption.

Conclusion

I first met Anita Canillas this April, when Vanessa Vega Mendez and I interviewed her as part of an effort to get to know Sudoeste del Besòs from the perspective of its current residents. She is now 77, and has lived in the neighborhood for 60 years. She married and raised three children there, all of whom have now moved away. Now a widow, she lives alone in the same apartment where she moved with her parents at the age of 13. Looking back, she remembers years of struggle to bring services to the neighborhood, and attributes most of the improvements to the advocacy of the neighbors:

"The neighborhood began to improve, they paved the streets, we had buses, trams, schools. All this with a lot of neighborhood struggle. In 1977 there was a very big protest because of the subway. As a result of its construction, many blocks cracked, we fought to have 7 blocks torn down and built again, including El Casal del Barri and Espai Municipal Carmen Gómez. The neighborhood, the leaks, the basements, were fixed up a lot. If we had continued fighting, the entire neighborhood would have been thrown out and rebuilt. To get something you have to fight, why? If a traffic light is needed on a street, why do you have to go out into the street to fight and cut off traffic? In the end they do it. But better that they do it without people having to go out into the street."²⁴⁰



Photo by the author. Anita and Vanessa, Sudoeste del Besòs, April 2022

²⁴⁰ Anita Canillas, interview with Katie Murphy and Vanessa Vega Mendez, April 2022

There is still a sense of solidarity among the neighbors who were there for the years of struggle. Most of the neighborhood residents who are involved in community organizations are from this group, although as the years pass they are getting older and some leave the house less. The businesses opened by these first residents have now all closed, as the children of their founders didn't keep them up when their parents retired. On a walk from her home off Rambla Prim toward the new mall on Avinguda Diagonal, Anita pointed out the locations of shops that had once been run by her friends. Some of these shopfronts remain empty, some have been replaced by chain stores, and others evidence the investments of newcomers in the neighborhood: a Pakistani restaurant and a convenience store with a sign in the window advertising wire transfers to Senegal.

Mbaye Puy is the president of the Dahira Jazbul Xulob Association, an association of Senegalese immigrants located in the neighborhood. Many of its members are neighborhood residents, but others come from all over Barcelona--mostly the same neighborhoods where the residents of the barraques were resettled in government-built flats sixty years ago. Mbaye was interviewed by two other members of MISMeC the same week Vanessa and I met Anita:

"When I arrived, it was not an area of immigrants, now it is, because most of the people are immigrants. Now there are many more Senegalese here, and in Barcelona in general, than in many other places. Of all the Senegalese who live in Barcelona, the majority live here. In the association, the majority live here, but they come from outside as well. Sant Feliu de Llobregat, and I live in Badalona, for example, there are others who live in the center, there are others from Nou Barris, from Santa Coloma,"²⁴¹

Immigrants have come to Sudoeste del Besòs because it is cheap. As we have seen, this was because the neighborhood was designed to be peripheral. The city-provided services that its residents fought so hard for were slow to come and always as afterthought for the city council. And it was not long before the flats, which had been built quickly and cheaply on land not originally destined for urbanization, began to have structural problems. The children of the first generation were upwardly mobile, thanks to the efforts of their parents to ensure their education, and the process of globalization that had improved the general standard of living in Spain at the expense of other countries, like the ones the new immigrants were fleeing. This second generation, with somewhat more capital than their parents, didn't see the neighborhood, with its

²⁴¹ Anita Canillas, interview with Katie Murphy and Vanessa Vega Mendez, April 2022

decaying infrastructure that had felt more like a prison than a home, as a good place to invest their time, efforts or money. Many of these children have inherited the flats of their parents, but aren't interested in living in them, so they rent them out to recent immigrants.



