

REPORT FROM A PRELIMINARY RESEARCH TRIP TO NORTH-WESTERN MEXICO¹

This short selective report is the result of a study trip to the state of Chihuahua in north-western Mexico. In it I will try to summarize the assumptions, highlights, central concepts and meetings with key people. I refer to this study trip, carried out from September 15 to October 7, 2021, as preparatory and return fieldwork. The main motive of the trip was to map the terrain and prepare the ground for a new anthropological project. At its core will be an ethnographic investigation of local biodiversity, its negotiation, local knowledge related to the conservation of natural resources, and the responses of local actors to environmental change and the violent destruction of their territories by external actors.² I refer to it as recoverable because I conducted research there in 1992, 1996 and 2001. At that time, research visits were conducted almost exclusively in Tarahumara (Rarámuri) communities, the largest indigenous ethnic group in north-western Mexico. These three long-ago research visits produced first a master's thesis (1998), and later a dissertation (2007) and several texts published in the faculty journal *Urban People* (2010). They also served as chapters in a collective monograph (2010), and finally a monograph based on my dissertation, which I expanded and revised as a book (2019).³ I have

recently completed a study in which I return to these three periods of field research, mainly on a methodological level, describing and analysing the gradual transformation I have undergone as an anthropologist and ethnographer over a period of more than thirty years. In the conclusion of this text, I briefly outline the main focus of future larger-scale research.⁴ Twenty years have passed since my last in-depth ethnographic research in the Tarahumara communities of the Ejido Munerachi,⁵ so one of the goals of the trip was to renew old

ethnic Groups of Northwestern Mexico, MA thesis defended at the Institute of Ethnology, Faculty of Arts, Charles University in 1998; *Tarahumara/Rarámuri in Mexico: From Caves to Ejido*, (PhD Thesis), defended in the same department in 2007; "Ritual compadrazgo as an Instrument of Interethnic and Social Adaptation among the Rarámuri in Northwestern Mexico and its Possible Correlations to Local Political Events", *Urban People / Lidé města* 8/1, 2010, pp. 331–384; "Social Adaptation of the Tarahumara in Northwestern Mexico in the Context of Local Ecology", in: Vendula Hingarová et al. (eds.), *Mexico: 200 years of independence*, Červený Kostelec: Pavel Mervart, 2010, pp. 151–170; *Lost in Canyons and on Ranches: Social and Ecological Adaptation of the Tarahumara in Northern Mexico*, (expanded and revised version of dissertation), Prague: TOGGA, 2019.

¹ This study trip was funded by the Progress Q 22 *Anthropological Studies in the Natural Sciences, Humanities and History* programme with variable symbol 20602219 under the project *Sierra Tarahumara as a biodiversity hotspot: local knowledge and environmental change*.

² The working title of the project, which I plan to submit to the GACR (Grant Agency of the Czech Republic) competition in 2023, is *Glocalization of Local Knowledge of Biodiversity Conservation in an Anthropological Perspective*.

³ These are: *Acculturation among the Tarahumara with a Brief Comparison with the Native*

⁴ The text, *Between "Chaos" and "Order": the Anthropologist and his Experience in the Changes of Time*, is published in the journal *Ibero-Americana Pragensia* 49/1, 2023, pp. 11–38.

⁵ The ejido is a complex socioeconomic, political, and ecological unit introduced in Mexico primarily after the revolution of the 1920s to integrate a dispersed rural of predominantly Indian origin. For a more detailed discussion of the genesis of the ejido in general and in the

contacts in the indigenous communities of this ejido, while another was to establish contacts in some new localities that I consider important for future research and in those Mexican institutions whose activities are related to the topic of my project.

