



University of Zadar
&



International Small Islands Studies Association (ISISA)

18th Islands of the World Conference

Book of Abstracts

ISLANDS: NATURE AND CULTURE

13th – 17th June 2022, Zadar, Croatia



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KEYNOTES

CULTURE(S) OF NATURE

Beate RATTER¹

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Nature – and islands – are not simply there. What we perceive as *nature* depends on our socio-cultural context, our situated experiences and the various knowledge(s) we have acquired and accumulated over time. *Nature* is a cultural construct. A fundamental shift in how the Western world regards nature occurred during the Enlightenment, leading to the problematic dichotomy between nature and culture and, with this, alienation from nature and the (mistaken) belief that we can master it. Looking back over 30 years of ISISA conferences, the nature-culture dichotomy has been subconsciously perpetuated in island studies, influencing another dichotomy between the island and the mainland and islanders and mainlanders – leading to the concealed elevation of the *noble islander*. The talk will explore predominant *cultures of nature* as a conceptual entry point to explore and characterise the in-between of islands and islanders, considering the consequences of the nature-culture divide and how this might constrain us in our perceptions and our research. Why is it valuable to overcome the existing dichotomies for the future of island studies?

BOXING CLEVER – A NEW CARTOGRAPHIC VISION OF SHETLAND

Andrew JENNINGS¹

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Despite a public ban in 2018 on putting Shetland in a box on official Scottish government maps, the islands are still often mistakenly removed from their true geographical position and consigned to a area far south of their true location and much closer to the Scottish mainland. The then MSP for Shetland Tavish Scott claimed that this irks the locals and misrepresents reality, which can have a real-life impact, creating a false impression of the geographical and climatic challenges faced by the islanders. If policy makers in the Scottish and UK governments are unaware of the true size and geographical position, 60 degrees north, of Shetland, this can lead them astray. The assumptions upon which they base policy decisions can be flawed.

However, whether in a box, or positioned far to the north of the Scottish mainland at its true latitude, the image of Shetland is still being conceptualised from outside. In the latter case, it is seen as far from the centre of Scottish life. What happens when Shetland is taken as its own cartographic focus? This research and presentation will, through the exploration of newly created maps and visualisations by the speaker, present a different conceptualisation of Shetland, not that of an isolated island group at the extremity of Scotland, but rather that of a northern community and central node in the North Atlantic.

PAG ISLAND – CULTURE IN NATURE

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In the Anthropocene, it is difficult to recognize a clear boundary between the natural and cultural systems. Different natural elements of space can be perceived visually. However, functionally, most of these elements have been shaped or touched by man differently.

The island of Pag is a place where different microsystems are in contact. Undoubtedly, the significant influence of geological composition, relief and climate on the island landscape can be recognized. However, for at least three millennia, man has contributed to shaping the landscape, which therefore acquires the character of a cultural space from both an aesthetic and a functional point of view. Island settlements with a mosaic of profane and sacral architecture, dry stone walls that cover the whole island and olive groves, vineyards and gardens that enrich the rocky karst desert like oases and various port installations are strong imprints of man in the island nature from which development resources were drawn, but also motives in artistic creation. The indented olive trees in Lun are a counterpoint to Pag's lace. Rocks exposed to the bora wind and sheep grazing surrounding large saltworks have been a subject of interest for centuries by the ruling elites who administrated the island from Adriatic metropolises.

Although it has been bridged for six decades, the centuries-old insularity of Pag still makes this Croatian island a space that cannot be defined and understood by applying a continental narrative. Considering the tactile connection of natural and cultural heritage and broad exposure to the tourism industry, the challenge of the modern generation is to sustainably manage this resource while treating it as a fundamental building element in which the Mediterranean life spirit is woven into the island's identity.

ISLAND STUDIES – A VIEW FROM THE NEAR ISLANDS

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Once relatively asymmetrical and straightforward, the mainland–island relationship has become complex. Islands are commonly captured by wider mainland traffic, infrastructure, and economic and social networks. Once highly self-sustained and richly structured, island economies have been specialising and becoming increasingly dependent on mainland inputs, final products, and the interests of mainland investors.

Near islands are particularly affected by these processes. Most of the near islands are administrative parts of coastal administrative territorial units subject to mainland-made development policies. The basic presumption of mainland policymakers is „the island handicap“, i.e. the supposedly inferior micro-regional insular position to be overcome, which results in spreading the infrastructure networks across islands and securing services and connections with the mainland.

Amid the Anthropocene, islands are facing de-insularisation. An often neglected outcome of this is endangered islandness, slowly fading away, overshadowed by bridges, tunnels, fast connections to the mainland and better services. What is the role of island scholars in this process? Observe and analyse the island specificities. Yes, but should we use the results and findings to warn that islands will remain islands only if the islandness is preserved? Should we get involved in policy making, actual development management and satisfactory education of islanders? The questions await a quick response.

PRESENTERS

ANTHROPOCENE ISLANDING: GRANULAR GEOGRAPHIES OF MATERIAL AND POLITICAL PROCESSES

Katherine SAMMLER¹

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Islands hold an important and contested place in global socio-political imaginaries. From island formation to erosion, the physical processes that move granular island materials have taken on new meanings amidst the impacts of climate change. However, the geopolitics of sediments and rocks also draw attention to the significance of island matters to Anthropocene landscapes and seascapes. Whether artificial island creation, rapid volcanic island formation, valuable sand excavation, or even sediment plumes, the ways we may think about solid ground can be upended at particular scales and within specific practices. When material and social constructs intersect in ways that circulate, relocate, or circumnavigate what might normatively be considered stable and bounded figures, excesses or porosity introduce openings for refiguring previous categorisations. Then the stability of something as distinct as an island can have its object-ness brought into question. Using case study vignettes from seabed mining in Aotearoa, New Zealand to geodetic discovery in Croatia, this paper examines islands as subjects, processes, and relations, continually pushing beyond static categorisations and binaries. This study aims to think with mixtures, hybrids, and cyborgs, across Anthropocene islands to contribute to dynamic critical thinking within a climatically shifting world.

Keywords: new materialism, climate change, granular geographies, seabed mining, political ecology

SCHOOL FOOD ON AN ISLAND IN THE ANTHROPOCENE: AN ECOLOGICAL ANALYSIS OF SCHOOL FOOD IN NEWFOUNDLAND

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As ecological and environmental contexts at the local and planetary levels are ignored, the justification for reconceptualising schools and their food systems grows. In this paper, I will describe how the mission of bridging socio-ecological thinking to school food on an island in Canada requires a re-examination of island identity and systematically qualifying educational, health and environmental policies. To do this, I will present four scenarios of school food on the island of Newfoundland using an ecological public health framework. The first scenario presents how a pre-colonial version of “school food” may have looked. The next presents a description of a colonised, early history version of school food in the province of Newfoundland and Labrador. The third scenario will describe today’s modern industrialised version of school food. The final scenario imagines island school food responsive to intertwined threats people face today (including economic hardship, high mortality, food insecurity and poor educational outcomes) and the interconnected strengths based on island life (distance from the mainland, unique culture and togetherness). The presentation of scenarios of school food over time on the island of Newfoundland is used as an example of a research pedagogy that embraces ecological consciousness as required in the Anthropocene.

Keywords: school food system, Newfoundland, ecological consciousness

ISLANDS OF CONTROL: GATES COMMUNITIES AND THE FUTURE OF ISLAND LIFE

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Many fictional stories portray a certain kind of island that seems far from reality. In many books and films, those in power have constructed their own islands to control resources and isolate themselves from the rest of society. From *James Bond* to *Jurassic Park*, *The Incredibles* to *Squid Games*, fictitious islands of control abound. Even manufactured environments such as the satellite continent in *Elysium* and the domed captivity in *The Truman Show* emulate island-like controlled isolation. These depictions are often dystopian, showcasing clear physical divides between the “haves” and “have-nots” of society. While many of these fictional islands seem too indulgent to be real, these constructed environments of control are not just found on our television screens; we are seeing them more regularly in the real world as private islands and gated communities become increasingly popular. These spaces represent the physical manifestations of isolation and control, two themes that commonly appear in discussions of island studies. They also provide physical markers of class separation and income inequalities that are harder to define in mainland urban areas.

This paper explores the parallels between gated communities and islands, speculating the potential trajectories of islands in the future. Combining an environmental scan with a review of relevant articles, literature, and pop culture, the paper focuses on gated communities generally as built metaphors for islands of control. Today’s gated communities could be thought of as islands; their walls are the shores, their gates are the bridges or marinas, and the world outside their borders are oceans of “others”. Certain existing gated communities in countries such as India and Thailand can be considered case studies for contemporary gated community living that hint at the future of these heterotopian environments. Furthermore, as gated communities are currently being built in nations around the world, will islands of the future be treated as gated communities? Some islands are already quite controlled, with tolls and guards at their entrances. Will these gates become more popular to control the flow of people and resources on and off islands? Will islands be reserved for those able to afford to escape to a paradise where they can forget about the challenges of the ‘real world’? This paper also asks, can an island gated community ever be completely independent without the support of off-island resources? What other impacts might an increasing wealth inequality have on the control and use of global islands? These questions are explored through the lens of community planning. The paper discusses contemporary community planning theory in relation to the future of islands with a focus on mixed-use spaces and local economies.

Keywords: Gated communities; Socio-economic inequality; Mixed-use; Heterotopia; Community planning

THE DISAPPEARING ISLAND: EXPLORING ISLANDNESS AND THE LANGUAGE OF ART IN THE ANTHROPOCENE

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In 2013, Prince Edward Island fabric artist Catherine Miller joined a panel of scientists and government officials to discuss the effects of Anthropogenic climate change on Prince Edward Island, Canada. Her installation, entitled *Changing Environs*, hung just outside Charlottetown's Confederation Centre of the Arts lecture theatre, including *Rising Sea Level, PEI*, 2010, demonstrating blatantly and poignantly what will happen to our beloved island when the Northumberland Strait inevitably rises. What was once one island will become four.

Artists the world over will go to great lengths to protest the ways in which humans ravage the environment—and to demonstrate the results. This is hardly new: for centuries, writers and artists have been producing work that brings social issues to the fore. Sometimes what they create resonates with audiences at the intellectual level, but it often grabs people emotionally. At the same time, island artists are acutely attached to their landscapes and wish to tend to what geographer Edward Relph calls “fields of care”: the places they call home, documenting them before they change irrevocably or disappear altogether.

Now, island artists who find themselves at the forefront of Anthropogenic climate change are using their creative practices to deliver the message of the dire straits in which we find ourselves, ranging from despair to hope, from the practical to the profane.

Through the lens of current Anthropocene thinking, this presentation explores how we convey information through the language of art and highlights some of the efforts artists have made in protesting climate change. The presentation will segue into work by Prince Edward Island visual artists Rilla Marshall and Brenda Whiteway, who use the language of art as a clarion cry, waking us up to the global existential threat of anthropogenic climate change.

Keywords: creative arts, islands, Anthropogenic climate change, sea level rise

IMAGINATIONS OF ISLAND LITERATURE: TRANSFORMATIVE LEARNING IN RELATIONSHIP BETWEEN SELF AND SURROUNDING IN PENGHU ARCHIPELAGO, TAIWAN

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Transformative learning is the transformation of a learner's meaning, perspectives, frames of reference, and habits of mind. When exposed to new information, people will often evaluate their past thoughts and understandings and change their worldview through critical thinking.

"Heaven" and "paradise" are how many people think of islands. When surrounded by landscapes and seascapes, people often find islands fertile ground for the imagination to take hold. Utopia is often presented in the form of island literature, becoming the story of fulfilling inner desires. Through writing, people turn their own experiences and impressions into words and gradually change their cognition and behaviour, an element of transformative learning. Individuals experience the process of self-reflection about the value of life, beliefs, assumptions, expectations, and other meaningful viewpoints and, in the process, reconstruct their core identity.

This research project uses transformative learning theory to discuss modern Penghu Island literature. The Penghu Archipelago, consisting of 90 small islands between Taiwan and China, is influenced by Chinese culture. Because of the isolation of the ocean, people rely on the sea in the economy, transportation, life, and literature, with the latter often characterised by its marine culture. We gain a new perspective on island literature through the lens of transformative learning and islands. The study used Content Analysis Method to analyse 117 essays for the Penghu Literature Award from 1998 to 2019. Five pieces of prose were selected as representative works. The research divides the transformational learning of literature into four stages: (1) Difficulties and Confusion, (2) Experiences and impacts, (3) Exploration and Reflection, and (4) Transformation and Integration.

The results show that: (1) People on the islands can experience changes in their identity due to the strong sense of periphery and isolation. These meanings are transformed into a unique sense of intimacy and attachment to place, often through memory and nostalgia. (2) The relationship between islands is not only spatial but exists among islanders, too. Through literature, readers know that the island is not a closed microcosm. Instead, it provides grounds for the creation of new social relations and distinctive island identities in cultural interaction. (3) There are diverse cultures in isolated islands. People's impression of island space changes with time and experience and gradually reflects the ethical relationship between self and the environment (from the criticism of environmental relations to the emphasis on social relations). People also emphasise the collective rather than pure personal experience and imagination in the transformation process.

The research discusses the effects of the island on Penghu Island literature and also uses the perspective of transformative learning to understand the changes in people and the connotation of Eastern Chinese thinking through the cultural context and the imagination of the island. From the transformation of individuals to the transformation of people, then to the unity of people and the island, island literature steps from the inside to the outside, from the individual to the whole, from human to the unity with nature.

Keywords: Island Literature, Imaginations of Space, Transformative Learning, Penghu Archipelago

THE BEGINNING OF THE END: THE CONQUEST OF THE CARIBBEAN AS A PREMONITION OF THE CURRENT CLIMATE CRISIS

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Within the Anthropocene, the discovery of a seaway to the Western end of the Atlantic and the contact with the Arawak and Carib people of the islands and coasts marks a special place and time. While discerning the Atlantic from the Pacific ocean and the landmass in-between is pivotal for a global conception of the inhabited world—both in the sense of conceiving Earth as depicted on Martin Waldseemüller's globe and in the sense of establishing global trade routes—the conquest and transformation of the islands and mainlands of the Americas are central for financing the industrial revolution (Benítez Rojo) and Eurocentric coloniality/modernity as such (Quijano). In consequence, the devastation of local nature and culture on the islands of the Caribbean basin can arguably be read as a premonition of the current climate crisis. This can best be seen in the logbook of Cristóforo Colombo, the *brevísima relación* by Bartolomé de Las Casas and the early relations of conquistadors such as Cortés. After all, these texts—which form part of *the invention of America* (O'Gorman)—show an opportunist, deceiving, and extractionist treatment of humans and their nonhuman surroundings and form part of a *green imperialism* (Grove).

In my presentation, I would like to undertake a close reading of various texts by so-called discoverers and conquistadors and focus on rhetorics of extractionism, depletion, eradication, and elimination that may be interpreted as outsets and premonitions of the current climate crisis. The analyses will show that tropes of (island) paradise found and (island) paradise lost are pivotal for these early textual productions and that the urge for gold, silver, fertile land and other resources marks the path in-between.

The conclusion will show that these *relaciones*, directed to kings and queens of the nascent Spanish empire, may primarily praise the geomorphology and social geography of the islands, but at the same time, already show the erosions and demises their colonisation and integration in a global capitalist system will cause.

Keywords: Anthropocene, climate crisis, Caribbean

REEF PASSAGES IN NEW CALEDONIA AND THEIR SOCIAL-ECOLOGICAL ROLES

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The importance of coral reefs for the Small Island States in the tropics has long been undisputed. Healthy and protected reefs help island systems (cultural, ecological, social, and physical) thrive and survive. Reef passages link the open ocean to the lagoon and coastal areas in coral reef ecosystems and are generally home to an exceptionally diverse and abundant marine life, hosting emblematic species and fish spawning aggregations particularly vulnerable to fishing. The social and ecological roles of reef passages provide multiple benefits for the islands and their people but are so far poorly characterised. Data was collected on the social-ecological role of reef passages along the north coast of New Caledonia.

Three types of interviews (semi-structured face-to-face interviews, qualitative in-depth life-history interviews, key informant interviews) based on three different guides were used, along with recorded narratives, telephone calls, and social media correspondence under lockdown circumstances. A preliminary analysis of the qualitative interviews was made, including listing the different social and ecological roles mentioned, with a particular focus on key species cited by the interviewees (endangered, emblematic, totem or targeted/high value).

We highlight the multi-faceted importance of these special openings in fringing reefs that connect inshore and offshore areas even at shallow tides. Every day, various living and non-living objects are transferred through these openings. This can be sediments from an island's hinterland, returning fish in spawning mode (or on regular migration), emblematic megafaunas such as turtles and sharks (juvenile/adult), fishers, souls of the deceased people, or even sounds that are produced or passing through the passage. Reef passages are 'connectivity zones' between inshore coastal and open waters and showcase many transboundary issues that need to be better understood. This understanding will be explicitly required for conservation planning, supporting fisheries, and protecting marine biodiversity and culture as we move towards achieving the international objective of protecting 30% of the ocean by 2030.

Keywords: Small islands, coral reef passages, connectivity, social-ecological roles, fishing

“INVASIVE SPECIES” IN THE AMERICAN MEDITERRANEAN: LIONFISH, REGIONAL RHETORICS AND CLIMATE CHANGE

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For this talk, I will discuss place-based rhetorics and literacies on climate change and “invasive species” in the island, coastal and aquatic region assemblage known as the American Mediterranean Sea. This region consists of the Gulf of Mexico and the Caribbean Sea, aquatically linking almost 40 countries and territories in the Americas, along with thousands of islets, reefs, cays, and waterways. In this friction zone (Tsing), species, both human and non, are linked through their shared transitions and identities of land and sea, by culture, politics, adaption, geo-social identity, and through the airspace, ecologies, and interactions. Scientists speculate that in this region of the Americas, such impending “natural” disasters as warming sea temperatures (for example, coral bleaching), sea level rise (for example, Tangier Island and Isle De Jean Charles), and increasing storm severity (for example, devastating hurricanes Katrina, Sandy and, in more recent years, Harvey, Irma, Jose, and Maria), are likely indicators of climate change caused by anthropogenic activity (Bender et al.). As the seas warm, so-called “invasive species”, in this case, lionfish, proliferate and threaten native species, fishing industries, and food supplies throughout the Caribbean and Gulf of Mexico and may migrate even further north and south in the coastal Atlantic Americas (Côté; Greenhalgh). In the face of these already burgeoning and future ecological disruptions, it is rhetorically challenging to situate and unpack the complexities of encounters along micro and macro scales. Jenny Rice argues that rhetorical regionalism “disrupts given narratives of belonging that are framed on a national level and between individuals.” She poses a four-premise model thusly: Region is an Interface; Region and Nation are Non-concentric; Regions are Folds; Regions are Strategies.

In this presentation, I will unpack the case of lionfish as a nexus of rhetorical intra-action and argue for such a systematic lens on aquapelagic (Hayward) and coastal assemblages that incorporates concepts and geographies of the coastal, island, and aquatic features of the region and brings into play the multiple planes of flow and friction between discursive, ecological, inter-species, and socio-cultural landscapes.

Keywords: climate change, regional rhetoric, invasive species, aquapelagic assemblages

ADAPTIVE RESPONSES TO ENVIRONMENTAL CHANGE IN SMALL ISLANDS IN THE WESTERN INDIAN OCEAN (WIO): A SYSTEMATIC REVIEW

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Small tropical islands are at the frontline of rapid environmental change, impacting people and nature. Environmental change is caused by human influence and natural processes, affecting societies and their environments at different spatial and temporal scales. In small islands, multiple environmental and socio-economic change stressors interact and intensify at their reduced spatial scales. The complex and uncertain nature of this change means that actors and institutions must respond through adaptive and innovative thinking and action. Adaptive responses are actions planned or implemented by individuals, groups or organisations to respond to changing contexts and scenarios by reducing, preventing, and reverting the risks and impacts of environmental change. Through a systematic qualitative review of academic literature from 2010 to 2020 using the Web of Science literature database, we document the types of adaptive responses to environmental change, the actors involved and the elements of effective responses. We analysed 329 studies focusing on nine islands in the Western Indian Ocean – Zanzibar, Mafia, Seychelles, Comoros, Mayotte, La Réunion, Mauritius, Maldives and Lakshadweep. These islands are heterogeneous, differing in size, physical geography, population, culture, international position, political status, economy, human development, and governance. While they vary in specific contexts, they share common insular characteristics, heavily depend on their marine resources for both subsistence and livelihoods (e.g. fishing, tourism), have deep colonial histories, face similar pressures and impacts of environmental change, and, to an extent, respond in similar ways to this change.