Photo from Ivan Duarte and Farah Odeh Abuoudeh, *Meeting with Mbaye at the Dahira Jazbul Xulob Association, Sudoeste del Besòs, April 2022*

Mbaye continued,

This is also what is interesting to know: the standard of living here compared to other areas, it is easier to have a life, a flat than other areas. This affects all immigrants, including all migrants, the reason is this. Finding a flat here is easier, if all Westerners leave, they leave gaps, immigrants arrive, as in El Raval now. The majority there are Pakistani immigrants. Some leave, and the immigrants tell their friends "there is a place here for sale". And one buys it. In all the cities they enter as ghetto zones; because you leave because you don't want to live with some immigrants; and they will leave the hole and an immigrant will fill it.²⁴²

Like the migrants who moved to Barcelona from the countryside in the 1900s, recent immigrants often can only access the lowest-paying jobs because the skills and knowledge they have are not recognized in the new job market. Mbaye added,

"In Senegal, French and Arabic are spoken; then people come here and that's different. For example, in my case, I came from Senegal with my studies and here they don't validate it and it costs a lot, it's better to leave it. There is no such opportunity. The other day we were talking about the Senegalese who were born here and their opportunities. There is an anecdote about a girl who was born here and, living in the town of Rubí, a teacher told the girl: "you cannot go to university," encouraging the child not to go to university. It should be the other way around. You can't go, if it's expensive or whatever, but a teacher can't say that. Since she is an immigrant, the professor has looked at her from a different perspective. But the girl, with all that, she said to herself: "I need to go" and now she is studying at the university... We have made a calculation which shows that the majority of Senegalese do not reach university... when they reach the age of 16 they leave school... We consider this as a failure, born here or come from a very young age, they must have the chance to pursue the career they want. But I think that, as an immigrant, one thing is that I have to study and another is the possibilities that they give me. There are not opportunities for everyone; the immigrants are an exception."²⁴³

Isa Redondo is the director of Martinet Solidari, a community organization that offers social activities and adult education. She told us,

"Twelve percent of the population has higher education, which is very low compared to the surrounding neighborhoods. Bet on an adult school, because jobs are lacking. Courses that can help people find jobs, a good IT center with computers and Wi-Fi. During the pandemic when we started doing online classes, you could see that young people don't have a space to study, they don't have their own space. As a 15-year-old, what you want is privacy. They share small apartments, there are many of them, they are uncles, mothers-in-law, etc. Coexistence problems are generated, later it affects academic performance, and they end up abandoning their studies, because within the neighborhood they do not have a space to go to do this activity, the library is

²⁴² Mbaye Puy, interview with Ivan Duarte and Farah Odeh Abuoudeh April 2022

²⁴³ Mbaye Puy, interview with Ivan Duarte and Farah Odeh Abuoudeh April 2022

very small and is not used much... What is also needed are study rooms, some spaces so that young people can go, even if it is just to connect."²⁴⁴

Without the ability to acquire knowledge capital, recent immigrants are stuck at the bottom of the industrial pyramid, like their predecessors sixty years before. The cost of housing is a heavy burden to shoulder with a low-wage job, so, like the rural migrants a century ago, they afford the rent by sharing a house between multiple families. Anita has observed this in her neighborhood:

"Immigrants today are poor people like we were 60 years ago... And the people who come from abroad, two or three married couples live together with four or five boys or girls to be able to pay the rent. Many of them later have to register to fix their situation, since they do not have stability, they move apartments frequently. So many times they are registered in other places. They share rooms, they go from one place to another, they have no stability. So I think that all this is also not reflected in the statistics. To participate in the association they do not have to be registered."

The association Anita refers to is the staircase association--the governing bodies, made up of owners of flats, which must collaboratively maintain the "commons" of the building: the staircase or elevator, the roof, the facade. Since many flats are no longer owner-occupied, and the actual occupants are not represented in the governing body, it becomes very difficult to make decisions about building maintenance, to the detriment of everyone living there. Anita continues:

"In some cases, the owners rent the flat to people from outside, which I do not mean to criticize, it is reality. And this person who comes pays the owner the rent but the owner doesn't care about the staircase, he doesn't come to meetings, he doesn't pay the maintenance. There are many buildings in which there is no president, because in their culture they do not organize themselves for the maintenance of the building."²⁴⁵

Thus, we can see how the industrial system has, over 60 years, managed to replicate the same conditions of poverty and powerlessness in a continuous cycle. When asked if she thought the neighborhood had generally improved over the years, Anita found it difficult to answer. Many of the services she and her neighbors had fought for had been achieved, and her own standard of living had improved, but the poverty of many of her neighbors is evident, and it reminds her of the life she herself escaped. Furthermore, the neighborhood solidarity that had brought light to