In the long interim between my last research in 2001 and the exploratory trip in 2021, I conducted other non-European research on the east coast of Madagascar,⁶ but at the same time the idea of returning to the Tarahumara and conducting new anthropological research that would optimally link the two remote areas thematically gradually matured in me. While thinking about the new project, I came across Edward O. Wilson's book *The Diversity of Life* (1992, Czech translation 1995), among many others, in which the famous American naturalist discusses the concept of biodiversity and draws attention to its disappearance in relation to human activity. In one of the chapters, Wilson summarizes the eighteen biodiversity hotspots (hereafter BH)⁷ known at that time. The term BH was introduced into the scientific lexicon by the British environmentalist Norman Myers. In the environmental sense, BH are biogeographical regions with a considerable degree of biodiversity significantly threatened by human presence and activity. They are the areas that, from a global perspective, most urgently need protection: extremely threatened areas containing large numbers of endemic species, with less than 10% of their original range remaining or threatened with such decline within a few decades. The disappearance or severe threat to the diversity of such a region can lead to irreversible consequences, with the original landscape turning into barren desert, savannah,

etc. Thus, for me, as a social anthropologist, the key claim of both Myers and Wilson and other biologists, ecologists, and other natural scientists was that humans are strongly interfering with the natural environment. I began to gather literature on this concept and to study it more thoroughly. I soon discovered that the two areas in which I was conducting field research (Madagascar and north-western Mexico), which are otherwise quite different from an environmental point of view, were linked by the fact that they were successively classified as "hot spots". Myers initially identified ten of these BH exclusively in tropical areas, as he believed that it was in tropical rainforests that biodiversity was most threatened, but with other naturalists gradually expanded the group to the current number of thirty six, which also includes large areas in the oceans and seas, and occur on every continent except Antarctica.⁸

Long before the trip, I did a thorough search of studies that I would describe as an *anthropological turn to biodiversity*, going back to around the turn of the 1980s and 1990s. At the theoretical and methodological level, the pioneering work of Arturo Escobar in the field of *ethnography of biodiversity* is crucial to my research. Escobar pointed to the fact, which he also studied extensively in Colombian communities, for example, that in many parts of the world there are social movements developing their own (native) conceptions of biodiversity, its appropriation and conservation, and whose environmental policies differ from those developed by other major actors such as progressive intellectuals, NGOs, but also some indigenous leaders, advocating a more open approach to the outside (global) world, etc. One of Escobar's concepts of so-called *hybrid natures* is based on this approach, based on:

[...] a certain openness of local communities to the transnational apparatus associated with biodiversity and an attempt to

Mexican context, see HALBICH, *Lost in the Canyons*, 2019, pp. 239–245.

⁶ I conducted ethnographic research in Madagascar in 2011–2014 within the framework of the GACR project P410/12/P860 *Ecological Change in Madagascar: Betsimisaraka in a Globalized World*. The main output of the project is a book currently being completed, *The Transformations of the Big Island: Ecological and Social Change in Madagascar. Betsimisaraka in a Globalized World*, which will be published by Pavel Mervart Publishing House in Červený Kostelec.

⁷ First time in the article "Threatened Biotas: 'Hot Spots' in Tropical Forests", *Environmentalist* 8/3, 1988, pp. 187–208.

⁸ Russell A. MITTERMEIER et al., "Global Biodiversity Conservation: The Critical Role of Hotspots", in: Frank E. Zachos – Jan Christian Habel (eds.), *Biodiversity Hotspots. Distribution and Protection of Conservation Priority Areas*, Berlin – Heidelberg: Springer, 2011, pp. 3–22; Christian MARCHESE, "Biodiversity Hotspots: A shortcut for a more complicated concept", *Global Ecology and Conservation* 3, 2015, pp. 297–309.

incorporate different constructions of nature in negotiating with translocal forces in order to maintain at least a modicum of autonomy and cultural cohesion.⁹

This approximate characterization of hybrid natures has become one of the key epistemological concepts for my planned future research. While most anthropological research on biodiversity and local knowledge to date has focused on different ecosystems, ecological niches, microenvironments, protected areas, ethnoclimatology, etc., my project will focus on one or more BH, which from 2004 has included a large part of the Sierra Madre Mountains in north-western Mexico (*Madrean Pine-Oak Woodlands*).¹⁰ At the heart of the biodiversity here, with its high number of endemics, are the pine and oak forests (hence the name of this BH), which are one of the most important economic commodities of the region and the subject of conflicts between local (mainly Tarahumara) communities and regional urban centres such as Chihuahua, Cuauhtémoc, Creel and others, where political power, often linked to organised crime, is concentrated. Shortly before my trip to the Tarahumara communities, I came across a 2019 Amnesty International report on a series of murders of indigenous leaders and activists defending their

natural resources.¹¹ The very first days of my stay in Chihuahua showed that organized crime, consisting mainly of illegal pine logging and narcotics trafficking, is or could be the biggest obstacle and danger for future field research.

