Advances in Geographical and Environmental Sciences

Jerzy Bański Michael Meadows *Editors*

Research Directions, Challenges and Achievements of Modern Geography





Advances in Geographical and Environmental Sciences

Series Editors

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Research Directions, Challenges and Achievements of Modern Geography



Chapter 7 Global Change and Human Mobility in the Anthropocene



Josefina Domínguez-Mujica D, Dušan Drbohlav D, MarIa Lucinda Fonseca D, Daniel Göler D, Zaiga Krišjāne D, Wei Li, Cristóbal Mendoza D, Gábor Michalkó D, Comfort Iyabo Ogunleye-Adetona, Susana M. Sassone, and Barbara Staniscia D

Abstract In a period of increasing large-scale human effects on the planet, the named Anthropocene, the mobility turn has emerged as a crucial paradigm for social sciences. Since the end of the twentieth century, human mobility, associated with the globalisation process, has become a constitutive element of most of the social and economic changes, establishing new forms of relationship between space and society. Thus, persistent socioeconomic inequalities, armed conflicts, the nexus between

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migration and development, and the complexity of the drivers of mobility make Geography an essential science for interpreting the relationship between mobility and social sustainability. A good example of this is the importance mobility acquires for young people and their identity formation, as well as the prominence of tourism flows. In the opposite direction, in post-pandemic times, the (im)mobility forced new interpretations of this paradigm due to its restructuring role in a changing world involved in new political tensions and environmental reconfigurations.

Keywords Human mobility · Mobility drivers · Global South · Global North · Migration-development nexus · Youth mobility · Tourism mobility · Post-pandemic times

7.1 **Introduction. Human Mobility in Post-Pandemic Times**

When the evolution of geographical thought is analysed, we identify trends and paradigms that are closely related to the evolution of science, philosophy, culture, and the great socioeconomic transformations in the history of human beings (Taylor 2015). In the case of human mobility, it has always been associated with Geography, either studied by geographers or with geographical perspectives since the beginning of time.

Cartographer and demographer Ernst Georg Ravenstein, in the late nineteenth century, was among the first ones to describe migration in "The Laws of Migration" (Ravenstein 1885) to explain both internal (rural to urban) and international migration. His gravity model remains the foundation for migration theory (Poot et al. 2016). Wilbur Zelinsky's hypothesis on mobility transition (Zelinsky 1971) led geographers to interrogate the linkages between mobility, demographic change, economic growth, technological innovations, and community resilience in different places and times (Cook et al. 2018). Finally, based on economic development and

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social conditions, the sociologist Immanuel Wallerstein approached world geography through the post-Marxist World Systems Theory, dividing the countries into core, semi-periphery, and periphery, and explaining migration flows often from lower rank countries to higher-ranked countries (Wallerstein 1974). Their insights guided the way of Geography, contributing to the advancement of migration theory until the last decades of the twentieth century and into the twenty-first century.

At that moment, the so-called *new mobilities paradigm* was formulated by such prestigious sociologists as John Urry, Thomas Faist, Kevin Hannam, and Mimi Sheller who placed human mobility at the heart of the social sciences, incorporating advanced critical thought regarding complex systems of social, cultural, economic, and political movement in reference to processes of technological innovations, globalisation, climate change, citizenship, and tourism. Also known as the mobility turn, many geographers (Tim Cresswell, Michael Hall, Daniel Hiernaux, Aharon Kellerman, Armando Montanari, Allan Williams, among others) have cultivated this perspective of analysis by reflecting on the assumptions underlying the nexus between social and spatial movement, dealing with the different mobilities of human beings and their interdependencies. Closely related to this paradigm, these authors have also echoed the importance of place and transnational spaces, as people today live in one place, in several places in succession, in several places at the same time, or in "no-place". This makes the geographical perspective essential in reflections on human mobility flows. For this reason, the objective of this contribution is to claim the role of Geography, proposing different thoughts on some of the central issues in human mobility studies.

