Supplement

What are the mountains?

Mosè Cometta

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This seemingly banal question actually conceals pitfalls worthy of Socratic interrogation. "Mountain" is indeed a concept so familiar to us that it requires no special attention, and for this very reason, upon closer analysis, it reveals the fragility of its foundations. "It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so." This quote, apocryphally attributed to Mark Twain, sums up the issue well: sometimes what we think we know best proves more unstable than we might have imagined. Through this text, we shall attempt to piece apart the reality of the "mountain" to better understand what it implies. This is no mere rhetorical exercise—it's a reflection that leads us to question highland areas, the communities that inhabit them, and the relationships they maintain with other territories.

Contemporary human geography has been radically influenced by ideas that emerged in France during the second half of the twentieth century, particularly by Henri Lefebvre's work (1968, 2000, 2001). Analyzing society's territorial transformations, he identified a progressive tendency toward urbanization—not to be understood as the expansion of the urban fabric and city centers, but

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as a gradual emptying of the characteristics that made territories and "rural" communities qualitatively different from urban ones. Today, no geographer worth their salt would uncritically accept the use of terms like "city" and "countryside," precisely because we have realized that the territories described by these categories have been transformed and taken on distinct characteristics. Cities, for example, have exploded, occupying much more space, extending their tentacles in every direction and, especially on plains, spreading like oil stains (Carloni, 2011; Indovina, 1990). These new spaces, created especially with the advent of automobiles and consumer society, are undoubtedly urban, but they don't correspond to the traditional idea of what a city is—indeed, often, viewed through that lens, they prove to be deficient spaces, lacking quality, offering little scope for genuinely civic life (Bernt & Colini, 2013; Campos Venuti, 2010). Several points for reflection emerge here that merit deeper exploration.

Firstly, we might ask what concretely constitutes an urban space. A leading French geographer argues that we can differentiate various spaces based on a series of gradients, in a matrix comprising the density and diversity of actors and activities (Lévy, 1994). In short, we find ourselves in urban space when there's high density and diversity, and in non-urban spaces when there's low density and little diversity of content. In its simplicity, this formula reveals important aspects of what shapes urban space: the plurality of actors to be found there, and thus also necessarily a certain incoherence, since each of these actors will have distinct objectives and aspirations, perhaps



even in conflict with each other; the almost constant presence of serendipity-given the high density, it's much easier to have chance encounters that give rise to new projects, ideas, and relationships. Yet this definition, which fits so well with the idea of the "urban," doesn't necessarily work equally well with that of the "city." The "city," in a conception of it influenced by European medieval history, refers to an entity that is somehow defined, with territory that may be delimited. The city walls, in this regard, play not only a military role but especially a political and identity-forming one: they clearly signal "inside" and "outside." In the Greek term polis, we see a feature of this polysemic term, one which indicates both physical space (the territory) and the community that shapes it—what in Italian is rendered by the proximity between città and cittadinanza (city and citizenship). We need not invoke Plutarch (Them. XI) or Herodotus (VIII, 61-62) to note that these two meanings—that of political community and territory-can contradict each other. What's interesting to observe, however, is that a "traditional" conception of city, in the European cultural paradigm, implies delimitation. Just as walls, especially in medieval Europe, marked a clear boundary between the city and the countryside, in Greek philosophy we find numerous discussions about the ideal demographic size for a city. Plato, in his Laws (V, 737e), suggests 5,040 male citizens as the ideal quota for a city, while Aristotle, in Politics (VII, 1326a-b), reminds us that a state must be neither too small nor, significantly, too large. We thus understand how the terms "city" and "urban" do not fully overlap: "city" refers to a defined and delineated unit—be it territorial or political—while "urban"



represents more of a gradient describing the density and diversity of contents present in a given place.