I would divide the three-week trip itself, which was to some extent influenced by the current epidemiological situation,¹² into two main parts: 1. meetings (face-to-face, online) with colleagues in academic institutions such as Universidad Nacional Autónoma de México (UNAM) in Mexico City, government institutions (e.g. Coordinadora Estatal de la Tarahumara), non-profit organizations and independent projects (Tarahumara Sustentable), and with people who are in regular contact with the local native population in the Sierra Tarahumara in Chihuahua; 2. A stay of approximately ten days in the Tarahumara communities of Ejido Munerachi (Munerachi, Retosachi, Sorichique communities) in the Lower Tarahumara, where I have conducted field research in the past; a five-day stay in two important Upper Tarahumara centers, Guachochi and Norogachi; and one transitional community between the Upper and Lower Tarahumara (Samachique), as sites I consider significant for my new project, which territorially will

⁹ Marek HALBICH, "From environmental determinism to a new ecological anthropology", in: Marek Halbich – Václav Kozina (eds.), *Reader of Texts from Ecological Anthropology: the Americas*, Praha: TOGGA, 2012, p. 49. Among the most important texts by Arturo Escobar in the field of ethnography of biodiversity and hybrid natures is "Comunidades Negras de Colombia: en defensa de biodiversidad, territorio y cultura", *Biodiversidad* 22, 1999, pp. 15–20, and "After Nature: Steps to an Antiessentialist Political Ecology [and Comments and Replies]", *Current Anthropology* 40/1, 1999, pp. 1–30.

¹⁰ In a major interdisciplinary publication on the origins and distribution of Mexican biodiversity, the authors argue that Mexico is the only country with "megadiversity" that was also one of the centres of the origins of agriculture see Thennilapuram Parasuraman RAMAMOORTHY et al. (eds.), *Biological Diversity of Mexico: Origins and Distribution*, New York: Oxford University Press, 1993.

¹¹ According to the report, *Caught between bullets and neglect. Lack of protection for defenders of the territory in the Sierra Tarahumara*, London: Amnesty International, 2019, more than ten Tarahumara leaders, environmental and human rights activists, the most famous of whom was Julián Carillo Martínez, were murdered between August 2015 and October 2018 in the small community of Coloradas de la Virgen alone, which has some 45 inhabitants. None of these murders have been independently investigated, and no one has yet been punished for these acts.

¹² Before the trip I had to have a negative PCR test for Covid-19, which I had to prove before boarding the plane in Prague. On all flights, including two domestic flights in Mexico, I had to wear an FFP2 respirator at all times. At the time of my stay, the Mexican authorities were no longer as strict as the Czech MFA website said, but on the streets of the capital or Chihuahua in the north of the country many people wore respirators, masks or even protective plexiglas not only in enclosed spaces but also on the street.

go well beyond the boundaries of Ejido Munerachi and Batopilas district.¹³

I spent the first two days in the capital, Mexico City, negotiating with several Mexican anthropologists who are conducting field research among the Tarahumara. One of them was Carlo Bonfiglioli, a professor of anthropology at the Autonomous National University of Mexico in Mexico City, whose main specialization is the anthropology of dance and its symbolism in a transcultural perspective. This experienced ethnographer and educator has been working systematically among the Tarahumara for more than thirty years, and most of his research has been concentrated in the native communities of the Upper Tarahumara, Tehuachi, Carichi or Sisoguichi.¹⁴ Carlo, in addition to providing me with valuable information about the current situation in the area, gave me the contact details of his best student, as he pointed out several times, José Alejandro Fujigaki Lares, whose name I had not known until then. I could no longer meet Alejandro in person or online due to lack of time, but I was at least able to download some of his texts based on his recent research among the Tarahumara, focusing on their deep connection

with the surrounding nature. On the eve of my departure from the capital to Chihuahua, during my regular internet research, I came across several texts by Enrique Salmón, a North American social anthropologist and ethnobotanist of Tarahumara descent, unknown to me until then, based at California State University, East Bay, with whom I am in email contact.