There is no doubt, moreover, that the perspective of mobility as a subject and object of geographical interest is closely related to globalisation (Montanari and Staniscia 2016). The increase in the possibilities of displacement is a distinctive condition of the context of current globalisation, which has been expressed as a goal and condition in the most diverse dimensions, such as the circulation of goods, capital, information, and people. In this vein, Cresswell (2006) argued that human mobility, in the context of globalisation, is practised as a way of existing in the world; Engbersen and Snel (2013), Castles (2016), and Domínguez-Mujica and Díaz-Hernández (2019), adopting Zygmunt Bauman's concept of fluidity, used the term liquid migrations to refer to more flexible and unpredictable forms of human mobility; Göler and Krisjane (2016) referred to "elusive migration systems" with the same intention. Nevertheless, this framework does not prevent the certainties we have achieved, placing Geography at the forefront of critical thinking, from being shaken by circumstances that only a few academics could have foreseen.

The international economic-financial crisis that began in 2008, the so-called Great Recession, one of the periodic crises of capitalism has marked a turning point in the reorganisation of the production system and international relations on a planetary scale, with a disparate temporal and territorial impact. The origin of this crisis lies in its socioeconomic structure, and we have, therefore, continued to interpret the effects of the capitalist mode of production; to speak of globalisation and glocalisation; to refer to the strength of information and communication technologies; to explain the transformative capacity of tourism; to recognise the impetus of urbanisation; to be

puzzled by the management of migration and refugee movements; and to be alarmed by the consequences of the climate crisis (Borja and Castells 2013; Fulger 2015; Harvey 2014; McCarthy 2015). However, only very few scientists thought that the patterns of epidemiological transition could be altered and that a major pandemic, such as COVID-19, could occur (Manzano et al. 2020). This caused not only the loss of many human lives and severe socioeconomic effects, but also resulted in transformations of human mobilities around the world, as the spread of COVID-19 made it clear that the world is globalised (Antràs et al. 2023).

Just as financial flows have moved faster than humanity could have imagined three decades ago, the pandemic spread at an unprecedented speed and geographical dimension. This necessitated the containment of movement through norms and citizenship policies that were established for a world very different from the one we live in. During the pandemic (im)mobility gained ground and, in the words of Armando Montanari, honorary member of the IGU Globility Commission, "the society of flows became solid" (2021).

At this point, it is worth wondering whether we will return to the situation of mobility pre-COVID-19 disease or whether, on the contrary, the feeling of vulnerability associated with it is generating changes, not only in population movements for reasons of work, study, or tourism, but also in human relations and in the norms of citizenship. The experience of more than two years of the pandemic with restrictions on movement has given rise to new bodily practices, new understandings of self and others, and altered social dynamics at various scales. These restrictions have also led to the emergence of new inequalities and other forced displacements linked to the struggle for the control of energy and mineral resources, exacerbating longstanding disparities, as evidenced by the geopolitical conflict between the Russian Federation and Ukraine. This also occurs in a world in which climate change continues to cause the migration of hundreds of thousands of people in search of environmental conditions that allow them to survive. Consequently, the post-pandemic times force us to re-understand the world we live in and the role that mobility plays as an instrument of connection between spaces and societies. Given that mobility transformations are reshaping people and places in diverse ways, a rethinking of the global complexities of mobilities nowadays is more relevant than ever before for a comprehensive understanding of the planet in the Anthropocene.

To this end, the members of the Steering Committee of the IGU Globility Commission reflect in this chapter on some key issues, namely: (i) the complexity of drivers in human mobility (Maria Lucinda Fonseca and Wei Li) linked to (ii) the persistent inequalities between the Global South and Global North (Daniel Göler and Susana Sassone). They also look at (iii) the migration-development nexus (Dusan Drbohlav and Comfort Ogunleye-Adetona) and identify (iv) the transformative role of youth mobility (Zaiga Krisjane and Cristóbal Mendoza). Finally, they broaden (v) the conventional tourism scheme with the new conceptual model in search of a sustainable planet (Gábor Michalkó). In the final section, Barbara Staniscia traces the lines of research promoted by the Globility Commission in the last twenty years.

The topics covered in this chapters do not solve all the doubts about human mobility in the age of the Anthropocene but allow us to further strengthen the validity of this paradigm in post-pandemic times; the selected topics are among the most outstanding ones in the current scientific debate concerning human mobility.

