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Transhumance as a Prism. Toward a Planetary Rural Geography of Mountain Space

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ABSTRACT

Transhumance is a marginal—yet crucial—practice within mountain and rural geographies at a global scale. The term refers to a wide range of extensive grazing systems characterized by the seasonal movement of herds and flocks between different altitudes, within diverse governance systems. In recent years, this practice has gained relevance in scholarly debates and in international agendas, following its inscription on the UNESCO Representative List of the Intangible Cultural Heritage of Humanity in 2019. In this context, a clear and incisive geographical reading of transhumance remains marginal. This paper addresses this gap by reviewing the rich yet fragmented debates on transhumance across ecology, heritage and political economy, while proposing an understanding of this practice through the lens of “planetary rural geographies”. More specifically, we use transhumance as a prism through which to examine the relational and transcalar logics shaping the material and symbolic production of rurality and mountaininess. In doing so, the paper advances a research agenda for a planetary rural geography of mountain space, shedding light on the entanglements between rural, mountain, and urban spaces within planetary political, cultural, economic, and more-than-human processes.

1 | Introduction

Transhumance is a marginal—yet crucial—practice within mountain and rural geographies at a global scale, and a valuable prism for understanding their transcalar relations.

The term refers to diverse extensive grazing systems characterized by the seasonal mobility of herds and flocks across different altitudes and within diverse mountain governance systems encompassing a wide range of agro-pastoral practices.

Horizontal and vertical transhumance are the most widespread forms: clearly distinct, yet at times practiced concurrently. The former refers to the long-range seasonal migration of flocks and herds, along historically consolidated routes, usually in plain regions, plateaus and coastal areas. It was once

widespread in Mediterranean regions (Braudel 1966; Sereni 1972) and is still fundamental for agro-pastoral economies in regions like Central Asia, the Arctic or the Sahel (Khazanov 1983; Mirzikashvili 2026). Vertical transhumance refers to shorter-distance mobilities of livestock, taking advantage of the altitudinal gradient in climatic and environmental conditions; namely: summer ascents to high-altitude mountain pastures, and autumn descents to the lowlands. This kind of practice is common in and around mountain regions, such as the Alps (Bätzing 2005), the Caucasus (Gunya et al. 2019) and the Andes (Browman 1974).

Both practices are specialized forms of mixed farming developed by settled agro-pastoralists (Evans 1940; Davies 1941; S. Jones 2005), and distinguished from pastoral nomadism by fixed

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patterns of seasonal movement from one grazing area to another (Khazanov 1983; Fernández-Giménez and Le Febre 2006).

Despite many internal differences, pastoral nomadism is characterized by portable dwellings, livestock-based economies, historically rooted land management systems, and tensions with state institutions due to sedentarization efforts (Salzman 2004; Semplici and Rodgers 2023; Blais 2024). Within this label, a wide range of practices can be identified, including nomadic, semi-nomadic, transhumant, semi-sedentary, and sedentary pastoralism, spanning from North (Domínguez 2014; Blais 2024) and East Africa (McCabe 2004; Casciarri 2009) to Southwest (Beck 2014) and Central Asia (Fernández-Giménez 2002).

Given its wide range of meanings, in this paper we refer to transhumance as defined by long-standing geographical discussions—namely a range of extensive grazing systems characterized by human–animal mobility with fixed patterns (Fernández-Giménez and Le Febre 2006), seasonality, and altitude—while also considering some literature on nomadic pastoralism, given the entanglements between these practices.

In last decades, transhumance has been challenged by multiple factors: agricultural industrialization and concentration, forced pastoral sedentarization, policies transforming land management (Karatassiou et al. 2014; Renes et al. 2023) have largely threatened transhumance worldwide, often replacing it with intensive or semi-extensive livestock farming (Sidiropoulou et al. 2015). Despite having significantly declined—to the point that some consider it almost extinct along with its traditional routes (Oteros-Rozas et al. 2013; Takola et al. 2016)—transhumance has gained increasing relevance. In 2019, the inscription of transhumance on the UNESCO Representative List of the Intangible Cultural Heritage of Humanity revealed the growing interest of international policy agendas, as well as academic debates, in this practice.

Specifically, studies on transhumance have appeared in Ecology, Environmental Science, Veterinarian and Agrarian studies, as well as in Anthropology (Moritz 2024), with research focused on cultural heritage (Aime 2011; Bindi 2022) and ethnographical accounts (M. Nori 2016; M. Nori and Farinella 2020). Its popularity across disciplines has made transhumance what has ironically been defined as “the new black” (Bindi 2022): a loosely defined label under which different practices are recognized and diverse initiatives carried out, encompassing a wide spectrum of meanings, from nostalgic representations of the past to strategic resources for climate adaptation and the regeneration of contemporary rural and mountain areas.

