SCHOOL OF TRANSNATIONAL GOVERNANCE

Where the most beautiful clouds pass: place attachment, voluntary immobility, and environmental risks. The role of Vanua, Fenua, and Watan Shirin.

Costanza Bindi

Thesis submitted for assessment with a view to obtaining the degree of Master of Arts in Transnational Governance of the European University Institute

Florence, 15 May 2023

European University Institute
School of Transnational Governance

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Supervisor
Professor Lorenzo Piccoli, School of Transnational Governance

Student declaration to accompany the submission of written work
School of Transnational Governance

I, **Costanza Bindi**, certify that I am the author of the work "*Where the most beautiful clouds pass*: place attachment, voluntary immobility, and environmental risks. The role of Vanua, Fenua, and Watan Shirin" I have presented for examination for the Master of Arts in Transnational Governance. at the European University Institute. I also certify that this is solely my own original work, other than where I have clearly indicated, in this declaration and in the thesis, that it is the work of others.

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I declare that this work consists of [10,950] words.

Signature:

Date:
15 May 2023

ACKNOWLEDGMENT

I consider it necessary to thank all those who contributed to this achievement.

First of all, I would love to thank my supervisor Lorenzo Piccoli.
Without your assistance and dedicated involvement at every single stage of the process, this work would never have been realised. Thank you very much for your support, care, and understanding over these months.

Special thanks go to my parents Gabriella and Giuseppe and my sister Diletta.
If I am celebrating this milestone today, it is also thanks to you. None of this would have been possible without your unwavering support, shown to me constantly throughout these years of preparation and study. This thesis is a testimony to your unconditional love and encouragement.

Finally, I must thank all my friends who have walked beside me.
Not only have you often been a source of inspiration and learning, but your smiles and caresses have also helped me to get through some of the more difficult moments.

ABSTRACT

This thesis explores the nexus between voluntary immobility, environmental risks, and the feeling of attachment to one's place of origin or residence. In particular, this research asks how place attachment contributes to the choice not to migrate despite the threat of environmental hazards. To do so, it offers a systematic review of the existing literature on three specific case studies (Fiji Islands, Tuvalu Island, and Bartang Valley in Tajikistan), as each of these areas has a particular indigenous term that exemplifies the strong sentiment of attachment we refer to in this work. These three concepts are as follows: *Vanua* for the Fiji Islands, *Fenua* for Tuvalu, and finally, *Watan Shirin*, which is typical of the Bartang Valley in Tajikistan.

The dissertation compares the three examples under consideration and for each one analyses in detail how place attachment manifests itself and how this factor influences the voluntary choice not to migrate. Finally, it concludes by highlighting the importance of taking this sentiment of attachment into account when assessing and managing the link between immobility and environmental change.

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INTRODUCTION

"I would rather die here. Without this piece of land that defines who I am, I am nothing."
- A Pacific Islander (Miller 2014)

The question that today motivates much of the current research on migration is both elusive and deceptively simple: "*Why do people migrate and where do they go?*". This question is of critical relevance also for the study of environmental migration, which is defined as "*the movement of persons or groups of persons who, for compelling reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their habitual homes or choose to do so, either temporarily or permanently, and who move either within their country or abroad*" ('MC/INF/288 - Discussion Note: Migration and the Environment' 2007). In fact, researchers often gather data on the number of people leaving their homeland due to various environmental phenomena (Clement et al. 2021) as they seek to explain environmental drivers and the places of origin and destination of these flows (Piguet, Pécoud, and de Guchteneire 2011). Among the countless reports observing these aspects, one of the most recent estimates that, by 2050, 216 million people will migrate as a consequence of slow-onset environmental factors and in the absence of concrete climate and development action ('Groundswell Report' 2021).

Thus, while much research in recent years has focused on the phenomenon of environmental migration, at the same time it has often overlooked the opposite situation, namely environmental non-migration, which is regarded as a "*spatial continuity in an individual's centre of gravity over a period of time and can be caused by a preference to stay or an incapacity to realise migration desires"* (Schewel 2020). Indeed, despite the fact that the majority of a country's population still imagines its relationship with place in sedentary terms and only a minority actually migrates (only one in 30 are migrants, which corresponds to 3,6% of the global population) ('Interactive World Migration Report 2022' 2022), there is still a lack of research on the phenomenon of non-migration and a tendency to underestimate the question: "*Why do individuals not migrate?*" (Mallick and Hunter 2023).

This, at least initially, might be linked to the fact that those who remain in areas affected by environmental changes appear to be beyond the purview of research on migration and mobility (Zickgraf 2021). However, environmental migration and environmental non-migration are two sides of the same coin. They are both part of the spectrum of the vast concept of migration and neither can exclude the other. Therefore, to be exhaustive and coherent, the study of

environmental mobility should necessarily include a perspective on immobility so that both can receive equal attention and priority in research (Zickgraf 2018).

This thesis contributes to a better understanding of non-migration due to serious environmental risks, and, more specifically, voluntary immobility. Indeed, when discussing immobility and considering the distinction between involuntary (trapped) and voluntary (immobile) immobility outlined by both Black and Collyer and the Foresight report (R. Black and Collyer 2014; R. Black and Geddes 2014), it is quite typical to exclusively concentrate on individuals who are trapped and the reasons why they are unable to move. However, this leads to an underestimation of people's desires for immobility or aspirations to remain as an adaptive strategy in response to environmental risks on which in fact there are relatively fewer studies[11,12,13] and on which it is instead important to shed more and more light (Mallick 2019; Mallick and Schanze 2020; Schewel 2020).

There are various reasons why people may voluntarily stay in their place: demographic, social, economic, and political factors, as well as availability and access to natural resources (Biswas et al. 2021). Another motivation may be attachment to the place where one lives (Raymond, Brown, and Weber 2010): this is defined as "*a symbolic relationship with the place which is formed by giving the emotional meanings and common sense to a particular place or territory and that explain how people percept of places and how they relate to them*" (Low and Altman 1992; Hashemnezhad, Heidari, and Mohammad Hoseini 2013).

Place attachment is often considered part of a fundamental human need or even a natural condition of human existence (Relph, 1976; Lewicka 2011). This inherent connection between man and nature makes people often reluctant to leave their homeland and influences their choice not to migrate. This is also demonstrated by the various studies on environmental non-migration that identify place attachment as one of the often recurring and influential reasons for wanting to stay (Scannell and Gifford 2010; Di Masso et al. 2019; Swapan and Sadeque 2021; Praskievicz 2022). My research focuses precisely on this factor: "*How does place attachment contribute to the choice not to migrate despite serious environmental risks? The role of Vanua, Fenua and Watan Shirin".*

To answer this question, after a brief excursus on the general concept of mobility and the more specific notion of spatial mobility, we use the so-called "mobility paradigm", which was introduced by John Urry and Mimi Sheller in the early 2000s to emphasise the importance of mobility for contemporary societies, and which has over time often been applied to environmental migration (Sheller and Urry 2006). Instead, this thesis sets out to counter this mobility bias by focusing on immobility despite environmental risks: it therefore first

distinguishes between forced and voluntary immobility and then focuses solely on the voluntary choice not to migrate. In this regard, it analyses the various factors that can determine the choice to remain, emphasising among them the relevance of attachment to place.

It does so by conducting a literature review in which it analyses academic articles as well as journal articles, peer-reviewed articles, recent reports, interviews, and policy briefs that all refer to this idea of place attachment as a reason not to migrate despite the risk of being subjected to significant environmental hazards. In particular, in the analysis, we propose three case studies (Fiji Islands, Tuvalu Island, and Bartang Valley in Tajikistan), chosen not only because these are areas particularly threatened by environmental impacts (Kumar et al. 2020; 'Tajikistan World Bank Climate Change Knowledge Portal' n.d), but also because all three present an exact conceptualisation of the idea of place attachment. Each of these areas has a particular indigenous term that expresses this sentiment of attachment: the term *Vanua* for the Fiji Islands (Yee, McNamara, et al. 2022), the Tuvaluan *Fenua* (Stratford 2013), and finally, the term *Watan Shirin*, typical of the Bartang Valley in Tajikistan (Blondin 2021b).

For each concept, this work will mainly provide information on the context of the area under analysis, the climatic conditions affecting the three places, and finally, how their concept of place attachment affects the voluntary choice not to migrate.

In the last part, we will compare the three case studies to analyse the similarities and differences in the way place attachment manifests itself. Finally, we will conclude by once again emphasising the crucial role of place attachment in defining the choice not to migrate and stress the importance of taking this factor into account when assessing and managing the nexus between immobility and environmental change.

LITERATURE REVIEW

The concept of mobility and the mobilities paradigm

Mobility is a polysemous term whose different meanings depend on one's disciplinary background (Kaufmann 2021). This makes the concept difficult to define, especially in the current period of profound economic and social change.

However, in general, we can use the initial meaning of mobility, from the 18th century, when the word first appeared in German, English, and French dictionaries to arouse mental agility and, consequently, the capacity to change. In detail, it was defined as follows: "*Facility to change, to modify oneself. Mobility of features, of physiognomy. Mobility of light, of reflexes. Mobility of character, of spirit, of imagination, ability to pass rapidly from one disposition to another, from one object to another. Mobility of feelings, of mood. Mobility of opinions*" (Kaufmann 2021).

For this thesis, we are particularly interested in the concept of "spatial mobility", the foundations of which were laid by the work of Michel Bassand and Marie-Claude Brulhardt in their book "*Mobilité Spatiale*" (Bassand and Brulhardt 1983). They considered mobility as a total social phenomenon and defined it as the set of movements that result in a change of state of the actor or system considered (Kaufmann 2021).