7.2 Topics, Scope, and Perspectives of the Research in Human Mobility

(a) The Geographical Perspective in Human Mobility: Migration and Mobility Drivers

Human beings have been mobile since the beginning of our species—move to seek food and shelter, better work and life, family reunification, intellectual pursuit, or professional training. Such mobility, or lack thereof, could be explained through different drivers and motivations influenced by cultural, demographical, economic, political, or societal factors. The migration decision-making process is complex and highly context-dependent (Czaika and Reinprecht 2020).

Recently, migration studies tended to use the concept of 'drivers of migration' in attempting to overcome conventional, often deterministic thinking (Van Hear et al. 2018; Czaika and Reinprecht 2020; IOM 2020). Drivers of migration are defined as a "complex set of interlinking factors that influence an individual, family or population group's decisions relating to migration, including displacement. The concept [...] is dynamic, reflecting an interaction of personal, social, structural, environmental, and circumstantial factors working in tandem with local, national, regional, and global level incentives and constraints" (IOM, 2019, 58).

From this perspective, economic factors, namely employment opportunities and working conditions, have been historically the main driver for labour migrations (Van den Broeck 1996). In addition, they also affect the secondary and primary movements of those who migrate involuntarily, such as refugees (Fasani et al. 2020). On the other hand, the development of modern communication and transportation technologies has broadened the accessibility to distant places promoting travel and the subsequent growth in tourist flows. Those transformations led to different mobility regimes and temporalities, with the increasing relevance of impermanent and circular migration, new forms of family arrangements, and transnational and translocal lives. Therefore, as claimed by the *new mobilities paradigm*, an interlinkage between the flows generated by an economic motivation and those generated by a recreational motivation can be established, being the production-led mobility inseparable from the consumption-led one (Domínguez-Mujica and Montanari 2022).

Otherwise, as the access of the poorest populations to digital communications expands and the knowledge of the differences in economic opportunities and quality of life in distinct parts of the world increases, the propensity to emigrate also tends to be greater (McAuliffe 2021). Moreover, smartphones have become part of a fundamental toolkit for managing border crossing, arrival, and asylum, and also had the potential to function as tools for mobilising migrants' struggles and resistance (Trimikliniotis et al. 2015). In this way, the different capacities for economic growth

or worsening of the recession, in different locations and the economic and social inequalities that result from them, will certainly increase the migratory pressure to the well-off countries and regions. Simultaneously, the contraction of the overall economy will probably lead to more restrictive immigration policies and the expansion of populist anti-immigrant sentiments. Sudden geopolitical events, such as the Russian Federation-Ukrainian conflict, natural disasters, and pandemics can cause differential impacts and migration outcomes. War, famine, or disaster can originate major exodus as internally displaced populations or economic or political refugees.

A pandemic, such as COVID-19, caused sudden immobility that hauls short-or long-distance travel as the result of border closure, or lockdown of life and commute, while digital technologies contributed to reinforcing digital nomadism, a symbol of flux, hybridity, and mobility in a globalising world (Richards 2015). Paradoxically, the pandemic, which contained many international flows of travellers, favoured residential relocation and nomadism linked to teleworking (Parreño-Castellano et al. 2022). Therefore, the consequences of the pandemic on national and regional economies, labour markets, the expansion of teleworking from home, and the increasing use of digital technologies are reshaping the main drivers of internal and international migration (Martin and Bergmann 2020; Gamlen 2020). However, they will not affect all the potential migrants in the same way, because the decision to migrate varies according to the migrant's motivations and employment status (Beets and Willekens 2009), making it difficult to anticipate how migration and mobility will evolve after the pandemic since it will depend on the combination of several factors that can generate contradictory effects.

As a result of these circumstances, in addition to the impacts on the dimension, composition, and temporality of migration flows, the effects of the health crisis can also cause an increase in irregular migration, changes in the chosen destination, and migratory routes. The growth observed in 2021 of irregular migrations to Europe, from North African countries, strongly affected by the income decline generated by a paralysed tourism activity, or from Latin America to the United States, together with the sharp drop in legal migration flows, confirm this trend (ICMPD 2022). Furthermore, it should be noted that the aspirations and capabilities to implement the migratory project are very diverse, so restrictions on mobility and international migration do not involve all types of migrants in the same way (labour, highly qualified, students, lifestyle, or other forms of privileged migrants), especially affecting less qualified immigrants (De Haas et al. 2019). On the other hand, even if immigration restrictions are tight and economic opportunities are scarce, the existence of well-established migration networks and a 'culture of migration' may be perpetuating migration (Massey et al 1993; Czaika and de Haas 2017).