In this context, an explicit reflection on transhumance from the perspective of rural and mountain geographies remains unexplored. As we argue in the paper, by challenging rural–urban, mountain–urban, and rural–mountain dualisms, transhumance becomes a prism through which to understand the processes that shape mountain regions, situating them within planetary rural geographies (Wang et al. 2023). This perspective conceptualizes rural spaces as deeply interconnected with global socio-economic, environmental, and political processes rather than depicting them as isolated peripheries.

The paper critically reviews interdisciplinary debates on transhumance along those we identified as the most influential lines of debate: ecology, heritage, and political economy. First, we overview literature exploring the ecologies of transhumance (Section 2); then, we critically review literature on transhumance as heritage (Section 3); finally, we explore the debate on the politics and economies of transhumance, from its capitalist entanglements to the diverse economies in which it participates (Section 4). These lines of debate offer fundamental—yet partial—perspectives on transhumance. After defining the distinct yet interlinked domains of rural and mountain geographies (Section 5), we explore why and how transhumance can represent a prism through which to understand the planetary entanglements of rural and mountain spaces (Section 6). In other words, this paper proposes a research agenda for an original theoretical perspective by bringing the planetary rural approach into debates on mountain geography: a theoretical move that remains largely unexplored.

2 | Ecologies of Transhumance

Transhumance has been a key factor in the ecological dynamics of inhabited mountain regions across the globe for millennia, leaving a significant footprint on environmental systems. Due to its strong entanglements with broader economic and social processes, the ecological dimension of transhumance is currently facing epochal challenges. For instance, in the Alps transhumant agro-pastoral systems are challenged by depopulation, rewilding and the transformation of the economy toward tourism and post-production (Carrer et al. 2020), nonetheless showing strong dynamism and resilience in adapting to a changed context (Jurt et al. 2015; Soto 2025). In the Andes, the socio-ecological values of transhumance remain as spaces of resistance to the capitalist incorporation of agricultural and livestock practices (Soto 2025); while in the Caucasus, the historical landscape produced by mobile grazing has been dealing with the making and unmaking of the Soviet collective economies (Gunya et al. 2019).

Within the vast literature on the ecologies of transhumance, four intertwined domains can be individuated: *historical ecology*, *bio-ecology*, *landscape ecology*, *political ecology*.

From a *historical ecology* perspective, transhumance is analyzed diachronically, focusing on the role of grazing in shaping places, landscapes and environment. Beside historical, anthropological and ethnographic studies (S. Jones 2005; Palladino 2018), geographic research highlighted the legacy of transhumance in contemporary territorial organisation, agro-environmental processes (Ruiz and Ruiz 1986; Costello and Svensson 2018) and “biocultural heritage” (Easdale et al. 2023).

From a *bio-ecological* perspective, the reciprocal interactions between animal mobilities, mountain ecologies and metabolic processes is frequently highlighted. Generally, the focus is on how the long-standing integration of crop cultivation, grassland management, and livestock production characteristic of transhumance contributes to ecological sustainability. This includes, for example, soil quality, carbon sequestration, fire prevention and defense to erosion, also where agriculture is not feasible

(Ocak 2016; Sharifian et al. 2022; Vidal-González et al. 2024). Several contributions explore the positive effects of livestock mobilities and extensive grazing on wildlife biodiversity, particularly regarding more sensitive species, both in comparison with intensive farming areas and with ungrazed lands (Bunce et al. 2004; Aguilera-Alcalá et al. 2022; Ubach et al. 2023). Differently from intensive farming, searching for specialized very productive breeds, transhumance and mountain extensive grazing play a key role in increasing the biodiversity of livestock species, favoring the reproduction of local breeds historically selected to better adapt to mobility and harsh environments (Battaglini et al. 2014; Koczura 2019). With a broader perspective, some highlight the role of transhumance as an ecosystem services producer (Oteros-Rozas et al. 2014). Nevertheless, the negative impacts of transhumance and extensive livestock farming exceeding carrying capacity is also explored. This perspective is mostly adopted by research focusing on the mountains in the Global South, like Himalaya (Haq et al. 2021) or the Ethiopian Tigray (Tsfamariam et al. 2019). In the European debate, the conflict between mobile livestock grazing and large wild carnivores is lately flourishing (Franchini et al. 2021; Rossberg et al. 2024).