Using qualitative content analysis, we extracted and categorised information based on pre-defined response categories ranging from institutional (economic instruments, laws, policies and community-based), social (educational and informational), infrastructural (engineered and technological) and ecological restoration-based responses. The reviewed articles varied widely in their distribution across islands, focus, and depth regarding the responses studied. Academic research documents a wide diversity of responses that often overlap across categories and may be combined and pursued simultaneously. For example, to address environmental change in small islands, many

different responses are designed, ranging from coastal protection structures, land reclamation, land elevation and artificial islands to mangrove restoration, awareness raising programs, coastal zone regulations and climate induced migration and relocation policies. Responses were predominantly institutional (85%) - driven by national (84%) and local (70%) governments. The most common social responses (53%) were linked to environmental education programs and knowledge sharing platforms. Although the responses indicated increasing interest in ecological restoration (27%) and community-based initiatives (36%), they were largely underrepresented in research.

The reviewed literature highlighted that the elements of effective responses mainly depended on the relevance to the local social-ecological context, resources available (time and funding), knowledge (access, diversity, integration, transfer, innovative and anticipatory), governance of responses (coordinated, transparent, adaptive, equitable, participatory and polycentric) and iterative monitoring. These elements of effectiveness tend to be synergistic, and no single element is effective in isolation. When these elements are not considered, the response intervention could be maladaptive or counterproductive, wherein poorly designed adaptation-labelled responses result in perverse social and ecological outcomes, further increasing the exposure and vulnerability to the stressors of environmental change. For example, the establishment of exclusionary protected areas could marginalise local communities and threaten their livelihoods, or in the case of poorly designed infrastructural responses, environmental impacts could worsen. There should be more focus on diversifying funding sources, assessing the successes and failures of responses over a long time scale, and strengthening institutional coordination, collaboration and local participatory decision-making. There is a need for more context specific empirical research on response effectiveness. This research synthesises what we know, points to the gaps in the literature and highlights the potential for islands to learn from each other and apply these lessons to non-island contexts further. Cataloguing the different responses may help incorporate diversity into well-informed decisions, offer alternative ways of thinking and highlight specific areas and response types that should be the focus of future research and practice.

Keywords: Environmental change, adaptation, small islands, decision-making, Indian Ocean

SOCIAL INNOVATION AND JUST RESILIENCE IN THE GOVERNANCE OF SMALL ISLAND SOCIAL-ECOLOGICAL SYSTEMS: EXAMINING THE ROLE OF PLACE-BASED SUSTAINABILITY INITIATIVES

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Small, insular, tourism-oriented islands aim at developing sustainably to reduce vulnerabilities and create a more resilient future. However, the social-ecological governance of tourist islands is characterised by several tensions and frictions in their attempt to accommodate sustainability objectives, power imbalances and diverse interests. Negative externalities of tourism on islands include environmental degradation coupled with socio-economic polarisation, economic leakages through high imports and expatriate labour, and profit repatriation. Tensions exist between sustainable environmental governance versus economic growth, contributing to vulnerabilities and threatening a chance at a sustainable national trajectory. Many place-based sustainability initiatives, holding the potential to be socially innovative, have emerged on tourist islands as a sustainable alternative to counteract a development trajectory laden with the negative consequences of an extractivist economic model. The place-based initiatives considered have been initiated by citizens at a local island level to promote sustainable development through innovative approaches to manage, conserve and restore marine and terrestrial natural resources. These initiatives include mangrove restoration, coral reef regeneration, fisheries, zero waste/circular economy promotion, endemic species conservation, and ecotourism. By the ‘socially innovative potential of place-based sustainability initiatives as a more sustainable alternative’, this research refers to the role and qualities of these initiatives in promoting entangled (material and non-material) needs satisfaction, transformations of social relations, empowerment of social actors, and sustainable social-ecological governance. As social innovation is about the satisfaction of both material and non-material needs, encompassing cultural and socio-psychological dimensions (e.g. reproduction of culture, self-identity, and sense of place) concurrently, this view considers island cultures that are in contrast to the dominant nature-society dichotomy in Western culture. This paper presents an analytical framework to understand how the concepts of place-based sustainability and social innovation relate to each other and the ambition of transforming the vulnerability of small island social-ecological systems into just resilience.

Drawing on existing studies and theories on social-ecological systems (SES) transformation and resilience, social innovation and place-based sustainability, this paper develops a framework that sheds light on how place-based sustainability initiatives can represent socio-political dynamics countering vulnerabilities with their socially innovative potential leading to negotiation and construction of just resilience. This paper supports the expansion of the conceptual vocabulary and the horizon for what is to be understood as ‘resilience’ by emphasising a normative component with the word ‘just’. Thereby reinforcing that sustainable transformation towards just resilience is inherently ‘political’ and should be recognised as such within analytical lenses for small islands SESs focusing on sustainable development and resilience. Subsequently, this paper will elucidate the framework with an island with a strong tourism development trajectory, namely, Aruba.

Keywords: Social-ecological systems (SES), just resilience, islands, social innovation, tourism

LANDSCAPE ARCHAEOLOGY ON THE ISLAND OF IST - DIACHRONIC STUDY ON THE ANTHROPOGENIC TRANSFORMATION OF THE LANDSCAPE FROM THE BRONZE AGE TO THE EARLY MODERN PERIOD

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As closed, geographically defined units, islands are an ideal polygon for interdisciplinary studies of landscape evolution and its anthropogenic transformation through prehistoric and historical periods. In that case, small islands, which are especially susceptible to human impacts, provide a unique opportunity to apply a holistic approach to landscape research. The island of Ist, with its 9.65 km², belongs to the group of small outer islands of the northern Dalmatian archipelago. The island of Ist had never been archaeologically explored, and the poor research state is primarily due to inaccessibility and a harsh karst landscape. The student project „Archaeological Landscape of the island of Ist – Archaeo.IST“ was initiated in 2019 to collect relevant data contributing to understanding the dynamics of human behaviour reflected in various traces of complex interactions between human-islanders and the island-nature in the way of creating the cultural landscape. The landscape research methodology was based on the processing of data systematised using GIS and collected through fieldwork, published and unpublished sources, analysis of the topographic and historical maps, and interpretation of satellite and aerial images. An extensive field survey of selected areas has been followed by trial excavations on sites where surface artefacts indicated significant archaeological potential.

Preliminary analysis of archaeological records emphasised the intensive land use in the late prehistoric periods, Bronze and Iron Ages, which left traces in the formation of hillforts and tumuli. The change in the political and social situations brought about by the establishment of Roman rule will lead to the transformation and centralisation of the settlement pattern. The formation of the villa rustica site on Selišće may be seen as a repercussion of new cultural dynamics and economic basis with a preference for different land use patterns. Significant chronological lacuna is associated with the period of the early and high Middle Ages with the complete absence of archaeological evidence. The only site from the late Middle Ages was recorded in the bay of Mavrela, and it can only be assumed that the main reason for the construction of the small object was the advantages of a protected bay with water sources.

The research results provide insights into how an island society may have transformed and sustained its use and perception of the island landscape. People-islanders made great efforts to shape and recreate the island landscape according to their needs and possibilities in specific topographic conditions with scarce natural resources. Current conclusions, with the lack of evidence for some periods, emphasise the importance of revision of traditional views of remoteness and isolation in favour of examining ways of integrating the island within a wider local or regional maritime network of cultural interactions, which may have been one of the determining factors of its cultural development through the past.

Keywords: Landscape archaeology, island archaeology, the island of Ist, hillforts, diachronic study

THE PRELIMINARY SURVEY OF MARINE LITTER ON THE COASTS OF KORNATI AND ELAFITI ISLANDS (ADRIATIC SEA, CROATIA)

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Marine litter (or marine debris) is an artificial object that reaches the marine environment after use. The most frequent material in marine litter is plastics (categorized from micro- to megaplastics) due to their widespread use and long decomposition time (approx. 450 years for a plastic bottle). In recent times, the pollution of marine environments with microplastics has been widely addressed in scientific studies, which led to increasing scientific interest in the study of marine litter in general. The prerequisite for any marine litter management project is a detailed survey of the coasts to determine which parts are the most vulnerable and what are the driving mechanisms for accumulations of litter on those coasts. As a relatively long, narrow and semi-enclosed basin, the Adriatic Sea is considered a preferential area for marine litter accumulation in the whole Mediterranean due to prevailing winds and sea currents. Since the Adriatic coast is a European tourism hotspot, pollution with marine litter could potentially cause environmental and economic challenges. Adriatic islands are susceptible to marine litter pollution due to the exposition of their coasts and the fact that local communities depend almost exclusively on tourism.

In this paper, we present the results of the preliminary survey of marine litter on the coasts of two archipelagos in the Croatian Adriatic: Elafiti islands in the south and the Kornati islands in the central part of the Adriatic Sea. The study sites were chosen because of their exposure to the open sea and their tourist appeal. Moreover, both locations have a high seasonal population while sparsely populated in the off season, so the locally produced waste can be excluded as the leading contributor to the marine litter. The survey was conducted visually and does not include any form of micro waste (microplastics, microorganisms, or the like) or marine and beach sediment pollution. We have approached the subject from an environmental geography point of view to determine some islands' features regarding the coastal pollution state-of-the-art.

The preliminary research was carried out on the Kornati islands in 2018. We have used that survey mainly to test the research methodology as we prepared the list of indicators, which were used to determine the features of marine litter, its type and possible origin. That methodology was later used in a similar study on the Elafiti islands. The methodology was established as a geographical concept from the physical and social point of view concerning wind and sea currents and other environmental settings. The list of environmental indicators included: 1) coast orientation, 2) exposure of the bay/cove to the open sea, 3) coastal vegetation presence and state, 4) distance between marine litter and the shoreline, and 5) landscape exposure of the waste area. To show the socio-geographical features of the marine litter locations, we have chosen: 6) the amount of litter (in m³), 7) origin of litter (information obtained from the packaging), 8) type and percentage of the litter type, 9) share of plastic litter (in %) and 10) type of litter distribution.

During the survey, we registered 43.8 m³ of marine litter on the Elafiti islands and 52.8 m³ on the Kornati archipelago. The average share of plastic waste was higher in the Kornati region, 65.4 %, compared to 51.54 % on Elafiti islands.

The origin of the litter remains uncertain. Determining the origin of the “made in” labels can be misleading as it indicates the country of production and not necessarily the country from which the litter entered the Adriatic Sea. Nevertheless, using the “made in” labels, we have identified 19 countries regarding litter in Elafiti and 12 countries for the Kornati islands. Perhaps a better indicator

of the litter's origin would be massive litter pollution after the strong SE wind (sirocco), particularly on the Elafiti islands, which indicates that most non-Croatian litter originates from the southern Adriatic basin and the coasts of Albania, Montenegro, and south-eastern Italy. However, further investigation is needed to corroborate these findings. However, even the preliminary results show that the problem of marine litter can only be solved through a joint effort of all Adriatic countries.

Keywords: marine litter, coast pollution, Kornati islands, Elafiti islands, Croatia

THE FUNCTION OF DRYSTONE WALLING IN THE FORMATION OF THE INSULAR LANDSCAPE – AN EXAMPLE OF SELECTED CROATIAN ISLANDS

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Croatian Islands have been inhabited since prehistoric times. At first, communities cultivated more suitable lands like drained fields. Later on, land use patterns changed, and agricultural production was transferred onto hilly karst slopes because the population increased. To obtain additional land and fence the plots, the communities erected drystone walls whose characteristics were determined by the specifics of the karst terrain (geological features, terrain morphology and availability of stone).

Drystone walls were not erected only in the Adriatic region and the Mediterranean but also in other areas due to the availability of stone, the need for terracing, soil conservation, pasture fencing, runoff control, and torrent prevention. By building drystone walls, islanders changed the natural landscape and obtained land for agricultural production (cattle breeding, cereals, olives, grapevines). In addition, man has used drystone walls to mitigate negative natural processes such as erosion, flooding, soil loss, and the like.

The research aims are to make an inventory of drystone walls on selected islands in the Croatian part of the Adriatic Sea. The authors intended to place drystone walls in the context of the geomorphological features of the terrain to find out if there is a pattern of drystone walls' appearance. Also, the goal was to determine the role of drystone walls in land use over the last 200 years and if the drystone wall network is following the cadastral division of land. The authors used different types of aerial images along with detailed cadastral plans to map drystone walls. All the data were incorporated into a GIS database that enabled the analysis of drystone walls, terrain, and land-use features.

The results indicate the existence of different densities of drystone wall mesh concerning terrain characteristics. Also, the analysis of drystone wall orientation may indicate their function in terracing where drystone walls extend perpendicular to the direction of the slope, or the orientation of extension may correspond to the orientation of the slope if the drystone wall is in the function of fencing. Drystone walls have preserved the way of land use in the past and also served to prevent soil loss on the slopes.

Keywords: drystone walls, Croatia, islands, landscape, land use

WHAT CAN THE TROBRIAND ISLANDS TEACH US ABOUT THE ŠIBENIK ARCHIPELAGO? A REFLECTION AT THE CENTENARY OF MALINOWSKI'S ANTHROPOLOGICAL CLASSIC

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The description of Melanesian preindustrial interisland material and ceremonial exchange — Kula — by anthropologist Bronislaw Malinowski (*Argonauts of the Western Pacific*, 1915) has become one of the most constitutive texts in the history of (social) anthropology. At the beginning of its ethnographic inquiry, islands and archipelagos were inscribed in the anthropological perception of culture.

In Malinowski's description of the Trobriand natives, I was not interested in the exact structure or technology of the kula and gifts that fascinated anthropologists in the twentieth century but in kula as a manifestation of broader affiliation and long-distance integration of islands. However, from my experience and knowledge of the Šibenik archipelago (Dalmatia), there have always been few ties between the neighbouring islands. When I asked an elderly local on the island if they were visiting neighbouring islands, at least for the brides, he exclaimed: "Are you normal? You have to row for that!" My anthropological research aimed to understand the socio-historical conditions and forms and facilitate cooperation and exchange among the inhabitants of the two *archipelagos*. This study used data from ongoing ethnographic research in the Šibenik archipelago, starting from 2012, and various 19th and 20th century scholarly and archival sources.

Participants in Malinowski's description of Melanesian kula gained social prestige and access to canoes, pottery, and various foods from other islands. In the Šibenik archipelago, all communities of colonists were engaged in cultivating vineyards, grazing, olive groves and household gardens, or fishery, so they were not motivated to change. Almost nothing on the other islands could be obtained on their own. For anything else, they would go to Šibenik. Amongst the most important factors distinguishing the two archipelagos is vegetation that conditions economic activities. The next important difference came from historical landowners and urban centres that defined the roles and meanings of their (hinter)lands. Dalmatia was a notable part of European society with the production and sale of wine and olive oil and was also crucial for Venetian religious and territorial defence against the Ottomans. The tradition of colonnades on the Šibenik archipelago paved the way for its modern commodification (from oil and wine to industry and tourism). The capitalisation of island resources and the construction of urban centres also played a key role in the social change in Massim and the disappearance of the big kula at the end of the 20 Century.

Keywords: interisland relations, social change, market, Massim, Dalmatia

SUSTAINABLE DEVELOPMENT OF GEOPARKS AT TAIWAN'S ISLANDS

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This study aims to demonstrate the adaptation of the *geopark* concept for the sustainable development of Taiwan's islands. Taiwan is an island with more than 100 adjunct islands, all of which are naturally hazard-prone due to tectonics, monsoons and typhoons. Different government departments and local communities that operate and live on these islands face unique challenges due to the threat of these natural disasters. Therefore, it is imperative to find a way for sustainable development for these islands. Taiwan revised their Cultural Heritage Preservation Law to add the *geopark* concept in 2016, adopting the idea from UNESCO, with the law prescribing this designation as a way toward local, sustainable development. Matsu and Penghu, two islands designated as local level *geoparks*, were used as case studies to explore a question: what is the best way to develop the Taiwanese islands locally and sustainably?

The natural background and potential environmental hazards have been reviewed within the methodological frame. One of the study's goals was to find a way for landscape conservation to prevent and reduce the impact of natural hazards, such as coastal erosion and landslides. Additionally, this research sought to understand how local communities monitor landscape change and hazards under the threat of climate change and how they enhance their resilience to natural hazards. It is essential to promote local geo-products and geo-tour by a local guide to increase local economic activities.

The results show that both Matsu and Penghu islands adapt to winter monsoons and summer tropical cyclones. During extreme weather conditions, the need for water resources, electricity and food are the priority. For water resources, desalination facilities are becoming critical engineering for the islands around Taiwan; engineering that must be prepared in advance. To reduce the impact of coastal hazards, local people and governments will need greater environmental education to raise resilience capabilities on these islands. For local, sustainable development, technical support in water, energy and food resources is needed, along with strategies to reduce damages from climate change and natural hazards to meet the SDGs goals.

Keywords: SDGs goals, natural hazard, carry capacity, Taiwan

A STORY ABOUT HEART-SHAPED ISLET GALEŠNJAK, CROATIA: LANDSCAPE PRESERVATION AT THRESHOLD^{1*}

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Galešnjak is an islet near Biograd widely reproduced in tourist publications as *Love Island* due to its resemblance to a heart symbol. Its sudden fame, enforced by drone and satellite photography, marked a technological change between the epoch of state-reserved graphical tools to user-centred devices with a new kind of aesthetic preference in panoramic and landscape perception. Emblematic or symmetric structures viewed from above are a regular part of an everyday observer's experience, transforming the observed terrain adapted and selected for pictorial presentations. Here we shall present a number of Eastern Adriatic island landscapes where changing aesthetic impulses made ground for certain field restructuring. Concerning landscape protection, it could be argued that mass aesthetic preferences interlaced with conservation transformation from object protection to practice safeguarding, resulting in enhanced legal perspectives of local communities and their collective intellectual rights in cultivation.

Specific island impacts can be observed, with insular landscapes especially prone to market forces in a predominantly tourism economy. Various indigenous reactions simultaneously degrade and uphold different resource capabilities of creative communities, mostly of local nature. The change of photographic perspective, which produced phenomena like *Love Island*, *Fingerprint Island*, and others, indicates perceptive clues that decisively belong to a mass cultivation domain. It somewhat paradoxically brings consumers to commoners' doorsteps away from mass tourism facilities and opens unique market opportunities.

Using ethnographic methodology and inclusive and participant research strategies, we conclude our presentation with preservation perspectives. As elsewhere, islands offer an opportunity to outline broader social and cultural processes in a more closed environment. Therefore we propose a close inspection of regulatory change, discussed from the 1980s onwards and articulated in various spheres of legal expertise. A heart-shaped islet of simple limestone composition bears a perceptive future for cultivated landscapes to be consumed in their products and a versatile emblem in the internet age.

Keywords: Cultural landscape, conservation, local community, creative resources

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LAND USE CHANGES ON THE ISLANDS OF CROATIA: DRIVERS AND CONSEQUENCES

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The Croatian Islands form an archipelago of 1246 islands, islets, rocks and rocks awash along the eastern Adriatic coastline. Out of that number, only 50 islands are permanently populated. A karst environment and climate conditions predetermined them as areas of traditional Mediterranean agriculture.

Islands have been inhabited since prehistory, and scientific research enables the reconstruction of their main land use types. Further, the systematic land survey makes it possible to accurately determine the share of specific land use types from the 19th century. Preliminary results indicate the peak of agriculture activities and land use at the turn of the 20th century due to the demographic increase and conjuncture in wine production. The islands' population started to decline during the 1920s, which resulted in land abandonment and succession of the natural vegetation. Nowadays, only a small share of land is cultivated, mainly by lucrative plants like olive trees and grapes. As a result, Mediterranean maquis and forests cover most islands' surfaces, which increases the risk of summer fires and threatens the traditional agricultural landscape.

This research aims to determine the main factors that influenced land use changes and landscape development in the last century. Such encompassing approach for all Croatian Islands has not been applied before. Furthermore, the results will be compared to other Mediterranean Islands. The methodology compares land use categories from different periods and sources, such as archival cadastral data, agriculture censuses and contemporary satellite imagery. We will also compare land use intensity depending on the island's size, population and distance from the mainland. In our opinion, this research would contribute to understanding complex social processes on the islands in certain historical circumstances and their influence on the formation of the different land use patterns.