(b) Human Mobility Between the Global South and Global North: Migration Aspirations and Capabilities in the Light of Persistent Inequalities and Vulnerability

The globalising world is facing growing multidimensional economic, social, and political inequalities. They affect both human mobility and immobility. International organisations, nation-states, and even local communities are concerned about the

social polarisation and spatial disparities, which are the main root causes and determinants of migration between the Global South and North (Sassone and Yépez de Castillo 2014).

From a critical position, we must question the rigidities of some core categories that are persistent in contemporary migration studies and, maybe much more, in migration policies, i.e., the distinction between internal vs international, temporary versus permanent, regular versus irregular, labour versus refugee, and voluntary versus involuntary migration—shady dialectics that were recently labelled as 'categorical fetishism' (Crawley and Skleparis 2018). In reality, the categories and drivers are diverse and often overlapping, and they open a new field of dialogues and discussions.

Large parts of the world suffer from critical constellations of vulnerabilities, defined by unfavourable political and/or socioeconomic situations, impacts of armed conflicts, pandemic effects, and consequences of climate change, among the main ones. Far too often, these factors are strongly interrelated and perpetuating. Human mobility is one of the strategies for individuals, households, and communities to cope with risks like those and to migrate, be it within the Global South or in a wider context.

From a theoretical point of view, scholars realise more and more that thinking and explaining in (neo)classical schemes with gravity and push–pull models or utility and opportunity assumptions are no longer feasible. Agency and structure are still important, but they must be rethought beyond new conceptual frameworks. Recently, de Haas (2021, 1) inspired the debate by conceptualising "migration as a function of aspirations and capabilities". That framework advances in the analysis of Human Mobility as an intrinsic part of the vast process of social change, in relation to the perceived geographical opportunity structures. Based on positive and negative liberty conditions, external constraints and individual capabilities form a theoretical matrix with four migration categories (ibidem, 27): precarious, distress, improvement, and free migration. All of them entail different degrees of freedom regarding the decision to migrate or not.

Precarious migration occurs often within the Global South, mostly short-distance, and performed by those undocumented and the poor that are vulnerable, while free migration refers mainly to the relatively unconstrained movements between rich countries of the Global North or those moving from Global North to Global South as expats or self-initiated for job opportunities. Migrants have the capability to move as they are skilled workers, lifestyle migrants, students, etc. These considerations are slightly similar for improvement migration, which refers to impoverished people with the freedom to move but generally limited capabilities. With a little bit of phantasy, we can locate migration from Global North to South here, as observed in the wake of the global financial and economic crisis starting in 2008 when young qualified returned due to deteriorated living conditions (Sassone and Yépez de Castillo, 2014). If we look at the most recent migration crisis in and around Europe, distress migration may apply best as is the case in Syria starting in 2012 or in Ukraine in 2022. Staying is no option due to life-threatening circumstances in some regions of the world; as they have the resources to migrate and obtain a legal status abroad, hundreds of thousands

of women and children leave Ukraine as refugees, leaving men at home and living with great uncertainty how long this state of forced family separation will last.

All examples demonstrate the multifaceted aspects of decision-making and migration. Those who have certain levels of freedom choose their destination according to their aspirations and capabilities and may move from A to B directly. Others enter a long-term migration trajectory, moving at least three times (named by Wee and Yeoh 2021, serial migrants), and then, in many cases, the one and only driver of migration cannot be identified; the same is true for the wide-spread assumption of an ex-ante predefined destination of migration. In fact, migration trajectories, especially those connecting the Global South with the North, include rethinking and new decision-making *en route*, possible redirections of the journey, back-and-forth movements and sometimes getting stuck in unfavourable risky places. Migrant's decisions are not set in stone. They are subject to permanent change, depending on the migrant's changing assets of aspirations and capabilities.