Additionally, the role of transhumance and extensive livestock farming in shaping ecosystems is addressed from a *landscape ecology* perspective, stressing the impact of this set of practices on multiple ecosystems and environments, contributing to the landscape mosaic (Simmons 2004). For example, Gómez-Sal et al. (2024) highlight the role of this perspective in understanding socio-ecological challenges on a range of spatial and temporal scales in the Iberian peninsula. Similarly, Li et al. (2021) explore the mutual relationship between landscape, grassland ecological systems and socio-economic shifts, focusing on changes in extensive livestock systems and transhumance practices in Tibet. The landscape approach, based on a holistic, relational and hybrid understanding of socio-environmental relations, is widely used in researching transhumance. It can focus on the influence of livestock mobility on the material forms of landscape (e.g., Tsfamariam et al. 2019, on Ethiopia; Meini et al. 2014, on Italy), or on its role in shaping identities, values and landscape perceptions (see Daugstad et al. 2014, on Norway and Spain).

Finally, the *political ecology* perspective on transhumance investigates the relationships between environmental change and political, economic, and social factors (Robbins 2003). Conflicts and negotiations over land resources linked to livestock mobility are a typical political ecology topic, especially concerning conflictual peasant-herders relationships in Sub-saharan rural regions (Bassett 1988; Gonin and Gautier 2015; McGuirk and Nunn 2025), or in the Sahel (Turner 2004). In different geographical contexts, political ecology lenses are mobilized to explore the links between transhumant practices and urgent challenges affecting socio-environmental systems such as climate change (Yeh et al. 2014); the coexistence with large carnivores (Pons-Raga 2024); the incorporation of pastoral systems in the neoliberal logics (Zhang et al. 2021), or local communities adaptation to changing socio-economic conditions (Michon 2011; Jurt et al. 2015; Gallardo et al. 2017).

Moreover, transhumance has been reinterpreted adopting the lenses of more-than-human geographies and environmental

humanities. Despite its criticized connection to the meat and dairy production system (Salliou 2023), transhumance is considered as an alternative to intensive, sedentary livestock farming (Starrs 2018), representing an ethically informed practice promoting animal well-being and challenging the so-called conventional agriculture (Altieri 1995). In this light, transhumance is represented in terms of agroecology (Colombino and Soriani 2024; Frija et al. 2025) or an “ecological transition from below” (Soto 2025). Specifically, some authors move beyond merely acknowledging the multispecies nature of this practice, proposing a less anthropocentric perspective on the human-animal relationships on which it is founded (Palladino 2018; Colombino and Palladino 2019; Colombino and Soriani 2024). By framing extensive grazing—as opposed to intensive livestock production—as an ethical way of living with animals, Colombino and Soriani (2024) suggest that transhumance participates in a “diverse bioeconomy”, thus resisting the incorporation of mountain ecologies into extractive neoliberal logics and fostering alternative relationships with capitalist economies.

Taken together, these strands of literature show that the interplay between socio-economic and environmental change makes ecologies central to understanding transhumance.

Moreover, the literature review of diverse debates on the ecologies of transhumance highlights multiple forms of conflict and coexistence characterizing this practice: aspects that need to be framed within the perspective of a planetary rural geography of mountain space.

3 | Transhumance as Heritage

Beyond its ecological value, in recent years transhumance has gained increasing recognition as cultural heritage through a multilevel process of heritage-making.

Since 1992, UNESCO has recognized the role of transhumance and extensive grazing in shaping some Cultural Landscapes—such as the Causses and Cévennes agro-pastoral Cultural Landscape in France (WHC 2011), the Madriu-Perafita-Claror Valley in Spain (WHC 2004), and the Kôç Yolu Transhumance Route in Azerbaijan (WHC 2023)—defined by socio-ecological relations, and diverse material cultural heritages. Following this framework, in 2019 a joint nomination by Austria, Greece, and Italy led to the inscription of “Transhumance: The seasonal droving of livestock along migratory routes in the Mediterranean and the Alps” on the Representative List of the Intangible Cultural Heritage of Humanity, a recognition that in 2023 was extended to additional European countries with longstanding pastoral traditions under the revised title “Transhumance, the seasonal droving of livestock”. According to UNESCO (2019), this recognition depends on the role of transhumance in shaping local identities, fostering social cohesion, contributing to food security, sustaining biodiversity, and addressing contemporary challenges such as urbanization and globalization. Within the same process, the drovers’ roads were nominated—but not designated—as World Heritage (i.e., tangible), leaving unresolved issues regarding land use in contemporary transhumance (Bindi 2022): a challenge that calls for new governance models engaging transcalar stakeholders (Mastronardi et al. 2023).