It is precisely from this idea of crossing a geographical space that the so-called "mobilities paradigm" or "mobility turn" began to emerge in the early 2000s. This approach, introduced by John Urry and Mimi Sheller (Sheller and Urry 2006), was conceived as "*a way of analysing societies by paying attention to the role that movements play in the organization of social relations*" (Kaufmann 2021). In particular, it started highlighting the importance of mobility for contemporary societies and proposed replacing the sedentary logic that had previously been predominant within migration studies with a mobilities logic, repositioning movement as a significant aspect of human existence that has an impact on many social processes and is important to social sciences (Gruber 2021). As Sheller and Urry stated, *"Social science has largely ignored or trivialised the importance of the systematic movements of people (…). This paradigm challenges the ways in which much social science research has been 'a-mobile*'" (Sheller and Urry 2006). In particular, this approach underlined that most theories related to mobility tended to romanticize and idealize the concept, without focusing on the actual movement of people and resources or taking into consideration the unequal distribution of mobility and its adverse effects (Sheller and Urry 2006). Instead, they advocated for research that explored the diverse roles of mobilities, such as those of people, resources, information,

ideas, technologies, hazards, and more, in generating and perpetuating social interactions at the local, regional, and global levels. The mobilities paradigm saw the world as fluid and always in motion, rather than perceiving it as basically fixed with some mobility between places (Sheller 2017).

Adopting a mobilities perspective to environmental migration

This mobilities perspective is an analytical approach that can also respond to the growing requests for a more nuanced understanding of how people react to new or shifting migratory pressures in the context of environmental change (Arnall and Kothari 2015; Klepp and Herbeck 2016).

Initially, the literature on mobilities and the literature on environmental migration used to be clearly separated from one another. Migration theories were the primary source of inspiration for the area of environmental migration, while research on mobilities, on the other hand, mostly looked at environmental challenges from the standpoint of carbon emissions from transportation vehicles (Blondin 2021). Changing direction and playing a key role in connecting the mobilities paradigm and environmental migration literature was a 2018 article written by Ingrid Boas and other colleagues (Boas et al. 2018). This work popularised the term "*environmental mobilities*", appropriating the mobility paradigm to study the "*composition, speed, paths and volume*" of these mobilities: "*The term [environmental mobilities] captures a three-way relationship between mobilities and the environment. First, the movement of people, materials, and information impacts the environment in various ways. Second, there are material and immaterial environmental issues, such as waste, pollution, and CO^2, that have a particularly mobile and cross-border character. Third, environmental issues or changes may shape or cause movement*." (Boas et al. 2018).

Within this framework of mobility, the concept of environmental migration has over time gained more and more ground in the literature (Piguet 2010; Hoffmann, Šedová, and Vinke 2021): in particular, in the late 1990s - early 2000s much has been written about the conceptual and legal ambiguities surrounding the terms "climate migrants" and "refugees" (Mcadam 2012), with a discursive divide between more "alarmist" positions that feared large numbers of "environmental refugees" moving due to environmental changes in the future (Myers 2002), versus more "optimistic" voices that saw local and regional migration as a key strategy to adapt to environmental hazards (Richard Black and Geddes 2014; McLeman and Smit 2006).

A whole new viewpoint on the relationship between migration and environmental change emerged in the late 2000s. As the environment (natural, socio-political, or economic) changed,

migration was identified as a key strategy of human adaptation (Blondin 2021). According to this approach, leaving high-risk locations and using remittances from migrant family members to increase resilience locally are both crucial activities (McLeman and Smit 2006). As such, proactive and adaptive environmental migration does not assume helpless flight, but controlled and responsible migration to safely reduce household or community vulnerabilities (Sakdapolrak et al. 2016).

An introduction to the option of staying

While this overconcentration of theoretical and empirical focus on the causes and effects of mobility, which has come to be known as *mobility bias* (Schewel 2020), has resulted in a near-exclusive focus on the various assumptions about who is moving, where they are migrating from, and the number of migrations, on the other hand, it has neglected the opposite phenomenon, namely immobility. Indeed, the academic literature has paid little consideration to the subject of why and how individuals are not migrating in the context of rising migratory pressures brought on by environmental changes in recent years (Adams 2016; Farbotko et al. 2018).

Yet, if we look at De Haas's definition of human mobility, we clearly see that it refers to "*people's ability to choose where to live - including the option to stay*" (H. de Haas 2014). This, for the first time, opens up the possibility of thinking of migration and permanence as two sides of the same coin, thus showing how "*immobility is inextricably, albeit often invisibly, linked to our understandings of human mobility*" (Zickgraf 2018). It also underlines the fundamental urgency of increasingly extending the field of research and investigation to those who remain, who are equally important and influential in the migration debate.

The aspirations–capabilities model and the different categories of immobility

To better understand both mobility and immobility, it was considered salient to find a theoretical framework that could adapt to both phenomena and describe them comprehensively. One of these is certainly the *aspirations-capabilities model* (Fig. 1) described by Jorgen Carling in 2002 in one of his seminal articles (Carling 2002). In fact, although the model was born in the context of international migration, its use was presented as a general framework, appropriate "*for analysing migration within most contexts*" (Carling 2002), thus making it easily adaptable to environmental fields. This model has succeeded in unifying immobility and mobility as two distinct outcomes of the same decision-making process by recognising both the structure and the agency that shape people's movement and non-movement as an output

based on various *aspirations* (people's desires and wishes) and *capabilities* (capacity or otherwise to turn this desire into reality, given context-specific obstacles and opportunities like personal resources and financial, social, or cultural capital) (Carling and Schewel 2018).
Thus, in addition to the two categories of voluntary migrants (who have both high aspirations to move and high ability to do so) and forced migrants (who have low aspirations to move, and the ability to move does not play a significant role), Carling initially postulated two forms of immobility: *voluntary immobility* (those who do not seek to migrate, the ability to do so being irrelevant) and *involuntary immobility* (those who desire to move but lack the ability to do so) (Carling 2002). Subsequently, in 2019, Schewel introduced a fourth category of '*acquiescent immobility*' to emphasise those who do not wish to migrate and are unable to do so. Indeed, the Latin roots of the word acquiescent, which means "*to remain at rest*", imply non-resistance to restrictions (Schewel 2020).

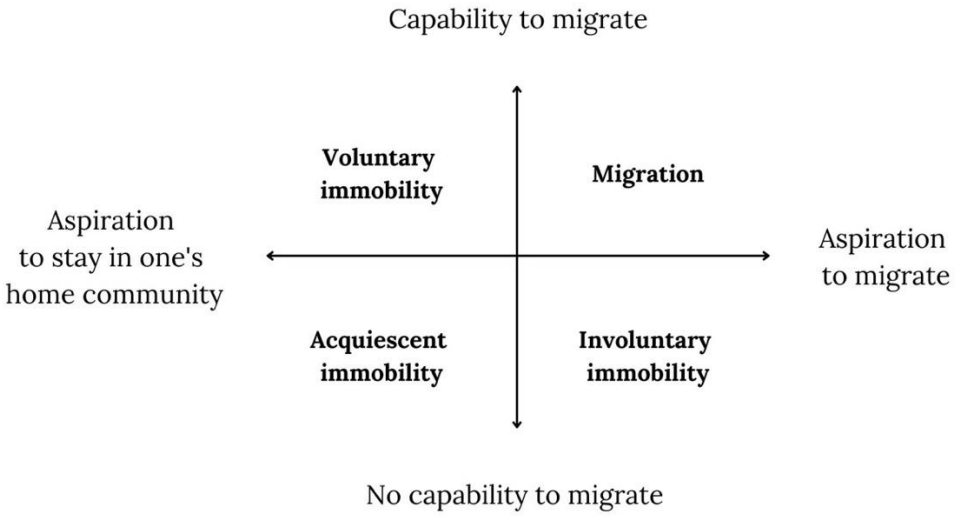

Figure 1: The aspirations – capabilities model
(K. Schewel, 2020, p. 335)

For the sake of clarity and transparency, it should be noted that abilities and aspirations are not aspects one simply has or does not have but exist along a continuum. As a person's resources and desires change over time, so does their location along this spectrum, therefore these categories of (im)mobility are to be understood as ideal types rather than rigid categories demarcations (Schewel 2020). Indeed, it is difficult to distinguish, conceptually or in practice, between those who stay or move by choice and those whose (im)mobility is somewhat involuntary, because many times the complexity lies in the difficulty of capturing in a questionnaire or focus group discussion the subjective feelings, emotions, and nuances of a

person's desire, aspiration and ability to move (Hein de Haas 2021). This is why the aspirations-capabilities framework could be used as a fruitful conceptual frame of reference for the study of (im)mobility.

Having said that, however, there is still a discrepancy in the academic articles and documents on the subject of immobility: references and research on the inability or unwillingness of populations to escape from environmentally risky and vulnerable places, and thus remain immobile, are significantly less numerous. The first explicit connection to environmental immobility only emerged in 2011, when the UK Foresight report referred to those who are forced to stay, the so-called "trapped populations" (Richard Black and Geddes 2014). Since then, there has been a modest but rising push to include immobile populations in environmental migration studies, although most of these contributions have focused on involuntary immobility, leaving out individuals who voluntarily choose to stay in their country of origin (Richard Black et al. 2013; Zickgraf 2019; R. Black and Collyer 2014).

This imbalance was mostly justified as it was believed that "*particularly vulnerable populations will be trapped. Yet, the potentially extreme vulnerability of the involuntarily immobile justifies greater attention to this group anyway*" (R. Black and Collyer 2014).

On the contrary, it was commonly believed that the voluntary immobile were less susceptible to environmental change than their trapped counterparts and were also thought to be fully aware and informed of the environmental hazards. For these reasons, therefore, they were considered less in need of attention and help (Zickgraf 2018).