Beyond national and international labour migration (which still covers the main part of global migration), migration studies have to accept that drivers of migration are getting more diverse and that migratory movements are becoming long-term trajectories that include phases of mobility and immobility. Consequently, migration became a substantial part of many individual biographies. Migration policy and the public should consider that the volatile circumstances of "elusive migration systems" (Göler and Krišjāne, 2016) make migratory movements hard to predict regarding their volume, directions, and destinations.

(c) Migration-Development Nexus with Special Regard to Remittances

Over the years, migration has been a key component of population shift and development in many emerging countries, as has been identified by the United Nations Sustainable Development Goal 10. Migration generally has significant development implications and may have a positive or negative impact on migrants' and their families' livelihoods depending on a variety of conditions in both the origin and destination areas. Internal rural—urban migration can significantly affect people, places, and development by improving their adaptive capacity under certain circumstances; however, it can also damage livelihoods if not properly planned and managed (Skeldon 1997). The same might be said about international migration movements.

Migration is a complex phenomenon and cannot be explained by a single theory. Obviously, there are growing calls to better understand it as a process that can contribute to alleviating both socioeconomic inequalities, political oppression, or, environmental adaptation, while, at the same time, boosting the development of the countries of origin of migrants. There is a need for new research activities and policy debates that will be centred on whether and how migration might contribute to beneficial human development outcomes (Hoffmann et al. 2019). Since the 1960s, the human migration—development nexus (Bastia and Skeldon 2020) focused on diasporas, brain drain, and financial remittances; later social remittances has represented a platform where the above concerns were materialised.

According to the World Bank, financial remittances (FR) are the sum of personal transfers and compensation of employees. From a pragmatic definition, FR are the

money sent (or brought) to family members in a migrant's home country by a migrant from a destination country. The officially documented remittances do not cover any informal transfers (outside formal financial institutions) and in-kind remittances. The size of informal transfers is not marginal at all and makes remittances' statistics underestimated (de Haas 2012). Despite this, for many less developed countries, FR represent an important financial inflow because "remittances underpin the livelihood and survival strategies of over 1 billion people" (Guermond 2021, 2). In 2021, remittance flows to low- and middle-income countries were expected to reach \$589 billion because, notwithstanding the COVID-19 pandemic, these flows demonstrated their resilience and decreased less than expected in 2020, registering a robust 7.3 percent growth in 2021 (World Bank 2021).

Research on conditionalities and impacts of FR upon destination societies is complex and not fully developed; it presents several ambiguities since remittances' production, circulation, and adoption are not only financial and economic issues; they have their own social, cultural, and symbolic meanings. Importantly, geographies of finance and market making, labour geographies of remittance households, and the political economy of financial subordination should be studied from a transnational perspective (Guermond 2021). We lack an entrenched theoretical framework to lean on. In any case, FR represent over time a very stable and effective, directly targeted financial source, nevertheless, often not reaching the poorest people and/or countries and regions.

Whereas FR flows importantly contribute to the improvement of individual and family livelihoods—while also often substituting the role of dysfunctional public social policies—at a macro-societal level their role is less convincing, unclarified, and even negative. There is a need to continue to further explore the migration-remittances nexus while also trying to help cope with concrete problems in the field—like, for instance, by making remittances' recipients spend more for investment *vis-a-vis* consumption, bringing down the financial transaction price and, beyond the rent-seeking perspective, decreasing the reliance on migrants' remittances via developing more prosperous and democratic societies.

The concept of social remittances (SR) is quite new. According to Levitt (1998, 927), SR are "the ideas, behaviours, identities and social capital flow from receiving—to sending country communities". Sometimes, also know-how, practices and skills, mindsets, worldviews, values and attitudes, and norms of behaviour come explicitly into play with the term SR (Markley 2011). Occasionally, political remittances are analysed separately. Levitt (1998) divides SR into (a) normative structures (ideas, values, and beliefs), (b) systems of practice (actions shaped by normative structures), and (c) social capital. SR have gradually become an integral part of the migration—development nexus and its discourses.