We may thus conclude that the present is an era of profound crisis for cities, of spatial redefinition, one which becomes increasingly urban but, for this very reason, destroys the territorial model of cities. How do these transformations occur? According to Lefebvre (1970), who identified the creation of urban space as a key characteristic of capitalism—and therefore as the most important result of the industrialization process, which gets reduced to an 'introductory' phase of this new society-some academics have dedicated much of their work to understanding the dynamics that lead to the production of urban space. David Harvey is certainly one of the most important authors in this regard. In his fundamentally Marxist-inspired work, he argues that throughout its accumulation process, capitalism comes up against systemic crises with a certain frequency. Among the methods the system has found to overcome these crises, apart from wars and various forms of destruction, is the production of urban space (Harvey, 2008). From the radical transformation of Paris carried out by Haussmann to overcome the 1848 financial crisis to the major infrastructural works with which China is currently attempting to surpass the contradictions of its economic model, producing (new) urban space has proven a very effective way not only to destroy existing stock but also to create new markets, refueling speculative dynamics while allowing job generation in construction—a sector that acquires growing strategic importance as a driving force for the rest of the economy.

In this light, one of capitalism's most relevant



transformations is thus not industrialization, as one might be led to think, but an unprecedented territorial transformation: the advent of urban society. Without wanting to reopen the debate on the difference between "city" and "urban" concepts, it's still important to emphasize that "urban" is derived from urbs, which in Latin pairs with civitas to provide the dual meaning of the Greek polis. Thus, urban society is one in which the community's political bond is less relevant; what matters more is the territorial aspect. Indeed, construction and territorial development appear increasingly less guided by political logic and directed instead by market criteria. Even when it behaves actively, and not only as regulator, the state appears increasingly subservient and adherent to economic logics and market criteria. This reveals a certain political "emptying" of space production.

Precisely on the territorial issue, we may address the third point: planetary urbanization (Schmid & Brenner, 2011). Indeed, Lefebvre and Harvey encourage us to reflect on contemporary society as one in which the urban, despite its various manifestations, extends ever more widely. This doesn't mean, as one might hear in superficial analyses, that "most of the population now lives in cities." As we have observed, not only is the territorial and political form of the "city" in crisis precisely due to urban expansion, but the very definition of what a "city" is varies in every context, making it practically impossible to provide an effective definition on a global scale. Hence what does it mean that the urban extends? Fundamentally, it means contemporary society has made construction, infrastructure implementation, building projects to be destroyed



and rebuilt, or build anew, an increasingly substantial portion of planetary territory. Ever more spaces are turned into active elements of an urban system, increasingly interconnected on a planetary scale. Thus, spatial concepts we were once accustomed to-like "city" and "countryside"-become increasingly inadequate to truly understand what happens in contemporary space, to the point of stimulating a genuine appeal to overcome perspectives where the "city" remains the primary analytical matrix (Angelo, 2017; Angelo & Wachsmuth, 2015). This, in turn, implies a major epistemological challenge. Academic knowledge is often constrained by disciplinary definitions related to the division universities make between various faculties and departments. However, this territorial reshuffling renders obsolete various objects of study that have profoundly marked traditions such as urban studies, agrarian studies, or rural geography, to name but a few. In contemporary urban reality, objects of study blend together, and researchers are obliged to address issues that once fell outside their discipline, with all the problems of "epistemic imperialism" and translatability between various traditions this entails. Before such a state of play, the question that naturally arises is what new concepts might let us analyze contemporary spatiality? There are countless candidates, but all aim to emphasize greater complexity, dynamism, and interrelation between various areas, avoiding instead more rigid and defined criteria-just like the binary between the "city" and "countryside" binary.

We should examine some of these new elements that must be considered in territorial analysis. The first is



certainly urban metabolism. Instead of thinking of urban centers as decontextualized elements, as standalone cities, we might look upon them as living organisms. As such, urban centers not only require constant input of resources (and people) but also constantly produce flows of goods and waste (and people) "outbound" (Broto et al., 2012; Inostroza & Zepp, 2021; Swyngedouw, 2006). This perspective allows more effective observation of the interrelations that have—in fact always—connected cities to the countryside and other territories, even on much vaster scales. Through historical examples even very distant in time, we observe classical Athens' dependence on grain imports from the Black Sea, 1800s Milan's dependence on construction timber transported by river from Alpine forests, as well as the importance of infrastructural connections with Asia for contemporary Venice's tourist economy, to cite but a few examples. Flow evolution can testify not only to economic and social transformation but also the territorial transformation of an urban system. All this allows us to overcome a simplistic vision where the urban center would be more closely connected to surrounding territories in a system formed by concentric circles, and instead observe territoriality as a complex network of relationships in a constant state of change. This isn't merely an intellectual exercise: metabolic flows are fundamental for understanding an urban system's evolution-consider how different forms of energy production have an impact on where it proves most economical to build (nineteenth-century factories were placed beside waterways to exploit hydraulic power), or how creating mobility infrastructure can make a territory more central