Besides this failure, the UNESCO process led to a “heritagization of transhumance” (Lebaudy 2016; Bindi 2022; Mannia 2024), whereby a practice once associated with a stigma of backwardness has been revalorized as cultural heritage and a resource for tourism—a process analyzed from socio-anthropological perspectives, highlighting its opportunities and risks.

On a material level, several studies have examined the intersection between the heritagization of transhumance and broader debates on the role of tourism in the regeneration strategies of inner and rural areas (for an extensive literature review, see Salvatore et al. 2018). Considering pastoral tourism as a potential segment (Potthoff et al. 2020; Filak and Gorišek 2022; Sauer et al. 2022) within the ill-defined domain of rural tourism (Lane 1994), transhumance has become a strategic resource for ecotourism, offering rural experiences along traditional sheep tracks (Belliggiano et al. 2021). In this context, the link between the heritagization of transhumance and food valorization has been widely explored, highlighting how transhumance supports sustainable landscape management and Alternative Food Networks (Holloway et al. 2006; Cox et al. 2011), producing material and symbolic connections between landscapes and the typicality of cheese (Pettenati et al. 2023).

On the symbolic level, the heritagization of transhumance has nurtured multiple narratives—novels, poems, documentaries, performances—enriching mountain and rural representations (Bindi 2020), and fostering greater awareness of culture as a key pillar of sustainability in mountain regions (Ghirardello et al. 2022). At the same time, this process reflects the critical dynamics of heritage-making: the valorization of a marginal practice produces a “heritage fiction of pastoral culture” (Lebaudy 2016) where representations romanticize a disappearing and often conflictual practice into a nostalgic, pacified, and backward-looking re-enactment (Bindi 2022), reducing the complexity and diversity of contemporary pastoralism as a mountain livelihood. Such representations reflect an “urban-centric gaze” (Varotto 2020), portraying rural and mountain areas as peripheral spaces of global capitalism, destined for leisure, conservation, and niche production for external markets. This process, also defined as “Arcadisation” (Markaki 2023), simplifies complex mountain landscapes into idyllic images for urban consumption, depicting them either as primitive economies, despite their dynamic productive networks, or as uninhabited, despite their tidal inhabitation patterns.

From this standpoint, the heritagization can be questioned in light of UNESCO’s concept of outstanding universal value, criticized (Lázaro Ortiz and Jiménez de Madariaga 2021) for reflecting European traditions while marginalizing other cultures’ heritage (Eriksen 2001; Dattilo et al. 2025): a critique resonating with the bias of European soft power in shaping the cultural and aesthetic criteria guiding World Heritage List designations (Bertacchini et al. 2016). Indeed, the two-step recognition of transhumance has followed distinctly Eurocentric power geometries, both in the composition of the actor-network and in the definition of cultural heritage. While the first step concerned only Mediterranean and Alpine transhumance, the second expanded the geographical scope without broadening

the conceptual one, thus failing to encompass the wider range of practices associated with nomadic pastoralism. Thus, the heritagization of transhumance was driven by a dominant discourse (Mannia 2024), shaped by an urban-centric and Eurocentric perspective that marginalizes the plurality of nomadic pastoralism practices.

However, this Eurocentric bias has been partly offset by recent initiatives. First, the inscription of Mongol nomad migration in the Unesco Representative List of the Intangible Cultural Heritage of Humanity, in 2024 (UNESCO 2024). And secondly, the United Nations General Assembly’s designation of 2026 as the “International Year of Rangelands and Pastoralists,” promoting global initiatives to highlight the contribution of rangelands and pastoralist communities to the Sustainable Development Goals, encompassing environmental, socio-cultural, and economic dimensions (Louhaichi et al. 2024).

This literature review reveals that, through heritage-making, transhumance has been subject to both valorization and marginalization: a conflictual dynamic that needs to be further investigated from the perspective of planetary rural geography.

4 | Political Economies of Transhumance: Capitalist Entanglements and Diverse Economies

If transhumance has primarily been analyzed in terms of its ecological and cultural values, in recent years, a growing body of literature has engaged with its political and economic dimensions.