Keywords: Croatian Islands, land use changes, Mediterranean landscape

INTEGRATED MANAGEMENT OF NATURAL AND CULTURAL ISLAND LANDSCAPES IN THE MEDITERRANEAN

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The leading Mediterranean organisations working on island conservation (IUCN Med, the French “Conservatoire du littoral”, the PIM Initiative for the Small Mediterranean Islands, the Conservation Collective, WWF and MedPan) have come together in a Mediterranean islands collective (MIC). This MIC allows them to set up pilot projects on Mediterranean islands to conserve biodiversity, linking actors and protectors of the islands in different Mediterranean territories to feed a Mediterranean strategy for conserving the islands post-2022. Guided by successfully implemented projects and consultations with local actors, a conservation strategy is on the horizon and aimed to be promoted at the Mediterranean level to institutional actors, NGOs, research organisations and donors to consider island biodiversity in all decision-making processes. The MIC, coordinated by the PIM Initiative, has had the opportunity to work in pilot sites in Zlarin, on the Aeolian Islands, the Balearics, Sardinia, and beyond.

This presentation identifies and analyses the aims, the first results of this strategy, and its application in the field, in particular, by focusing on a pilot island, Zlarin (County of Sibenik-Knin, City of Sibenik), and further discusses the feasibility of extending and replicating the pilot results on other islands. In Zlarin, the objective is to enhance and develop the natural and cultural heritage and integrate restoration activities in the island’s local spatial planning schemes by promoting public and private cooperation. Ultimately, this will help preserve the island’s natural resources, creating a point of attraction for natural spaces, island wetlands and agricultural areas outside the village and activities solely focused on sea-related services. Thus, through a participatory approach, it aims to define the type of actions and produce recommendations for future operations envisaged to resume agricultural activities (rehabilitation of olive growing, dry stone walls, monitoring programmes of endemic species) that are not harmful to island landscapes and biodiversity. One of the objectives of these actions is also to provide an opportunity to rework water management issues (percolation for groundwater recharge and “production” of biodiversity). Finally, SMILO will reflect on good practices and lessons learnt from the pilot actions.

Keywords: landscapes, Mediterranean, islands, Integrated management

DECEPTION ISLAND(S): REMOTE ECOSYSTEMS BETWEEN REALITY AND UTOPIA

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On 25 March 2017, an expedition of 30 creative professionals (including artists, writers, curators, poets, philosophers and architects) entered the waters above the caldera of Deception Island in the South Shetland Islands, approximately 100km north of the Antarctic Peninsula. I was one of them. It was the last stage in a week-long series of performances and interventions that promised to bring a new culture to an otherwise ‘cultureless’ continent. The island revealed in full the contradictions of such a venture: its territorial integrity was constantly threatened by volcanic activity; the ruins it hosted - remnants of a Norwegian whaling station - at once defined as dangerous debris and architectural heritage; the legal framework established to protect it - enshrined in the Antarctic Treaty of 1959 and the Environment Protocol of 1991 - having no effective enforceability. Its remoteness, I argue, afforded it a status that went beyond the practicalities of any form of conservation. The markers of anthropisation are called not to be eradicated but reframed. To what purpose? The talk discusses the possibilities of reactivating this remote island as a site of artistic performance, interdisciplinary debate and, ultimately, entertainment. In doing so, it aims to highlight its double status as both a real and utopian ecosystem.

Keywords: wilderness, remoteness, Antarctica, performance, art, utopia

RUSSKY VOYENNY KORABL, IDI NA KHUY THE SNAKE ISLAND INCIDENT, ITS MEME AND ITS SIGNIFICANCE AS A SIGN OF UKRAINIAN RESISTANCE TO RUSSIAN INVASION

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On February 24th, when Russia launched its invasion of parts of Ukrainian territory, the Russian guided missile cruiser Moskva (‘Moscow’) approached Zmiinyi Island (known in English as Snake Island) and demanded the surrender of a small garrison force. The reply they received – commonly translated as ‘Russian ship, go f— yourself’ - went viral and was seen as a defining characterisation of Ukrainian resistance at an early stage of its war with Russia. The (erroneous) assumption that members of the garrison had died in the Russian bombardment that followed their message added to its pluck and poignancy. This paper will discuss the background of the incident in terms of Zmiinyi’s strategic position in the Black Sea and look at the development of the incident as a meme and of the Ukrainian government’s conscious deployment of it as part of their media campaign to secure Western support and to maintain internal morale. Attention will also be given to the ‘after-life’ of the initial incident and how that was commemorated by the Ukrainian government. Particular attention will be paid to visual representation and how the incident and the island itself have been represented.

Keywords: Ukraine, Snake Island, memes

SMALL ISLANDS FACING CLIMATE CHANGE: EXPLORING ECOLOGICAL PRINCIPLE

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This intervention proposal aims to present part of the results of a multidisciplinary project on the vulnerability and adaptive capacity of tropical island societies facing climate change. The project, named SOTRISK, concerns the French islands of the Indian Ocean (Reunion, Eparses Islands) and the Central Pacific (French Polynesia). Particular attention has been given to the small islands of French Polynesia. This 48-month project aims to develop a transdisciplinary methodological protocol to improve knowledge and understanding of the vulnerability and adaptive capacity of tropical island societies to climate-induced extreme events (tropical cyclones, distant swells, ENSO phenomenon) and gradual changes due to climate warming (sea level rise and increased ocean temperatures) as well as ocean acidification.

The main issues driving this project are (1) properly integrating the fields of knowledge concerned with current and future risks (from climate and flood models to risk perception, socio-economic dimensions and maladaptation) and (2) assessing uncertainties (source, magnitude, implications in terms of vulnerability) in order to propose a strong approach to future risks.

This project is based on two complementary approaches founded on the concepts of chains of impact and trajectories of vulnerability: the first approach apprehends vulnerability through the analysis of the impacts of events and gradual changes, including resilience; the second approach deciphers the processes of land use planning in order to capture the root causes of its vulnerability. The central hypothesis is that these islands have varied vulnerability profiles and will be subject to diverse storylines of risk in the future. This hypothesis justifies a case study approach to build a typology of tropical islands based on their vulnerability profiles. Coastal risks related to current hazards and climate change will be translated into storylines of risk that will allow for concrete exchanges on risk reduction and adaptation strategies with relevant stakeholders.

As far as biological diversity is concerned, the islands are indeed rich in their endemic species and their tropical ecosystems (lagoons and coral reefs in particular) but, being small in area; they offer a lesser capacity of resilience of the ecosystems or species that populate them in the face of disturbances, particularly anthropogenic ones.

Ecological solidarity in life sciences and earth sciences refers to the awareness of the interdependence of all life forms within the universe and leads to a break with a dichotomous vision of man and nature. This concept allows apprehending the complexity of living and calls for an ecological awareness for each human being in all human societies. It considers the conditions of life of the human and the non-human.

In French law, according to the environmental code, the knowledge, protection, enhancement, restoration, rehabilitation, management, preservation of the capacity to evolve and safeguarding of the services provided by the elements that make up the nation's common heritage, notably, biodiversity, must be „inspired“ by the principle of ecological solidarity.

Considering the statement made on ecological functioning and biophysical dynamics in small islands, we propose applying the legal principle of ecological solidarity to develop a new adaptation approach to climate change for small islands.

Keywords: small island, climate change, ecological solidarity

THE EFFECTS OF THE FINANCIAL CRISIS ON SOCIAL COHESION AND SUSTAINABLE DEVELOPMENT OF THE ISLAND REGIONS IN THE EUROPEAN SOUTH

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The financial crisis of 2008 was and still is a subject of extensive research in the academic literature. It negatively impacted economic and social conditions, especially in southern European countries, and highlighted the structural weaknesses of both the euro area and the European Union. Greece, Cyprus, Portugal, and Spain pursued fiscal adjustment programs, while the crisis negatively affected the Italian economy. The austerity policies imposed on the southern countries were based on recession policies that resulted in a slowdown of growth and an increase in disparities with the financially strong northern countries. The purpose of this research is to record the effects of the financial crisis on the island regions (NUTS 2) of the countries of the European South (Greece, Cyprus, Portugal, Spain, Italy, Malta and France) through indicators corresponding both to social cohesion and the three dimensions of sustainable development: social inclusion, economic efficiency and environmental conservation in the period 2008 – 2020. The present research combines the academic literature with secondary data from Eurostat and the Organisation for Economic Co-operation and Development (OECD). In this way, the situation of the islands before, during and after the end of the financial crisis is reflected. The dominant development model (mass production of standardized goods that takes place in urban centres) is not compatible with the characteristics of the islands, such as the small size, peripherality and isolation. This study refers to the evolution of indicators, such as the Gross Domestic Product (GDP), the unemployment rate, the number of people at risk of poverty and social exclusion, the percentage of young people not in education, employment or training (NEETS) and the percentage of the area covered by NATURA 2000 sites.

The situation of the island regions is approached through their deviations from the average of the 27 Member States of the European Union and the national averages. Data are also compared among European island regions. Unemployment remains high, while their performance in almost all indicators of social cohesion is negative. Additionally, the vital issue of the environmental preservation of the islands remains, taking into account the vulnerability of their ecosystems and the scarcity of their natural resources. Despite the implementation of fiscal adjustment programs in Southern countries, convergence with the European Union average has not been achieved. Moreover, the island regions continue to perform poorly as far as their sustainable development is concerned. The analysis shows that the financial crisis had an adverse effect on achieving social cohesion and sustainable development in southern European island regions, which were already vulnerable due to their permanent features such as their small size, monoculture economies and remoteness. Furthermore, the data analysis shows that with a few exceptions, the European island regions, and especially the Greek ones, continue to show a significant degree of divergence in relation to the European Union average, but also at the national level in terms of economic indicators.

Keywords: Island regions, European Union, financial crisis, social cohesion, sustainable development

RECOVERY FROM CATASTROPHE: GARDENING AND WELLBEING ON A SMALL ISLAND

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Kangaroo Island, situated off the south coast of South Australia, is a small island still recovering from the devastation of catastrophic bushfires in the summer of 2019-20. A post-fire resurgence of gardening contributes significantly to the community's recovery and well-being. This resurgence, and the gardeners who are driving it, is the focus of this paper, which will be presented in the form of a photo essay. The research is based on in-depth case studies of twelve private and two community gardens. An extended spring open garden festival provided another significant source of data. Research methodologies included participant observation, semi-formal and informal interviews, social networking, and self-reflection. The research is based on holistic engagement by a trusted insider active in the local community.

In analyzing the results of the case studies, the researcher sought to understand the processes underlying recovery and resilience after catastrophe through the medium of gardening. Preliminary findings indicate that almost every gardener reported improved health and well-being from spending extended periods outdoors planting, weeding, growing flowers and vegetables, and harvesting the results of their efforts. A common theme was the solace and renewal they found in their gardens. Another significant finding was the extent to which gardeners support each other. There was a strong sense of interdependence. Significantly, mutual support networks went beyond practical support and exchange. Gardeners nurtured each other in deeper ways, offering personal solace and encouragement.

The paper concludes by examining the synergies between gardening and personal and community resilience after a catastrophe. It also explores how these synergies are unique to a small island setting, suggesting that 'islandness' adds a unique dimension to recovery.

Keywords: catastrophe, gardening, resilience, wellbeing, islandness

THE ISLAND WITHIN: PRINCE EDWARD ISLAND'S INVOLVEMENT IN THE ATLANTIC BUBBLE

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During the ongoing COVID-19 pandemic, jurisdictions across the globe have struggled with policy responses to mitigate the impact of the pandemic upon their respective populations. Given the origins of the initial outbreak in Wuhan, China, and the subsequent cases in Europe, especially Italy, the North American continent had some time to examine the epidemiology of the pandemic and associated policy responses. Evidence shows that globally many island jurisdictions have done very well in containing and limiting cases within their respective jurisdiction. In Atlantic Canada, the first wave of the pandemic in mid-2020 was comparatively mild, with fewer cases per 100,000 than in other Canadian provinces. In a perceived effort to mitigate further spread and case numbers, the four Atlantic provinces (Prince Edward Island, Nova Scotia, New Brunswick, Newfoundland and Labrador) established internal border controls with neighbouring jurisdictions, including each other. These controls allowed for non-quarantine travel between the four Atlantic provinces via surface, marine or air transportation while restricting access to the region by other Canadian citizens. This response, known now as the Atlantic Bubble, was launched on July 3, 2020.

As a conceptual island, the Atlantic Bubble is an archipelagic construct, connected via the Gulf of St. Lawrence and delineated through a shared terrestrial border with Quebec and the United States and the greater Atlantic Ocean. For one hundred and forty-five days, over twelve million seconds, or approximately 40% of the 2020 calendar year, this sub-national archipelagic construct endured until rising cases in the two non-island affiliated provinces were suspended by Prince Edward Island and Newfoundland and Labrador on November 24, 2020. This presentation examines Prince Edward Island's involvement in the Atlantic Bubble and is part of a more comprehensive doctoral research project seeking to answer how and why the Atlantic Bubble came into being and what role, if any, which islandness played. This research utilises a mixed-methods approach undertaking fieldwork involving semi-structured interviews with key policy actors in all four sub-national jurisdictions and secondary quantitative source data collection.

Understanding the policy construction of the Atlantic Bubble and its implementation is a crucial case study in Canadian federalism. This conceptual island archipelagic haven in a sea of COVID cases also merits further examination through the lens of island studies, specifically the role of islandness in the policy construction for the respective jurisdictions and policy actors. This research is also significant because it can help understand policy responses and approaches to mitigating the risk of the COVID-19 pandemic. This will assist in informing policy actors in other jurisdictions as to potential policy instruments and approaches that could be considered in responding to the pandemic. This interdisciplinary research project will contribute to our collective knowledge of the policy interventions undertaken during the global pandemic and other large scale public health emergencies and will come with certain timeliness. At the same time, the events and decisions are still relatively fresh in the minds of those involved and interviewed.

Keywords: COVID-19 pandemic, Atlantic Bubble, Intergovernmental Relations, Islandness, Interdisciplinary Research

DISASTERS AND REPUTATIONAL DAMAGE: THE CASES OF GIGLIO AND USTICA

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Islands that have served as the sites or ‘backdrops’ to specific disasters can emerge from oblivion and become famous overnight. This is the case of the two small Italian islands of Giglio (associated with the January 2011 Costa Concordia shipwreck) and Ustica (associated with the June 1980 crash of Itavia Flight 870). Both a content analysis of articles published online and interviews with stakeholders were conducted to assess the impact these disasters have left on the islands’ image as tourism destinations. Findings suggest that these disasters have helped render the two islands more visible in the national and international public gaze; but, as news of such disasters recedes and is replaced by fresher news in the media, the islands slid back to bland invisibility but continue to be sporadically mentioned again, mainly about the past disaster event. Over the years, media coverage has led the islands to become and remain stubbornly associated with the respective disaster and get less attention as attractive tourism destinations. With tourism being an important economic activity for both islands, this is a significant blow and disappointment. The image of the islands has been shaped from the outside in such a way that it fails to represent their real identity and protected area tourism potential. The study foregrounds the need for such islands to improve their online reputation management and increase their competitiveness as attractive tourism destinations. Such islands need to build on good practices, including joint marketing strategies, developing archipelago tourism (island hopping), and promoting protected area tourism (both terrestrial and marine). This will help the islands attract more of the „right“ type of tourists (including off season) and reduce dependence on domestic markets that focus on sun-sea-sand tourism. Furthermore, it leads to a more comprehensive image portrayal of the islands that media houses fail to explicitly outline in their respective coverages and counteract and correct sensational stories that may taint the islands’ image.

Keywords: disasters, reputation, protected area tourism, Giglio, Ustica

A “CORAL STATE” – SOCIO-POLITICAL IMPLICATIONS OF THE REEFS’ CRISES IN THE MALDIVES

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Coastal and archipelagic countries share specific adaptation needs and absorb a significant part of the global costs of climate change. Currently, national governments and local authorities operate to foster the integration of adaptation measures within the broad spectrum of national development policies. In the Maldives, corals act as a connection and a symbol of this priority. Reefs are vulnerable ecosystems facing environmental changes and are one of the primary resources of the country’s cultural and natural heritage. As with other countries across the Indian Ocean Region, coral material has been widely utilised in architectural constructions in the Maldives. Furthermore, the Maldivian national economy is highly dependent on international tourism. Indeed, the country’s leading position in the international market is based mainly on the attractiveness of coral reefs and coral sand beaches. Therefore, the effects of climate change on coral reefs directly threaten the key sector of the national economy. Moreover, tourism plays a strategic role in national adaptation and resilience strategies, as highlighted by the Ministry of Tourism and UNDP in 2012. Coral stone mosques entered the UNESCO World Heritage Tentative List in 2013. Facilitating the promotion of heritage sites as tourist attractions could be part of this strategy, allowing the country to maintain its competitiveness in the tourism market even while facing a scenario shaped by massive losses of reefs’ richness and biodiversity. In this presentation, we discuss the value and function of corals and the value their preservation (as both heritage and ecosystems) might have in environmental policies at national and local levels; we propose an overview of their socio-political meaning; and we open the discussion on the contemporary effectiveness of a taken for granted duo: healthy coral reefs and tourist attractiveness.

Keywords: Maldives, Corals, Climate Change, Heritage

EVIDENCE ON ISLAND ADAPTATION AND TRANSFORMATION UNDER CLIMATE CHANGE

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According to recent assessments from the Intergovernmental Panel on Climate Change (IPCC), climate change is likely to push some low-lying islands beyond adaptation limits. Increasing and inevitable sea level rise and extreme events cause loss and damage to island communities, threatening their livelihoods, identities, and potentially the existence of whole island nations. Therefore, climate change adaptation scholars often call for so-called “transformative adaptation”. Such transformative adaptation implies responses involving radical institutional and structural reforms and changes in behaviours, norms and mindsets.

Many island communities are already experiencing the impacts of climate change, and adaptation is taking place. However, there is a lack of synthesised knowledge on the depth and scope of these adaptation activities, especially concerning evidence of potentially transformative adaptation being implemented on small islands. Therefore, this paper asks what transformative adaptation means in an island context and whether and where it can already be observed.

The paper builds on a systematic review of island case studies from the Global Adaptation Mapping Initiative (GAMI) database, which includes more than 1,600 articles with documented evidence on climate change adaptation, including studies on islands. The review results provide an overview of the evidence on adaptation and transformation across different types of islands, including Small Island Developing States (SIDS), sub-national island jurisdictions (SNIJ), dependent islands, and rural and urban islands across different regions. Moreover, this study presents an in-depth analysis of illustrative examples from literature showing diverse ways of what transformation can look like in an island context.

The review contributes critical reflections on the conceptualisation of transformative adaptation from an island studies perspective.

Keywords: global warming, sea level change, limits to adaptation, risk, vulnerability

GENEROSITY THROUGH CRISIS: COMPARING OPPORTUNITIES OF MULTI-JURISDICTIONAL SOCIO-ECONOMIC RECOVERY THROUGH PHILANTHROPY IN ATLANTIC CANADA

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The long-term global socio-economic impacts of the pandemic remain widely unknown, with recent literature pointing to impacts being particularly difficult to assess in rural and island regions. Therefore, innovative strategies to address the recovery and revitalisation of these communities post-COVID-19 are required. In Canada, place-based philanthropic organisations, such as Community Foundations, have been identified as key players uniquely positioned to address and support socio-economic resilience in rural and island jurisdictions, with emergent literature pointing to an increased reliance on the resources and services that philanthropic organisations provide in the absence of pre-pandemic economic activity. Our presentation explores the varied responses of place-based philanthropic organisations across all four Atlantic Canadian provinces (two islands and two on the mainland) as a diverse sector that can effectively adapt and respond in times of crisis.

Recent scholarship illuminates the tension and trade-offs between mitigating socio-economic stress and mitigating the spread of COVID-19 in rural and island regions. However, much of this research has explored the implications of COVID-19 for Small Island Developing States (SIDS), particularly around governance and tourism in small island nation-states. Little research has been published exploring the socio-economic implications of the COVID-19 pandemic on subnational rural and island jurisdictions. The multi-jurisdictional governance structures prevalent in subnational regions such as Atlantic Canada, a subnational coastal region of Eastern Canada made up of both continental and island jurisdictions, provide an interesting context to study the socio-economic impacts and responses to the COVID-19 pandemic. The Atlantic Canadian region becomes even more intriguing given the differences between the two largest island jurisdictions, Prince Edward Island and Newfoundland, the former with a land connection (bridge access) and the latter without (ferry access).