However, today, we know that 85% of the world's population would not migrate even if they had the resources and the opportunity to do so (Inc 2023). Voluntary immobility is far more common than involuntary immobility and, like those who are forced to remain, those who voluntarily refuse migration are equally exposed to significant health risks and death due to climatic hazards (Debray, Ruyssen, and Schewel 2022). For these reasons, therefore, they are in no way less worthy of attention and investigation than trapped populations and require that much more be known about the causes and consequences of this choice. More consideration must be given to the reasons why so many individuals do not *wish* to move if we are to understand the pervasive immobility in today's globe.

Voluntary immobility

The emphasis on the reasons why people choose not to migrate helps to diversify the elements that are significant in migration decision-making models. Most rational choice models position individual cost-benefit analyses as the basis for migration decisions: it is not worthwhile to

leave one's country for another if the expenses outweigh the advantages (Cai et al. 2014). In these situations, immobility may also be partially explained by constrained rationality, which refers to citizens' limited access to information and possibly modest "computational capacity". Yet, there are also important social, cultural, and personal factors that can motivate a preference to stay (Czaika and Reinprecht 2022).

In general, among the "retain factors" (Debray, Ruyssen, and Schewel 2022; Mallick, Priovashini, and Schanze 2023) that may override the environmental driver of migration are:

- Immobile capital (e.g., land ownership, residential housing),
- Access to financial resources and institutions (e.g., credit, savings),
- Associations and affiliations (e.g., religious communities, political parties, clubs, community associations, water management committees),
- Life satisfaction (e.g., security, harmony, trust, happiness),
- Demographic characteristics (e.g., age, education, gender),
- Access to natural resources.

Place attachment

In addition to these reasons, voluntary immobility may also be a reflection of differences in place attachment, emotional attachments, local social standing, hereditary continuity, and cultural identity across families and individuals (Kelman et al. 2019). Indeed, attachment to place, although perhaps the most underestimated (Lewicka 2011), has become important to understand the local impacts of a changing environment and it is today one of the prime, most common, and powerful factors influencing immobility aspirations (Scannell and Gifford 2010; Di Masso et al. 2019; Swapan and Sadeque 2021; Praskievicz 2022). Often, the place is where the individual or community resides, or a place that is otherwise meaningful (Scannell and Gifford 2010). Prior research on the spatial scale at which place attachment occurs indicates that "*the better geographically and cognitively defined space, the more meaning it may acquire and the higher chance that it will become a target of attachment*" (Lewicka 2011).

However, place should not be considered exclusively as a geographical area. In fact, for those who decide to stay despite the environmental risks, it means much more: place attachment refers to people's connection to places, based on affections, cognitions, and practices (Gustafson 2006). As such it fosters a sense of community or belonging, very often intertwined with social variables and memories but also with perceived amenities and (natural) qualities (Stockdale, Theunissen, and Haartsen 2018). Not surprisingly, Adger et al. define places as "*symbols, products, and containers of the various cultures that value them*" (Adger et al. 2011).

Many people view their home country as a safe haven from which they reluctantly separate themselves because they feel comfortable there, have built social networks and livelihoods, and have significant care commitments to their family and friends. This attachment leads people to value their place of residence more than another, even if the latter is linked to a decreased chance of personal loss. Thus, the likelihood of not moving in the face of large losses is greater than the propensity to migrate and reap the resulting profits. In the most extreme cases, people are even prepared to risk their own lives and the lives of others in order to protect their identity and the places to which they belong (Knez, Eliasson, and Gustavsson 2020).
This explains why, therefore, the disruption of the home or other places to which people feel attached would not only break down that "sense of loyalty" or ability to exercise "voice", to use Hirschman's terms (Hirschman 1970), but would also lead to detrimental psychological and health impacts, such as emotions of sorrow, loss, and anxiety, and rattle social support networks of particular value to low-income communities (Fried 2000).

A three-pole theoretical framework of place attachment

For this work, to better define place attachment in its complexity, we will use the tripolar model shown below (Raymond, Brown, and Weber 2010) (Fig. 2) as we found it to be the most comprehensive and suitable for this research.

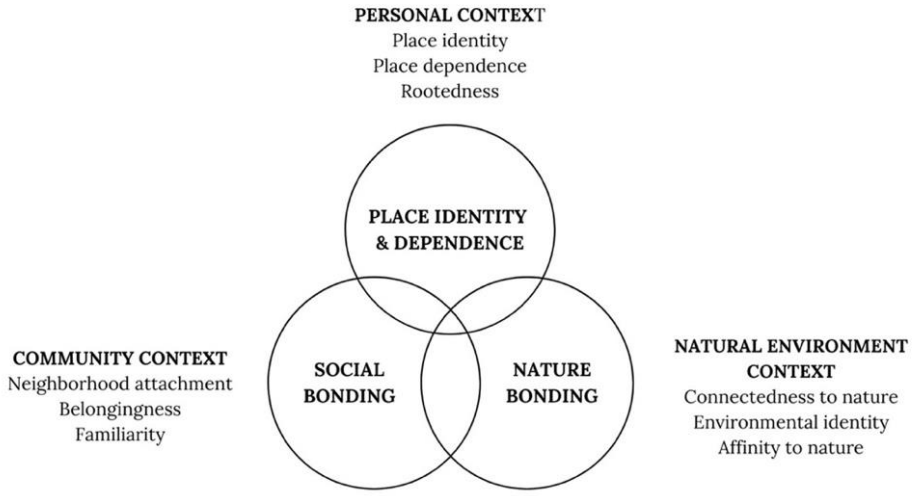

Figure 2: The three-pole theoretical framework of place attachment
(C.M. Raymond et al., 2010, p. 425)

The "self" pole at the top of the diagram shows that specific locations have deeply personal connotations relating to a person's life path, emotions, activities, and sense of self. The ideas

of place identity and place dependence are particularly used to operationalize this type of personal place attachment. Place identity refers to those dimensions of the self, such as the combination of feelings towards specific physical environments and symbolic connections to place that define who we are (Proshansky, Fabian, and Kaminoff 1983), while place dependence refers to functional or direct connections to an environment: for example, it reflects the degree to which the physical environment provides the conditions to support an intended use (Williams and Roggenbuck 1989).

On the other side, the "*other*" pole on the left stands for social bonding, or the sense of being a member of a group of people as well as emotional ties based on shared experiences, passions, or issues (Raymond, Brown, and Weber 2010). Neighbourhood attachment (which captures the emotional connection to one's surroundings), belonging (in which people feel they belong to an environment), and familiarity (defined as pleasant memories, memories of success, and environmental images associated with places) are a few ways in which this social context has been operationalized (B. Brown, Perkins, and Brown 2003).

Finally, "*nature bonding*", which is seen on the right, has been actualized through environmental identification, emotional affinities with nature, and connection to nature. According to environmental identity theory, people's interactions with nature shape their sense of self (Hinds and Sparks 2009). The nature connection scale measures how much an individual incorporates nature into his or her cognitive self-representation, whereas emotional affinity towards nature focuses on personal emotional ties to nature, such as "love of nature" (Kals, Schumacher, and Montada 1999).

RESEARCH DESIGN

To investigate the question, this thesis aims to offer a systematic review of the existing literature on the three concepts under scrutiny (*Vanua*, *Fenua*, and *Watan Shirin*).

To do so, we based the work on the search for well-structured sources with up-to-date scientific relevance. This research was mainly conducted using Google Scholar and Web of Science: an initial selection of articles was completed including specific keywords such as "voluntary immobility", "attachment to place" and "environmental risks" and considering only English-language papers. Fourteen results, all published in the time frame 2015-2023, were found that contained all three keywords (on the Asian continent, one result each for China, the Bartang Valley in Tajikistan, the coastal city of Semarang in Indonesia, the Himalayan region in Nepal, Iran, the Philippines, the Maldives and Lakshadweep in the Indian Ocean, and four for the Southwest coast of Bangladesh. In Oceania, one result each for Tuvalu and Fiji Islands. In Latin America one result is in Peru).

After analysing these contributions, we found that only in three specific cases was the attachment to place represented by a particular concept, described with a term from the local language, deeply rooted in the tradition and culture of the community. These three cases were the Fiji Islands, Tuvalu, and Tajikistan.

At this point then the research on Google Scholar was filtered on the basis of these three terms: *Vanua*, *Fenua*, and *Watan Shirin*. In order to find relevant sources, we again used specific keywords in each case: the respective term indicating the concept of place attachment, the area of interest ("Fiji", "Tuvalu", "Tajikistan"), "place attachment" and "voluntary immobility".

We thus collected 21 results consisting of academic articles, peer-reviewed articles, journal articles, university theses, interviews, and policy briefs. In detail, we found 9 articles, in the time span 2014-2022, that referred to the concept of *Vanua* and the Fiji Islands, 8 articles for the concept of *Fenua* in Tuvalu in the time span 2013-2022, and finally, 4 articles for the term *Watan Shirin* in Tajikistan published between 2020 and 2022 (Tab. 1).