From a political perspective, transhumance has been mostly examined with respect to the competition over resources, and its role in challenging top-down conventional regulations of space, including border regimes. For instance, some studies have analyzed the factors threatening the few European drovers’ roads (O’Flanagan et al. 2011; Fernández-Giménez and Estaque 2012), including conflicts over land access due to the governance transformation of the common-pool resources: once managed by collective institutions, and nowadays centralized at the national level (Ostrom 2008). Other studies and policy frameworks highlight significant issues related to land use in pastoralism and transhumance, particularly in the Global South and Asia. For instance, some have explored how pastoral mobility challenges conventional border regimes and national territorialities (Salzman 2004; Semplici and Rodgers 2023), suggesting alternative approaches to border and frontier management (M. Nori and Davies 2007).

From an economic perspective, transhumance is studied as a livelihood strategy practiced worldwide. At the beginning of the 21st century, different studies aimed at analyzing the economic dimension of transhumance. Even if largely in decline—if not disappeared (Takola et al. 2016)—it was estimated that pastoralism occupied roughly 25% of global land, supported nearly one billion livestock, and contributed about 10% of worldwide meat production (FAO 2001). More recent studies estimate that transhumance is present in approximately 75% of countries, involving around 500 million people and over one billion animals, with extensive rangelands covering 25%–40% of the Earth’s surface (Scoones 2021).

From a political economy perspective, transhumance is observed more broadly, linking socio-spatial relations with political and economic circumstances (M. Jones 2008). Indeed, the progressive integration of pastoralism and extensive livestock systems into the global geographies of neoliberalism and capitalism is a key aspect that reveals how transhumance is embedded within global rural economies (Gardner 2009; Scoones 2021; Moritz et al. 2025). For instance, L. Jones et al. (2019) note that, since the 19th century, transhumant farmers faced competitions with emerging actors of the globalized wool supply chains: opened to global markets, many pastoral economies have integrated into transnational networks, reshaping rural and mountain geographies through global networks, flows, and interests.

More in general, Scoones (2021) calls for a common approach to pastoral and peasant studies focused on three main issues: production, accumulation, and politics. In other terms, capitalism has deeply affected livestock systems, regarding new regimes of value related to labor and livestock, production goals and connections to multiscalar markets, role of investments, as well as land use regimes (Moritz et al. 2025). At the same time, livestock remains a “troublesome commodity” (Gardner 2009), because of its ontological and social specificities—such as the more-than-monetary value ascribed to grazing animals. As Johnson (2017) argues, it would be reductive to conceptualize these ongoing transformations merely as a gradual subsumption of pastoralist natures into capitalist relations of production.

Proposing to move beyond the categories of “ranching”, associated with capitalist systems, and “pastoralism”, linked to indigenous pre-capitalist systems, Moritz et al. (2025) describe livestock systems in relation to capitalism. In this light, livestock keepers operate:

- a. At the *margins* of capitalism; i.e. pre-capitalist agropastoral systems;
- b. In a capitalist *world*; i.e. practices accommodating to the “pressures, needs, and opportunities that capitalist structures around them provide”;
- c. In a capitalist *way*; i.e. where “livestock keeping is an entrepreneur’s business that integrates market exchange into its very operation and therefore sensitively reacts to market risks and opportunities”;
- d. *Against* capitalism, through explicit anti-capitalist practices, using livestock keeping for practicing economic and social alternatives.

In this perspective, transhumance is practised with different objectives and methods, within and outside capitalism. For instance, in mountain rural areas of the Global South, transhumance still represents a fundamental livelihood, yet marginalized by extractive capitalism and environmental crises (Singh and Kerven 2023 on South Asia; McGuirk and Nunn 2025 on Africa; Soto 2025 on the Andes). However, in most mountain regions, pastoral communities adapt their practices to the capitalist transition of rural economies, dealing with radical changes in terms of land, production, and mobility regulations (Carrer et al. 2020; Bruley et al. 2021; Oladele et al. 2024). As noted, in Europe transhumant herders act both “in a capitalist way”—through the commodification of the pastoral value chain (Farinella 2024)—

and “against capitalism”, since transhumance can be a space of alternatives to dominant agriculture, where the reproduction of mountain landscape and lifestyle is valued as much as the food production. Where transhumance is embedded within capitalist economies, it also experiments with agricultural innovation. In particular, the adoption of Precision Livestock Farming technologies enables a more efficient use of resources through the monitoring of grazing patterns, pasture conditions, and animals’ physiological parameters, thereby enhancing sustainability and herd management (Aquilani et al. 2022).

This overview of the twofold relationship between transhumance and contemporary political economies shows that transhumance is not a marginal practice; rather, it integrates mountain rural economies into globalized capitalism, while also representing a fertile space for experimenting with diverse economies.