Our findings emerge from a regional case study from a larger Canadian-wide research project funded by the Social Sciences and Humanities Research Council (SSHRC) entitled “Examining Place-Based Endowments in the Canadian Periphery.” The research team in Atlantic Canada conducted 19 semi-structured interviews with both grant-making and grant-receiving organisations from all four Atlantic Canadian provinces. These respondents were selected as thought leaders and stakeholders in the philanthropic sector across the region. These interviews aimed to explore trends, opportunities, and challenges in the rural and island philanthropic landscape. Analysis of coded interview transcripts (in NVivo software) was conducted through the lenses of rurality and islandness to understand how these evolving contexts have affected philanthropic initiatives and funding strategies throughout the pandemic thus far. These interviews are contextualised by an in-depth document analysis of ever-changing COVID-19 related policies, restrictions, and strategies that each Atlantic Canadian province enacted. This research has led to a better understanding of the potential of place-based philanthropy as a mechanism of rural and island community development.

Our preliminary findings suggest that despite the collective difficulty of adjusting to a “new normal,” Atlantic Canadian place-based philanthropic organisations remain deeply committed to their service area, with many pivoting to meet the changing needs of rural Canadians and devising innovative strategies to overcome these new challenges. Given the mix of island and mainland jurisdictions in Atlantic Canada, our study offers insights into the similarities and differences between

both contexts. Presenting these insights at the 2022 International Small Islands Studies Association Conference under the “Islands and Crises” sub-theme, we aim to share with and learn from other jurisdictions to inform better policy governing the philanthropic sector to foster increased place-based resiliency, particularly in rural and island jurisdictions in Atlantic Canada as we begin to navigate its post-pandemic recovery efforts.

Keywords: philanthropy, socioeconomic recovery, rurality, islandness, coronavirus

COUNTING ISLANDS IN THE NETHERLANDS

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The coastline of the Netherlands has dramatically changed in the course of history. As a low-lying delta area at the edge of a shallow sea, the sediment deposited by some major rivers and tributaries from mountainous areas in Switzerland, Germany, France, and Belgium created numerous islands and extensive peat swamps. The sea created coastal islands and dunes. Irregular heavy storms and floods made some islands disappear or drastically changed their shape.

Protection against flooding was the primary reason why many islands were connected to the mainland via dams, dykes and tunnels. Other islands were completely ‘swallowed’ by their incorporation into large new polders to expand the agricultural land and safety reasons. Massive infrastructural projects had a significant impact on islands and were implemented in the first decades of the 20th century. Meanwhile, a major flooding event in 1953 led the government to decide that islands in the southwest part of the country had to be protected by the so-called ‘delta plan’. Presently, the country counts no more than a small number of ‘real’ islands, particularly those in the Wadden Sea in the North, while some former islands retain a strong island identity despite their fixed links with the mainland.

This presentation will discuss the historical processes of transformation that have reduced the number of islands in the country. They vary from safety and economic reasons to environmental and climatic considerations. The presentation is based on recent literature and fieldwork on several (former) islands.

Keywords: Netherlands, number of islands, processes of transformation

RETURN MIGRATION TO THE ISLAND OF DUGI OTOK – PARADIGM CHANGE ^{2*}

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This paper aims to examine the role of time by analysing the migration experiences of returnee islanders. Migrations always have, regardless of the direction (island - mainland - island) or time (changes in historical and economic living conditions, but also the perspective of each individual - the perspective of life course), determined the way and quality of life of islanders and island communities. Analysing the role of certain types of migrants in the structure of island communities, especially the small ones found on most inhabited Croatian islands, confirms the importance of a group of returnees whose migration decisions, but also behaviour (new knowledge, experience) significantly affects the quality of life in contemporary communities. Return migrations are investigated mainly as a process of closing the migration cycle of an individual, particularly as the outcome of migrations by permanent return or the relocation of external migrants (who emigrated primarily to another country) to the country of origin, regardless of the length of stay.

A survey of returnees on Dugi Otok conducted in October 2021 confirmed that the more practical explanation is that returnees are islanders who have moved from the island at some point and returned temporarily or permanently; hence, those who spent some time outside the island in other parts of Croatia. At the same time, regular weekly circulators from the mainland centre where the island gravitates - Zadar - were excluded from the potential sample of returnee respondents. The research confirms that modern returnees to the island should be viewed mainly through the prism of temporality, often with their regular semi-annual migration between the island and the country or settlement to which they moved. That way, an important part of the sample is the so-called 'circulating emigrees', a significant group in the typology of Croatian island migrants. The research on Dugi Otok was conducted using a biographical method in semi-structured interviews, which collected the life stories of 17 interviews in five island settlements. Based on the results of previous research conducted by authors on other Croatian islands, the researchers intended to determine the rhythm (irregularity) and reasons for visits and returns of emigrants during and after their life working period. Namely, most contemporary returnees to the islands are older people whose migrations represent a subtype of circular migrations with elements of different conceptual models of retirement migration. Therefore, the main hypothesis of the research is: along with economic factors, the most important reason for emigrated islanders to visit and return (temporary or permanent) is the feeling of belonging to the island as a social and physical space.

Keywords: Croatian islands, Dugi otok, return migrations, temporality

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EXPLORING THE OPPORTUNITIES, CHALLENGES, AND TRADE-OFFS OF EMPLOYMENT-RELATED GEOGRAPHICAL MOBILITY FOR COMMUNITY SUSTAINABILITY ON THE ISLAND OF NEWFOUNDLAND, CANADA

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Newfoundlanders choose to engage with long-distance employment-related geographical mobility (E-RGM), or mobile work, for several reasons, including access to more reliable employment opportunities, higher potential earnings than are available locally, and maintaining strong place-based attachments to the island and their home communities. These individual employment decisions, in turn, present a complex mix of opportunities and challenges for rural and outport communities. For instance, access to E-RGM may allow communities without local employment opportunities to retain residents who feel deeply attached to them (e.g. due to friend and family connections or family heritage). The challenge in this context is that long-distance commuters may spend so much time commuting or away from the home communities that they may not be able to contribute time to volunteering in these communities, and they may miss out on cultural opportunities that are of value to them (e.g., seasonal hunting). Depending on their work arrangements, mobile workers may also have higher incomes than locally-employed residents and the potential to support their communities through local spending. However, the ability of mobile workers to support local businesses may depend on whether there are local businesses in their home communities, and mobile workers may be more inclined to spend money outside of their community for a better price or higher quality products. As such, the decision to engage with mobile work and subsequent decisions around how they spend their time and earnings represent socio-economic trade-offs that accommodate their mobile employment arrangements. These trade-offs impact workers at the individual level and raise important sustainability questions for rural and outport communities where mobile work has emerged as a key employer. For instance, in the event of a significant economic downturn, how might these communities fare?

This paper will explore the opportunities and challenges presented by E-RGM for the social and economic sustainability of rural and outport Newfoundland communities. It builds on findings from the Community Impacts component of the *On the Move Partnership* in Newfoundland and Labrador (NL), primarily semi-structured interviews conducted with key informants, mobile workers, and their families, and door-to-door surveys. E-RGM has been suggested as an opportunity to sustain rural and outport communities in Newfoundland, many of which have seen a population decline due to out-migration and ageing. Through investigation of individual decisions and broader community impacts, this paper will consider another important trade-off of relevance to island communities globally: while mobile work may be an avenue for sustaining rural and outport populations, it may also increase the vulnerability of these communities to external shocks, such as economic downturns.

Keywords: employment-related geographic mobility, mobile work, community impacts, sustainability

CONTEMPORARY DEMOGRAPHIC TRENDS ON ZADAR ISLANDS, CROATIA – IS REPOPULATION REAL OR FICTITIOUS?

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For over a century, Croatian Islands have been an emigrational area, reaching their population peak in the early 20th century. Depopulation intensified after the Second World War due to intensive emigration and natural decrease. The Zadar islands recorded a population peak in 1948 before a continuous natural decrease, beginning in the late 1960s. However, at the beginning of the 21st century, some Zadar islands recorded a population increase driven by positive net migration. Recent studies indicate that, in many cases, this increase is fictional due to individuals living on the mainland registering their residence on the islands to obtain certain benefits.

This paper discusses contemporary demographic trends on Zadar islands, which include 17 inhabited islands. The analysis focuses on the period after 1991, and it takes into account the number of inhabitants, registered migration trends, natural population change and selected population structures. The paper aims to determine recent demographic changes on the islands and indicate differences among them to determine which have more favourable demographic trends and why. Particular emphasis will be given to analyzing migration trends and determining how the recent migration has influenced other demographic indicators. The recently conducted population census will provide additional information on the most recent population number on the islands and how the situation has changed in the last ten years.

Keywords: Zadar Islands, depopulation, repopulation, migration, natural decrease

„WE HAVE LITTLE LAND OF OUR OWN LEFT”: GENTRIFICATION, CLIMATE CHANGE, AND LAND LOSS ON SAPELO ISLAND, GEORGIA, USA

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The Georgia coast spans 100 miles and features 14 major barrier islands. These islands protect the marshes and interior wetlands of the southeastern United States from storm events and contain rare and unique habitats for many plants and animals. Currently, many of the islands are uninhabited and held in various conservation states. Their beaches, forests, and marshes are valued by coastal residents and tourists for their beauty and natural resources.

However, the islands have a deep, rich, and violent history. After the removal/eradication of Native American groups living on the islands, enslaved people - mostly from West Africa - were forcibly brought to the coast to grow rice, corn, cotton, indigo, and sugarcane. Plantation owners/slaveholders relied heavily on their knowledge of these crops and cultivation methods and on their labour to construct the physical landscape that would support the plantations.

Sapelo Island is midway down the Georgia coast, and much of the island was cleared and cultivated in the 18th and 19th centuries. This included creating an extensive network of irrigation ditches and dikes to drain or irrigate specific areas. While these are not still highly visible on the landscape - in fact, most tourists comment on the “wildness” of the island - the ecology of Sapelo is still influenced by the legacy of these historic efforts. In addition, the people who live on Sapelo still face the legacy of slavery and racism that directed those efforts.

While most of the descendants of enslaved people, called Gullah-Geechee, were forced off the islands after the Civil War and the end of slavery, Sapelo has the last intact Geechee community on the Georgia coast. The members of Hogg Hummock can trace their history directly back to the West African people that were brought to Sapelo in 1802 and have remained there ever since. They maintain many elements of the unique culture, language, and traditions of the “Rice Coast” of West Africa.

Presently, Hogg Hummock faces a land loss crisis, with threats coming from multiple directions. The majority of the island surrounding the community is owned by the state and cannot be purchased for development. This puts pressure on the relatively small amount of private land that can be bought or sold, and speculative developers have aggressively targeted land owned by descendants. Coupled with the limited access to the island (Sapelo is accessible by ferry or private boat - there are no bridges to the island), the community is vulnerable to stress and fracturing from land loss, racism, and a lack of job opportunities.

In addition, sea level rise threatens the habitability of Hogg Hummock. The historical network of ditches that the Geechee’s enslaved ancestors were forced to dig may now be facilitating saltwater intrusion and flooding of the community during high tide or storm events. New developments are largely by white, wealthy outsiders who can prioritize modifications (like raised homes) that offer protection from these flooding events. Most of the historic structures and descendants’ homes are ageing and low to the ground, making them extremely vulnerable to the effects of flooding.

Here, I report preliminary results from two efforts on Sapelo Island. First, I present an early analysis of how water moves through the historical network of ditches in and around Hogg Hummock and if they are facilitating saltwater intrusion and flooding within the community. In addition, I will present options for modifying this ditching system (i.e., filling in areas or building culverts) that may mitigate these effects. Second, I discuss the status of the efforts of the Sapelo Island Cultural and Revitalization Society (SICARS), a grassroots, Geechee led organization, to address the imminent

threat of land loss through land retention strategies. In addition, SICARS has several sustainable economic development programs in development, such as an agriculture program for heritage crops like Carolina Gold Rice, purple ribbon sugarcane, and Geechee red peas. This program encourages the preservation of traditional lifeways, educates the local community about Gullah-Geechee history, and provides economic opportunities for descendants on the island and those who may wish to return to Sapelo in the future.

Keywords: gentrification, land loss, sustainable development, climate change

ENERGY TRANSITION AND FUTURE-MAKING ON THE CROATIAN ISLAND OF HVAR

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In the summer of 2020, the island of Hvar voted on the Energy Transition Strategy that, in the period of its preparation and implementation, has become a topic of top-down and down-up discussions. Implementation of the strategy will take place in tight cooperation with two associations, one that gathers market actors in the production of the renewable energy supplies, the Association of Renewable Energy Sources of Croatia (RESC), and another that grew out of youth activism at the level of the East Adriatic archipelago and has developed as a political actor at the level of EU islands initiatives (Island Movement). The Energy Transition Strategy relates to the period from 2020 to 2035 and includes four pillars: civic society, educational institutions, local self-government bodies, and the entrepreneurial sector. In agreement with citizens through workshops, an analysis was made of their proposals that formed the basis from which they developed a shared vision of the island's self-sustainability. The present state shows that only six per cent of islanders produce their own energy. Officially, the island has a population of 11,077 and wishes to develop solar power plants. So far, the investors that have offered to build it have not successfully negotiated with the local government on the percentage of the local community's ownership of the solar plant. As a cultural anthropologist, I conducted ethnographic research on the island and collected data on how top-down policies reach the local community and merge with local initiatives concerning clean energy. Additionally, I was interested in narratives on the traditional ways islands have been kept 'clean' for centuries—until unplanned agriculture, the strong development of (mass) tourism, and intensified building and transport on the island of Hvar connected with it intervened. The idea that emerged as the crucial topic of islanders' future-making processes is the collective vision of energy transition, which relates to local communities becoming the default owners of the infrastructure built around their living spaces and supported by the state and EU financial aid. This praxis has not been the case in Croatia so far. However, it has recently been negotiated on the island of Hvar and a few other Adriatic archipelago islands.

Keywords: island futures, energy transitions, communal energy, policies

FUTURE DEVELOPMENT POSSIBILITIES OF ŠĆEDRO ISLAND EXPLAINED THROUGH LOCAL OPPORTUNITIES AND POLICY LIMITATIONS

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Since 1972, the Croatian island of Šćedro has been defined and protected as a landscape of preserved and unique features. Its past times are narrated in various historical writings, describing it as the primary strategic point of the central and south Dalmatia due to maritime routes and bays that provided shelter to merchants and other seafarers in the Adriatic sea. Šćedro belongs to the sub archipelago of the island of Hvar. Its terrain configuration and the fertile land supplied the main island with bread, wood and building stone. Today, the island is desolated during the tourism off-season. Its protection is questionable due to national policies that halt the island's development, thus limiting the revival of the once rich Šćedro identity. Under the 'Association of Friends of the Šćedro Island', Šćedro has pushed off adverse effects, and locals have worked to preserve the island year-round. How does one evaluate the effort, determination and results of their work vis-a-vis the future sustainable development of the island? Is Croatian island policy producing difficulties instead of being the wind in the backs of remaining islanders? Are the island's sustainable development path and the realization of the development vision jeopardized? Islands have obstacles and opportunities that differ across the archipelago. As such, islands should have a national policy that offers opportunities for each island to develop its policy to follow national standards, albeit tailored to the island's needs.

Using ten years of field research with local initiatives, we will present and discuss the gap between local realities and policy regulations. The research and the presentation aim to offer guidelines for approaching prevailing island problems, using Šćedro as a model as an example of good local development practice. What are the natural obstacles that decelerate processes and opportunities today and in the future? The research methodology covers three main topics: current development policies, real opportunities in the island space, and the island vision. The intention is to propose an elaborated analysis for future research and a database for Šćedro Association's future work. The analysis is based on deconstructing its constituent elements into layers, such as landscape, seascape, agricultural fields, archaeology, demography, infrastructure, culture, economy, and sustainability. These layers will be defined according to a proposed policy-opportunity-vision methodology. The model could be more constructively adapted as an example offered to other islands that want to replicate some of our activities. Following the primary analysis results, the answers to the main questions can begin to take shape: how do we see Šćedro in the near and far future? What is the purpose of the long-term work of development initiatives on the island? How to revive a once vivid island and adjust it to modern times? Unfortunately, some of these problems can be detected on every Croatian island without a positive way out. Only by continuous testing of different methods and approaches, it is possible to move forward, take a sustainable island development path, and find answers about the future of small islands.

Keywords: Island model, development Policies, Archeology, Tourism, Inhabitants, landscape

PERFORMING ALTERNATIVE ISLAND CLIMATE FUTURES: BODIES AND EMOTIONS IN TUVALUAN DIPLOMACY

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Scholarship within feminist geopolitics and diplomacy studies has highlighted the significance of the body, emotions, and performance within the practice of diplomacy. Bringing this literature into conversation with contemporary work in island studies, this paper explores how diplomacy has been utilised to challenge imaginaries of “sinking islands” in the South Pacific. Within popular imaginaries, low-lying island states have been constructed as emblematic of the Anthropocene and at risk of inundation due to rising sea levels. Considering the relationship between emotions, bodies and performance in diplomacy, this paper questions how different geographies of salvation have been constructed and resisted within Tuvalu’s diplomatic practices. This paper is based on six months of fieldwork in the South Pacific in 2018 and 2019, as well as two weeks of fieldwork at the 24th UN Climate Change Conference (COP24) in Katowice, Poland, in December 2018. It draws upon 55 in-depth elite interviews alongside participant observation of climate negotiations and diplomacy.

Through a focus on the 50th Pacific Islands Forum, hosted by Tuvalu in Funafuti, I contend that island scholars and geographers should pay closer attention to how discourses of “saving” are mobilised within geopolitics in the Anthropocene, with particular bodies as constructed as in need of “saving”. This paper questions whether the rhetorical devices used to posit atolls as spaces in need of “saving” empower small island states or merely reinforce existing power structures. Particular bodies are enrolled within diplomacy to construct geographies of spectacle that make visible and contest particular futures. Within this paper, I discuss the role of children within the Pacific Island Forum and the visit of the UN Secretary-General to Tuvalu in 2019. I argue that bodies construe a vital territorial conjuncture in which future threats to the territory of the state are made visible. Thus, through a greater focus on the body as a key site in island diplomacy, island studies scholars and geographers are better placed to conceptualise how performances are used to contest hegemonic discourses and prefigure alternative political futures.

Keywords: Diplomacy, Climate Change, Tuvalu, Bodies, Performance

MAPPING A FUTURE FOR ISLANDS THROUGH ART

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This presentation focuses on the *Mapping & Re-envisioning Islands* project developed within the research cluster COMET: *Communicating, Observing, Mapping Environments and Tolerance*. The scope of research considers the United Arab Emirates, particularly its islands with historical and heritage prominence, where the capital Abu Dhabi is made of an archipelago of over 200 islands. Other islands like Delma, the Palm and The World Islands have been identified as a comparison while considering a history of artificial versus reclaimed islands. The project focused on Sir Bani Yas and stories collected there through interviews and visual recordings. Students were brought to visit Sir Bani Yas to learn from the land and develop artwork that spoke to the island's history and sustainability efforts. Students participated in a beach cleanup on both trips and worked together to develop sculptures out of marine debris. The second trip included tours with Dr Mark Beech, Head of Coastal Heritage and Palaeontology and archaeological digs that uncovered important sites, including a monastery and an irrigation system (falaj). The data collected was later used to encourage the students to communicate their ideas about the island as an attempt to map the story of the island through objects and video mapping. A comparison was drawn between students who have been to the island and those who viewed it through the lens of storytelling and image documentation. The paper concludes with the results presented in a public exhibition format and the cluster's online portal.

Keywords: sustainability, art, culture, mapping, archaeology

VIRTUAL ASSET REGULATIONS IN SMALL ISLAND JURISDICTIONS: THE CASE OF MALTA

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Since the inception of virtual assets, regulatory approaches by small island states have been marginalized and discredited for enabling the blockchain industry. Without being formally connected to the discourse on small states as financial centres, the literature on virtual asset regulation has reinforced the narrative of small islands as risky, lacking transparency, and vulnerable to financial crime. This research challenges some of the findings from the literature in the field of financial services in the context of small island states and, building on the case of Malta, discusses findings that possibly suggest a new narrative.