These three contemporary anthropologists were, at the time of my departure for Tarahumara, crucial to my planned research, and still are. Bonfiglioli, in particular, with his analysis of several Tarahumara dances, of which the *yûmari*, whose origins go back far beyond the arrival of the first Spanish colonizers in present-day Chihuahua, is probably one of the keys to understanding Tarahumara cosmology, and encodes the collective memory of the Tarahumara ethnic group, their history, but above all their relationship to nature and life in its complexity.¹⁵ Fujigaki Lares's recent research and, independently of him, the earlier but relatively little known research of Enrique Salmón, in turn, clearly show that the Tarahumara and all the environment that surrounds them (land, mountains, rocks, rivers, streams, trees, heavens and celestial bodies, all wildlife and domestic animals, etc.) are an inseparable, deeply connected whole. The concept of *iwígara*, ethnographically explored by Salmón, is probably the greatest inspiration for my research. Salmón characterizes it as a cognitive model of nature similar to Western notions of biodiversity/nature, but with the difference that Western cultural models separate humans from nature. The Tarahumara, and in various forms many other native (indigenous) ethnicities, treat the land (nature, environment) in ways that are **culturally encoded ethics of spiritual and practical knowledge and thought shaping access to their land**. Salmón convincingly points to the connection with the term *iwí*, which has multiple meanings among the Tarahumara. It means both the soul, in a broader sense the essence of all life, but also the breath, breathing. *Iwígara* thus expresses the continuous cycle of spiritual and physical life, the maintenance of physical, social, spiritual and mental health.¹⁶ Fujigaki Lares, in

¹³ In terms of methodology, the three previous research projects were based mainly on so-called stationary (single-sited) research, i.e. observations in a relatively limited area of one community or, in my case, one ejido. The new research will be based on other methods, such as multi-sited ethnography observing people, things, stories, conflicts, etc., in multiple places, or glocal ethnography focused, for example, on trying to know and understand how people's thinking and behaviour is shaped by local and global influences, etc.

¹⁴ The Jesuit missionary Joseph Neumann, who worked in Prague before leaving for overseas missions, was active in this area for over fifty years at the turn of the 17th and 18th centuries. He was the author of a chronicle of the uprisings of the Tarahumara Indians, whose Latin original has from 1730 been in the Department of Manuscripts and Rare Prints at the National Library in Prague. It is still a valuable historical and ethnographic source for understanding this largest North Mexican native group. For an ethnohistorical analysis of Neumann's Chronicle, see HALBICH, *Lost in the Canyons*, 2019, pp. 84–90.

¹⁵ Carlo BONFIGLIOLI, "El *yûmari* clave de acceso a la cosmología rarámuri", *Cuicuilco* 15/42, 2008, pp. 45–60.

¹⁶ Enrique SALMÓN, "*Iwígara*: A Rarámuri Cognitive Model of Biodiversity and Its

his recently published text, in turn shows how important the “ordinary” pine tree is for the life of the Tarahumara, which for the majority of Westerners, but also for the average Mexican, is, for example, a tree with long fragrant needles, one of the symbols of the Mediterranean coast, or at best a tiny part of biodiversity. For many Tarahumara communities, however, the pine tree and pine forests are literally of existential importance; they are considered relatives of the people and their care is a reflection of “the collective protection of the natural environment”.¹⁷ The Tarahumara also relate to other non-human actors in a similarly “kincentric” way,¹⁸ and their coexistence with them reflects their notion of themselves as “pillars supporting the world”.¹⁹