Vanua in the Fiji Islands				
	AUTHOR	**TITLE**	**PUBLICATION DATE**	**PUBLISHER**
1.	Barnett, J. & Jarillo, S.	Repositioning the (Is)land: Climate Change Adaptation and the Atoll Assemblage	March 2022	*Antipode*
2.	Chave-Dartoen, S.	*Banua, *panua, fenua: An Austronesian conception of the sociocosmic world	April 2014	*UC Berkeley: Archaeological Research Facility.*
3.	Farbotko, C. & Campbell, J.	Who defines atoll 'uninhabitability'?	December 2022	*Environmental Science & Policy*
4.	Farbotko, C., McMichael, C., Dun, O., Ransan-Cooper, H., McNamara, K.E., Thornton, F.	Transformative mobilities in the Pacific: Promoting adaptation and development in a changing climate	August 2018	*Asia & the Pacific Policy Studies*
5.	Farbotko, C. & McMichael, C.	Voluntary immobility and existential security in a changing climate in the Pacific	August 2019	*Asia Pacific Viewpoint*
6.	Long, M.	Vanua in the Anthropocene: Relationality and Sea Level Rise in Fiji	2017	*symplokē*
7.	Randin, G.	The Importance of Kinship, *Vanua* (tribe, land) system and *Veilomani* (mutual compassion) in Fiji and their influence on the Social and Spatial Response to Climate Change. A Case Study of Dawasamu, Viti Levu Island.	2018	*Université de Neuchâtel, Switzerland: Institut d'ethnologie.*
8.	Vaai, U. L.	"We Are Therefore We Live": Pacific Eco-Relational Spirituality and Changing the Climate Change Story	October 2019	*Toda Peace Institute*
9.	Yee M., McNamara K.E., Piggott-McKellar A.E. & McMichael C.	The role of Vanua in climate-related voluntary immobility in Fiji	December 2022	*Frontiers in Climate*
Fenua in Tuvalu				
	AUTHOR	**TITLE**	**PUBLICATION DATE**	**PUBLISHER**
1.	Barnett, J. & Jarillo, S.	Repositioning the (Is)land: Climate Change Adaptation and the Atoll Assemblage	March 2022	*Antipode*
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5.	Farbotko, C. & McMichael, C.	Voluntary immobility and existential security in a changing climate in the Pacific	August 2019	*Asia Pacific Viewpoint*
6.	Farbotko C., Stratford E. & Lazrus H.	Climate migrants and new identities? The geopolitics of embracing or rejecting mobility	September 2015	*Social & Cultural Geography*
7.	Oakes, R.	Culture, climate change, and mobility decisions in Pacific Small Island Developing States	June 2019	*Population and Environment*
8.	Stratford, E., Farbotko, C. & Lazrus, H.	Tuvalu, sovereignty and climate change: considering fenua, the archipelago, and emigration	May 2013	*Faculty of Science, Medicine, and Health, Papers: part A. - University of Wollongong Australia*
Watan Shirin in the Bartang Valley in Tajikistan				
	AUTHOR	**TITLE**	**PUBLICATION DATE**	**PUBLISHER**
1.	Blondin, S.	Dwelling and circulating in a context of risks: (im)mobilities and environmental hazards in Tajikistan's Pamir mountains	August 2021	Institute of Geography - University of Neuchâtel
2.	Blondin, S.	Staying despite disaster risks: Place attachment, voluntary immobility and adaptation in Tajikistan's Pamir Mountains	November 2021	Geoforum
3.	Blondin, S.	Understanding involuntary immobility in the Bartang Valley of Tajikistan through the prism of motility	April 2020	Mobilities
4.	Yee M., McNamara K.E., Piggott-McKellar A.E. & McMichael C.	The role of Vanua in climate-related voluntary immobility in Fiji	December 2022	*Frontiers in Climate*

Table 1: Results found in the existing literature that refer to the concepts of Vanua, Fenua, and Watan Shirin.
(Own elaboration)

Based on these resources and always referring to the theoretical frameworks discussed in the literature review above (mobilities paradigm, aspirations-capabilities model, three-pole framework of the place attachment), we analysed each case study by adhering to the following precise argumentative structure:

- The community context in which the three concepts are embedded.
- The environmental conditions that put the population at risk.
- The mechanisms through which the voluntary immobility of this population can be explained through a specific idea of attachment to place.

Limitations

A first limitation of this work may concern the analysis focusing only on articles in English. This may introduce a bias as there may be other contributions in other languages that are not taken into account, but which may be particularly relevant to this research. Another limitation may be the fact that most of the results we found regarding place attachment, voluntary immobility, and environmental hazards are based on the continents of Asia and Oceania, thus greatly restricting the field of research to a single area with precise characteristics. However, there may be other regions of the world, equally affected by environmental changes and where this attachment to place emerges that leads to the choice not to migrate, which have not been studied.

Finally, as shown above by the results found for each case study, there is a disparity in the number of articles referring to Tajikistan and the concept of *Watan Shirin* compared to the other two. These are in fact fewer and 3 out of 4 are written by the same author (Suzy Blondin). Here again, therefore, a bias may emerge due to the lack of further studies on the subject and further perspectives that could provide an even more detailed view of the issue.

To conclude, this thesis is intended as a contribution to the study of place attachment, voluntary immobility, and environmental risks, emphasising with concrete examples the importance of place attachment in deciding whether or not to migrate. However, further research in this field is needed to eliminate biases and complete this work.

ANALYSIS

Place attachment is an extremely articulated and multifaceted concept. This makes this notion recurrently found behind the decision not to move despite serious environmental risks, since every population that makes this choice can find itself in a specific connotation of this feeling. Based on the articles identified in our literature review, the cases where place attachment has such a deep value for the community that it influences its choice to move or not to move are varied and are found most frequently in East Asia and Oceania (Fig. 3). In particular, among these, there are some populations that have specific terms from their local language that describe this sentiment of attachment.

In this thesis, we analyse three of them: *Vanua* used by communities in the Fiji Islands, *Fenua* typical of the island of Tuvalu, and finally, *Watan Shirin*, a local concept from the Bartang Valley in Tajikistan.

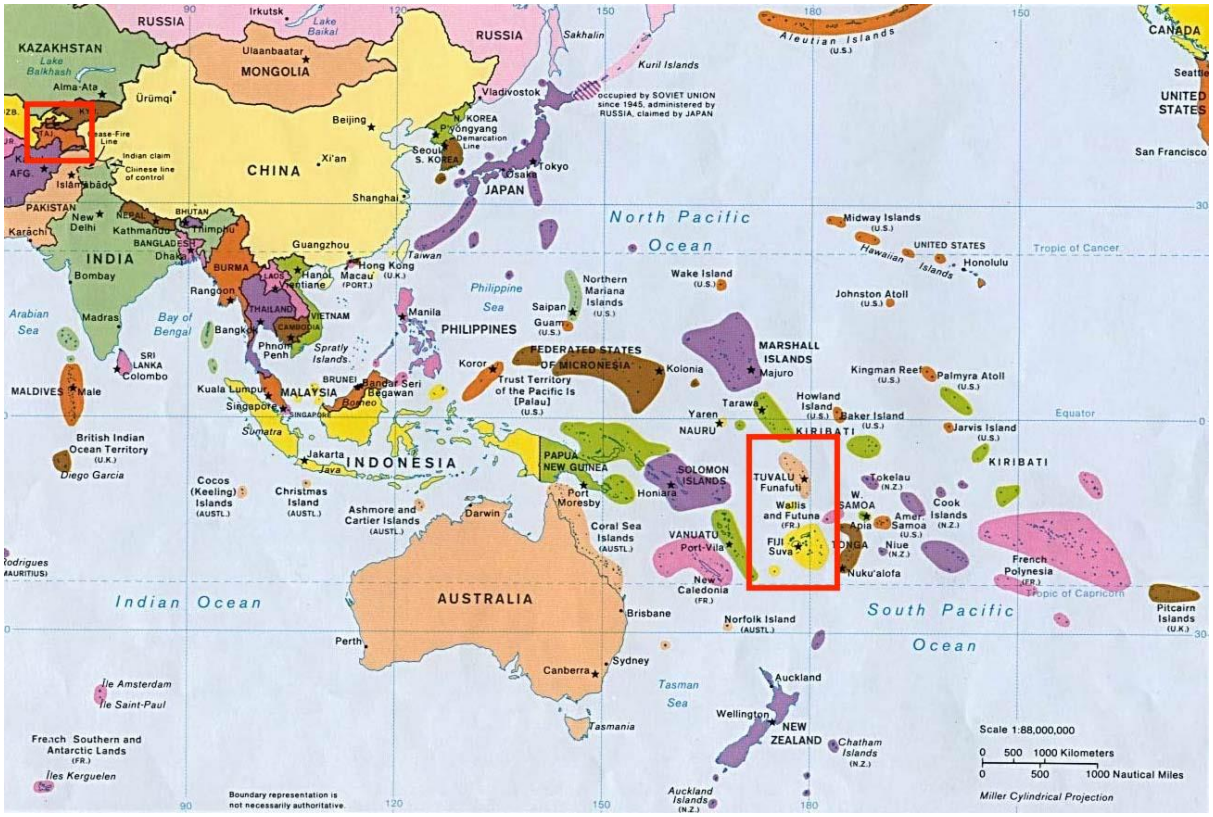

Figure 3: East Asia and Oceania
(Map from *Central Intelligence Agency*, 1992. Own re-elaboration)

The Pacific Islands region: a magnifying glass on Fiji and Tuvalu

"Land is equivalent to life in our culture. If you lose your land, you are dead. So, if your land has been gradually eroded by the sea, you are literally seeing your life being eaten away".

- *A Pacific islander (McNamara and Gibson 2009)*

The Pacific Islands region comprises 22 countries and territories that differ in terms of population, policies, physical characteristics, and cultures (Campbell and Barnett 2010).
These territories are divided into Melanesian island countries which are typically large and mountainous with fertile soils, and the smaller Polynesian and Micronesian islands which are either volcanic areas or low-lying coral atolls (Charlton et al. 2016).
Out of these 22 countries, for the reasons already mentioned, this dissertation focuses on the analysis of two territories: Fiji and Tuvalu.