This research adopts a mixed-method approach, analyzing the Virtual Financial Assets Act (VFAA) adopted in Malta and the European Commission's Directive on Markets in Crypto-Assets (MiCA) proposal. By initially focusing on a specific case study island, a standardized research approach prevalent in small island state studies was taken. We then introduced computational linguistics methods to assess legislation and map themes and prevalent patterns. Informed by the theory of small-scale flexible specialization, the results led to a keyword query, which guided the qualitative document analysis of the VFAA and MiCA.

Our results confirm that Malta's self-proclamation as a blockchain island was not an announcement leading to laissez-faire regulation. Instead, it prompted a regulation of virtual assets that is viable and competitive within the EU financial market. Furthermore, in parts of the directive proposed by the European Commission, we find that the legislation adopted in Malta can be regarded as a blueprint for virtual asset regulation, as set out by MiCA. For small island state studies, the findings imply the need to further review the mainstream narrative in financial assets literature that depicts islands mostly negatively. This paper also points to the need to have further research on how other small island states regulate this new class of financial assets to shed further light on both the hegemonic narrative on islands and whether virtual assets promote investments and provide long-lasting development opportunities for islands.

Keywords: Virtual Asset Regulation, Small Island States, Competitiveness, Malta, Mixed Methods, Blockchain.

UNDERSTANDING PERSPECTIVES ON HEALTH IMPROVEMENT WITHIN A SMALL ISLAND COMMUNITY

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Health challenges in small island communities can be complex and multifaceted, requiring context-specific interventions. Efforts to understand island needs and design appropriate solutions emphasise the importance of including local people in designing and prioritising health improvement initiatives. This process needs to recognise that there may be diverse and competing views on how to improve health, both between and within small island communities.

This research sought to uncover the shared perspectives of residents of one remote-rural island community in Scotland on how to improve health in communities such as theirs. A secondary aim was to consider the perceived relative role of the community ownership of the island in affecting residents' health.

The study used Q Methodology to uncover and interpret shared perspectives toward health improvement. The concourse (n=185 statements) was structured around theories of rural health and distilled into a 40-statement Q-Set following two rounds of piloting. The P-Set (n=62) consisted of a broad demographic range of residents in one small island community in Scotland. Data analysis utilised Centroid extraction and Varimax rotation, using KenQ analysis software. There were four different perspectives on how health could be improved.

Local Economic Activity: This perspective focused on the importance of employment and local business development in providing opportunities for people to work and remain on the island instead of leaving for the mainland. It was critical of external interference in cultural life and business practices through increased tax and red tape. **Protect and Care for the Community:** Exemplars of this factor favoured the provision of care for the elderly and vulnerable within the community through expanding health and social care services. They also sought to restrict the influence of poorer 'incomers' who were being blamed for introducing a culture of crime, drugs and worklessness to the community.

Redistribution of Resources: Respondents holding this perspective focused on reducing societal inequalities through progressive taxation and investments in public services for the benefit of the most vulnerable in society. Less emphasis was placed on community-based interventions as a broader societal approach was favoured.

Investing in People: These respondents favoured a community-based approach to reducing social isolation and enhancing self-value through the provision of employment and opportunities for leisure. This strategy was considered to bring individuals to the point where they would adopt healthier behaviours and take responsibility for their own health improvement.

There was consensus around the need to relieve poverty and provide accessible public services for the health of the island's residents. The role of community land ownership was considered fairly minor or neutral by the majority of respondents. There are multiple distinct perspectives on how health can be improved in small island communities. This counters tendencies to treat the 'voice of the community' as a unitary consensus. Community land ownership was not considered to play a significant role in improving health.

Keywords: Island, Rural community, Health

TOO SMALL TO KEEP UP? CHALLENGES TO INNOVATION AND DEVELOPMENT ON THE ISLAND OF GOZO (MALTA)

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Innovation is said to be essential for economies to move on and be more competitive on the global stage. However, what is the situation for very small islands; can they be innovative and remain competitive in a future digitalised global environment? What role does innovation play in a small island's development policies? This paper analyses the situation of innovation and development on the small island of Gozo and asks whether small islands can include innovation in their development strategies.

As a small island within an archipelago and very much dependent on direction and, most of all, financing from the mainland, the island administers a budget for everyday maintenance activities but does not appear to have a holistic strategy to sustain a diversified economy and not one based mainly on internal and international tourism. Whilst the possibility for Gozo to act as the home of nomad online workers could be entertained, the strategy has not been spelt out with vigour. The recent onslaught of construction is endangering the beauty of and new opportunities available to an idyllic small Mediterranean island to maintain its natural habitat while being innovative in developing its green credentials within the green and blue economy.

The methodology is based on interviews with the main stakeholders in the process, including businesspersons, the Ministry for Gozo and a recent set-up, the Gozo Regional Development Authority. Furthermore, a survey was administered by the Gozo Business Chamber to its members.

Initial results suggest that while development policies have been devised over the years, the follow-up of such policies tends to be more haphazard than cohesive. Furthermore, when Ministers change, so too does the focus. Thus, the idea of a long-term development process cannot usually succeed. Interesting results were also found in the perspectives on innovation by local businesspersons.

Keywords: small islands, innovation, development, Gozo

ABANDON OR REVIVAL? THE IMPACTS OF TOURISM ON ISLAND SOCIAL-ECOLOGICAL SYSTEMS ON FOUR SMALL ISLANDS IN THE PENGHU ARCHIPELAGO

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Tourism development is often an alternative strategy for social-economic regeneration in depopulating small island settings. Tourism could generate job opportunities on the islands, thus improving local livelihood. However, the impacts of tourism on the small island communities whose livelihood mainly depends on fisheries may be more complex due to the dynamic situation of changing island social-ecological systems. In this study, we explore (1) the trend of declining and increasing population of four small islands, namely Dongjiyu (1.77 km²), Xijiyou (0.90 km²), Donyupingyu (0.48km²), Xiyupingyu (0.35km²) of the southern Penghu Archipelago (also named Pescadores) in the middle of the Taiwan Strait; (2) the driving forces behind the choices of islanders to leave or stay (one of these four islands has been abandoned since 1979); and, (3) the impacts of recent tourism development on these islands after establishing the South Penghu Marine National Park in 2014. The new Marine National Park consists of these four islands. The surrounding waters, which abound with fish species and coral reef ecosystems, have attracted recreational divers while serving as a 'germplasm bank' for fishery resources.

A framework of complex Social-Ecological Systems (SESs)(Ostrom, 2009) is applied for analyzing the sustainability of the islands' land and sea resources, as well as island communities. A semi-constructed questionnaire, derived from the SESs framework, was conducted with in-depth interviews on current residents and islanders who have moved to cities or harbours elsewhere. The results show that: (1) The most populous stage of the four islands was in the 1960s when fishery resources were still abundant but began to decline in 1967 when Kaoshiung Harbor on Taiwan's main island became operational, pulling people out of fishery villages. The population declined from 2,572 people (1967) to 401 people (1995); the island Xijiyou was abandoned in 1979. The current population gradually increased to 1,204 people (registered households); however, the islands' long-time permanent residents are only 50 people; (2) Many abandoned houses were left on the islands, but traditional cultural events or festivals still attract hundreds of people back home to pray to ancestors; (3) The new National Park brought more resource units to the islands (such as visitor centres, diving and snorkelling service stations); thus increasing the number of tourists in the last three years, even during the 2020 Covid-19 global outbreak, which seemingly did not affect these islands.

Permanent residents have not significantly increased or even declined in smaller isles while tourism has boomed. Have islanders benefited from tourism revival? Our analysis of dynamic island SESs on the interactions among resource systems (archipelagic related ecosystems), resource units, users (residents, tourists), and governance systems (community leaders, tourism agencies, park service) will be presented. In addition, a few appropriate and more sustainable island development scenarios based on SES analysis will be discussed.

Keywords: Island tourism, Social-Ecological System (SES), islanders, South Penghu Marine National Park

WICKED PROBLEMS: REFLECTIONS ON THE POLITICS OF A SMALL ISLAND

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There are three tiers of government in Australia: federal, state, and local. All face wicked problems in revenue raising, resource allocation and service provision. Kangaroo Island is one of 68 local government jurisdictions in the state of South Australia and the only one located exclusively on an island. This paper focuses on the wicked problems faced by the island's elected council, seeking to identify those uniquely related to its island context and providing several case studies by way of example.

The case studies explore a range of wicked problems in areas as diverse as wildlife management, road construction and maintenance; the harvesting and shipping of plantation timber; and the provision of tourist facilities, especially in cruise ship visitation and airport operations. The research underlying the case studies uses multiple data gathering approaches, including documentary analysis of the Island Council records, informal and semi-formal interviews with key informants, on-site visits for direct observation and recording, and anecdotal evidence recorded from encounters and incidents during day-to-day activities. Essentially the researcher has used processes of holistic engagement as a trusted insider. Information has been acquired over several years, seeking to achieve data saturation using 'slow' data collection techniques.

The research is ongoing. The aim is to identify those wicked problems, or aspects of them unique to an island context, thereby adding to our understanding of the elusive concept of islandness. The research also examines local attempts to manage wicked problems. The paper will offer provisional findings confirming the uniqueness of the case-studied problems to an island context and suggesting that local islanders prefer to tame them via compromise rather than confrontation. The paper then explores the implications of the findings for public policy and planning on small islands.

Keywords: wicked problems; local government; island politics

WHEN RARENESS MEETS SMALLNESS: THERAPEUTIC REMOTENESS IN THE MALDIVES

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Providing health care and other community services has always been challenging in island locations. Diseconomies of scale, weak health, travel infrastructure, and the lack of trained health personnel are often cited as major hurdles and drivers in the literature. This situation further deteriorates when islanders suffer from a rare disease.

The Republic of Maldives is Asia's smallest country in terms of land area and population but records the highest prevalence of *beta thalassaemia* globally. More than 600 patients are registered with this inherited blood disorder. Half of them live on the capital island, where major health institutions are located; the other half lives dispersed over almost all of the archipelago's 20 atolls. There are also 18 islanders in the country with sickle cell disease, another life threatening genetic disorder of the haemoglobin. With their divergent prevention and treatment needs, especially when facing severe pain crises so characteristic of this condition, these patients form pockets – or islands – of sickle cell disease dispersed in an archipelago of thalassaemia.

Based on ethnographic fieldwork, this paper focuses on the 'insular' health experiences of the particularly vulnerable group of Maldivian sickle cell patients. Therapeutic remoteness takes its toll in everyday life with this rare disease in small island contexts. Medical travels and health related migration often are unavoidable to access high-quality multidisciplinary care. This presentation proposes the notion of "therapeutic remoteness" to indicate health inequities and identify unmet needs this group of patients faces. Therapeutic remoteness refers to an asymmetric relation associated with, but not identical to, infrastructurally weak areas, nor to distance, marginality, or peripherality. It addresses a 'remoteness' shaped by island geography, genes and human agency. Drawing on the concepts of remoteness (Ardener, 1987), genetic responsibility (Novas & Rose, 2000), bio-sociality (Rabinow, 1996; Gibbon & Novas, 2008) and islandness (Gupta, 2010), among others, I argue that therapeutic remoteness is sound to think with in island contexts.

Keywords: remoteness, rare disease, sickle cell disease, archipelago, Maldives

SMALL ISLANDS AS INNER AREAS

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This presentation is an extract from PhD research entitled “Small Islands as Inner Areas”. It reflects on a hypothesis of a strict correlation between the small Italian archipelagos and the themes of marginality and abandonment typical of inner areas.

Italy is a peninsula whose coasts extend for about 7.458 km and present phenomena of settlement sprawl, consumption of coastal dunes and Mediterranean vegetation, the creation of harbour facilities and industrial complexes, and coastal erosion, which in recent decades has accelerated its progress exponentially due to the effects of climate change. Moreover, settlements, port areas and abandoned military areas alternate with areas of environmental value and marine reserves, a succession of conditions and complexity that make the Italian coasts extremely fragile territories.

These general conditions manifest themselves with even more significant effects on the rich system of small Italian archipelagos, afflicted not only by problems of a physical and anthropic nature but also by mass tourism and a seasonal population “mordi e fuggi”.

Moreover, small islands suffer from marginality and abandonment due to intrinsic island conditions that inevitably affect the levels of habitability. They are, in fact, exponentially larger than those experienced by the mainland, although in marginal areas. The challenge of residing in small Italian archipelagos is also evident via logistic and environmental problems connected to the distance from the mainland.

It refers, for the first question, to the problems deriving from the connections “with the mainland” that affect the rights to the habitability of the islands: freedom of access and mobility to and from the islands; health care; the right to primary and secondary education; water supply for civil and agricultural uses; fuel supply and waste disposal (considering the existing asymmetry between winter and summer season).

The second one refers to relevant phenomena of coastal erosion, extinction of insular endemism (both animal and vegetable), and hydrogeological collapse, which affect resources and soil consumption under the effects of climate change, notably a rising threat of sea level rise. Regarding these premises, the present contribution reflects a need to develop a methodology indicative of small islands’ geographical and social realities in Mediterranean regions to promote territorial regeneration and enhance cultural heritage that mitigates marginality and abandonment. It is a project that aims to protect these fragile but precious landscapes through a circular process based on the Blue Economy and a new vision of sustainable tourism.

The recent European Green Deal can also represent a helpful tool for achieving this goal. Many objectives are even more urgent and necessary on small islands: efficient use of resources, transition to a clean and circular economy, interruption of climate change and loss of biodiversity, and reducing pollution.

This research began with studying and analysing the state of the art and new Italian and European tools to define a taxonomy of the Italian island heritage. It would be compared then with a European taxonomy made by exemplary case studies. The expected results of the research are the elaboration of policies and strategies to contrast marginality, abandonment and depopulation as they affect Italian and European islands. They will define new indicators that can redesign the geography of marginalisation and “internity” of our territories, including small islands. Although increasingly forgotten and abandoned, places that represent a new chance of repopulating, especially in light of recent events, have shown us the makings and the possibilities of “remote living”.

Keywords: small islands, inner areas, depopulation, urban regeneration, future scenarios

NEGOTIATING CONFLICT IN THE DEVELOPMENT OF INDIGENOUS ECOTOURISM ON SMALL ISLANDS. THE CASE OF PAHAWANG ISLAND, INDONESIA

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Interest-based relationships make small island coasts amongst the most contested spaces where stakeholders compete dynamically and threaten indigenous ecotourism ideals by increasing the cash economy and market shares. After looking at the various forms of contestation that challenge tourism production and its development on small islands, this paper focuses on the ways conflicts are negotiated to support the sustainable governance of indigenous ecotourism. Using empirical material from Pahawang Island, Indonesia, collected through 53 semi-structured interviews, fieldwork, and document analysis, it first interrogates the conflicts that emerge when different social groups from different logics exploit their territory and livelihoods, access coastal land, and accumulate wealth. The paper then illustrates potential contradictions of social innovation by showing how something that started as a social innovation (satisfying basic needs, stimulating community socio-ecological empowerment, enhancing nature conservation, creating a political network) can be turned into an 'insurrection' for the rich through the self-development of island tourism, and degrade ecotourism ideals. Finally, the paper explores the alternative governance that can allow multiple actors to collaborate synergetically and how it has become a prominent device for sustainable indigenous ecotourism on a small island. This governance mobilizes neither top-down nor bottom-up decision making but is a more dialectical way of negotiation, highlighting the emergence of bottom-linked governance.

Keywords: Small islands, social innovation, ecotourism, governance, Indonesia

FROM THE MARGINS TO THE CENTER: THE CASE OF ISLAND BASED FIRMS

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Islands are unique spaces that have generally been overlooked in studies on organization and the process of their internationalization. Small in size and numerous, they are often viewed as more minor (less complex) versions of larger countries; their domestic market size determines natural boundaries that may better understand the rationale for venturing abroad. Islands are disproportionately challenged by issues such as size, remoteness, exogenous shocks, and isolation, facilitating a striking contrast with nations conventionally observed when studying International Entrepreneurship (IE).

The quest for diversity in IE studies has since revealed a plethora of drivers, motivators, promoters and discouraging factors. These findings signal that the phenomenon of IE is still relevant and calls for further examination to truly understand the dynamics that usher the ultimate decision to venture abroad. Previously, only large firms from industrialized nations toyed with venturing beyond domestic borders, and increasingly, firms from emerging markets proved to be equally, if not more, successful in IE. Four propositions that shaped decisions for (becoming) MNEs have been identified: country selection and evaluation, entry mode, segmentation-targeting-positioning, and the marketing mix.

IE is an opportunity that firms abroad act upon, delivering substantially different results from those that decide to focus domestically. Many factors may have contributed to the adoption of IE as a strategic goal for firms, and a recent publication in the *Island Studies Journal* has given attention to the process by which Island Based Firms (IBF) internationalize. This study presents a unique environment where firms are generally resource oriented and have to respond to institutional changes, as islands typically face exogenous shocks.

This paper reviews the particularities of islands that relate to or may determine IE and research gaps where islands may inform the drivers, motivators, challenges, and discouraging aspects that frame IBFs in their quest to engage in markets abroad. The study employs a systematic literature review of studies in the past 20 years. It identifies primarily a lack of understanding of how the size of the domestic market influences strategic expansion choices of firms (particularly that of family firms) and presents islands as unique spaces to study this phenomenon.

Keywords: Island based firms, islands

SEGREGATING ARCHIPELAGOES: THE CHICAGO SCHOOL REVISITED ON THE DANISH SMALL ISLANDS

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It is evident that the Danish archipelago is at a crossroads today. Since the 1930s, the total number of inhabitants on the 27 small islands in Denmark has decreased by 50% (ca 4.500 in 2021) while at the same time struggling with both some autogenic problems (poor financialisation, vulnerable ferry economies, centralisation, out-migration, and urbanisation) and allogenic challenges (impacts of societal pressure, large scale tourism and displacement of permanent residents by second home owning). Despite this, the total number of inhabitants began increasing in 2016 due to in-migration, especially from larger cities in Denmark, which continued in the following years. However, the distribution of the new islanders was indeed unequal, concentrating roughly in only 1/3 of the small islands and to such an extent that it exceeded the continued decrease on the latter 2/3 islands.

A study from Arbejdernes Erhvervsråd, a Danish think tank, suggested that the actual crossing time, the size of the community, and the presence of a local school, were of vital importance to whether an island could thrive and be desirable to move to or not, leading to the discussion on how to maintain such infrastructural conditions and social investments or even improve them.

While most Danish researchers engaged in how to develop solutions to those challenges, an extensive theoretical framework has remained absent and unaddressed: is there a larger segregation process going on, dividing the small islands of Denmark into growth areas and depopulated abandoned places, and if so, why? The theory of human ecology and the thoughts of the Chicago School, prominently known for its contributions to American urban sociology, is surprisingly applicable in its ability to analyse the ongoing processes and disseminate the core factors and societal dangers of socio-spatial segregation. The theoretical deficiencies in this field are not only bettered by introducing human ecology as a framework but are also widening the analytical depth of such an investigation, helping us to discover new ways to understand the data.

Based on several qualitative interviews with newcomers and ethnographic fieldwork on three different small islands, situated in the same regional area and belonging to the same mainland municipality, the notion of segregating archipelagos materializes empirically. This study shows that not only was the scale of migration extremely unequal on the three different small islands, but also that the social environment is, in fact, the most critical factor for attracting newcomers; not abolishing the meaning of infrastructure and administrative services and systems, but that specific social environments, identifiable and desirable to a potential newcomer or not, are the most important reasoning in the individual's residential selection and arises as a prominent feature of everyday small island migration and small island living in Denmark.

Keywords: Small islands, migration, counter urbanisation, rural sociology, human ecology

THE GLOBAL ISLAND DATABASE GID. WHAT ARE ITS USES?

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The present GID/BIM (base de données Insulaires Mondiale) is based on pioneering works at the UNEP (Dahl, 1992) and the WCMC (2010). The main aim was to contribute to prioritized actions (inventory, survey and protection) relevant to island biodiversity globally under the umbrella of the WCMC, CBD and GLISPA. The GID/BIM data is downloadable and presently online and includes 185,000 islands, including all islands greater than 5 hectares. It compiles homogeneous information collected from other global databases about island names (GTGN), elevation and relief (GTOPO30 and SRTM), present and future climate (WORLDCLIM), ecosystem and bioclimate (WWF and Holdridge), and geography (country, archipelago, shape, relative location continental versus oceanic islands). Each island is coded (International Island code IIC) to avoid confusion between names and is associated with 187 attributes such as distance to the closest continent, elongation index, average elevation, mean yearly and monthly precipitations 1950-2000, number of Holdridge's biomes, and population estimates. The following is an example of the data collected for two Croatian islands:

- Dugi Otok: (IIC 12470): average elevation 124 meters, elongation index 3.7 (45 km), mean annual temperature and precipitation 14°C and 952 mm, WWF ecosystem code PA1222 (Mediterranean central part, similar to Malta or Elba).
- Pag: (IIC 6940), also named *Pago*, mean temperature 1950-2000 in June 19.9°C, for 2050 in June 22.4°C (CC +2,5°C), karstic geological type, distance to continent 1 km.