Research activities in the field of broadly defined SR concern a wide spectrum of subtopics and studied regions/countries; the concept is still new and internally diversified, fragmented, and underdeveloped in terms of conceptual, methodological, and methodical aspects (Boccagni and Decimo 2013). Besides continuing to study SR in close relation to transnationalism, analysing who (with which characteristics and qualities) and how (through which modes) transmits SR, the question of the impacts

upon the country of origin seems to be crucial. In addition to the individual migrant's micro-behavioural patterns, macro-context structures (institutions, history, culture, geography) also matter and do influence SR flows and their spread. Consequently, more research is needed on how to strengthen the SR influence "by scaling up to other levels of government and scaling out to other domains of practice" (Levitt and Lamba-Nieves 2010), as well as processes of re-migration and return.

(d) Mobility, Youth, and Freedom. Is Mobility an Attribute of Youth Identity?

International student mobility (ISM) is a critical educational tool for increasing students' multicultural competence and labour market potential. Over the last few decades, there has been a surge of interest in ISM in the literature (e.g., Van Mol et al. 2021). Students' decisions to study overseas may be due to limited university options in their home countries (e.g., lack of specialised study programs) or to the wish to explore the world outside their home country. Still, non-academic reasons (e.g., desire to live abroad) might also have relevance in such decisions. Even if international studies serve as a means of securing future employment, many students prefer to travel abroad for the sake of enjoyment and adventure. International students might choose to go to a new country for a different lifestyle, influencing whether or not they will stay in these locations after graduation (Prazeres et al. 2017). Furthermore, many international studies offer greater job chances after graduation because they provide the possibility of building social and cultural capital, and this fact may expand the labour possibilities back home (Baláz and Williams 2004).

"Although the literature has amply explored education-work transitions among young graduates, it has rarely studied post-study transitions associated with international migration" (Mendoza, Ortiz, and Oliveras, 2019, 961). It, therefore, remains unclear how young graduates perceive, experience, negotiate, and manage complex personal and employment transitions abroad. Furthermore, it has been claimed that young people no longer follow common and predictable transitions towards adult life to the same extent as in the past "but instead move between status positions and occupational activities in complex ways" (Frändberg 2015, 554).

In this regard, (further) migration can be caused by a mismatch between supply and demand in qualified jobs that hampers young graduates' access to stable, skilled jobs that are "reserved" for older people and more experienced workers. In other words, the economic structure may push away young people towards secondary labour markets, seriously affecting their options for upward labour and social mobility. Young people in countries with highly regulated labour markets and a supply of highly skilled workers, such as Spain and Italy, are at a clear disadvantage when it comes to looking for a job, and when they manage to succeed in this, their jobs tend to be precarious, unstable, and badly paid. In these contexts, international migration is a plausible option (Mendoza et al. 2020).

On the other hand, an increasing number of young people are embarking on short-term international migrations in search of a "global experience" while postponing their transition to adulthood and consequently their full incorporation into labour markets. The literature on middling migrants helps explain these transitions since it focuses on young graduates at the early stages of their careers. This stresses individual

characteristics (e.g., human capital, a moment in the life cycle) and preferences, as well as adventure, self-achievement, and the desire for an international experience, to explain migration undertaken before full adulthood (Wiles 2008).

Indeed, mobility has become an important marker for youth in many global contexts, being used the term of mobile transitions to describe "transition pathways under conditions of mobility" (Robertson et al. 2018, 203). And these last produce new experiences, memories, feelings, and identities through their life course. Similarly, the concept of "liquid migration" appears to be useful for explaining some young people's migration projects, as defended by King 2018, 5. So, it has happened with research on intra-European migration among young people trying their luck in new and multiple destinations, benefiting from open borders and open labour markets (Engbersen et al. 2010; Bygnes and Erdal 2017).