I spent approximately twenty days in the state of Chihuahua, mostly in the districts of Batopilas, Guachochi and Norogachi. Practically from the beginning of my return to Chihuahua, I was confronted with the current security situation. It was explained to me everywhere I went, how dangerous it was to travel, particularly to the regions of the Lower Tarahumara, which includes the district of Batopilas and the surrounding Tarahumara communities. Searching on the internet, I discovered that this region is part of the so-called *Golden Triangle*, an area that runs through three Mexican states (Chihuahua, Sinaloa, Durango), notorious for organised crime. I had to keep this circumstance constantly in mind prior to my planned movements between locations, and it greatly complicated and affected my logistics. Despite this serious problem, I managed to spend approximately one week in two of the four

important communities in Ejido Munerachi, right in the locations of my former fieldwork. My base for this short stay was the “Karí Owáame” (literally “House of Healing”) clinic recently established in the Retosachi community by the American composer Romayne Wheeler, who has lived among the Tarahumara since the early 1990s.²⁰ I attempted to acquaint Romayne thoroughly with my research project, and as a result he and several of his Tarahumara friends became my main informants for several days, helping me to map quickly the current environmental, economic, social, political, human rights and other situations in the ejido and the wider region. In my interviews and observations, I was most interested in whether it would be possible to study local knowledge of biodiversity and those concepts that are predominantly explored in Upper Tarahumara communities by Carlo Bonfiglioli, Enrique Salmón, José Alejandro Fujigaki Lares, and other anthropologists ethnographically. I wondered if these were more theoretical concepts that might not work in the field. Thoroughly walking in the land of the communities of Munerachi, Retosachi and Sorichique convinced me that not only the pine trees, but also the ubiquitous rocky surface, the small cornfields, and the almost dry beds of small streams, are so existentially crucial for the local inhabitants that their condition is negotiated in regular community meetings.²¹ At

Effects on Land Management”, in: Paul E. Minnis – Wayne J. Elisens (eds.), *Biodiversity and Native America*, Norman: University of Oklahoma Press, 2000, pp. 180–203.

¹⁷ In the language of rarámuri “napawika tibupo kawi” (José Alejandro FUJIGAKI LARES, “Caminos Rarámuri para sostener o acabar el mundo. Teoría etnográfica, cambio climático y antropoceno”, *Mana* 26/1, 2020, p. 16.

¹⁸ A term used by Enrique Salmón to express the kinship of the Tarahumara with all that surrounds them see Enrique SALMÓN, “Kincentric Ecology: Indigenous Perceptions of the Human-Nature Relationship”, *Ecological Applications* 10(5), 2000, pp. 1327–1332.

¹⁹ FUJIGAKI LARES, *ibid.*

²⁰ I met Romayne Wheeler by chance at the Votive Church in Vienna in the summer of 1989, then met him in November 1992 at the House of Culture in Creel, North Mexico, and then several more times in 1996 and 2001 when he hosted me at his “eagle’s nest”, as he calls his house in the Retosachi community on the edge of deep canyon Munerachi. Romayne is an iconic Sierra Tarahumara figure known far beyond Mexico. His concerts in the United States, Mexico, and numerous European and Asian countries continue to contribute to the development of Tarahumara communities, for which he founded the Tarahumara Relief Fund, even in his 80s. Approximately 450 Tarahumara families are now benefiting from this foundation and the availability of medical care by top Mexican medical professionals.

²¹ On September 25, 2021, several dozen people from this community and its neighbors gathered in the Retosachi community for a full day to discuss how to continue building small

these meetings they discuss ways of looking after these assets and how to protect them not only from climate change, of which the local people are very aware, but also from the encroachment of foreign companies trying to penetrate the Tarahumara communities for logging or to find new farmland, etc.

From the communities of Lower Tarahumara, I quickly moved by rental car to the two central urban centers of Upper Tarahumara – Guachochi and especially Norogachi. Guachochi is now a bustling mestizo town with a branch of the Coordinadora Estatal de la Tarahumara, a government organization whose main objective is to map the social, economic, health, etc. situation. It is also responsible for determining the financial assistance to families and individuals. Some of the most common problems that Coordinadora agents have to deal with throughout the Tarahumara territory are the annually recurring crop failures, especially of corn, sacred and crucial to Tarahumara culture, as well as the lack of potable and, locally, even utility water, diseases for which the locals have no cure, and illegal logging. These problems have led to relatively strong internal migration, even of entire families, to towns located both inside the Tarahumara habitat (Guachochi, Creel) and even further outside (especially Chihuahua, Cuauhtémoc, Ciudad Juárez, etc.). The situation is complicated by the fact that some of the Tarahumara men work for these timber companies, while others, according to the information I have received, are involved in various positions in organised crime, whose traces go far beyond the borders of the northern Mexican states, mainly to the United States and other Mexican regions. I was confronted with this reality at the end of this trip in Norogachi, where I spent the last two days before returning to Chihuahua city. On the one hand, there are people who live