The criterion of data homogeneity is crucial for comparative purposes and operational uses. In addition, GID appears to be a helpful (or accurate) tool for scientific research in understanding the dynamic processes of Dispersal-Diffusion-Migration (DDM) more precisely. It provides better insight into the geohistorical patterns throughout the world archipelago and contributes to the endeavour of nissology as defined and initiated by Grant McCall and Iroshi Kakazu, both members of ISISA. Examples of GID uses for scientific researchers will be presented on various topics: biodiversity according to the size of the island, diffusion of the Austronesian languages in the Pacific and the Indian Ocean, and comparative geohistory of the Mediterranean and Baltic islands.

Several global datasets and tools for island mapping are available:

GID 2010: http://www.globalislands.net/about/gid_functions.php

BIM 2020: <https://doi.org/10.23708/T37SoK>

Global_Islands (MapServer):

<https://data-gis.unep-wcmc.org/portal/home/item.html?id=864f59c3e2164032bb1f5c7b4bf131f5>

<https://www.gislounge.com/mapping-the-worlds-islands/>

Keywords: database, islands, GIS, bioclimatology, nissology

EDUCATION ON CROATIAN ISLANDS BETWEEN 1945 AND 2020

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Croatian islands are the second largest archipelago in the Mediterranean. Overall, 1,244 islands, reefs and islets cover an area of approximately 3,300 km², 5.8% of the total Croatian land area. According to a definition of settlement, 67 islands are considered populated. However, according to a definition of inhabited settlement, only 47 islands are populated throughout the year. The Croatian islands are also one of the least populated areas in the country, with a continuous trend of depopulation. In 1948, there were 151,835 people on the islands, or 3.9% of the entire population, while in 2011, that number was 124,955, or 2.9% of all inhabitants.

The trend of depopulation is persisting on Croatian islands. After World War II, Croatia launched intensive teacher education programmes and literacy programmes, followed by the schooling of primarily rural agricultural populations for industrialisation purposes. This resulted in more schools opening, particularly on the islands, following the premise that every village should have a school. In the academic year 1953/54 (according to data available for most of the islands), there were 179 schools (146 primary and 33 secondary) attended by 12,621 pupils (8,580 in primary and 4,041 in secondary). In 2020/21, there were 78 schools open on these same islands (64 in primary and 12 in secondary schools) attended by 8,209 pupils (6,211 in primary and 1,998 in secondary schools). The number of island schools has thus decreased by more than half (51%), and the number of pupils has decreased even further (59%). The trend of island depopulation has led to a decrease in students, challenges organising home-to-school transfers, and difficulties in ensuring a teaching staff and sufficient equipment for island schools. The number of primary schools in larger island towns and regional schools in smaller places categorised as “primary schools with difficult working conditions” is increasing. Unfortunately, the most distant, small and sparsely populated islands no longer fulfil the conditions for having primary schools (both main and regional ones).

This paper follows education development on Croatian islands between 1945 and 2020. The falling trend in the number of pupils and school closings are analysed and explored for both the present and future quality of life. The research was based on primary and secondary sources, including official data from the Ministry of Science and Education and the Croatian Bureau of Statistics, statistical yearbooks of the socialist Republic of Croatia, and prior academic research results. Qualitative analysis was used to process and interpret results using a historical-comparative approach. This presentation will offer recommendations for sustainable changes needed to mitigate the current crisis and move toward a long-term strategy based on a holistic and selective approach to reverse negative population trends and revitalise the education system on the Croatian islands.

Keywords: Croatian islands, island population, schools, education

TRAFFIC CONNECTION AS A FACTOR OF THE MULTIPLE TEMPORALITIES CREATED WITHIN THE SAME ISLAND – THE CASE OF DUGI OTOK, CROATIA^{3*}

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Linear time and temporality have long been a research focus within various disciplines, including sociology and anthropology, but their concepts have recently become more intriguing to geographers. Place and space were researched separately from time and temporality until it became clearer that because social changes occur within a certain space at a certain time, both dimensions require equal consideration in an analysis. The idea of this unbreakable connection became the foundation of time-space geography.

Islands have a special allure to time-sensitive researchers because they are often perceived as “time capsules” or places where time stops or flows slowly. Needless to say, an islander’s perception of the time and place in which they live is completely different from that of an occasional visitor, usually owing to the long-prevailing periodic functions of life in an island space. Progress in building traffic connections to link islanders and the mainland can alter these temporal processes and trigger a duality in development, creating different perceptions of time in the same space.

This study investigates the notion of multiple temporalities using results from a multidisciplinary project about the network of island temporality on Dugi Otok in the Zadar archipelago. The research focuses on social changes in opposing parts of the island that happened along with enhanced traffic connections and focuses on the idea and significance of linear time and changes in life rhythms after introducing 24-hour clock time. All Dugi Otok settlements are rural, and islanders’ lives were once linked to seasonal or daily work in agriculture and fishery, which depended on meteorological conditions, fishing seasons, lunar phases, crop calendars, and the like. The establishment of regular boat connections and developments in industry and education shifted work and life rhythms to adjust to linear time.

The methodology includes comparing data about different socio-geographic aspects of life on the island before and after introducing faster connections and a quantitative study with semi-structured interviews of the islanders from the opposing parts of the island. The preliminary results point to different notions of time in two island areas (NW and SE), with northern settlements experiencing more negative socio-economic processes, including heavy emigration and ageing. In conclusion, the study will explain how perceptions of space and time change due to traffic connections and how much these perceptions diverge in a shared island space.

Keywords: Dugi otok Island, temporality, traffic connection

* This presentation is the result of a competitive research project *A Network of Island Temporalities: Multidisciplinary Research of Temporalities on Dugi otok and Kornati islands*. The project is funded by the University of Zadar for the period of 2021-2023 (project code IP.01.2021.13)

BETWEEN CULTURAL AND POLITICAL IDENTITIES: STATE AND SOCIETY IN THE MAKING OF ENGGANO, AN OUTER ISLAND IN INDONESIA

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In literature, Indigenous people are frequently depicted as vulnerable, neglected, and dependent on a more considerable authority, such as the state. They face discrimination due to governmental dominance, which pushes them to alter their identity. The state conducts an assimilation effort, isolating indigenous people from their ancestors and homelands, even annexing their territory. There are numerous examples of state power assigning indigenous groups to the lowest socio-economic class or excluding them, which frequently leads to political resistance and activism manifested in social movements that advocate for the rights of the indigenous people. The Engganese, an indigenous group that lives on the tiny island of Enggano in Indonesia, demonstrates how indigenous peoples may survive despite state intervention and modernisation.

This paper aims to examine the contestation among the state, modernisation, and their *adat* (customary laws) that contribute to the dynamics of Engganese identity. This study asks how the Engganese survive and protect their identity from external threats considering the expansion of various nations and ethnic groups to Enggano since the 16th century. Data for this analysis is based on a series of visits to Enggano, including three years of two-week field observations (2017, 2018, and 2019). In addition, interviews with traditional leaders, religious leaders, community leaders, and migrants have been carried out. As presented in the first ethnography research in Enggano, historical records have been the basis for the analysis as a part of the library study. The Indonesian Constitution (Undang-Undang Dasar 1945) and government regulations on the indigenous status constitute the starting point of the research.

The findings show that the Engganese identity has been constructed through a lengthy process in their history of meeting and interacting with different peoples from outside; the Portuguese, the Dutch, the Japanese, and other ethnic groups of Indonesia. Several factors contribute to the Engganese's identity: their past experiences, collective memories, pressures from government policies, and the influx of new peoples and values. Enggano is a site of contestation, in which the people of Enggano assert their cultural identity while the state promotes its brand of nationalism. However, being isolated does not mean being beyond the reach of the state's regulations and interests that tend to ignore local interests.

The Engganese have used their *adat* as local wisdom to protect themselves from external threats. For the Engganese's identity, their *adat* has been the core value system applied to any group coming to Enggano. Although the Enggano people cannot reject the new values of modernisation, their *adat* has functioned as a code of conduct and filter for Enggano to preserve and define their identity in the course of history.

Keywords: Island of Enggano, Indigenous People, Local Identity, State Regulations, Customary Law, Modernization, Indonesia

ASSESSING THE IMPACT OF TRANSPORT ACCESSIBILITY ON ECONOMIC RESILIENCE OF THE CROATIAN ISLANDS - EMPIRICAL FINDINGS

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Since the 2010s, resilience has been frequently addressed in regional economic empirical literature. Focusing on the highly heterogeneous territorial impacts of the 2008-2009 crisis, the empirical approach promotes the resilience concept for understanding the factors behind this heterogeneity. Resilience is defined as the capacity of a system to absorb disturbance and self-organize to retain its basic function, structure, and identity and as the capacity for undergoing adaptive changes for transit towards a new sustainable path. Regional economic resilience has been studied extensively under various frameworks, from a determination of resilience capacity and differences in resilience capacities among different regions to an exploration of the factors that establish regional economic resilience capacity. Although it has been acknowledged that transport infrastructure and accessibility contribute to the production of heterogeneous socio-economic effects among territories, empirical studies produced so far have given almost no attention to the role of transportation accessibility in building resilient regional economies. This shortcoming is particularly felt in the analysis of the resilience of island regions. In the discontinuous space context of islands, marked by constraints of scale economies, micro-climate, and spatial reach of networks, transport accessibility has a unique role in economic development.

In this presentation, we supplement a lack of literature by exploring the relationship between regional resilience capacity and the degree of transportation accessibility. We focus on the resistance and recovery phase of the resilience of the Croatian islands in the period 2007-2017. The key research question is whether the islands' transport accessibility has a significant impact on islands' responses to economic downturns or, in other words, on islands' resilience capacity.

The literature offers several ways to proxy regional economic resilience ranging from descriptive and interpretative case studies to econometric models. We have opted for the model that defines *regional economic resilience* as a combination of the resistance capacity (relative growth during the crisis) and recovery capacity (relative growth after the crisis) needed to overcome the crisis period. The model deals with high or low resilience and high or low recovery dimensions. This allows for more detailed insights into differential effects of resilience determinants and assigning regions into one of the four possible groups: high resistance/fast recovery, high resistance/slow recovery, low resistance/fast recovery and low resistance/slow recovery group.

Applying the model, we have defined four groups of the Croatian islands' local administrative units (LAU) based on the performance of resilience dimensions. The key challenges of the model and data specification have been in regional economic resilience estimation and accessibility (remoteness) and control variables assessment. We applied the multinomial logit model, which provides evidence on whether the distance from the mainland centre is one of the determinants of islands' regional economic resilience, whether the transport accessibility affects regional economic resilience and whether all islands respond equally in terms of resistance to shock and recovery from it.

Our empirical findings indicate a higher level of resilience for less isolated islands' LAUs, implicating the importance of transportation accessibility in building a resilient island economy. The degree of transportation accessibility appears to be less important when the resistance dimension of resilience is analyzed for the islands' LAUs, explaining that the resistance is mainly determined by the previously achieved level of socio-economic development rather than its connectedness to the mainland in times of crisis.

Keywords: Accessibility, Transport, Islands, Resilience, Resistance, Recovery

SMALL-SCALE FISHING AND ENVIRONMENTAL GOVERNANCE; THE SICILIAN SMALL ISLANDS SYSTEMS BETWEEN BEST PRACTICES AND SCALABILITY: A RESEARCH AGENDA

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Artisanal and small-scale fisheries are a heritage of Mediterranean islands and serve as potential examples of sustainable human-environmental interactions. Preserving their uniqueness should be a priority in a European strategy for the Mediterranean. Presently, coastal attractiveness determines the success of mass tourism. Without guidance, mass tourism can exacerbate conflicts between tourists and communities, hasten the decline of cultural and environmental specificities, and cause the erosion or withdrawal of traditional activities. The integration between fishing and tourism and the involvement of fishers in Marine Protected Areas programs and actions are potent and effective strategies to face marginalisation, guarantee economic livelihoods, and encourage local community involvement in environmental protection.

Sicilian Small Islands' fishers have been promoting and implementing cooperative fishing management, positively influencing human activities, such as tourism, and potentially contributing to the sustainable use of marine resources. Moreover, these islands cooperate at the European FAR-NET level through a network gathering Sicilian Small archipelagos as a whole: the Sicily Islands FLAG. The contribution aims at tracing a research agenda. Starting from this scenario and documenting a preliminary review, our proposal aims to describe the existing synergies between small-scale fishing systems in Sicily, identify the best practices developed by fishers and local stakeholders, and outline a research agenda that can bring virtuous models of environmental governance to the scalability of these networks. Our proposal targets island studies by showing how synergies between small scale fishing and environmental management may be a promising way to strengthen the agency of small islands within Mediterranean governance systems.

Keywords: Small-Scale Fishing, Small Sicilian Islands, Environmental Governance

NEOLIBERALISM AND HEALTH IN TONGA

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This presentation, a contribution to the political ecology of health, looks at the adverse health outcomes from high caloric, low nutrition foods imported into the Kingdom of Tonga as a foreign aid contribution by developed countries. Foreign aid plays a significant part in the economic development of Tonga. The introduction of these previously discarded off-cuts of meat, including mutton flaps and turkey tails, are foods introduced into the Tongan's local diet and have contributed to adverse health effects, including significant rates of obesity and diabetes. Health system capacity and lifestyle interventions are reviewed within the broader context of social and economic changes in Tongan society over the past several decades. Neoliberal economics and the resulting globalized trade, along with the role of world institutions, farmers, and meat processors in developed countries, are examined to focus on the issue of power in increasing or worsening health inequalities in Tonga. Local policymakers, religious leaders, and local public health workers can change Tongans' attitudes towards reversing this change in dietary habits and re-adopting healthy nutritional behaviours. Findings suggest the importance of social, cultural, and structural issues in shifting attitudes towards a more traditional Tongan diet and lifestyle.

Keywords: neoliberal trade, political ecology of health, Tonga, obesity, global food commodities

CITIZEN SCIENCE AND BIOCULTURAL DIVERSITY FOR BUILDING COMMUNITY CAPABILITY IN THE RYUKYU ISLANDS, JAPAN

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This presentation will discuss the social impact of collaborative research between researchers and local residents on social issues relating to cultural inheritance using a case study of citizen science in biocultural diversity in the Ryukyu Islands, Japan, conducted between 2014 to 2021. The Ryukyu Islands are spectacularly rich in cultural diversity, language, and traditional ecological knowledge (TEK) connected to the biological diversity of the fauna and flora of the islands. This study was based on the interplay of TEK and the recognition and usage of animals and plants for subsistence. In 2009, UNESCO designated most Ryukyuan languages as endangered, with four defined as definitely and two critically endangered. The islands have suffered from a cultural crisis due to the loss of biological diversity, socio-cultural changes, and depopulation in rural communities.

This study investigated two pieces of the citizen science in the Ryukyu Islands; collaborative research of small-scale fisheries and TEK in the coral reef in Oku village in the northern part of Okinawa Island, known as Yanbaru, which was designated a World Natural Heritage site in 2021; and Yoron Island in the Southern part of Kagoshima prefecture, where methods of recording endangered biocultural diversity and designing community education considering cultural inheritance were examined. The studies were conducted with researchers, residents, public and private museums, fishers cooperative associations, and NPOs, which recorded fishers' narratives and fishing equipment for small scall fishery in Coral reefs. Photographs were collected from family albums and government documents and analyzed compared with the current island landscape to clarify historical changes in the environment, landscape, lifestyle, and livelihood of the islands.

We discussed two outreach practices regarding opening and sharing data with the local community. First, we used a QR code to lead to a website where we published additional materials to access sound and video data of folk terms and narratives spoken by our local counterparts. Second, a participatory exhibition was held to share the collected narratives and photos. It had the effect of gathering residents' voices and adding new information to visitors to this exhibition. This collaborative research demonstrated that the ordinary events of an individual's daily life could be shared as the public history of the community and historical practices with implications for the future of the island.

Finally, we indicated how citizen science not only led to a revitalization of their culture and history for the people and community but also focused on the future of humanity. Furthermore, we would like to discuss how citizen science will ultimately contribute to rebuilding community capabilities and resilience to surpass the uncertainty of the future.

Keywords: Biocultural Diversity, Citizen science, Community Capabilities

ISLANDS: PARADISE OR HELL? ATTITUDES AND PERCEPTIONS OF GREEK CITIZENS REGARDING THE CONTENT OF THE CONCEPTS “ISLAND” AND “INSULARITY” TODAY

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An island is a piece of land surrounded by water – perhaps, the plainest geographical language to describe its concept. Nowadays, is the “island” a central structural unit of scientific analysis or is it still a relatively neglected research theme under a continuous (re)definition process to enhance the visibility of this geographical entity as a “place”? Indeed, a theoretical reflection on the “worlds” of the islands, according to which they must be studied “on their own terms” (and consequently on the terms of the islanders), has not spread as much as expected, despite the tremendous and often intense international debate about destinations, coastal areas, and blue economy. Is the content attributed to the concept of the “island” singular for the relevant stakeholders or differentiated? Do the experiential relationship with the place and identifying characteristics of an island affect the way the citizens perceive the meaning of the island but also insularity? However, what does “studying the islands on their own terms” mean in practice? In the present study, we attempt to approach this perspective in three ways: (a) to give a step to express their views on various issues related to island life of Greek islanders, (b) to give a more enriched content to the meaning of “island”, beyond a - rather commonly accepted - geographical definition, and (c) to outline the content of the concept of “insularity” today. The present discussion paper explores such questions by presenting selected findings of extensive nationwide research on behalf of the University of the Aegean, using a structured electronic questionnaire. More than 1,200 questionnaires were completed by people over the age of 17 living permanently in Greece, of which more than 500 residents stated that they live permanently on islands while the rest are on the mainland. By adopting this methodology, the research attaches particular importance to the attitudes and perceptions of citizens on issues of insularity/islandness and the very concept of “island”. On a practical level, the importance of exploring citizens’ attitudes and perceptions of issues regarding “places” is directly related to place management and promotion issues and therefore has a direct implementation in applicable public policies and local development strategies. In general, the preliminary findings of the study demonstrate that neither the word “island” nor the concept of “insularity” for most populations targets studied here is considered synonymous with exclusion and a set of negative concepts. It reinforces the narrative that insularity is a “handicap” that does not perceive islanders as the general population and consequently does not favour island areas.

Keywords: islands, insularity, islandness, place, perceptions

LIFE AND DEATH ON THE CROATIAN ISLANDS DURING THE COVID-19 PANDEMIC

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Island size, geographical boundedness, remoteness, isolation, small population and manageable access points protect islands and island communities from epidemics. An island's unique characteristics affect the transmission of mainland epidemics and their frequency. Nevertheless, if an infection breaks out, the results are more severe, and the history of epidemics on islands shows us that islands are often more affected than the mainland and highly vulnerable. In the time of the ongoing global COVID-19 pandemic, islands have demonstrated resilience with no or few cases and low mortality rates.

The current pandemic is a unique moment for research on perceptions, practices and narratives of islands' communities during crises, such as local responses to the pandemic, travel bans and problems with connectivity, the health care system (especially for older adults and chronic patients), and the influence of epidemiological measures on the life and death of islanders.

The COVID-19 pandemic made us confront mass death and individual and societal challenges when dealing with death and grief. The infected and dead are reduced to depersonalized data points in daily reports. The epidemiological measures and restrictions include physical distance, the ban on larger gatherings, and avoiding contact with the dead body. Funerals, funerary rites, commemorations and mortuary practices have been banned, abbreviated, postponed, or transformed. Also, the mourning process is being altered, and the bereaved mourn without the usual support and care. Using qualitative approaches and methodology (semi-structured in-depth interviews, in-person or online), this paper presents the experiences and feelings of people during the COVID-19 pandemic on the Croatian islands, focusing on death, funerals, mourning and loss of family members. Island communities accepted new rules and adapted to new circumstances but indicated that island-specific and more flexible crisis management should be applied during this health crisis. Some epidemiological measures, such as social distancing, internal island travel restrictions, and reduced gatherings, were highlighted by islanders as challenging and sometimes unnecessarily strict for some islands and their specific situations.