(e) Mobility Within the Context of Total Tourism

The economic and social impact of the COVID-19 pandemic has shown the extent to which tourism has become a way of life for humanity in the twenty-first century (Fotiadis et al. 2021). In fact, it is most likely that tourist mobility enhanced the global spread of the coronavirus in just a few months. While in 2019, there were nearly one and a half billion international tourist arrivals; by 2020, cross-border tourist flows declined to around 380 million (74%) due to fears of contracting the virus and restrictive measures (World Tourism Organization 2021). Most actors in the tourism industry were in a state of extreme crisis, and the lack of environmental change provided by travel created psychological challenges for societies. The lack of demand had a negative impact on many segments of the economy due to the multiplier effects of tourism, which also affected households through employment struggles. Tourist mobility has been breaking records every year since 2010, therefore, the sudden halt caused by the COVID-19 epidemic and its diverse consequences confirmed that tourism has entered its "total" period in the twenty-first century. According to the latest UNWTO World Tourism Barometer, international tourist arrivals almost tripled from January to July 2022 (+172%) compared to the same period in 2021, meaning that the sector stood at almost 60% of pre-pandemic levels. This steady recovery reflects the strong pent-up demand for international travel, as well as the easing or lifting of travel restrictions to date (as of September 19, 2022).

Three periods have characterised the history of tourism development: (i) the intracontinental period, from the advent of Thomas Cook (1841) to the 1960s; (ii) the global period, the second half of the twentieth century; and (iii) the "total" period, as we may consider the present time (Michalkó–Rátz 2019). Every epochal change has been induced by the symbiosis between the emergence of technical achievements and changes in consumer demands. Tourist mobility has been transformed by the combination of the urbanising society (railways), the consumer society (jet aircrafts), and the experience society (digitalisation). Between 2000 and 2019, the number of international tourist arrivals doubled, with the result that experiential demand not only spread across the planet horizontally, but also vertically. In the era of total tourism, (i) popular destinations suffer from the phenomenon of overtourism, while previously almost unknown places garner interest among tourists; (ii) demand extends beyond

the tourist centre of a destination and spreads capillary-like to the locality and its surroundings; (iii) there is hardly any segment of society that is not involved in the tourism industry, either on the supply or on the demand side; (iv) both municipalities and governments pay special attention to tourism and try to allocate as many resources as possible to tourism development.

The term "total", borrowed from the vocabulary of military science, is the best way of describing this stage in the history of tourism, as it expresses the fact that the tourism industry is no longer just a set of services designed to serve leisure activities, but an organising force that permeates almost every segment of the social, economic, political, technical, and natural environment. The following changes have served as catalysts for the transition of tourism from its conventional function: (i) digitalisation, in particular, the use of internet-based booking and rating systems and travel apps on smartphones; (ii) partly related to this, the proliferation of social media platforms as experience-sharing, travel promotion platforms; (iii) the democratisation of air travel with the emergence and market penetration of low-cost flights; (iv) the increasing popularity of the sharing economy, the explosion of Airbnb accommodation; (v) the never-ending expansion of the experience apparatus (Dallen et al. 2022). Of course, these trends, together with each other and other social and economic processes, shape the nature of tourism.

Not even estimates are available of the global volume of tourist mobility, as international tourism measurement methods and databases are not necessarily uniform, and counting domestic tourism is downright "mission impossible". Measuring tourist flows by focusing on border crossing points and registered accommodations is far from providing a complete picture of the real volume of demand, with a growing amount of so-called invisible tourism (Rátz et al. 2015). It is not possible to register domestic and cross-border trips of less than 24 h, but trips with a minimum stay of one night are not necessarily registered in official accommodations that would be a part of the observed metrics either. Cross-border shopping trips, short-haul trips for certain health services, day trips to popular tourist destinations, the use of a private weekend home, or staying overnight at the home of a relative or friend living abroad all reflect uncounted mobility under the umbrella of tourism.

The link between the Anthropocene and tourist mobility is not new (Gren and Huijbens 2014). The negative environmental impacts of tourism have been evident since the dawn of travel, with regional problems becoming national, then continental, and then global. After conquering water and land, the next step was the sky. Carrying hundreds of millions of travellers, cruise ships, diesel locomotives, kerosene-burning aeroplanes, cars, and buses can be considered the ecological time bombs of tourism as well as the level of water consumption. The biggest challenge to sustainability is not the volume of tourist mobility per se, but the dramatically changing nature of tourism and the rate at which demand for tourism is growing year on year. The solution may be the spread of the responsible travel paradigm for sustainable development (Tanja et al. 2021). The relative lull during the pandemic has shown what the environment gains from a drastic reduction in tourism, however, it also shined a light on the losses society and the economy must face.