Between the lines of this review, transhumance, thus, becomes a crucial prism to investigate the relationships of rural mountain geographies with global economic processes, revealing crises, conflicts, and forms of hope—a prism that we now describe.

5 | Transhumance Within Mountain and Rural Geography

While ecological, anthropological and political-economic debates have outlined theoretical frameworks of transhumance, geography has focused on specific aspects of this practice. Pivotal studies have addressed the differences between transhumance and pastoralism (Evans 1940; Davies 1941; S. Jones 2005), while recent works have analyzed the political-economies of transhumance and pastoralism (Gardner 2009; Scoones 2021; Moritz et al. 2025), as well as their mobility patterns and socio-spatial relations. However, an explicit reflection on the role of transhumance in understanding the contemporary geographies of rural mountain spaces remains unexplored.

Studies in rural and mountain geographies have largely evolved along parallel trajectories: very rich, often region-specific traditions that it is neither possible nor within the scope of this paper to summarize here (for a state of the art on rural geography, see Chen 2023; and on mountain geography, see Resler and Sarmiento 2016). However, for the purposes of this paper, it is interesting to highlight the points of contact of these debates.

From a theoretical perspective, both have shown interest in relational and constructivist approaches to deconstruct spatial dualisms across multiple scales. Indeed, both rural and mountain geographies place strong emphasis on the definition of geographic categories. The multiple discussions around the “mountain” as a socio-cultural category (Debarbieux and Rudaz 2015; Pettenati et al. 2025) with a political imaginary (Armiero 2014; Della Dora 2016) mirror the *vexata quaestio* of what are the rural and rurality, from the culturalist deconstruction of the “rural idyll” (Williams 1973) onwards (Heley and Jones 2012). Furthermore, these bodies of scholarship extensively examine how rural and mountain regions are being reshaped by neoliberal economic and spatial logics. On the one hand, some scholars have analyzed how the productivist paradigm has mechanised labor, favoring large enterprises

integrated into globalised, long-chain commercial networks, thereby configuring the so-called global countrysides (Woods 2007; McCarthy 2008). On the other hand, some authors have observed the urbanization of mountain spaces (Bätzing et al. 1996) as a twofold process embedded within neoliberal economic dynamics of accumulation and globalization (Debarbieux and Price 2012). In this light, the mountain and the rural have been considered marginal spaces becoming commodities for consumption: the commodification of the mountain landscape (Vaccaro and Beltran 2009; Perlik 2019) seems embedded in the broader transformation of rural landscapes of production into landscapes of consumption (Cloe and Goodwin 1992). More recently, both rural and mountain geographies have shown a similar interest in the role of more-than-human relationships in the material and symbolic fabric of rural and mountain spaces. What has been described as the hybrid countryside (Murdoch 2003) or relational rural (Heley and Jones 2012) resonates with the political ecologies of the mountain (Zinzani 2023). Despite these entanglements, rural and mountain geographies have evolved almost separately, to the point that the lenses of rural geography are rarely applied to the study of mountains, and vice versa.

Instead, these sub-disciplines would benefit from a thorough intersection, since they share empirical and theoretical points of contact, as many mountainous regions are rural in terms of economies, spatial relations, social practices, and cultural traditions. Specifically, we believe that transhumance could be considered a fruitful theoretical and empirical prism connecting rural and mountain geographies.

Indeed, transhumance materially and symbolically connects very different and distant mountain, rural, and urban geographies through economic practices, spatial relations, and cultural representations. Due to its mobile and more-than-human nature, transhumance ontologically challenges spatial dualisms: neither solely rural or mountain, nor entirely urban, it connects different regions through the ecological and cultural grazing paths.

By challenging and reconfiguring rural–urban, mountain–urban, and rural–mountain dualisms, transhumance can help to understand rural mountain spaces as embedded in planetary processes.

Here, we draw on a theoretical perspective that seeks to transcend spatial dualisms through a relational, non-essentialist, and multi-scalar approach: the planetary rural geography (Wang et al. 2023). Based on the planetary urbanization theory (Brenner and Schmid 2015), this approach conceives spatial phenomena not as originating in the urban and radiating outward but as produced within urban–rural relations, involving diffuse, multi-directional, and more-than-human agencies (Wang et al. 2023; Kolawole 2023; Wang et al. 2025). This approach invites the integration of place-based and path-dependent readings with a more-than-human perspective, viewing rural—and, we add, mountain—spaces as reproduced through and in turn reproducing planetary crises, conflicts, and hopes. As Wang et al. (2023: 5) write: “Rural places are contingent assemblages of human and non-human, material and expressive components that are intrinsically connected through translocal flows and networks

with other places, both rural and urban, but which maintain, as associations of practices and discourses, an identity that is articulated through culturally situated understandings of ruralness”.