The pandemic has affected island communities, especially the deaths of loved ones and how funerals, related rites and customs are performed. For family members of those who died from COVID-19, additional factors and challenges complicate loss. Funerals and funerary rites differ in urban and rural island communities. In rural funerals, mourners were more often not adhering to COVID-19 prevention guidelines. When we compared results from islands and the mainland, there were differences in many aspects of burial and mourning practices. The bereaved on the islands adapted to the rules by creating new strategies and new forms of funeral gatherings and burial ceremonies. Digital and social media were used to connect people and help them cope with the challenges of mourning in solitude and isolation. During the global pandemic, island communities responded to the impacts of the crises and adapted to new circumstances of the "new normal".

Keywords: COVID-19 pandemic, epidemiological measures, island-specific crisis management Croatian islands, funerals, mourning

RELIGION AND LGBTQI+ RIGHTS IN SMALL ISLAND DEVELOPING STATES: A CASE STUDY OF MAURITIUS

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The Mauritian constitution prohibits discrimination based on creed and provides for freedom of thought and religion, including the right of individuals to change, manifest, and propagate their religion or belief in worship, teaching, practice, and observance, alone or in community, in private or in public. The Equal Opportunities Act of 2008 protects against discrimination based on gender and sexual orientation. However, in practice, LGBTQI+ individuals on the island often have negative experiences in places of worship because of their sex, sexual orientation, gender identity and expression and sex characteristics. While some religious leaders preach a message of tolerance and acceptance toward LGBTQI+ individuals, others consider their status as blasphemy to their religious beliefs. A series of interviews will be carried out with LGBTQI+ individuals and faith leaders in Mauritius, and the qualitative data collected will be analysed using Nvivo. By starting with a systematic literature review of the level of knowledge, and research gaps, in terms of religion and LGBTQI+ in SIDS, this research will then zoom in on how LGBTQI+ individuals negotiate their sexuality and faith and find ways of reconciling the two within the context of a small island developing state.

Keywords: Religion, LGBTQI+, Islands, Mauritius

ISLANDERS' PERCEPTIONS ON TOURISM DEVELOPMENT - THREE ISLANDS' CASE STUDY

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Tourism development on Croatian Islands relates to that of other Mediterranean Islands. Their development started in the middle of the 19th century, almost simultaneously as organized tourism appeared in other parts of Europe, peaking during the second half of the 20th century. Concerning land areas, tourism development on the islands is determined by significantly different socio-economic preconditions. Tourism became highly salient and, for Croatian islands, the most important and almost exclusive economic activity.

Nowadays, geographically attractive island regions are transformed from areas predominantly oriented toward labour and production into spaces for leisure and tourism. As tourism gains and monoculture characteristics that increasingly resemble mass tourism spring up, island futures and tourism development face uncertainties. The recent social and economic transformation and transition period significantly influenced all Croatian islands that closely connect tourism with their economic development. The present situation emphasizes an evident touristification of islands, and numerous questions arise on recent tourism development and its influence on island communities and prospects alike.

For this study, the Zadar islands were analyzed in the context of global and local processes influencing their socio-economic functions as fragile regions dependent on numerous factors. Considering that each island's reality is different and unique and that each island is a world unto itself, this paper aims to analyze the predominant attitudes/perceptions of local inhabitants on tourism and its influence on their quality of life. This research was conducted on three Zadar islands: Silba, Vir and Ugljan. Silba is the most distant from the mainland, Vir is bridged, and Ugljan is part of the Zadar peri-urban region. The research aims to compare these islanders' attitudes based on surveys conducted in 2011/2012 and 2021/2022.

Even though researched islands are different according to geographical and some socio-economic indicators, similar attitudes concerning tourism development on all three islands are detected. The current acute problems on the Zadar islands reflect negative demographic processes, a poor economy, and inadequate administrative centres as causes for their marginalization. In such circumstances, tourism on these islands should be analyzed as one of the developmental instruments and based on sustainable principles to raise the islanders' life quality and prevent further depopulation and economic regress.

Keywords: tourism, sustainable development, islanders' perception, Zadar Islands

ISLAND RESILIENCE: REMAPPING PLACE NAMES WITH INDIGENOUS KNOWLEDGE OF TAO ON PONGSO NO TAO/ ORCHID ISLAND

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Small islands and coastal communities are on the front lines of climate change. Compelling evidence shows that the communities in these hazard-prone areas have developed knowledge and competencies in disaster prevention, observation, early warning, response, and adaptive strategies. The cultures and traditions of Indigenous communities have been recognised as inherently resilient. However, Indigenous knowledge operates at a much finer spatial and temporal scale than science; Indigenous resilience is upheld in their language and embedded in place names, taboos, stories, memories, eco-cultural spaces, and sacred sites. Much of this Indigenous knowledge has yet to be documented by outside observers. In this study, we investigate and map the hidden Indigenous knowledge for risk management of the *Tao* (pronounced Ta-u), who live on a 47 sq. km small Pacific island, *Pongo-no-Tao* (literally, 'Island of People'; also named Botel Tobago in earlier Western literature, or Orchid Island since 1947 when Taiwan government arrived). Unfortunately, due to decades of linguistic and cultural assimilation, Indigenous place names have been replaced by Mandarin Chinese terms with different connotations (e.g., several places have been named for the shape of particular rocks). Therefore, the meanings of these places in Indigenous knowledge have been lost or only kept in elders' memories.

Researchers conducted semi-structured interviews with elders from six tribal communities along the island coast to discover this hidden knowledge, and significant hazard-prone sites were identified and re-mapped in the Indigenous *Tao* language. We noticed that the meaning of the place names in the islanders' language presented rich knowledge of weather observations and warnings, such as winds, waves, falling rocks, or "evil" signs. Other evidence of adaptive strategies for dealing with extreme weather, such as housing structures, sacred sites (beach, sacred grove, stream, mountain, and the like) and seasonal rituals (by eco-calendar) were also documented. This study indicates that the *Tao* culture has proven itself resilient in facing challenges such as frequent typhoons and extreme climate. The valuable in-depth knowledge in places and spaces with hidden Indigenous language should be re-discovered, re-mapped, and re-learned. It is also crucially significant for strengthening island resilience by passing this Indigenous knowledge to the next generations.

Keywords: Resilience, Orchid Island, Indigenous knowledge, place names, *Tao*

OBSERVING ISLAND-TRAPPED WAVES AROUND LASTOVO ISLAND, ADRIATIC SEA

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Island-trapped waves (ITWs) are a special type of coastal-trapped waves (CTWs), a well-known oceanographic phenomenon whereby the Earth's rotation causes the trapping of surface and internal waves at coastal boundaries, resulting in wave propagation along the coast. Until recently, most research related to ITWs has focused on islands in the deep ocean, like Hawaii and Bermuda, while the phenomenon has only recently been recognised in a shallow and seasonally stratified water body like the Adriatic Sea. On the island of Lastovo, the link between those physical processes and ecosystem diversity and functioning has not yet been explored. Therefore, a pilot experiment was conducted during the stratification period in 2021, where a set of thermistors was deployed at nine equidistant depths of 5 to 45 metres at opposite sides of the island, on rocky cliffs facing north (islet Maslovnjak), south (Cape Struga), and at the control station on the island of Korčula (islet Vrhovnjak). Bottom-moored ADCP was also deployed to the west of Cape Struga, with measurements every 4 metres, between 11 and 83 metres. Diurnal internal waves were observed throughout the investigated period. Temperature oscillations at opposite sides of the island were out of phase, indicating the clockwise propagation of the internal waves around this northern hemisphere island. Several episodes with large diurnal thermocline oscillations were observed, with a range surpassing 20 metres. A ship-based survey was also organised in July 2021 on the southern side of the island. CTD measurements were performed twice a day, around 06:00 (UTC+2) and around 18:00 (UTC+2), when a deep thermocline and a shallow thermocline were expected, respectively. The CTD temperature measurements showed that the ITW range was declining away from the coast. Complementary to the CTD measurements, discreet water nutrients and plankton (bacterio-, phyto- and zooplankton) samples were taken for further analysis to test the hypothesis of ITWs as the main driver of primary production at Lastovo island archipelago.

Keywords: Lastovo island, island-trapped waves, oceanography, stratification, thermocline

VARIATIONS IN REPRESENTATIONS OF ADRIATIC SEA ISLANDS ON EARLY MODERN NAUTICAL CHARTS AND GEOGRAPHICAL MAPS ^{4*}

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A vast majority of Adriatic Sea islands, especially the larger ones, were represented on many early modern nautical charts and geographic maps. However, their exact number and geometric appearance, same as the number of place names related to islands (or to certain geographical features), differ among these charts and maps.

The main goal of the research was to examine how cartographic generalization and map aesthetics affected the representations of Adriatic Sea islands on selected charts and maps – both in terms of ‘appearances’ and ‘disappearances’ of certain islands and in terms of geometric varieties of their appearance according to the following parameters: type of map, year of production, map scale, physical dimensions of the map, area of the island in reality, and island proximity to larger cities and important contemporary sailing routes.

The complete research sample consists of Early Modern portolan charts with rhumb networks, Early Modern printed navigational charts on which graticules of longitudes and latitudes are displayed, and Early Modern geographic maps with graticules. Selected Adriatic Sea islands (both larger and smaller ones) were statistically processed to determine the variations of their place names and whether they were displayed on charts and maps, depending on the particular map type and its map scale. The renderings of their coastlines were converted into vector datasets, which were used to compute variations in their visual appearances, both in terms of their *mapping accuracy* (in comparison with the modern reference map, which was considered to be error-free), and in terms of their *mapping precision* (the computation of geometric similarities or dissimilarities within the complete island-dataset and within the particular map-type related data-subsets).

The research outcome is expected to serve as a supplement to existing knowledge about island representations on early modern maps and charts in general and to offer methodological advances in quantitative analysis of the geographical content of old charts and maps.

Keywords: early modern nautical charts, early modern maps, Adriatic Sea islands, cartographic generalization

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ISLAND TOURISMSCAPE CONSTRUCTED BY GEOGRAPHICAL IMAGINARY: TOURISTS' GAZE IN "TAIWANESE GREECE"

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Tourists collect in tourism markers, which are constructed through a social and cultural environment, tourism capitalism, and reproduced in practice. The *tourismscape* represents the geographical image captured by the tourists, which has been hastened in the Internet Age, where a circular effect of its representation is propelled by photos and other artefacts that can be uploaded and shared widely, indirectly affecting the shape of its processes. Qinbi village has the most well-preserved traditional "Mindong" buildings along steep hills, located on Beigan Island of Matsu, one of the offshore islands of Taiwan. Qinbi village is interestingly advertised as a geographical imagination as "Taiwanese Greece" by the local tourism bureau, although it is located in Subtropical Asia.

This research explores why the "Taiwanese Greece" slogan was formed. How does the slogan influence tourists' expectations of Qinbi village through the circle of representation on social media? How do social media influencers, government, tourism operators, and residents interact? Furthermore, how should we reflect on this phenomenon? It applies empirical analysis from secondary data on online tourism advertisements for Qinbi village and in-depth interviews, demonstrating how social media influencers empowered the process of shaping the *tourismscape*. This research analyzes tourism information on the internet, including Vlogs, blogs, social media posts, and hashtags. We use content analysis to find the origins of the tourism slogan, represented most frequently online within five years. Next, we interviewed Taiwanese tourists who have visited Qinbi village, government officers, tourism operators, and the host residents. We will analyze the elements linked to Greece and reflect on how the tourism sector can strengthen the authenticity characteristics of Qinbi Village in island tourism.

The research results will contribute to understanding the construction of the *tourismscape* through the geographical imaginary on social media and make suggestions for follow-up research about the island identity and the marketing strategy of building a brand with island characteristics.

Keywords: Tourists' Gaze; Circle of Representation; Social Media; Authenticity, Qinbi Village

THE ROLE OF THE SPORT IN THE RELATIONSHIP BETWEEN TOURISTS AND LOCALS. THE CASE STUDY OF THE MALDIVIAN ARCHIPELAGO

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The Maldives has been represented in the collective imaginary as a naturalistic paradise and a privileged location for water sports, though possibly at the expense of land-based sports activities and opportunities for social engagement between island locals and visitors. Presently, there is a lack of academic references about sports spaces and social connections topics in the Maldives, which could be due to a low interest in sports as a touristic experience compared to other activities. However, even in the most classical form of tourism in the Maldives, resorts, it is indeed possible to observe sports as a remarkable component of the touristic offer. Since 2007, in fact, as guesthouses have spread throughout the archipelago, encounters between locals and travellers in sports spaces have also increased, revealing a considerable power of mediation and cultural translation.

Using an empirical study about land-based sports impacts, this presentation will describe how sports spaces in the Maldivian islands become meeting places for tourists and residents. This study aimed to investigate how land-based activities and sports grounds can represent a space for exchanging values, ideas, mindsets and ethics in the Maldivian Islands. The preliminary results will show that water sports dominate marketing promotion. In contrast, land-based sports facilities are frequent and vital despite minimal to no promotion in marketing materials and are an important mechanism for local development and growth of the tourism industry.

In the Maldives and elsewhere, sport is an aggregator of ideologies and an opportunity for dialogue and hybridisation. People show different philosophies, ways of understanding religion, ritual, ethics and other components of identity. Participation in sporting activities with locals creates an added value to the tourist experience, being an opportunity for them to access the “authentic” dimension of the inhabitants. On the other hand, this new market has a significant impact on daily life for the local communities. To conclude, within the growing guesthouse market in the Maldives, land-based sports are a new venue for social encounters, which have created new spaces for cultural interpretation.

Keywords: Maldives, resort, guesthouse, local community, impact of sport-tourism

CROATIAN ISLANDS – FULL OF LIFE?

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The Croatian islands have long been important to their country, and they face various complex problems. Some of the primary troubles in the last century were poverty and migration to the developed western countries. Migration to the mainland and cities has continued in the past fifty years, mainly for those seeking education and employment. Depopulation was accompanied by the gradual extinction of traditional economic activities, such as fishing, shipbuilding, agriculture, and cattle breeding. In general, searching for a better life has led to decay and stagnation in the Croatian archipelago. Today, Croatian islands are primarily inhabited by elderly populations. The lack of central infrastructure, poor education and healthcare, and lack of economic activities are just some of the constraints of living on islands. Nevertheless, they are often considered to be isolated communities with a pleasant Mediterranean climate and rich natural and cultural heritage. They are presented as very attractive and “full of life” areas suitable for tourist activities in this context. Accordingly, most activities are focused on tourism, assuming it encourages development. Various policies and measures at the national and EU level are also trying to spur progress. The importance of cultural and natural heritage has been recognized by various island associations whose activities try to raise awareness to protect and promote island life. However, it seems there has been no significant shift.

This paper aims to determine the characteristics of Croatian islands and life on them now and in the future. For this purpose, using semi-structured interviews gathered in 2021, research was conducted on 44 inhabitants of 14 Croatian islands. Respondents were inhabitants of small and large Croatian islands. The sample consisted of respondents with different demographic characteristics, and they were asked to express their attitudes about the prospects and constraints of island living. Based on the results, we conclude that the main benefit of living on an island is quality of life – a peaceful and no stress environment, living in rich and preserved nature and isolation from rushed urban life. On the other hand, there are many constraints, such as continued depopulation and elderly populations living on islands, living costs, distance and limited connection to the mainland, lack of infrastructure, education and medical care, and the like. Possibilities are seen in tourism, organic agriculture and cattle breeding, and fishing and fish farming. It also seems that bigger islands have a more positive perspective than smaller islands, considering their current socio-economic development level. Perspectives for Croatian islands are seen in connecting elements in specific and sustainable products and ensuring that economic activities and other living standards lead to a decent life on the islands.

Keywords: Croatian islands, depopulation, island development, island sustainability

DIVING TOURISM AND MARINE PROTECTED AREAS: PROMOTING AN ADAPTIVE MANAGEMENT APPROACH – THE CASE OF MEDES ISLANDS, SPAIN

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Diving tourism generates financial benefits for communities. If properly planned and performed in marine protected areas (MPAs), it promotes public awareness of visitors and provides revenues for maintaining an MPAs' conservation agenda. However, it must be effectively managed to ensure that any impacts on the marine ecosystem do not outweigh its benefits. Understanding the effectiveness of different diving management initiatives to ensure conservation goals is also critical for designing new targeted strategies to address and manage diver impacts. This study, adopting a political ecology approach, presents the case of the Medes Islands, an archipelago of seven non-inhabited islands located in Catalunya, Spain, less than 1 km from the coast of the municipality L'Estartit. In 2001, the Medes Islands were included in the SPAMI list. The archipelago is currently part of the Montgrí, Medes Islands, Baix-Ter National Park, declared a Natura 2000 site under the EU Habitats and Birds Directives. More than 75,000 dives are registered each year during the summer season, bringing almost 10 million euros to the local community annually. The rich marine life found in this area and the fragility of underwater communities made it necessary to implement conservation policies that limited the exponential expansion of a well-established diving tourism industry that has been in place since the 1970s. Thus, their disruption would result in a conflictual implication between conservation and development agendas. The complexity of the context is also exacerbated by a general discontent about how the Natural Park is managed, especially in terms of lacking surveillance and regulation for activities other than diving and the absence of a proper Master Plan outside the Medes Islands Marine Reserve. This research analyzed the adaptive management approach adopted to regulate the access to diving spots and the diving activities in the islands through a review of the Master Plan of the Marine Reserve updates.

The complexities of this appealing Mediterranean diving destination have been explored through a mixed-method approach to investigate the effectiveness of the legal framework regulating divers' access to the islands. Additionally, this research explored the potential roles of divers in managing the MPA and undertook a thorough analysis of the conflicts among stakeholders that militate the diving tourism system. The final aim of this work was to give recommendations to the MPA managers to improve the diving tourism industry of this insular area while promoting a transformation of this destination into a sustainable example of a diving attraction. This work has brought attention to the current management model and stressed the need for a faster implementation cycle and a more effective decision-making process, coupled with additional efforts for training and surveilling diving groups. The proposed model for managing diving activities will adjust the carrying capacity and Limits of Acceptable Change thresholds of diving spots in real-time, based on solid monitoring of ecological and social indicators.

The framework proposed could serve as a model for other micro insular contexts, where dialogue about the tourism industry and environmental protection should be fostered to achieve successful environmental governance.

Keywords: political ecology, diving tourism, Marine Protected Area, island tourism, Medes Islands

WATER SUPPLY CHALLENGES OF CROATIAN ISLANDS UNDER THE CONDITIONS OF CLIMATE CHANGE AND TOURISM GROWTH

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Proper water supply is an essential precondition for developing all regions. This is the case especially for islands since they are the areas with a distinct sensitivity that arises from their relative isolation, often limited water resources and requirements for water supply as a result of tourism seasonality and the impact of modern climate change. In addition, the demand for potable water on the islands increases with the development of higher value-added tourism services that include pool infrastructure, wellness facilities, and the like. Therefore, in the context of sustainable development and the sensitivity of island areas to environmental and social pressures, it is necessary to anticipate present and future processes that may affect an island's water supply systems.

This presentation aims to illustrate the adaptation and resilience possibilities for water supply systems on selected Croatian islands in the conditions of growing demands caused by tourism growth and climate change. The data from the Croatian Meteorological and Hydrological Service, communal water supply companies of selected Croatian islands, the Croatian Bureau of Statistics, and local tourist boards were used in the study.

Contemporary climatological research indicates increasing spring and summer temperatures on the Croatian coast. While a signal of spatial and seasonal changes in precipitation is unclear, the decrease in summer precipitation is significant. A continuation of these climate change trends will affect aquifers being recharged in the future, along with the quality of water in them, and may lead to an increased risk of the salinisation of coastal karst springs. Climate change impacts will be more pronounced on the islands and will likely affect the water supply systems.

Since some of the Croatian islands are connected to water supply systems on the mainland, the research analysed the climatic features of the wider distribution area, not only on the islands. Furthermore, the data of communal water supply companies were analysed to gain insight into the ratio of resident and non-resident population water consumption and project the sustainability of future water supply sustainability, as peak loads of water supply systems coincide with dry, warm periods of the year. To analyse the condition and resilience of island water supply systems, four islands with different water supply types and climatic features were selected and presented as case studies for possible preventive actions to improve their water supply sustainability.