Fiji and the role of Vanua

"This is for our ancestors, just staying here... they protect us... We stay here. Better we stay here... Our great grandfathers, they were born here, they died here. We stay here, we die here."

- *A Fijian islander (McMichael et al. 2021)*

Figure 4: Map identifying Fiji Islands
(M. Yee, K.E. McNamara, A.E. Piggott-McKellar AE & C. McMichael, 2022, p.7)

Fiji lies in the heart of the Pacific Ocean, covering 1.3 million square kilometres, halfway between the Equator and the South Pole ('About Fiji - History, Government and Economy' n.d.).

It is often referred to as "*300 islands in the sun*" (Fig. 4), of which only one-third are permanently inhabited ('Fiji Geography, Maps, Climate, Environment and Terrain from Fiji | - CountryReports' n.d). Overall, there is now a population of about 947,760 people with a growth rate of 0.42%. Most of the inhabitants (about 93%) live on the two largest islands, Viti Levu and Vanua Levu, which make up 87% of Fiji's total landmass ('Fiji' 2023). Viti Levu, where the capital Suva is located, is not only the largest of the Fiji Islands, covering 10,388 square kilometres, but it is also the most populated and developed island. Vanua Levu, on the other hand, is the second largest in Fiji, covering 5,587.1 square kilometres (2,157.2 square miles) ('Fiji Geography' n.d.).

Agriculture, tourism, and fishing serve as the main economic pillars of the Fiji Islands area. With a current market value of over $690 million (FJ$1.5 billion) and an estimated 8.1 percent of the GDP of Fiji, including the sugar industry (1.1 percent), the agriculture sector is crucial to the nation's economy. It supports the livelihoods of 27% of the country's residents and more than 83 percent of Fiji's rural population relies on this industry as their primary source of employment. The main fruit products are papayas, pineapples, and bananas; however, there are a few businesses that process local produce, mostly for the home market, and make fruit juice concentrates ('Fiji - Agricultural Commodities' 2022).

Another significant factor in Fiji's economic expansion is tourism, which also serves as the country's main export market, particularly with Australia and New Zealand. Closely related to the tourism industry is the fishing field, one of the major natural resource-based sectors in the nation's economy and a significant source of livelihood, employment, and food for many Fijians ('Fisheries in the economies of Pacific Island countries and territories - Pacific Data Hub' n.d.).

Unfortunately, however, all these three sectors and the rest of the Fijian economy in recent years have been particularly exposed to shocks such as the spread of the COVID-19 pandemic, commodity price fluctuations, and natural disasters.

Focusing on this last factor, the environmental one, recent studies show how vulnerable the country is to the effects of environmental change (Yee, Piggott-McKellar, et al. 2022; Nunn 2013). Since 1993, indeed, sea levels in Fiji have increased by an average of 6.3 millimetres per year, and it is possible that sea levels could rise by 1.2 meters by 2100 (Nunn 2013). Under the representative concentration pathway (RCP) and based on current population estimates, as many as 30,000 Fijians may be directly exposed to rising sea levels by 2050, and up to 80,000 by 2100 (Kulp and Strauss 2019). This could result in food supply issues due to flooding of farmland, coral reef bleaching, coastal erosion, and loss of artisanal fisheries (Lata and Nunn

2012). According to the 2014 Intergovernmental Panel on Climate Change (IPCC) report ('AR5 Climate Change 2014: Impacts, Adaptation, and Vulnerability — IPCC' 2015) severe weather events and the spread of diseases like dengue can directly and indirectly impact human health. Moreover, factors such as inadequate resources, lack of technology, weak regulatory frameworks, and insufficient funding worsen the environmental effects of these issues (Becken 2005).

The local population is also struggling with agriculture as their crops no longer grow well, and they must rely just on para grass and bore fruit. Even fruits grown on non-salinised land are small, like coconuts and mangoes which have become shrivelled and reduced in size ("*na niu sa qoqovi lalai, na maqo sa vuavuai lalai*') (Randin, 2018.). Soil salinisation prevents subsistence crops such as taro, banana, cassava, and coconut from growing close to homes, and frequent flooding often necessitates the urgent erection of a boundary wall around inhabited areas (Randin 2018). All these environmental impacts, according to a Fiji Climate Vulnerability Assessment prepared by the Fijian government, the World Bank Group, and the Global Facility for Disaster Reduction and Recovery (GFDRR) in 2017 ('Climate Vulnerability Assessment: Making Fiji Climate Resilient - Fiji | World Bank Group 2017), will make low-lying villages and settlements "*unsustainable in the long term*".

Therefore, in order to cope with this worrying possibility, the first solution that many policymakers have found most suitable is the forced and planned relocation of these populations to safer and more fruitful areas. Instead, what describes the present and future of this community is the Indigenous Fijian phrase *"Tu ga na I nima ka luvu na waqa*" which means that "*the boat is sinking but the bail for draining water from the boat is within reach*" (Yee, Piggott-McKellar, et al. 2022). Returning to the aspirations-capabilities model, we thus see that these people realise and anticipate the impacts of environmental change, may even have the "capability to migrate" (Carling 2002) and escape these environmental hazards, but prefer not to consider this option and choose instead to stay, drawing strength from *Vanua*.

It is in fact this articulated concept of *Vanua* that helps our understanding of Fiji islanders' spatial and social responses to environmental change, by opposing relocation plans and choosing immobility and their land (Yee, McNamara, et al. 2022).

How can we describe this notion? *Vanua* "*is an encompassing one; it is the totality of a Fijian community"* (Long 2018). It indeed indicates the network of relationships between the natural environment, social bonds, kinship ties, ways of being, spirituality, and stewardship (Yee, McNamara, et al. 2022). For instance, *Vanua* can be used to refer to the entire country governed by a central authority, or it can describe a local community's island home consisting of a

confederacy of people under a paramount chief (Yee, McNamara, et al. 2022). In Indigenous Fijian society, all members belong to the *Vanua*, a hierarchical social group with the I Tokatoka as the smallest unit, followed by the Mataqali (clan) and Yavusa (tribe) (Randin 2018). For Indigenous Fijian children, the *Vanua* serves as their classroom, where they learn about identity, belonging, traditional kinship roles, and responsibilities to family, community, and self (Lagi and Armstrong 2017). All clans are highly spiritual and connected to *mana*, the spiritual energy of the *Vanua*, which is often manifested through the veneration of the paramount chief and the protection of sacred sites known as *Vanua tabu*. These are often the graves of the former supreme chiefs themselves or the original site of the first founding ancestor (Yee, McNamara, et al. 2022). And it is this loyalty and respect that, despite the experiences people face due to environmental impacts, often prevent them from leaving.

However, *Vanua* encompasses more than just customs and spirituality. Indeed, if we look at the lexical meaning, the term refers to "*land, region, place, or spot*" (Capell 1957). The concept of *Vanua* acknowledges the deep relationship and mutual reliance between individuals, nature, and the places they inhabit. It serves as a unifying force that ties people to their land, to one another, and to their history and future, forming a comprehensive system that is so tightly interconnected that it can be seen as a single entity (Jarillo and Barnett 2022).

In this interconnected relationship, according to which "*without people, the land becomes dead and useless, and similarly, without land to live on, people become helpless and insecure"* (Yee, McNamara, et al. 2022), local people do not view land as a purchasable commodity in the context of a market-based economy. This is reflected in the phrase "*Na qau vanua*" or in the term "*I cavuti*" (Yee, McNamara, et al. 2022), which mean "not owning the land" but rather "*the land to which I belong, of which I am an integral part: the land that is part of me and sustains me*" (Roth 1973). The people feel responsible and obliged to care for this land in the same way as the land cares for its inhabitants and to exercise active stewardship to protect the *Vanua* that God has given them at any cost. The *Lewe ni vanua* (Vanua people) not only safeguard and utilise the resources of the land but also essentially represent its social identity (Long 2018) (Vaai 2019).

Inspired by the tripartite framework of place attachment mentioned above (Raymond, Brown, and Weber 2010), we could therefore say that, in this case, we find first of all a deep dependence on place and a place identity that help define residents for who they are. Also strong is the pole of social bonding, in which the deep-rooted feeling of belonging to the environment and its heritage stands out above all. Finally, care for and identification with the

resources that the land itself offers is a sign of a powerful environmental identity in which people's interaction with nature shapes their sense of self.

In conclusion, therefore, for residents to leave this land would mean not only abandoning "*the bones of the ancestors*" (Yee, Piggott-McKellar, et al. 2022), but losing themselves completely, being "*stripped off of the tangible foundation for identification and belonging"* (Yee, McNamara, et al. 2022). This must be avoided: the need to remain and to protect a place of belonging outweighs the pressures to relocate as environmental-related threats increase.

The widespread idea among Fijians, therefore, is that it is better to give up one's life but preserve the *Vanua* than to "*remain an orphan and go to a new place as a visitor*" (Yee, McNamara, et al. 2022).

Tuvalu and the role of Fenua

"Tuvalu is the best place for Tuvaluan people. Relocation does not remove the existence of Tuvaluans from the face of the Earth, but it removes their identity as Tuvaluans".