or peripheral, bringing it closer to or further from major economic flows. Thus to simplify, we might affirm that upon closer analysis, urban centers are not and cannot be understood as defined and self-contained objects, but must always be analyzed within their technological, infrastructural, political, and social context, as a system extending well beyond what we would traditionally define as "cities." This doesn't simply mean asserting generic interconnection that would make every region "urban," but conversely implies the need to pay greater attention to the concrete analysis of each area, in order to understand the interrelations, the inbound and outbound flows it maintains with other locations, developing analyses much more attentive to the individual particularities of each case.

These analyses provide interesting insights particularly for all those territories that would traditionally have been considered "rural" or "wild," and which today are more explicitly invested by phenomena of "extended urbanization" like "extractive landscapes" (Brenner & Katsikis, 2020). Large urban centers are often presented as areas of great vitality and dynamism, places where creation, innovation, and new forms of living develop. Nevertheless, or perhaps precisely because of this, they are also places that consume significant resources, ones which must necessarily be sourced elsewhere. Any urban center, in order to exist, thus requires extensive extraction territories where resources may be mined. It's no coincidence, for example, that the railroad network in the United States developed by first connecting eastern coastal cities to the Midwest agricultural plains, only later linking



major urban centers to each other. The entire policy of occupation and exploitation of those territories, from plot dimensions to infrastructural policy development, was aimed at making those spaces productive and functional for the satisfaction of coastal cities' needs (Katsikis, 2023).

The operationalization of a territory is an act that involves a certain degree of violence and prevarication, since it effectively enslaves a given area, and the communities inhabiting it, to the interests of a more or less distant urban center that may be perceived as foreign. It's no coincidence that several of these operations were initiated by military, imperial, or colonial undertakings. This consideration raises a number of relevant aspects. Firstly, the need to understand space—even "natural" space—not as something separate from society. For example, consider the fundamental contribution to maintaining Amazon rainforest biodiversity made by the indigenous communities that live there, the relationship between Native American societies and bison, and how this kept the great Midwest prairies deforested and "open", or the capacity of Alpine valley inhabitants to create a mosaic landscape that ensured the development of a rich and complex ecological system in the very heart of Europe. Acknowledging these aspects means affirming that "extractive landscapes" are not "empty". Often, thinking about nature and the desire to expand an urban center's metabolic flows, new territories are presented as a "tabula rasa" on which it's possible to build, create progress, usher in evolution. This often renders invisible the communities already inhabiting those territories and their practices. The term



"wilderness" well summarizes this way of seeing; it's a term that describes areas considered not only "natural" but "wild". This inevitably brings us back to that ethnocentrism of ancient Greece that justified any sort of behavior toward communities that, being non-Greek, were simply defined as barbarian. The idea underlying this type of discourse is that communities inhabiting these territories are a "quantité négligeable". In political decisions, the wellbeing and "progress" of urban centers carry much more weight than preserving the ways of life of "rural" communities.

A second aspect, linked to these considerations, recalls what Lefebvre called the "right to the city" (Lefebvre, 1968). The idea underlying this concept is simple: every actor contributing to urban space production insofar as they work, consume, or live in urban space and thus contribute to this system's metabolism—should have not only the chance to access urban space but also to actively contribute to decisions concerning it. It's fundamentally a rearticulation of the communist ideal of a society where there is no arbitrary exclusion of actors from the dynamics of power. According to Lefebvre, we might recall, the urban issue was more relevant than the industrial one in terms of defining contemporary capitalism. We might thus view this right to the city as a sort of trade union movement in favor of various actors making up urban spaces. This naturally raises several complex definitional questions: who are the actors to be considered, how should they be integrated, how might decisions be made equitably? Regarding extraction territories, this new urban democracy proves highly innovative. On one hand, if this



were accompanied by structural economic transformation inspired by the degrowth paradigm-which, as Savini (2023, 2025) rightly reminds us, doesn't mean economic crisis but rather generating a paradigm of abundance by abandoning the dynamics of economic growth that are instead inevitably accompanied by crises and poverty-this could lead extractive territories and their inhabiting communities to enjoy renewed decisional autonomy. On the other hand, for those territories that should continue to be integral parts of the metabolic flows feeding urban centers, it would become necessary to fully integrate "rural" communities into urban governance: in short, these communities should also fully participate in decision-making processes regarding development of an urban system to which they provide a fundamental metabolic contribution.