²⁴⁴ Isa Redondo, interview with Katie Murphy and Vanessa Vega Mendez, April 2022

²⁴⁵ Anita Canillas, interview with Katie Murphy and Vanessa Vega Mendez , April 2022

the hardships of the early years seems hard to locate today. Perhaps, Anita surmises, this is because the new neighbors have bigger things to worry about: "They struggle economically, they also come fleeing a war or mistreatment, so if there is a puddle in the street they will not care. What matters to them is to put a plate of food in their house." ²⁴⁶

Isa agreed with Anita, and added,

"The population of the neighborhood is very different. There are older people who get very involved because they fought for the neighborhood, for them to add public services. Poorer people have arrived and from different cultures; poor people who need to work and don't have a job, then the last thing they are going to do is participate. And there are cultures in which participation happens more within the home, more among the family. There are many factors. Also of gender, religion, etc... That is why it's always the same people who we find participating in different spaces. There are housing problems and work problems, if people don't solve them, they won't be able to worry about participating in other things."²⁴⁷

Language barriers and cultural differences have created divides between the older residents and the new immigrants, and between immigrant groups. On our first walks in the neighborhood, in September of 2021, my classmates and I noticed that each of the people we talked to on the street blamed a different group for what they perceived to be the neighborhood's problems. These social divides are evident in the huge expanses of unused public spaces in the neighborhood, as empty now as they were in the "bedroom community" days of the 1960s. When asked about these spaces, Mbaye responded,

"First we will have to know why they are not used. And the issue is about immigration. What I think is because one says that the spaces are for Westerners and others say that they are for immigrants and nobody wants to share it and vice-versa. One says it's not for me and the other says the same. For them to be used, for example, they need to be much more useful. If it is a space for children to play, do it in a way that children can play in it. There are places that are spaces but nobody knows what they are used for, they are not defined. A free space there, but no one knows what for. If it is a space to walk the dogs, or to sit and have a drink in the open air, that is for that, but it is not defined. There are many spaces but there are no facilities, if they make it

²⁴⁶ ibid.

²⁴⁷ Isa Redondo, interview with Katie Murphy and Vanessa Vega Mendez, April 2022

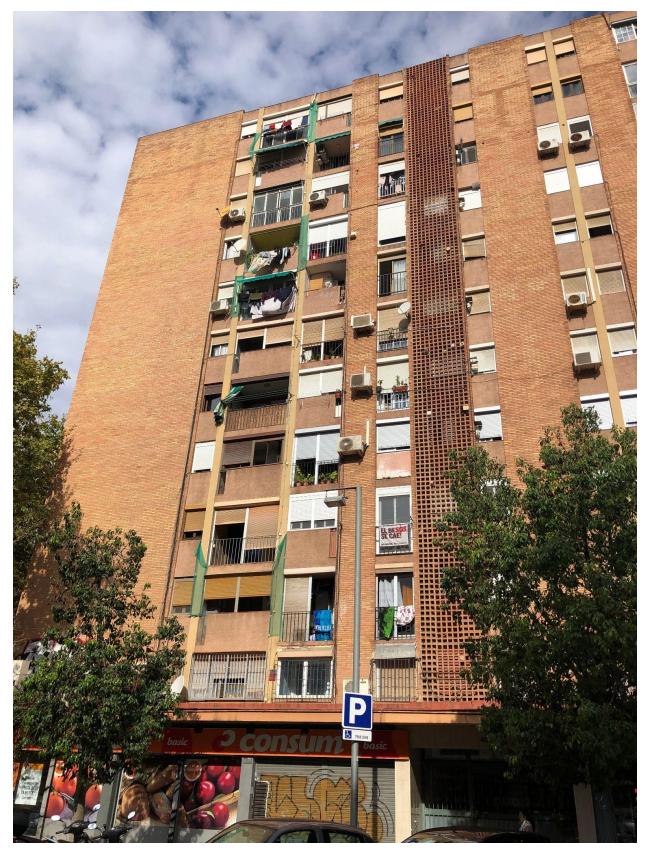
for walking then we will know that it is for that, if you put a space with slides then it is for the children to play.²⁴⁸