- A resident of Funafuti, the capital of Tuvalu (Farbotko, Stratford, and Lazrus 2015)

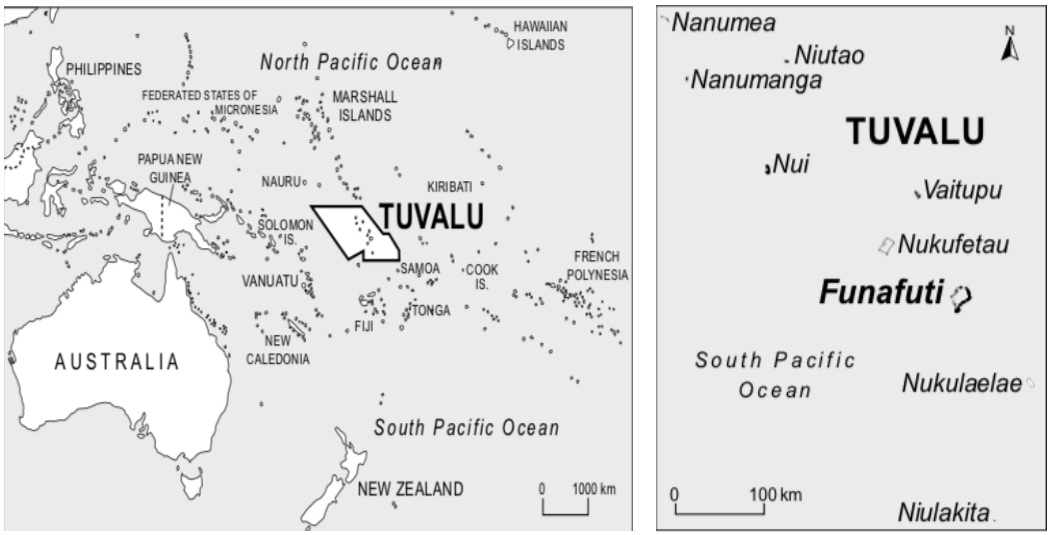

Figure 5: Maps identifying Tuvalu and its member islands
(C. McMichael, C. Farbotko, A. Piggott-McKellar, T. Powell & M. Kitara, 2021, p.90)

Tuvalu, one of the world's smallest independent nations, is located midway between Hawaii and Australia in the South Pacific Ocean. It comprises nine islands (four reef islands and five coral atolls) (Fig. 5) that cover a total surface area of 26 square kilometres (Australian Government Department of Foreign Affairs and Trade n.d.). Tuvalu's population is around 11,639, with about half living on the atoll of Funafuti, which is the capital. The remaining islands are sparsely populated, and some reefs are inaccessible to large boats ('Tuvalu' 2023).

Although the country reached the threshold to graduate from LDC status in 2012 on the basis of its human development indicators and high per capita income (UNCTAD 2022), it requested a postponement of its graduation due to extreme economic exposure, the immediate threat of environmental change and natural disasters. At present, therefore, Tuvalu is still classified as a Least Developed Country (LDC) ('Tuvalu | United Nations in Fiji, Solomon Islands, Tonga, Tuvalu, and Vanuatu' n.d.).

The country's economic and social situation is not among the most virtuous: economic potential is indeed limited by the country's isolated geographical position and fragmentation into nine islands and atolls. Access to major international markets is therefore very difficult and consequently, exports are few. Instead, the country is heavily dependent on imports, most of which are foodstuffs, fuel, construction materials, medicines, and medical equipment, as well as most consumer products, including motor vehicles, household appliances, and clothing ('Tuvalu | United Nations in Fiji, Solomon Islands, Tonga, Tuvalu, and Vanuatu' n.d.).

The main revenues on which the country depends include fishing license fees, dividends from the Tuvalu Trust Fund (a Sovereign Wealth Fund established in 1987 to benefit Tuvalu) ('About TTF' n.d.), income from rent of the Internet country code top-level domain (.tv) (Washington Post 2019), and overseas remittances mostly coming from Tuvaluans working on short-term contracts.

Tuvalu is also particularly vulnerable to the negative effects of environmental change, variability, and extreme weather events due to its small resource base, location, and natural features (IOM, n.d.). Each of its constituent islands is low-lying (less than one metre above spring tide levels), and their whole form depends on coral growth. However, in recent years, rising ocean acidity and water temperatures have made it more difficult for Tuvaluans to catch and eat fish by causing coral bleaching and affecting coral ecosystems that act as fish nurseries ('UNSDG n.d.).

Moreover, during the wet season between October and March, Tuvalu is often hit by tropical cyclones. These expose the area to high wind speeds, extreme precipitation, and storm surges, all of which worsen the economic and social damage, inflicting extensive harm on local infrastructure, agriculture, and major food sources (Barnett and Adger 2003; 'World Bank Climate Change Knowledge Portal' n.d.). The dry season, on the other hand, is marked by an increase in droughts that cause the loss of animals and crops as well as the depletion of freshwater resources, which are already few on the islands (McMichael et al. 2021). In addition, due to saltwater intrusion induced by increasing sea levels and facilitated by soil porosity,

groundwater supplies are no longer fit for human consumption ('Tuvalu | UNDP Climate Change Adaptation' n.d.).

Over the years, this precarious condition has led Tuvalu to be the *cause celebre* used by civil society, non-governmental and governmental organisations to sensationalise environmental risks: it has often been described as "disappearing", "drowning" and "sinking", resulting in the inevitable evacuation and forced migration to New Zealand (Chambers and Chambers 2007).

However, if one asks politicians, leaders, and activists from Tuvalu's member islands themselves, migration and relocation are the last options considered and the idea that people are or become environmental refugees is rejected. This is because the sense of nationhood, unity, and homeland is so strong in this area that many are convinced to stay despite the environmental risks.

Representing this union into a single entity is the name Tuvalu itself, which literally means "eight standing together" (*Tu* meaning 'to stand' and *valu*, signifying 'eight') that denotes its eight member islands of Funafuti, Nanumea, Nanumaga, Niutao, Nui, Nukufetau, Nukulaelae, and Vaitupu (Stratford 2013). This term alludes to a place, a stable federation, a national entity, and unitary sovereignty (Stratford 2013). To some extent, this concept is partly a result of Tuvalu's history of colonialism. Together with adjacent Kiribati (formerly known as the Gilbert Islands), Tuvalu (then known as the Ellice Islands) became a British protectorate in 1915. Due to cultural differences (Kiribatians are Micronesians, while Tuvaluans are Polynesians), as well as colonial rules and practices in the respective island capitals, the merger of the two island groups proved fragile. Hence, in 1974, with political freedom from Britain on the horizon, the separation of the Tuvaluans from Kiribati, followed by independence on 1 October 1978 (Finin 2002). Arguably, it was this historical process and profound affirmation of identity that contributed to a unified sense of Tuvaluan nationality and a deep rootedness in place (Stratford 2013).

Beyond this, however, there is another fundamental concept that contributes to the emergence of sovereign identity and filial loyalty to the nation: *Fenua*. This is defined as *"a set of customary practices and territorial markers*" that captures how Pacific community identity is usually tied to a part of the island, such as a valley or bay, and explains the *"biographical location of identity in place"* (Stratford 2013).

The term *Fenua* connects communities, people, and places, and explains why many Tuvaluans are hesitant to consider migration or relocation (Oakes 2019). This is because they have a strong attachment to their homeland, and fear losing their cultural identity and sovereignty (Mortreux and Barnett 2009). These sedentary feelings are deeply ingrained and lead to a commitment to

staying in place, even in the face of potential environmental disasters such as island inundation and despite the widely accepted importance of mobility for livelihood diversification (Farbotko, Stratford, and Lazrus 2015). This reluctance to migrate does not indicate a denial of environmental change or its impact on low-lying islands, but rather a fear of losing one's self and a reluctance to accept a future where people are mobile and disconnected from their place of origin.

The latter prospect would first of all entail the loss of "home": as several interviewees in the capital Funafuti pointed out, despite the drawbacks that may exist such as overpopulation, pollution and waste, alcohol abuse, and dependence on the cash economy, none of them ever believed these issues were compelling enough to make them leave (McMichael et al. 2021). In fact, they deemed that losing their unique identity, a sense of belonging (through genealogy and community), community ties, ancestral connections, and way of life, which are inseparably linked to the location, would be a greater loss than escaping the daily negative aspects that can cause discontent (Farbotko and McMichael 2019).

Secondly, another term of loss would concern the community context or social bonding (Raymond, Brown, and Weber 2010), namely all the aspects of daily life, those "customary practices" that constitute the *Fenua* and help to strengthen that people/place bond. If these were abandoned, for the locals, there would be a risk of annihilating even the cooperation that exists between the various member islands in supporting each other (Stratford 2013), as a truly great single entity, with the exchange of knowledge and resources (such as food supplies) in the event of difficulties and need.

Moreover, a further reason behind the decision to stay is the desire to maintain strong sovereignty, self-determination, cultural resilience, and territorial rights. Tuvalu is "*a country that deserves to be called like that"* (Farbotko, Stratford, and Lazrus 2015), a place where people are entitled to their sovereignty and culture and aim to maintain them. This rootedness, which is one of the manifestations of place attachment in the personal context (the "self" pole, as envisaged by the tripartite model) (Raymond, Brown, and Weber 2010), is so pronounced that it explains why many people refuse to see their island as a terminal case destined to empty out: this would be a real tragedy as it would mean that residents would have to adapt to a new and different way of life and end up as "*slaves*" (McMichael et al. 2021).

On the contrary, many wish to live a free and happy life in Tuvalu for as long as possible, they want to fight for their homeland and make their voice heard even if this involves dying, sacrificing, and going down with the land (Mortreux and Barnett 2009). In conclusion, the *Fenua* of the Tuvaluans can be described with the allegory that one Tuvaluan woman

interviewed offered: *"When I was little, there was a big hurricane, you know, hurricane Bebe in 1972. And it came in, the rain was like stones – it hurt. And I thought this is it, this is the end of the world ... and at the time we went to find a safer place in another building and my grandfather and grandmother, they were still alive at the time, they said, ''You go, leave, find another place that is safe. You are young – run, find protection. And if God says today is the day, then we stay here and go down with it.'' Then, we left and stayed in a concrete house that was filled with water and we just sat and waited. After, we went back, and our place was just the roof. But the roof was good you know, and my grandparents were sitting under it – waiting, fine."* (Mortreux and Barnett 2009).