Recently, this approach has been adopted to interpret mobile pastoralism. Some authors (Gillen et al. 2022) have considered it as a cultural reference that both connects and distinguishes rural and urban worlds. Similarly, an ethnographic study in Delhi (Bathla 2024) has shown that herders move their flocks through urban wastelands and surplus real estate, reassigning use value to these spaces through pastoral activity. The so-called “urbanism of transhumance” not only challenges urban–rural dualisms, but also conventional notions of land and property, since pastoralism is considered a practice operating through multi-scalar relations shaped by global processes of marginalization and valorization, simultaneously embedded in and beyond capitalist logics.

These case studies open a window onto the necessity of framing transhumance through the lens of planetary rural geography: a perspective that can help reveal the relationality of a practice that intrinsically challenges any dualism, while also helping to connect rural and mountain geographies.

6 | Conclusion: Transhumance as a Prism for a Planetary Rural Geography of Mountain Space

In their recent papers, Wang et al. (2023, 2025) frame the planetary rural as a space of: *crisis*, where rural processes are affected by and contribute to planetary crises; *conflict*, where competition over rural spaces and their material and symbolic resources intensify; and *hope*, where different rural actors weave more-than-human relationships, producing alternative territorialities as well as regenerative and diverse economies. Building on this argument, and considering transhumance's connections to planetary crises, its role as a site of conflict, and its relevance as a space of hope, we propose to consider transhumance as a prism through which to examine the heterogeneous logics shaping the material and symbolic production of rural mountain regions, embedded within “planetary rural geographies”.

First, as we have explored through the literature review, transhumance has always been—and continues to be—affected by multiple crises.

Over centuries, transhumance has been affected by economic crises due to the mechanization of agriculture and livestock farming. Following the rise of industrial agriculture and intensive livestock farming (Woods 2010)—initially supported by public policies such as the Common Agricultural Policy (Ragkos et al. 2017; Delattre et al. 2020), later reformed introducing support schemes for extensive grazing (S. Nori and Gemini 2011)—the seasonal human–animal mobility almost disappeared in many rural and mountain regions. In this context, the historically sedimented cyclicity and cross-scale management of labor, human food, and animal feed have increasingly been forced into a linear model of resource and societal management. These structural changes intersect with more recent biosecurity crises, such as those linked to livestock epidemics. In recent years, brucellosis (Oyetola et al. 2024) and the COVID-19 pandemic (Semplici and Rodgers 2023) have constrained

pastoral mobility worldwide, highlighting the entanglement of this practice in more-than-human relationships and their biopolitics.

Challenged by these—and other—crises, transhumance has largely declined: where it has not disappeared, it has become a strategic resource for ecotourism (Belliggiano et al. 2021), a sustainable system for environmental and landscape management (Vidal-González et al. 2024), a practice supporting Alternative Food Networks and ensuring the quality and typicality of products—namely cheese. From a subsistence-based economy of necessity, transhumance has become a strategic asset for the diversification and value creation within rural and mountain economies: a process that aligns with the neoliberal capitalist dynamics of the “post-productive countryside” (Woods 2010), in which mountain landscapes have been commodified into landscapes of consumption.

Applying the perspective of planetary rural geography to transhumance would help investigate how the above-mentioned processes are spatialised within rural and mountain spaces: dimensions that, even when remote, remain situated within transcalar political-economic and cultural dynamics, thereby exposing capitalist entanglements and broader conflicts.

Second, within structural and contingent crises, transhumance experiences different conflicts. If, for a long time, transhumance has been marked by significant herder–farmer conflicts, still present in some areas (Shettima and Tar 2008), in modern times it experiences conflicts linked to trans-scalar processes and actors. For instance, since the 19th century, transhumant farmers have faced competitions with emerging actors of the globalized wool supply chains: opened to global markets, many pastoral economies have integrated into transnational networks, reshaping rural and mountain geographies through global networks, flows, and interests (L. Jones et al. 2019).