Mbaye's reflections evidence several themes in the psychology of the modern industrial consumer. The spaces worry residents because their design does not contain clear enough instructions for use. Like the packaging Illich describes, in which shape, color, and symbols instruct us how a product should be used, we are used to constantly being instructed about how to use everything around us, including public space. Implicitly, people are worried that the space might be intended for someone else, and that their presence there might be socially incorrect or even illegal. And, even if they are allowed to be there, it might be possible to do the wrong thing, which could result in social awkwardness or even danger. It is easy to see how this would feel particularly relevant for immigrants navigating a world in which structural racism makes one's presence anywhere transgressive as a default.



²⁴⁸ Mbaye Puy, interview with Ivan Duarte Massetti and Farah (Moh'D Shaker) Odeh Abuoudeh , April 2022





What would Illich and Turner say, if they could stroll on Rambla Prim with Anita or watch the evening prayers with Mbaye? How would they react to the empty squares, the roar of cars on Gran Via, the new skyscrapers being constructed by the sea, or the crumbling buildings which the city council has offered to pay to fix, but remain decrepit because of the inability of the staircase association to agree to accept the funding? Hopefully, by this point, the reader is familiar enough with Illich and Turner's methods of diagnosis that the answer to these questions is obvious. The similarity of these problems to those of the 1960s is so striking that, if I were to diagnose them through the lens of the two thinkers, the result would be redundant. So, I will limit myself to the suggestions the two friends might make as to how these problems could be addressed.

Illich's proposed solutions, like his methods of diagnosis, are systemic rather than particular. He would argue that the situation of the current residents of Besòs, like their predecessors, is caused by the industrial system of production and consumption, and the solution is nothing less than a worldwide political and economic redirection, led by research into the appropriate scale of industrial tools and democratic deliberation about how to limit them, on a case-by-case basis. These deliberations would also necessarily focus on the question of fair and sustainable apportioning of resources in a global commons. In other words, a complete regime of worldwide economic degrowth. However, In order for these deliberations to function properly, they themselves must take place at an appropriate scale, and certainly Sudoeste del Besòs could even contain multiple such assemblies, governing the scale and nature of the tools that most directly affect residents' daily lives and the local resources necessary to reproduce daily life. Although these assemblies would ideally exist in a world in which everything is governed in such a way, they could potentially begin at the grassroots level.

At first, of course, many local resources would be unusable because of radical monopolies, and thus it might take some time before it would make sense to treat them as a commons at the neighborhood level. Similarly, many tools would be impossible to limit at a neighborhood scale until their worldwide monopoly was curtailed. However, some tools and resources could certainly be managed as a local commons, as a doorway to broader and deeper sovereignty. Many of these resources could be "ceded" to the commons in a controlled manner by the city council. As Ostrom notes, and Turner would agree with, the most successful commons exist

within nested levels of support, extending to centralized government.²⁴⁹ Public space is one example of a potential commons in which the city has the power to support neighborhood governance. In doing so, the city could open the question of "what and who public space is for" up to residents to decide for themselves, potentially putting life-supporting reproductive activities such as growing food, sharing knowledge and bartering goods and services, back on the table. Perhaps residents would choose to install a building with shared utilities in the public space, or to build new subsidized flats to decrease crowding. Of course, the support needed from the city would be significant, including funding, preferential pricing for materials, technical expertise, administrative support and conflict mediation. The latter would be especially important in a neighborhood with such significant pre-existing social divides. These are the roles Turner points to for central government, and he would argue that, in the current industrial system, simply giving people the freedom to decide for themselves is not enough.

The process of transitioning to a more sovereign local economy would, of course, be difficult, but Illich and Turner would both argue that each newly realized freedom would smooth the path for the next round of deliberations. As barriers decrease to supporting oneself in a sovereign way, people begin to identify with their circumstances more and feel a greater responsibility to take care of the commons. Furthermore, more options to access resources lead to more resources at people's disposal, and although incomes may not rise, alternative means of survival would mean people feel less desperate, and have more time and energy to invest in the neighborhood. Institutions such as timebanks, which lower barriers of access to resources by diversifying the currencies people can exchange for them (e.g. knowledge or time as opposed to money), could also ease the transition to more local control.