Tajikistan: the Bartang Valley and the role of Watan Shirin

"The homeland is sweet; the homeland is sweet. Don't you think?

Yes, it is true.

Would you move from Basid?

No.

Well, that is the same for me."

- An excerpt from an interview in the village of Basid, in the Bartang Valley (Blondin 2021b).

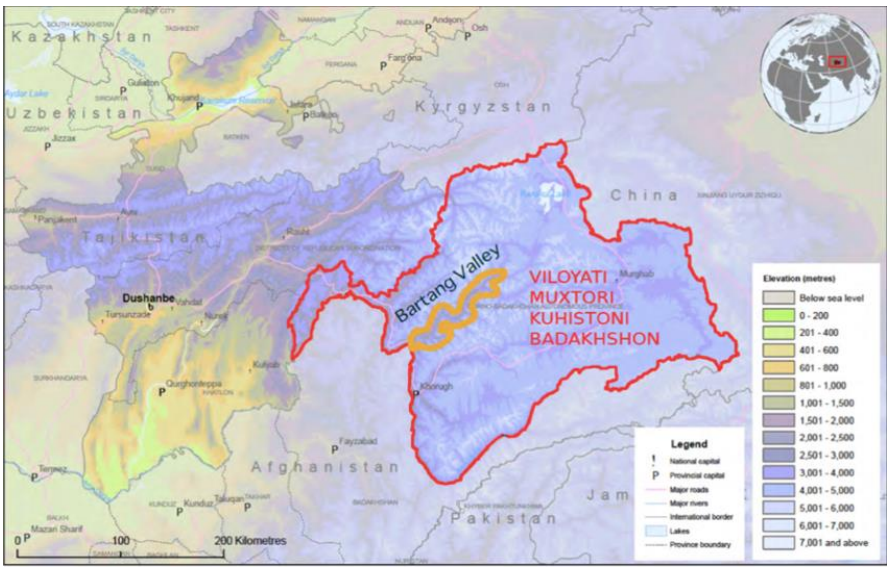

Figure 6: The location of the Bartang Valley within the Viloyati Muxtori Kuhistoni Badakhshon
(Base map from the UN OCHA "Tajikistan Reference Map - Elevation Map", S. Blondin, 2021, p.32)

The Bartang Valley is situated in the Pamir Mountains, at the heart of Viloyati Muxtori Kuhistoni Badakhshon (VMKB), also known as the Autonomous Mountainous Province of Badakhshan, in Tajikistan's Rushon district (*nohiya)* (Fig. 6). The Valley is named after the

river that connects Murghab district to Rushon district, which is currently home to around 25,000 people, while approximately 6,500 people reside in the Bartang Valley (Blondin 2021a). This Valley is considered, as Bliss stated, "*the most remote community of Tajikistan, perhaps even of all former Soviet central Asia*" (Bliss 2006). In his book, the author frequently highlights the seclusion of the Bartang Valley. Ethnographer Kicherer also wrote that the residents of Bartang call their valley "*the place behind the bottom*" (Kicherer 2018).

This isolation is mostly due to the poor condition of the only road leading to the area: built in the 1950s in Soviet times, it was the sole means of connecting to the Soviet "supply system" for goods and services (Mielke 2016), which ensured that all villages had access to essential items like food, clothing, and transportation. Once the Soviet system fell, the populations of this Valley found themselves alone in managing the supply of resources and goods for their well-being and survival, falling into a deep socio-economic crisis (Bliss 2006).

Tajikistan to date is often counted as one the poorest nations globally with a Gross National Income (GNI) per capita of about $1,150 in 2021 ('Tajikistan - GNI Per Capita, Atlas Method 2023), and the poorest country in Central Asia, with a national poverty rate over 26 percent in 2019, and an extreme poverty rate of nearly 11 percent (van 2021). The Bartangi people rely heavily on small-scale agriculture and herding to sustain themselves, but these practices do not guarantee food security. This problem becomes more severe during the spring when the food stocks from the autumn harvest start to dwindle (Blondin 2021a). Food insecurity is also aggravated by physical barriers like floods and avalanches, which block the roads and hinder the transportation of products like dried fruits (mulberries and apricots), causing their quantity and variety to decrease in the villages (Hohmann et al. 2014).

In addition to food insecurity, the Bartang Valley suffers from energy insecurity (Blondin 2020). In the past, during the Soviet period, there were centralised gasoline-powered generators that continuously produced energy, but since 1991, energy poverty has worsened in some areas. Despite the recent development of electrical infrastructure, there are still periodic shortages, and in certain locations, the energy supply is only adequate for necessities like lighting, television, or mobile phone charging (Blondin 2020). Furthermore, the unemployment rate is quite high, and the only state employees who have stable, compensated jobs are teachers, nurses, school cleaners, mayors, and intendants. Despite this, the majority of earnings fall between 300 and 1000 somoni (equivalent to $27 to $88 as of February 2021) and are insufficient to pay for essential household expenses like healthcare costs, construction costs, or college tuition (Blondin 2020).

Moreover, as the Synthesis Report of the Intergovernmental Panel on Climate Change's 2014 Fifth Assessment Report showed, vulnerable socioeconomic conditions reinforce the severity of environmental risks ('AR5 Synthesis Report: Climate Change 2014 — IPCC' 2015).

The Bartang Valley, being a mountainous region, is particularly prone to environmental hazards such as floods, avalanches, landslides, and mudslides, which pose a significant threat to neighbouring villages and often cause road closures (Blondin 2021a). In particular, rainfall triggers destructive rockfalls, mostly in the spring. Moreover, the frequency of floods and landslides is influenced by the reduction of glaciers in mountainous areas (Hock and Rasul 2019; Mergili et al. 2011). Levels of some rivers in the Pamirs appear to have increased and their temperatures decreased in summer under the effect of glacial melt (Saidov et al. 2018).

Finally, soil quality has deteriorated in many areas as a result of inadequate land management practices, and soil erosion resulting from deficient irrigation management is widespread. To prevent nutrient depletion, it is also often necessary to carefully manage soil nutrient cycles, particularly nitrogen fixation and humus production (Blondin 2021a).

However, these environmental hazards are often seen by the Bartangis as an "*everyday disaster*", to use a notion developed by Ibanez-Tirado to explain how catastrophic events combine with the difficulties of everyday life (Ibañez Tirado 2019). Environmental hazards, therefore, are strongly felt and feared in some Pamir villages, but are often overshadowed by food security and socio-economic issues that can directly impact daily life.

The most interesting aspect that is analysed below and that we have already found in the two previous cases is how, despite the environmental difficulties experienced and the possible capability to migrate (Habitable Blog 2020), many residents voluntarily decide to remain in their homeland and do not aspire to leave or only practice circular or temporary mobility (Carling 2002). The main reason for this lies in the strong connection to their place of residence or origin.

Place attachment among the Bartangis appears to be complex and multifaceted: here, indeed, we find all three poles of the framework mentioned above (Raymond, Brown, and Weber 2010). Place identity and place dependence are defined by the importance of place-oriented activities, such as agriculture and pastoralism or spiritual customs. The social bond is based on group identity and a strong sense of community and shared responsibility. The bond with the Valley is also linked to the enjoyment of natural features and a sense of connection with the surrounding ecosystem (Blondin 2021b).

Certainly, much of this attachment to place revolves around the concept of *Watan Shirin*, where "*Watan*" stands for homeland and "*Shirin*" for sweet. This is a widely used expression to

characterise the attachment to that place where the "*umbilical cord was cut*" (Blondin 2021b). It often refers to an "*unreflective attachment*" (Di Masso et al. 2019), experienced by long-term locals – some of whom have never lived anywhere else - for whom attachment to place serves as the cornerstone of links to family and culture (Blondin 2021b). This sentimental and rather traditional attachment to the *sweet homeland* is based less on particular social, cultural, or psychological facets of people's lives than on familiarity and a sense of comfort, both of which give a place a significant personal meaning (Blondin 2021b).

This feeling of comfort towards the land that shapes immobility aspirations also stems from the fact that many of the inhabitants have a positive view of life in the Valley and are often attached to biophysical amenities offered by their environment: it is indeed considered a *"safe haven*" (*panohgoh*), pure and clean, far from any form of pollution as well as from any danger from the cities. Here, people feel more physically resilient and blessed with a stronger immune system (Habitable Blog 2020). They also feel freer (*ozoddur*) and believe that no one can threaten them (*"Inja, hichkas tahdid namekonad"*) (Blondin 2021b).

In essence, the desire to stay is often justified by the love for *Watan*. Leaving one's homeland is in fact negatively connoted, because not only does it mean creating a rupture with the uncontaminated land and environment, but it also means abandoning one's closest relatives and "betraying" those ancestors who, after the forced relocations of the Soviet era, returned to stay precisely because of that special relationship with the place. On the contrary, the aspiration to remain in one's own homeland, to engage with one's community and ancestral heritage, and to stay close to one's relatives underlines the central human values of care, solidarity, and responsibility (Blondin 2021b).

More generally, we notice that this attachment to place expressed by the concept of *Watan Shirin* is actually conveyed through different points of view.

For instance, since many economic activities depend on the land, such as subsistence farming and pastoralism, which are essential for the survival of most residents, attachment to the place also has an occupational trait (G. Brown, Raymond, and Corcoran 2015). As a result, a strong bond is established between these activities and the Bartangis' sense of self, which often leads these people to refuse to leave their sweet homeland, because "*our animals and land*" are there, as some of the Bartang Valley residents interviewed stated (Blondin 2020).