Moreover, as we have seen, transhumance is increasingly shaped by conflicts related to resource competition and spatial governance. Nowadays, transhumance competes with industrialized agriculture and intensive livestock farming. At the same time, in some European contexts, it also competes with the distorted use of subsidies for extensive grazing (Calandra 2024), leading to speculation on pastures and the mistreatment of animals (Anselmo and Antoci 2019; Mencini 2021). Conflicts also emerge over land access, partly because of the disappearance of traditional drovers' roads (O'Flanagan et al. 2011; Fernández-Giménez and Estaque 2012; Ostrom 2008), and because of tensions with border regimes and national territorialities (Salzman 2004; M. Nori and Davies 2007; Semplici and Rodgers 2023). All these constraints can lead some pastoralists to graze in urban spaces, where transhumance either clashes with or integrates into other spatial uses (Bathla 2024).

Finally, as noted above, significant conflicts emerge between the human and non-human actors of transhumance. For instance, in touristic areas, new actors and practices generate friction among farmers, visitors, and animals (Genovese et al. 2017). At the same time, the return of wolves and other large carnivores on European highlands (Franchini et al. 2021; Pons-Raga 2024) has created tensions with farmers, while restrictive conservation

policies have sometimes disrupted anthropized ecosystems and farming practices.

Regarded from the perspective of a rural mountain geography, all these conflicts—and many others in which transhumance is embedded—reveal insights into rurality and mountainness. Since “the planetary rural is a space of conflict between competing propositions for Earth futures” (Wang et al. 2023: 9), these tensions make transhumance a crucial site where diverse discourses and uses of the rural and the mountain emerge, reflecting broader struggles over development models and interspecies coexistence.

Third, transhumance can also constitute a site of hope, much as Wang et al. (2023) argue rural space more generally does. As the authors note, rural—and, we add, mountain—spaces can foster ecological relationships grounded in more-than-human coexistence and interspecies kinship (Haraway 2016). Specifically, despite critiques of its entanglement with the meat and dairy production system (Salliou 2023), transhumance can be considered an alternative to intensive and sedentary livestock farming (Starrs 2018), promoting an ethical mode of coexisting with animals (Colombino and Soriani 2024), and constituting part of a “diverse bioeconomy”, while enabling alternative engagements with capitalist economies. In sum, transhumance offers a prism through which to understand how rural and mountain spaces can become sites for resisting the subsumption of ecologies into extractive neoliberal logics, and for experimenting with alternatives to dominant systems based on economic exploitation and interspecies domination.

Our reflection concludes on two levels. On the first level, we argue that transhumance is entangled in the multiple crises, conflicts, and hopes that situate mountain regions within planetary rural geographies (Wang et al. 2023), offering a vantage point for understanding the economic interests, spatial relations, governance regimes, and practices characterizing contemporary rural mountain regions. In other words, transhumance sheds light on the heterogeneous logics shaping the production of the rural mountain—not as a backward space, but as one actively engaged in contemporary political, cultural, and economic dynamics (Perlik 2019). Its relational nature, connecting places, human and non-human worlds, together with its historical sedimentation, makes transhumance a valuable lens for understanding the contemporary dynamics unfolding in rural and mountain spaces. Its intrinsic complexity as both economic activity and cultural heritage, practice and representation, makes transhumance particularly relevant within planetary rural geography, challenging rigid categories in order to foreground the complexity of mountain space.

As a prism, transhumance helps in understanding processes moving across rural and mountain regions, urban and protected areas, illuminating their entanglements. Linking rural areas, tourist mountains, cities, and lowlands, transhumance intersects the key challenges of planetary mountain and rural regions: heritage-making and extractive tourism; the post-productive agriculture; the integration of mountain economies into global capitalist networks; climate- and depopulation-related crises; multiscale governance; resource-use conflicts and land-use regimes; and emerging diverse economies.

On the second level, we argue that, since transhumance materially and symbolically connects very different and distant spaces, it represents a fruitful theoretical and empirical bridge connecting rural, urban, and mountain geographies. Rather than questioning whether transhumance reflects an urbanizing rurality, an urbanizing mountainness, or a ruralizing urbanity, a rural mountain geography with a planetary approach should examine how transhumance situates rural and mountain spaces within planetary crises, conflicts, and hopes (Wang et al. 2023)—and vice versa. This is the research agenda that we have outlined here.

In other words, a planetary rural geography of mountain space is necessary to reveal the blind spots surrounding transhumance; likewise, transhumance constitutes a vantage point for shedding light on contemporary processes shaping rural mountains: global in scale and more-than-human in nature.

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Ethics Statement

The authors confirm that this article adheres to the ethics and integrity policies of *Geography Compass*.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

Data sharing not applicable to this article as no datasets were generated or analyzed during the current study.

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