Precedents to this kind of work exist in the neighborhood. The Centre Sociale Besòs, Martinet Solidari and the Dahira Jazbul Xulob Association have all worked from the grassroots level to empower people to make use of the resources they and their neighbors already have. The youth members of the Centre Sociale Besòs may have missed out on state-provided education, but their ability to come together across differences in the face of a crisis of gang violence speaks to their wisdom and maturity. The process of fighting for what they had not been given arguably provided them a better education about how to survive in the industrial pyramid scheme--by resisting and working outside of it--than a state-sponsored education ever could have. They managed to publish a monthly newsletter that became one of the main sources of

²⁴⁹ Ostrom et al. "Revisiting the Commons: Local Lessons, Global Challenges," 278-282

local news in the neighborhood, delivered the defining letter that catalyzed the building of the first schools, and helped to build a culture of solidarity and mutual aid in the neighborhood that served as their legacy. Perhaps these youth were able to come to these conclusions because their time and energy was not taken up by formalized schooling. Or perhaps the necessity of working together, building community, and democratically discussing things they disagreed on was simply the only possible way out of a condition of crisis, and this was obvious to them. Either way, they were able to arrive at a very similar conclusion to Illich and Turner--that the only alternative to being crushed at the bottom of the industrial pyramid scheme was to reject it.

In a classroom at Martinet Solidari, Isa Redondo told us,

"We give language workshops, computer workshops, gymnastics classes, we go on excursions, we participate in assemblies. For us it is very important because it is part of education. The education to participate, to give an opinion. We hold three or four assemblies a year so that people can see that there is this democratic aspect to education...There are very different groups, from older people, who need and have the right to carry out educational and cultural activities, to people like the kids from Top Manta. These are the future of the neighborhood. When we die, the ones left in the neighborhood will be these guys. They will get married, have children and in 20 years they will be the neighbors of the neighborhood.

We have 400 students. They are coming to class. But why do they come to class? Because women can bring their babies and I set the schedule for the Top Manta boys at 09:00 so they can come to class before going to work. Of course, I have also spent many years not only doing the classes, but also participating in the festivals, doing this community work. You have to work with the neighborhood. If there are some activities that they tell me they prefer in the afternoon, then we will have them in the afternoon. If they tell me it has to be on Saturday, then we'll do it. If I know that one of the Sengalese boys found work, well, I don't kick him out of class for not coming for three weeks, because he has gone to Lleida to pick fruit, he is making an effort to come to class and for work, because when he comes he will have his space to come to class. So people participate. You adapt to their needs.

Organizations like Martinet Solidari are working between the cracks of the industrial system. Unlike a large educational institution that forces those who participate in it to conform to its structure, Martinet Solidari works around the needs and use-values of its participants, helping them to fill in the gaps that the industrial system doesn't provide them. It is able to do this because it is small, and many more like it should exist, ideally supported by more centralized government while retaining independence and flexibility. As Turner would point out, full systemic degrowth is the ultimate goal, but in the meantime, we make a difference in people's lives by lifting industrial burdens from their shoulders, and doing a better job of helping them support themselves and each other in ways they already know how to do.





References

Daniel Aldana-Cohen "Eco-Apartheid is Real," The Nation, July 26, 2019. https://www.thenation.com/article/archive/green-new-deal-housing-climate-change/

Aldana Cohen, Daniel. "Water Crisis and Eco-Apartheid in São Paolo: Beyond Naive Optimism about Climate-Linked Disasters," International Journal of Urban and Regional Research, 2018 <u>https://www.ijurr.org/spotlight-on/parched-cities-parched-citizens/water-crisis-and-eco-apartheid-in-sao-paulo-beyond-naive-optimis</u> <u>m-about-climate-linked-disasters/</u>

Antich Garcia, Bartomeu. "El Polígon del Sudoeste del Besòs: Habitatge Social dels Anys 50," Undergraduate thesis, Escola Polytecnica Superior d'Edificació de Barcelona, Universitat Polytechnic de Catalunya, 2010.