canals and pools to hold water that could then be distributed to individual households. A large part of the meeting was devoted to how to deal with dead trees and how to care for the small pine and oak shoots, of which I saw hundreds in Retosachi and which the local people believe may be of great importance to them in the future. This collective concern for the surrounding nature is exactly in the spirit of the Tarahumara approach to their surroundings *napawika tibupo kawi*, mentioned by Fujigaki Lares.

in harmony with the *iwígara*, such as the former *selame* (mayor) of this community and the environmental activist Marcelina Bustillos Romero,²² while on the other hand, one can encounter individuals who thwart collective efforts to protect nature and fight for human rights, at best through their indifference, and at worst through their collaboration with narco-traffickers and other actors of organised crime.

My last day in Chihuahua was spent in a personal meeting with the staff of the Central Coordinadora Estatal de la Tarahumara, whose mobility covers all the Tarahumara regions. Perhaps working with this organization would allow me to move quickly between communities in an otherwise vast and rugged territory, interviewing indigenous activists and observing the activities of local societies in the context of a multi-sited ethnography. Even more important for my return research was an online meeting with biologist Manuel Chávez, who is now employed by CONAFOR (Comisión Nacional Forestal), a state organization that maps in detail forest management in Chihuahua and especially in the Sierra Tarahumara regions. Manuel Chávez was the principal researcher of the *Tarahumara Sustentable* project from 2014–2019, which primarily addressed the conflict between Tarahumara communities and illegal sawmills that plunder pine and oak forests, resulting in the loss of biodiversity and the disruption of entire ecosystems. A personal meeting with Mr. Chávez, his former collaborators on this project, and access to their archives will be a great help in understanding the complex issues of indigenous peoples' relationship with their environment and their resistance to external pressures to exploit it illegally.

To conclude, whereas in the past I have focused more on the social and ecological adaptation of a particular Tarahumara (micro)group in a more general (theoretical) way, the new research will focus mainly on how local communities respond to and think about biodiversity loss, how they negotiate it with other actors (local, regional and national politicians, companies focused on the exploitation of natural resources and their use in different industries, environmental activists, social movements, travel agencies, missionaries, etc.), and how they deal with biodiversity loss), but

²² In a brief personal interview, Marcelina clearly reported that the Tarahumara are “pillars supporting the world”.

also among themselves, as the perception of their own environment by indigenous actors varies, or may vary, within the same ejido or community. The pre-research trip helped me to clarify some ideas, themes and questions – e.g.: Can a better understanding of local biodiversity, the knowledge of which indigenous peoples have accumulated over many millennia, help to build a sustainable and appropriate future? Can the Tarahumara relationship to the environment lead to some more general ontological or existential turn that acknowledges or even questions the relatedness of human and non-human actors and contribute its part to a global discourse on saving the planet? Is the native ontology represented by the concept of *iwigara* also applicable in the areas of the Lower Tarahumara (or other places on the planet), where there are people whose life cycle is different, more

dependent on transhuman alternations of settlement and for subsistence linked mainly to the cultivation of sacred maize, beans, tropical and subtropical fruits, etc.? Although I plan to carry out my project through extended ethnographic research primarily in north-western Mexico, my intention is to conduct more in-depth comparative research using my findings from other BHs (Madagascar, Mediterranean, Mesoamerica, Tropical Andes) in combination with available sources reflecting environmental anthropological issues in other BHs of the Earth. I would like to submit the final version of the project to the GACR standard project competition in 2023.

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(Written in English by the author)*