After this theoretical discussion, we may now go back to our initial question once more and ask more seriously: what are the mountains? The mountains are many things. Territories and communities, obstacles and points of contact, margins and living spaces, territories connecting human beings to the vertical dimension. First of all, again, it's important to insist on the mountains' communal dimension: communities exist that inhabit these spaces. Here a parenthesis must be opened. While throughout history, as we've emphasized, colonial dynamics and imperialistic expansion into "rural" territories and mountain spaces have always taken place, over the last two centuries, a dimension has been added to these dynamics that is similar in some ways, converging partly with tourism and greater geographical mobility: for some actors, these



territories have transformed into genuine "playgrounds" where they can achieve their dreams, taking advantage of less competition-and therefore lower costs in terms of economic, social, political, and cultural capital-for space compared to urban centers. In short, first elites and then increasingly also middle and working classes from urban centers have re-imagined "wild" territories no longer as empty and frightening spaces but as joyful and idyllic spaces in which to carry out their projects. This dual symbolic reality of the mountains—"obstacle" and "uncontaminated space," both frightening and enchanting placeunderpins numerous phenomena ranging from mountaineering to tourism to second homes. All these phenomena operationalize mountain territory within the broader urban system, and by doing so, contribute to transforming it—for example by introducing new actors, new practices, opening new markets, but also increasing land prices. All these transformations may have a strong impact on local communities, and for this reason it's fundamental not to forget that they exist. The mountains, therefore, are a living space, but also one endowed with particular features that are worth discussing briefly.

The most important orographic particularity of the mountains is certainly their verticality. In this sense, mountain zones are often hostile to human activities, constituting structural obstacles to unfettered development. This feature is fundamental for several reasons. On one hand, it explains and justifies the historical development of mountain territories, often characterized by certain urban marginality—in the sense that few major urban centers are actually located in mountain territory, while much



more frequently such centers are found on plains or large valleys that somehow mark the boundaries of mountain territories. This characterizes a metabolic relationship where, almost invariably, mountain territories are places of extraction, not of the accumulation of resources. In turn, however, this characteristic has a series of identitary and symbolic effects that are fundamental to explore if we wish to understand what the mountains are. Building and living difficulties mean that mountain territories have relatively low density and diversity of content, a sort of antithesis to urban centers. In turn, this favors a rhythm of life-and therefore cultural perception and identity construction—that is slower, with stronger connections to the past. This creates complex forms of stratification. In Alpine space, for example, despite almost total economic, technical, demographic, and social upheaval over the last century, in some actors within Alpine communities there persists a conviction of representing historical continuity with past communities and their practices, pride in keeping centuries-old traditions alive. It's impossible to truly establish how founded or not this perception of historical continuity is; yet there is a complex and stratified Alpine identity that requires particular attention.

Since mountains continue to represent an almost inexhaustible basin for forms of extraction and urban metabolism that are renewed over time—while centuries ago "timber and population" were extracted, today we think of wind and hydroelectric energy, tourism, and biodiversity conservation as fundamental elements to fuel the urban system as a whole—society as a whole should pay more attention to this reality, acknowledging mountain



communities' existence and their needs, and finding forms of arbitration between various needs that don't marginalize them excessively.