BCNEcologia: 20 Years of the Urban Ecology Agency of Barcelona, edited by Barcelona City Council, BCNEcologia and Barcelona Regional,

Coòpolis, l'Ateneu Cooperatiu de Barcelona https://www.bcn.coop/

Custodio Moreno, M. "Les Lluites Veïnals: el Barri del Carmel," in *in Barraques: La Barcelona Informal,* edited by Merce Tatjer and Cristina Larrea. Barcelona: Museu de Historia de Barcelona, Institut de Cultura, Ajuntament de Barcelona, 2010.

Davis, Mike, Planet of Slums. New York: Verso, 2017.

De Decker, Kris. "Wind powered factories: History (and Future) of Industrial Windmills." Low-Tech Magazine: Doubts on Progress and Technology. October 8, 2009. <u>https://www.lowtechmagazine.com/2009/10/history-of-industrial-windmills.html</u>

Diaz Molinaro, Maximiliano. "L'ocupació, la Construcció i la Vida a les Barraques," *in Barraques: La Barcelona Informal,* edited by Merce Tatjer and Cristina Larrea. Barcelona: Museu de Historia de Barcelona, Institut de Cultura, Ajuntament de Barcelona, 2010.

"Les cooperatives en model de cessió d'ús: una forma alternativa d'accés a l'habitatge" Habitatge, Urbanisme i Activitats, Newsletter 90, Diputació de Barcelona, April 2018

https://www.diba.cat/web/hua/-/les-cooperatives-en-model-de-cessio-d-us-una-forma-alternativa-d-acces-a-l-habitatge

Drehobl, Ariel and Lauren Ross, Lifting the Energy Burden in America's Largest Cities: How Energy Efficiency Can Improve Low-Income and Underserved Communities, American Coucil for an Energy-Efficient Economy, April 2016, "https://www.aceee.org/sites/default/files/publications/researchreports/u1602.pdf

Duarte Massetti, Ivan, "Learning from experience: A Social and Resource Comparison of the Barcelonian Informal Settlements during the Francoist Regime through Oral History." Master's Thesis. MISMeC, Escola Técnica Superior d'Arquitectura del Vallés. September 2022

Ferrer i Aixalà, Amador Els Polígons de Barcelona : l'habitatge massiu i la formació de l'àrea metropolitana (Barcelona: Edicions UPC, 1996)

Golda-Pongratz, Kathrin. "John F.C. Turner (1927-)" The Architectural Review. January 11, 2021. https://www.architectural-review.com/essays/reputations/john-fc-turner-1927

Illich, Ivan. Energy and Equity. New York: Harper and Row, 1974.

Illich, Ivan. Tools for Conviviality. London: Marian Boyars, 1973.

Kimble, Megan. "Austin's Fix for Homelessness: Tiny Houses, and lots of Neighbors." Bloomberg Citylab. November 12, 2018. https://www.bloomberg.com/news/articles/2018-11-12/austin-s-community-first-village-tackles-homelessness

"The High Cost of Transportation in the United States," Institute for Transportation and Development Policy, May 23, 2019, https://www.itdp.org/2019/05/23/high-cost-transportation-united-states/

Madar, Chase. "The People's Priest." American Conservative. February 1, 2010. https://www.theamericanconservative.com/the-peoples-priest/

Matas Pericé, Alfred. Al Sudoeste del Río Besós: Diez Años de la Vida de un Barrio Barcelonés, Edición Castellana. Translated by María Lourdes Nonell. Barcelona: Editorial Pòrtic, 1971. Originally published in Catalan, 1970.