Conclusions: The Global Change and Human Mobility Commission: Twenty Years Promoting Scientific Achievements in Theory and Practice

Globality—Global Change and Human Mobility was created in 2000 as one of IGU commissions. As of today (April 2022), it has 197 members from 53 countries. It was born from the theories revolving around revisiting the concept of human mobility following global changes (Montanari and Staniscia 2016). The mobility of people has lost the characteristics that had been characterised by the traditional division, namely the traditional classifications of migration and tourism. Mobility has acquired new forms providing: (i) multiplicity of mobility—mobility for production and mobility for consumption; permanent mobility and temporary mobility; mobility on an international, national and regional scale; free mobility and forced mobility; unidirectional, circular, return mobility; (ii) multiplicity of players with different characteristics representing different segments—young people, elderly, women, citizens of the Global South and those of the Global North, residents of core areas and those of peripheral areas; (iii) multiplicity of effects and impacts—regarding spatial such as regions of origin/departure and regions of destination/arrival, on individual practising mobility, and those related to global in terms of connections and international networks, tangible or intangible.

In over twenty years, Globality and its members have attempted to cover all those thematic areas and to follow their evolutions resulting from changes in global scenarios; among the latter, the economic-financial crisis that began in 2007–2008 and the pandemic crisis that originated in 2019–2020.

Some of the topics covered are:

- Changes in mobility after the end of Socialism (e.g., Baláz and Williams 2002; Kolossov and Galkina 2002, 2006) and Apartheid (e.g., Maharaj 2003; Manik et al. 2006).
- Changes in mobility resulting from new modes of production and consumption (e.g., Claval 2002; Venier 2002; Verquin 2002; Montanari 2005, 2010, 2012; Illes 2006; Brusa and Papotti 2011; Ishikawa 2011; Montanari and Staniscia 2011; Williams et al. 2012; Parreño-Castellano and Domínguez-Mujica 2016).
- Analysis of human mobility in relation to the local dimension (e.g., Salvà Tomàs 2002, 2003; Jansen and Bazargur 2003; Staniscia 2005; Michalkó and Rátz 2006).
- Female mobility (e.g., Domínguez-Mujica and Guerra Talavera 2005, 2006;
 Raghuram and Montiel 2003; Wickramasinghe 2002).
- Youth mobility (e.g., Lash 2003; Chikanda 2003; Staniscia 2012, 2018; Fonseca et al. 2016; Montanari and Staniscia 2017; Pumares et al. 2018; Staniscia and Benassi 2018; Staniscia et al. 2021).
- Urban changes linked to different types of mobility (e.g., Glorius and Friedrich 2006; Hatziprokopiou 2006; Montanari and Staniscia 2006, 2011; Domínguez-Mujica 2021).
- Changes in mobility linked to economic and financial crises and their spatial impacts (e.g., Ishikawa 2003, 2011; Montanari 2010; Brusa and Papotti 2011; Montanari and Staniscia 2011; Tömöri and Süli-Zakar 2011; Domínguez-Mujica et al. (2016); Glorius and Domínguez-Mujica 2017).

Cross-border mobility (e.g., Clark 2002; Laroussi 2002; Godenau and López-Sala 2016).

The health crisis linked to the global spread of SARS-CoV-2 and the geopolitical crisis linked to the conflict between the Russian Federation and Ukraine are characterising the beginning of the third decade in the twenty-first century. The consequences in economic and social terms on a global scale are negative and severe. Human mobility has been strongly influenced, resulting in an extremely difficult and reduced state. Even if there is no complete agreement among scholars on the future of global-scale mobility in its order of magnitude, it can already be predicted that, when the crises will be over, it will be significantly reconfigured. In this sense, it is essential to think about the consequences of climate and environmental changes, not only because of their effects on the displacement of populations and tourist trends, but also for the increasing vulnerabilities facing (im)mobilities. Studying human mobility reconfigurations linked to the advance of digital capitalism will also be necessary; the entangled production-led mobility/consumption-led mobility has never been so evident as in the new forms of digital nomadism in this stage of the Anthropocene.

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