We should consider one final aspect: forms of political expression. Some groups, as Gramsci (1975) teaches us, aim to conquer cultural hegemony-that is, the symbolic, identitary, and political direction of society, influencing ideas about reality and what is considered normal-or mask their particular interests as universal interests and convince other actors to follow them. The struggle for cultural hegemony is often an urban struggle: it's in major centers, due to the density and diversity of actors characterizing them, where these clashes assume maximum scope. In this respect, both the actors who currently detain hegemony and those who aspire to conquer it, thus building an anti-hegemonic bloc, have a certain urge to proselytize and impose their will. The scale on which hegemony is exercised, however, varies greatly. Some groups exercise local control, while others have influence on much vaster scales. Especially in rural and mountain areas, the worldview is closely tied to local reality. Thus, political and ideological conflicts often also take on local dimensions. This is significant because it creates a distinction between what has been called the "great tradition"-i.e. hegemonic discourses with a vocation to impose themselves on large scales, for example through state institutions—and the "little tradition"—i.e. that way of understanding the world very anchored to the small scale. to local particularism, the oral tradition-where not abstract concepts but concrete people become fundamental elements of political discourse (Scott, 2013). This



would explain why rural communities' resistance often isn't transformed into a will to revolutionize the system as a whole, imposing a new hegemony on a vast scale, but limits itself to defending prerogatives of local-scale hegemony. Rural communities are engaged in building, disputing, and transforming hegemonic discourses on local scales, and less interested in dominating society as a whole—a characteristic that has erroneously led various political analysts to deem these communities to be radically conservative.

The question is naturally more complex, but we cannot deny that right-wing populism often relies on the anger and demands of rural and outlying areas. However, it would be wrong to pass off the rural perspective as right-wing populism. As mentioned, great battles for rural communities often have a localist character, bound up in their inhabitants' daily reality. The fact that rural political battles are fought on a local scale means that any new external imposition, by actors exercising hegemony on a larger scale, is perceived with annoyance, as a potential obstacle. Right-wing populism, exploiting this phenomenon, pretends to be the spokesperson for rural areas' local demands, calling for greater autonomy and less regulation, yet maintains a hegemonic (or counter-hegemonic) vocation on the larger scale, with political programs that don't necessarily defend rural communities' interests and indeed often maintain those metabolic flows of extraction and subjugation that prevent rural communities from developing freely. The ways in which rural communities—and therefore also mountain ones—act politically thus creates an apparent contradiction. On one hand, right-wing



populism manages to establish itself as spokesperson for these communities' demands and desires, but once in power, maintains and reinforces forms of governance that contribute to rural communities' impoverishment and despoliation. On the other hand, other political movements, despite manifesting interest in the fate of rural and mountainside communities, often cannot be perceived by them if not as emanations of imperialistic, elitist, and urban interests. Rural and mountain communities, with their way of managing and disputing power on a local scale, thus involuntarily become a fundamental cog in a mechanism of political hegemony on a larger scale, with consequences for society as a whole. This contributes significantly to the crisis of legitimation and functioning of contemporary political institutions, which cannot adequately manage desires, needs, and wills articulated at distinct levels.

The mountains, therefore, are many things, but especially poorly known and little studied territories where, to this day, even in the heart of Europe, forms of invisibilization and structural marginalization are deployed that reinforce social discontent and fan the flames of populism—which then contribute to radically transforming the political and institutional landscape of the entire continent. As side margins to the urban system, the mountains are simultaneously at the hub of its transformation—and in this too it represents not only an orographic but also political challenge, and hence also an opportunity to rethink not only spatial categories but our society as a whole. Still today, the mountains are a space inhabited by communities which institutions leave almost no chance to express



themselves and be heard, and which end up involuntarily being used and manipulated politically by various actors. Thus, the mountains are a space that, still today, awaits to make its voice heard.

Biographical Notes

Mosè Cometta is a researcher at the University of Lugano in Switzerland, where he works on the relations between mountain territories and urban contexts, with a focus on extractive processes, marginalisation dynamics and power balances between local, regional and global actors. He studied philosophy and history in Barcelona, continuing his studies in political philosophy in Rome and obtaining a doctorate in geography in Lausanne.

He currently co-directs City-Collaboratory, a scientific network that brings together urban studies in Switzerland, is a member of the Swiss Young Academy, and is actively engaged in academic politics, with initiatives aimed at countering structural precariousness in research.

His scholarly work adopts a critical and interdisciplinary approach, aimed at bringing out the demands of peripheral and mountain communities, which are often invisible or instrumentalised, in both the political and academic spheres. His work interweaves theoretical reflection and analysis of contemporary dynamics, with a focus on the historical dimension and collaboration with local actors and territorial organisations.



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