Mateu Vico, Neus. "La Barcelona d'en Porcioles: La Idea de Ciutat de L'Alcalde Josep Maria de Porcioles (1957-1973)." Undergraduate Thesis. Escola d'Arquitectura La Salle, 2011

Mitcham, Carl. "In Memoriam: Ivan Illich, Critic of Professionalized Design." Massachusetts Institute of Technology. 19,4 (2003): 26-30

Mouffe, Chantal, Interview by Markus Miessen in The Nightmare of Participation (Boston: MIT Press, 2011) 107

New Scare City. "Illich Final Resting Place." July 29, 2013. http://backpalm.blogspot.com/2013/07/illich-resting-place.html

Nicholson, Simon "Theory of Loose Parts: How to not Cheat Children," Landscape Architecture Vol 62, 1971, 30-34' Ostrom, Elinor et al. "Revisiting the Commons: Local Lessons, Global Challenges" Science, Vol. 284, April 9, 1999, 278-282

Oyón, José Luis and Iglesias, Borja. "Les barraques i l'infrahabitatge en la construcció de Barcelona, 1914-1950" in *Barraques: La Barcelona Informal del Segle XX*, edited by Merce Tatjer and Cristina Larrea. Barcelona: Museu de Historia de Barcelona, Institut de Cultura, Ajuntament de Barcelona, 2010.

Oyón, José Luis and Serra Permanyer, Marta. "Las Casas de Reclus: Hacia la Fusión Naturaleza-Ciudad, 1830-1871" Scripta Nova: Revista Electrónica de Geografía y Ciencias Sociales, XVI, 421. December 1, 2012. http://www.ub.edu/geocrit/sn/sn-421.htm

PBS News Hour. "Timeline: Guatemala's Brutal Civil War." March 7, 2011. https://www.pbs.org/newshour/health/latin_america-ian-iune11-timeline_03-07

Permanyer, Lluís. L'Eixample, 150 anys d'Història. Barcelona: Viena Edicions i Ajuntament de Barcelona, 2008.

Roca i Albert, Joan. "La Ciutat Informal" in *Barraques: La Barcelona Informal del Segle XX,* edited by Merce Tatjer and Cristina Larrea. Barcelona: Museu de Historia de Barcelona, Institut de Cultura, Ajuntament de Barcelona, 2010.

Rosenblat, Alex. "When Your Boss is an Algorithm," Sunday Opinion, The New York Times. October 12, 2018. https://www.nytimes.com/2018/10/12/opinion/sunday/uber-driver-life.html

Sergio Tirado Herrero, Indicadors municipals de pobresa energètica a la ciutat de Barcelona, RMIT Europe and Ajuntament de Barcelona, January 2018, 38.

Turner, John. Housing by People: Towards Autonomy in Building Environments. London: Marion Boyars, 1976.

"Dying Alone: An Interview with Eric Klinenberg." University of Chicago Press, 2002. https://press.uchicago.edu/Misc/Chicago/443213in.html

"Municipal Housing in Vienna: History, Facts and Figures," (Vienna: City of Vienna--Wiener Wohnen, August 2021) https://www.wienerwohnen.at/wiener-gemeindebau/municipal-housing-in-vienna.html

Housing in Vienna: Annual Report, 2016 (Vienna: Geschäftsgruppe Wohnen, 2016) https://ec.europa.eu/futurium/en/system/files/ged/housing_in_vienna_annual_report_2016.pdf

Ward, Chelsea, "It's Time to Knock the Toilet off its Pedestal," Bloomberg, April 15, 2021. "https://www.bloomberg.com/news/articles/2021-04-15/toilet-and-sewer-technology-need-a-fresh-start

Wright, Pierce. "Ivan Illich." The Lancet (2003): 185.

Images (in order of appearance)

Ginés CUESTA, Horts al Mig de la Via Julia, Photograph, 1973, AHRNB

John Turner, Construction of El Ermitaño, Photograph, in Golda-Pongratz, "John F.C. Turner (1927-)"

Kathrin Golda-Pongratz, El Ermitaño in 2017, Golda-Pongratz, "John F.C. Turner (1927-)"

J. Snow, Prisoners on a treadmill in colonial Jamaica, Wikicommons

Prisoners in Rangoon Working on a Treadmill, Process print after Watts and Skeen. Wellcome Collection, Public Domain

Alex Rosenblat, "When Your Boss is an Algorithm," Sunday Opinion, The New York Times, October 12, 2018. https://www.nytimes.com/2018/10/12/opinion/sunday/uber-driver-life.html

Bragulí fotògrafs, Montjuic, 1920s Barraques: La barcelona Informal del Segle XX

Xavier Miserachs, Montjuic. Photograph, 1962 Collecció MACBA.