The rhythm of life in the Bartang Valley is also greatly influenced by religious practices, which are intimately related to notions of place and identity. The people of the Bartang Valley worship either in their homes or in *ostanen*, which are shrines decorated with regional elements like ibex horns to emphasise their connection to a particular location (Bliss 2006). It is believed that

the existence of shrines and mausoleums (mazaren) provides significant protection, strengthens the community's ties to the area, and adds to the deep spiritual associations with certain towns and valleys (Blondin 2021b).

Furthermore, the Bartangis consider strong divine protection (barakat), which is particularly important for their survival in the difficult living conditions of the Valley, to be a blessing. This is called *"Bartangi barakat"*, which emphasises the importance of spirituality in their particular region and strengthens their sense of place (Kicherer 2018).

Finally, from a social point of view, the concept of *Watan Shirin* is strongly associated with the identity of the Bartangi group. These people are used to working as a large cooperative and self-managed community that goes by the name of *mahallah*: they have a duty (*wazifa*) to take care of each other, the road, and the infrastructure. They regularly work together to do renovations that benefit society and provide money to the village's *gadja*, or community fund (Blondin 2021a).

Hence, again and inevitably, the strengthening of the feeling of attachment to their Valley and the choice not to migrate.

DISCUSSION

Through these three cases, we have shown the fundamental value that place attachment has in defining certain populations' attitudes towards the possibility or otherwise of migrating. In all three areas, indistinctly, from this strong link with the place of origin emerged a clear desire to remain in the homeland, while accepting the risk of suffering the impact of environmental hazards and seeing the socio-economic security diminished.

From the information gathered, we could see that this feeling of attachment to the place, in general, is very similar in the three examples and has common denominators. This, therefore, indicates how deeply embedded this concept is in these communities in East Asia and in Oceania and in their way of seeing and living life. Indeed, place attachment is commonly conceived by all three populations under analysis not only as an attachment to the land in the physical sense but also and above all as a connection to the place understood as the cradle of identity, culture, and connections with one's ancestors. The place of origin is thus described as the place where "*the umbilical cord was cut*" (Blondin 2021b), as an "*extension of self*" (Gharbaoui and Blocher 2018), as "*the ground of belonging, the place of being, the means of sustenance and the nourishment of life*" (Farbotko et al. 2018; Farbotko and McMichael 2019). And it is precisely through this conception that an obligation of loyalty to these places develops for the two communities in the Pacific as well as for the Bartangis in Tajikistan and manifests itself through the conscious choice to stay. A life without a homeland to live in or return to would be unbearable (Farbotko et al. 2018), the forced relocation and separation from these places would therefore constitute a significant interruption of life, the loss of the identity of each individual involved, and of "*all that is dear*" (Steiner 2015).

Hence, in essence, the preference for sedentariness over mobility, going so far as to evoke not only a sense of heroic rootedness in a place of extreme risk, but even the acceptance of death, if necessary, in this traditional territory rather than resignation to relocation (Farbotko, Stratford, and Lazrus 2015).

In addition to this strong place dependence and identity, another meaning of place attachment that emerged in all three cases concerns social bonding. However, during the analysis, we observed how this element is not actually interpreted in quite the same way by the three communities. Indeed, the communities in the Bartang Valley and Tuvalu understand this social bonding as belonging to a community in which people take care of each other and cooperate in "customary practices" and in some group work (Stratford 2013). On the other hand, the term *Vanua* in Fiji indicates not only a more general, albeit deep-rooted, feeling of belonging to the

social environment and its heritage, but also the structure of society. *Vanua* can be the central authority, a confederation of people under a chief, or even a hierarchical group divided into clans and tribes, and this inevitably creates a bond with the reality in which one lives that makes it difficult to abandon.

There are also other aspects to which the concept of attachment to place refers that do not emerge in each of the examples. For instance, only the notions of *Vanua* and *Watan Shirin* also correspond to a place attachment understood as "nature bonding": for the Fiji Islands, it translates into a deep respect for and identification with the natural resources that the islands provide, whereas for the Bartangis, it takes the form of a connection with the biophysical amenities provided by their environment, which is pure and clean, free from any threat from the cities as well as any form of pollution.

Similarly, the importance of spirituality in strengthening the sense of place and the protection of sacred sites or shrines are recurrent in Fiji and Tajikistan and determine their choice not to migrate, while it is not mentioned as a determining aspect for Tuvaluans.

However, for its part, Tuvalu with the concept of *Fenua* undoubtedly expresses a clear and strong desire to maintain its nationality, sovereignty, and self-determination. This rootedness is therefore much more pronounced here than in the other two areas.

These findings would therefore seem to suggest that, rather than "place attachment", it would probably be more correct to speak of "place attachments", namely an inseparable bond with one's homeland that is embodied, however, in a form that is not perfectly homogeneous according to the different geographical areas. Thus, certain traits of it manifest themselves in an extremely similar manner in several communities, even those differing from one another in terms of traditions, origins, and culture. Other elements, on the other hand, are only characteristic of certain populations (often neighbouring) precisely because they are influenced by the history and social structure of these individual communities.

The early 20th-century economist and sociologist Vilfredo Pareto posited that human beings exhibit dispositions and behaviours that lead to what he called the "persistence of aggregates", or a strong connection to places and traditions. This connection to a place, whether it be where one was born or the location of one's relationships, academic pursuits, or place of employment, is developed by individual experiences that associate feelings with particular territories. The place in which we live and where we develop our affections leaves a strong and indelible imprint on each of us: desire for possession? Emotions? Or affections? (Pollini 1994).

There is no single key to interpretation, but this can, objectively, explain the different facets of the way ties with the territory are born, expressed, and perpetuated and why, therefore, it is more correct to speak of attachments in the plural.

The set of data gathered so far is therefore of great interest, even though it derives from a series of studies conducted in a still limited geographical area, between East Asia and the islands of Oceania. We cannot, however, exclude the possibility that, as we have strictly limited our meta-analysis to works carried out in English, there may already be other studies on the subject in the database, in different languages, which confirm the importance of place attachment even in regions and populations of the world not involved in our study. At the same time, our investigation opens up extremely interesting study perspectives for years to come: it is conceivable, in fact, that in other areas of the world, equally if not even more deeply affected by environmental change, similar relationships could be observed and studied, leading to the delineation, even for these populations, of the absolute value of place attachment in the choice not to migrate.

After all, the fact that attachment to the homeland represents a deeply rooted feeling in people of all latitudes is demonstrated by the countless examples that world literature offers us: from Saba to Pavese, from Foscolo to von Hofmannsthal, from Darwish to Lumumba (Saba 1921; Pavese 1968; Foscolo 1856; von Hofmannsthal 2004; Darwish 2008; Lumumba 1995). How can we fail to recall in this regard the beautiful words dedicated to his homeland by the Chilean writer Pablo Neruda: "*I think that man must live in his homeland and I believe that the uprooting of human beings is a frustration that in one way or another clouds the clarity of the soul. I can only live in my land; I cannot live without putting my feet, hands, ears in it, without feeling the circulation of its waters and its shadows, without feeling how my roots search its clods for maternal substances*" (Neruda 1974).

Understanding, in this way, in a more analytical and precise manner, the dynamics with which place attachment manifests itself in completely different areas of the world could allow a new way of looking at men's choices in the face of environmental adversities that suddenly or progressively undermine their quiet life in the land of origin, in "their land", that and only that "*where the most beautiful clouds pass*" (Renard 1945). Moreover, it is precisely the meticulous analysis of the intersecting factors that lead men to move towards voluntary immobility that could open up access to a new way of approaching the migration phenomenon as a whole.

CONCLUSION

This thesis set out to answer the research question "*How does place attachment contribute to the choice not to migrate despite environmental risks*?". To do this in a comprehensive manner, we have presented the three concepts under analysis (*Vanua*, *Fenua*, and *Watan Shirin*) and observed for each of them the various dimensions through which attachment to place manifests itself (personal, social, and nature bonding).

In light of this study, we can therefore confirm our initial hypothesis that place attachment is so overwhelmingly strong in some communities that they choose not to migrate despite the high risk of being affected by environmental hazards.

This work aims to represent a small but significant contribution to the recent literature on the subject of immobility. Indeed, it shows how even in different areas, inhabited by peoples with dissimilar histories and traditions, attachment to place can profoundly condition the life choices of these people.

Extending the research to other areas of the world that are equally exposed to the risk of mass migration as a result of environmental events could lead to new and relevant insights into how crucial the role of attachment to place can be in the decisions of these populations to migrate or not, and thus underline the no longer negligible relevance of the mobility/immobility comparison for future migration policy strategies at the international level.

Pope Francis wrote in his recent message for the 109th World Migrant and Refugee Day 2023: "*Migrating should always be a free choice, yet in very many cases, even today, it is not (...). And where circumstances allow for the choice of whether to migrate or to stay, it is still necessary to ensure that this choice is informed and well-considered, lest so many men, women and children fall victim to risky illusions or unscrupulous traffickers.*" ('Messaggio per La 109ª Giornata Mondiale Del Migrante e Del Rifugiato 2023 | Francesco' n.d.).

Therefore, to make migration a truly free choice, we believe it is really important to cultivate a healthy respect for the diversity of people and cultures, based on the deep conviction that only through care and concern for each individual member of the human community we can safeguard the integrity and the future of our planet, of millions of enlightened minds inhabiting it and of every inimitable living soul, so that what Lev Tolstoy wrote should no longer be merely an image but a certainty: "*If it is true that there are as many minds as there are heads, then there are as many kinds of love as there are hearts.*" (Tolstoy 1878).

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