Pepe Encinas, Tramuntana, el Carmel, Photograph, Axiu Pepe Encinas, 197

Kim Manresa, La Roda de Dalt en construcció entra la Guineueta i Canyelles, Nou Barris, Photograph, MUHBA

Plan showing the relationship between the construction of housing polygons and automobile road. Amador Ferrer i Aixalà, Els Polígons de Barcelona : l'habitatge massiu i la formació de l'àrea metropolitana (Barcelona : Edicions UPC, 1996)

Pepe Encinas, La Mina, Photograph, 1978, Arxiu Pepe Encinas

Kim Manresa, Lluita per l'Escola pública, Nou Barris, Photograph, 1973, AHRNB

Pepe Encinas, Excursió critica pel Barri, Placa Prim. Photograph, 1974, Arxiu Pepe Encinas

Pepe Encinas, Fums al Barri del Poblenou, Photograph, 1970s, Arxiu Pepe Encinas

Oriol Maspons, La Trinitat, Photograph, 1960, Arxiu Històric del COAC

John Turner, Use Value Diagrams, Housing by People

John Turner, Governance Diagrams, Housing by People

Aerial view of Somorrostro, 1950s, Barraques: La Barcelona Informal del Segle XX

Aerial view of Can Tunis, 1970s, Barraques: La Barcelona Informal del Segle XX

Garden barraques in Montjuic, 1915, Barraques, La Barcelona Informal del Segle XX

Jacques Léonard, Jacques, Rosario i Familia Amaya al Jardí de l'oncle Antonio, Photograph, 1960, AFB

Photograph from the family album of Marisa Cerrato, Montjuic early 1960s, Barraques, La Barcelona Informal del Segle XX

Party in the quarry, Montjuic, 1945, Barraques: La Barcelona Informal del Segle XX

Marta Matalasser, Mattress Maker, 1970s, Photograph, POVO, AFB

J.M. Huertas, Venda Ambulant, Camp de la Bota, Photograph, 1970s, Arxiu J.M. Huertas Claveria

Barraque in Carmel, 1960s Barraques: La Barcelona Informal del Segle XX

Pau Barceló, "Repairman showing the contractual conditions of his work, 1967" Barraques: La Barcelona Informal del Segle XX

Bangulí fotògrafs, Fishermen and their barraques, Beach of Somorrostro 1915, Barraques: La Barcelona Informal del Segle XX

Josep M. Sagarra i Plana, Family of stonemasons of Montjuic, Photograph, 1915 Barraques: La Barcelona Informal del Segle XX

Ginés Cuesta, Els Safareigs de les Cases del Governador, Nou Barris, Photograph, 1973, AHRNB

Protest for public housing, Carmel, 1976 Barraques: La Barcelona Informal del Segle XX

Diagram by the author, Use-Values of Housing in Informal Settlements

J.M. Huertas, Cases Barates, Baro de Viver, Photograph, 1970s, Arxiu J.M. Huertas Claveria

Oriol Maspons, Montbau, 1960s, Arxiu Históric del COAC

Sudoeste del Besòs, 1971, Barraques, La Barcelona Informal del Segle XX

Xavier Miserachs, Treballadors de la Hispano Olivetti, Photograph, 1962, Colleció MACBA

F. Català-Roca, Treballadores de la Fàbrica Pirelli, Cornelià, Photograph, 1960s, Arxiu Històric del COAC

Xavier Miserachs, Tramvia en un Barri de la Periferia, Photograph, 1962, Colleció MACBA

J.M. Huertas Clavería, Sant Adrià de Besòs, Photograph, 1969, Arxiu J.M. Huertas Clavería

Photo by the author. Anita and Vanessa, Sudoeste del Besòs, April 2022

Photo from Ivan Duarte Massetti and Farah (Moh'D Shaker) Odeh Abuoudeh, Meeting with Mbaye at the Dahira Jazbul Xulob Association, Sudoeste del Besòs, April 2022