It can be concluded that there is a significant difference between the sustainable water supply on some Croatian islands due to tourism growth and a projected decrease in precipitation during the warmer parts of the year. Islands whose water supply systems are connected to the mainland will be much more resistant to change, although they will also have to adapt to climate change. Islands that rely on water resources from their geographical area will be more sensitive to climate change, and the local community, especially the tourism sector, will have to adapt significantly to the new climatic conditions.

Decreasing precipitation and unfavourable drought features indicate that the warmest parts of the year coincide with the maximum number of tourist visits. As such, water supply needs will cause the reconstruction of water supply systems to reduce water transport losses. Furthermore, the following measures will need to be applied: (1) increase water reserves during a part of the year when water resources are under less pressure, (2) reduction of general water consumption,

(3) establish new water sources for the islands, (4) reactivate traditional methods of rainwater collection and (5) separate the potable water system from technical water systems.

Keywords: water supply, climate change, tourism, islands

THE SOCIAL DIMENSION OF SMALL-SCALE FISHERIES AND POLICY CHANGES TO FISHERIES MANAGEMENT

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Prevailing political discourses in Croatia consider sustainable agriculture, fisheries, and tourism the main guidelines for sustainable island development. What precisely does sustainable fisheries imply? It is a very complex issue to which worldwide governments often respond with simple management solutions, causing further damage. The reason was that sustainable fisheries were often considered a synonym for viable fish stocks. Over the last decades, it has become clear that sustainable fisheries require social sustainability, along with environmental and economic. It means that viable fish stocks depend on viable communities and vice versa.

Consequently, social aspects and considerations of small scale fishing are slowly making their way to fisheries policies. Unfortunately, the same cannot be said for Croatian fisheries policy, which is still stuck between ecological and economic aims, neglecting the importance of social sustainability and interdependence of all three sustainability dimensions. The argument for such a claim can be found in a drastic reduction of small subsistence fishers, traditionally the most numerous categories. Subsistence fishing has always been represented on the Croatian coast, primarily on islands where relying on natural resources meant existing.

With time, subsistence fishing also became a specific lifestyle, tradition, and personal and collective identity source. Therefore, it was considered essential to explore the social meanings of small-scale subsistence fishing in island communities and comprehend the consequences of the serious reduction of fishing permits. This task is an objective of my doctoral thesis, „The social dimension of small-scale fisheries and policy changes to fisheries management“,—an ethnographic case study of Iž, a small island in the Zadar Archipelago, was conducted. Applied research methods included interviews, participant observations and document analysis to explore the meanings of fishing for fishers and other members of the community and their understanding of the possible impacts of changes in fisheries policy.

So far, data analysis has shown immediate negative consequences for people who lost their fishing permits. These consequences can be divided into three categories: (1) subjective (feelings of anger and injustice, interrupted the traditional way of life); (2) objective (unavailability of the most common food, loss of financial benefit); (3) relational (loss of touch with the island, illegal fishing). Future consequences that can be expected include a loss of traditional identity, loss of knowledge and skills and further loss of occasional touch with the island. Questionable policy changes were brought in and justified as an alignment of Croatian and European Union legislation. Although data analysis is not yet completed, it could be already concluded that policy changes have deeply undermined the sustainability of the studied community.

Keywords: sustainable islands, sustainable fisheries, social sustainability

BUILDING RESILIENCE IN SMALL ISLANDS: RESPONSES TO THE COVID-19 PANDEMIC IN THE TOURISM SECTOR

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This paper reviews and discusses the response of small islands to the disruptions brought by the COVID-19 pandemic to the tourism sector, intending to contribute to the growing research area of island tourism, as well as to theories in islands and small states studies that investigate factors capable of enhancing resilience in small islands.

COVID-19 and its socio-economic consequences have hit the entire globe, particularly small islands, which, while largely spared by the health crisis, witnessed the disruption of tourism, a critical economic sector. In this crisis, the response of small island governments has been essential in supporting economies that are generally undiversified and fragile to external shocks. Governments' responses have been mainly through additional spending in COVID-19 stimulus packages supporting business operators and workers, especially through bank loan deferrals and social nets measures. Another vital response enacted in small islands has been the resourcefulness of individuals and communities who, while relying on the support of government authorities, also carried out bottom-up actions by, for instance, using their personal networks and entrepreneurship to withstand the reduction in income and wellbeing.

This paper discusses the results of a survey conducted among key stakeholders in ten small islands with a vital tourism sector across the Pacific, Caribbean, and AIMS (Africa, Indian Ocean, Mediterranean and the South China Sea) regions. The ten small islands are Bahamas, Barbados, Fiji, Maldives, Malta, Mauritius, Samoa, Seychelles, St Lucia, and Vanuatu. The research explored the perception of governments' readiness and responses to the COVID-19 crisis and the resilience of tourism firms and workers.

Our results show that 1) governments were considered successful in handling the health crisis and mostly supportive and helpful with economic measures, and 2) while tourism firms and workers depended on government social and economic measures to withstand the negative impacts of COVID-19, they also relied on their networks, entrepreneurship, and the solidarity of fellow citizens to ensure the survival of the economic activities. Our results sit in the ongoing debate discussing the importance of policy actions versus the resourcefulness of islanders to build resilient islands, suggesting that a synergistic mix of these two factors can allow islands to better adapt to crises and build resilience in the long-term.

Keywords: tourism, COVID-19, resilience, vulnerability, small islands

BOUNCING FORWARD: A RESILIENCE APPROACH TO THE TRANSFORMATION OF THE FISHING-DEPENDENT ISLAND COMMUNITY

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The historical and geographical development of the island of Vis is inseparably linked to fisheries. For centuries, fishing meant survival for the island community, and during the 20th century, several fish processing plants operated on the island and provided a stable source of income. The collapse of the last fish processing factory on the island and the socio-economic changes that affected the island about 30 years ago (including the development of tourism) encouraged the transformation of the island's socio-ecological system and set demanding goals for the reorganization of the system. A characteristic of the island's economy is the limited ability to change the production structure, which led to several difficulties and, ultimately, an unfavourable demographic picture. However, fishing and fisheries are still valuable sources of income for the community, providing food security and are a vital part of the local identity.

Resilience is a complex concept, defined differently in different disciplines and contexts. The focus is increasingly on the resilience of human communities as they are recognized as the level for developing capacities to recover, reorganize and rebuild due to climate or social change. An important difference between ecological resilience and the resilience of human communities is that human communities cannot return to the state before the disturbance. However, there is an unpredictability that can cause qualitatively different "bounce forward".

The study sought to examine the developmental changes of a geographically marginal island, predominantly dependent on a natural resource, fisheries, during the second half of the 20th century, applying the model of natural patterns of changes in ecosystems and socio-environmental systems - the adaptive cycle. This research aims to analyze the developmental processes of the island Vis, focusing on fisheries, to understand the characteristics of the island's socio-ecological system and motivational factors. These factors lead to the development of local adaptation strategies and improve the resilience of the system and the ability to cope with different disturbances or otherwise make reorganization difficult.

An analysis of relevant literature and administrative data was conducted to reconstruct the causal links between the different historical events and identify the various phases of the adaptive cycles. An initial analysis of the adaptive cycle phases examined the socio-demographic structure and fisheries dynamics changes. The contextual and subjective dimensions of island fisheries were analyzed through in-depth interviews with representative stakeholders of the island fisheries. Finally, an evaluation of the dimensions, potential, connectedness, and resilience was carried out using the criteria for assessing social, economic, and natural capital.

Keywords: adaptive cycle, fisheries, resilience, islands, bounce forward

DEVELOPING SUSTAINABILITY AND RESILIENCE ON ISLANDS: SOLIDARITY ECONOMY ON CROATIAN ISLANDS

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The Solidarity economy, a kind of “radical” wing of the social and solidarity economy (SSE), encompasses a wide range of diverse initiatives and practices (such as workers’ cooperatives, co-operatives (*zadruga*), community-supported agriculture, shared housing, shared kitchens, open source, urban gardening, commons and many others). These practices are present worldwide, with each place having its particularities. One might rightfully expect that islands, usually associated with insularity, autarchy, sustainability and resilience, would be perfect laboratories for practising these new ways of achieving a more sustainable future. Could what Mumford (1922) called “the utopia of reconstruction” be exercised on one or more Croatian islands?

This presentation considers this question using Patrick Neveling’s (2017) development concept as political economy machinery. According to this point of view, development should be perceived as a category of practice that “maintains or amends long-existing practices of capitalist accumulation and is central to how global, national, and local political economies change”. Having this in mind, we analyse sustainability practices on the Croatian islands of Krk and Cres in light of sustainability as the island’s developmental policy. Results point to certain similarities in the approach of two energy cooperatives, primarily the incentives for such an endeavour and the differences regarding agency, i.e. individual vs group effort. Although it is too early to evaluate the long-term impact on Croatian territory, a relatively new type of endeavour (especially in the energy sector), the results show that it relies on solid incentives from EU funds available for promoting sustainable solutions and individual agency.

Keywords: Solidarity economy, Island development policies, island sustainability and resilience, Krk Island, Cres Island, Energy Cooperatives.

NATURAL GEOGRAPHICAL AND CULTURAL BASES OF CROATIAN ISLANDS REGIONALIZATION

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In scientific literature, the regionalization of Croatian islands and the associated sea waters is approached from different starting points and with different arguments. Even if the collective names of individual island groups are defined and generally accepted, their geographical and functional delimitation is sometimes debatable. This applies particularly to islands and groups at the junction of individual coastal regions where different influences of individual littoral urban systems permeate (e.g. Rab, Pag, Lastovo, Korčula) and to smaller ones, especially more remote islands or groups of islands (islets).

For a meaningful and generally acceptable differentiation of Croatian islands into basic groups and subgroups, clear criteria have been set. Depending on the starting point, the possible approach to differentiation can be partial or integral. The partial approach considers a particular feature so that the analysis can be, for example, physical-geographical, cultural, traditional, historical-geographical economic, political, and the like. The integrated approach seeks to conceptualize a single regionalization based on the weighting of several criteria. The research took into account the results of previous relevant research and the genesis of administrative divisions in historical-geographical development, all the way to modern differentiation, delimitation and the current administrative-territorial division of the Republic of Croatia. Contemporary regionalization is based on knowledge of natural, social, i.e. cultural and anthropogeographical features contrary to any static model. The discussion and analysis call attention to a contemporary, systematic regionalization of Croatian islands and the associated waters, which meet the development needs of islands and their inhabitants, respecting the socio-economic interests of that part of the Croatian littoral. Therefore, the Croatian islands consist of three clearly defined groups, northern, central, and southern.

The northern group (A), with the predominance of larger islands, specific relief direction route along the coast and connection to the Kvarner area and much smaller Istria, i.e. the centres in Rijeka and Pula, includes the western Istrian islands (A1) and Kvarner islands (A2) with subgroups Cres-Lošinj (A2.1), Krk (A2.2) and Rab (A2.3).

The central group (B) includes the north Dalmatian islands (B1) with a predominance of small islands and a typical Dalmatian type of parallel relief in the direction NW-SE, which are connected to the city centres of Zadar and Šibenik, with subgroups Pag (B1.1), Zadar (B1.2), Kornati (B1.3) and Šibenik (B1.4).

The southern group of Croatian islands (C) with predominantly larger islands relief in divergent stretching direction (predominantly W-E) includes the central Dalmatian islands (C1), which gravitate to the urban centre of Split with subgroups Trogir (C1.1), Brač-Šolta (C1.2), Hvar (C1.3) and Vis (C1.4) and southern Dalmatian islands connected to Dubrovnik (C2) with subgroups Korčula (C2.1), Lastovo (C2.2), Mljet (C2.3) and Elaphite (C2.4).

Keyword: Croatian islands, regionalization

THE HABITABILITY CONCEPT

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Kökar is a small island in the Baltic Sea with 232 people and part of the Åland Islands in Finland. In 2018, Kökar municipality decided to make a long-term plan based on a sustainability analysis. The work raised a strong interest from the community, and 130 residents actively participated. They talked to each other, googled, read, listened, chatted and argued during many meetings, lectures, workshops, sub-projects, and committee and board sessions. As the project was funded by the EU Central Baltic Interreg program, external experts and researchers could be engaged, but, most importantly, the people of Kökar acknowledged that they are the real experts on their island.

Halfway through the project, they got stuck. Many common sustainability indicators and tools proved unfit for a small island – too complicated and impossible to use on a small scale. Instead, the concept of habitability was invented and developed. What determines whether Kökar is a sustainable society is if those born and raised on the island want to stay or move back, if new families move in, if there are children in the school, if there is work, housing, ferries, social service and security. Kökar wants a mixed population of all ages, genders, origins and opinions. Being habitable is the most important part of its long-term sustainability. If the island is not habitable, it lacks resilience and becomes obsolete and depopulated, unable to serve its people, take care of its land, and mind its sea.

Habitability was defined by forty indicators arranged in seven areas: ecosystems, clean water, energy, place identity, local economy, municipal services and prosperous people. The islanders measured their island on a four-grade scale and were shocked. Although the place is attractive in many ways, life on the island has some negative sides and serious weaknesses. After further comparison, dialogue and numeration, we found that these negative trends can be altered, which led to a long-term plan called Our habitability - Sustainable Plan 2020-2030, adopted by the municipal assembly in late 2020.

The concept stirred interest among other islands. In the spring of 2021, the Archipelago Institute at Åbo Academy University organized a Habitability Course. Thirty-two islanders from 12 islands in Croatia, Ireland, Denmark, Sweden and Finland attended virtually. It was partly funded by the Archipelago Cooperation of the Nordic Council of Ministers, partly by the European Parliament, and partly by course fees. Lecturers included distinguished researchers, such as Godfrey Baldacchino, Thanasis Kizos, Nenad Starc, Louis Brigand, Owe Ronström, Siv Sandberg, and practitioners Søren Hermansen and Tonino Picula. Feedback from students and lecturers pushed the concept further ahead. A follow-up session is planned for mid-November with all 12 islands.

Finland has more than 500 islands with full-time settlements and almost 20,000 islands with part-time settlements, some without a fixed road connection, and about 100,000 resident islanders. Most islands have a declining population, weak attractiveness for immigration and strong seasonal variation due to intense tourism pressure. In October 2021, the Ministry of Employment and Economy granted Åbo Academy funding to use the habitability concept to analyze islands in Finland and create a national island network at the grassroots level.

Step 1 was the local development of the concept on Kökar in vivo. Step 2 was the Åbo Academy course, in vitro. Step 3 is the upscaled use of the concept on Finland's islands in vivo. The robust features of the concept are its simple logic, the measurability, the bottom-up approach making it possible to activate local knowledge, and a strong connection with the UN 17 sustainability goals. Some areas of weakness are its lack of real-life testing (only one case so far) and how the analysis results are fitted into other processes and tools.

Keywords: Habitability, Inclusion, Sustainability, Åbo Academy, Kökar

SHAPING THE ARCHIPELAGO: A RESPONSE TO THE FAILURES OF MAINLAND-ORIENTATED GOVERNANCE? THE CASE OF NEAR ISLANDS IN BRITTANY (FRANCE) AND CROATIA

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From the mainland, the temptation is strong to see in a group of islands the existence of an archipelago, a word derived from the Greek *Arkhipelagos*, designating islands as a whole. However, it is not because some islands are close to each other that they form a whole; the existence of an archipelago, therefore, most often stems from an optical illusion. This is particularly true in the case of islands close to the mainland in French Brittany and in Croatia, where island similarities, whether geographic, historical, landscape, sociological or economic, give the impression that they form a functional unit. Whether in the Adriatic or Atlantic islands, respectively placed in French and Croatian political contexts marked by a strong state and administrative centralism, their governance models reflect a strong mainland tropism. This approach determines a functioning based on a bilateral and asymmetric island/mainland relationship. For example, in France, the law on inter-communality has led many islands to join a mainland district on which they are dependent for territorial development. The case of Silba and Olib, located more than an hour away by catamaran from the city of Zadar (or even several hours by ferry in bad weather) and yet part of the Dalmatian city, is quite emblematic. Based on a “silo” relationship between the island and the mainland, this territorial scheme has weakened or even annihilated all forms of inter-island dynamics. This has resulted in real aberrations: even though the islands of Sestrunj and Rivanj are part of the municipality of the neighbouring island of Ugljan, located a few hundred meters away, their inhabitants are forced to go through the mainland to get to Ugljan. The maritime transport system thus provides a clear illustration of the predominance of a compartmentalised island-mainland relationship, which hinders potential opportunities for cooperation between the islands. More generally, this operating mode has deepened the dependence and marginalisation of islands, as they are stuck in bloated scales of governance that are poorly adapted to the diversity of their territorial characteristics.

Considering this, the emergence of new inter-island dynamics recently observed in the Ponant islands seems to provide a new alternative, making it possible to respond both to the need for critical mass and the resolution of specific island issues. In particular, the creation of the Association des Iles du Ponant in 1971 and Pokret Otoka in 2016 reflects a similar process of spreading the islanders’ voice and, above all, initiating innovative projects that are better suited to island socio-economic conditions. The shaping of these networks thus appears to lay the foundations for a new scale of decentralised and horizontal governance: that of the archipelago, more efficient in managing various island issues.

This reflection is part of a PhD work about governance issues on Croatian and French near islands, with various case studies on islands Cres, Unije, Silba, Ouessant and I’île-aux-Moines. The methodology is based, in particular, on qualitative interviews at different scales of governance in order to evaluate the adaptation of various development policies to the local realities of island territories.

Keywords: governance, centralism, near islands, cooperation

PUBLIC PARTICIPATION IN EXAMPLES OF ADOPTION OF URBAN DEVELOPMENT PLANS FOR SETTLEMENTS ON ISLANDS ŠIPAN AND LOPUD IN DUBROVNIK-NERETVA COUNTY

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This presentation gives the results of an analysis of public participation in the procedures of public debate for urban development plans (UDP) and their understanding for three island settlements: Sudurađ and Šipanska Luka on the island Šipan and Lopud on the island of Lopud. The islands Lopud and Šipan are part of the Elafiti archipelago and part of the coastal islands of the City of Dubrovnik. The population census from the year 2011 has recorded 207 residents in settlement Sudurađ, 212 in settlement Šipanska Luka, and 249 in settlement Lopud. The population on both islands has been continuously declining since the middle of the last century. Although both islands are permanently inhabited, the seasonality of the population is pronounced. There is a significant summer increase in inhabitants, weekenders, tourists and seasonal workers.

The planning process of development and adoption of spatial plans is characterised by continual balancing of protection measures of spatial values and sustainable management that would simultaneously increase an islander's quality of life while at the same time respecting landowners' rights and interests. Consequently, all requests of the interested public, often in opposition, are not always realised.

For the three spatial plans in question, the structure of remarks in the procedure of public debate was analysed and statistically processed. The research aimed to determine the scope of public participation and their understanding of the spatial plan development procedure, emphasising the inhabitants of the islands in question. We strove to recognise patterns in the inhabitants' remarks in certain settlements and propose measures to enhance the existing spatial plan development procedure. We hope to contribute to a greater understanding of the planning process and, ultimately, to the greater satisfaction of an interested public with future development in settlements.

We received many remarks on the urban development plan drafts, both from the inhabitants of the settlements and other interested members of the public. Regulations regarding built and un-built parts of the building area of settlement stood out as the public's primary interest. Remarks related to the tightening of building conditions were equally represented as those regarding the liberalisation of building conditions.

Even though the sample size is relatively small, the data analysis indicates that the spatial planning documents and scope of public participation in the planning procedures are not understood. This is the case with the general public and can also be said about the „professional public“ – participants responsible for developing and adopting spatial plans.

As a possible measure for improving the procedure, this presentation discusses an addition to the mandatory parts of the spatial plan that would allow the participant to visually perceive the spatial plan „dimensions“, which are the results of the usual urbanistic parameters (maximum allowed land plot built-up area, land plot usability coefficient/building gross developed area, building height, and the like). A three-dimensional representation of the building conditions defined by the urban development plan would allow the decision-makers, settlement inhabitants and other interested public involved a clearer insight into the results of the planned conditions.

Keywords: Urban development plans, island Sudurađ, island Lopud, public participation in the spatial plan development procedure

SMALL MEDITERRANEAN ISLANDS IN 20TH CENTURY INTELLECTUAL HISTORY

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Neither the Mediterranean nor islands or insularity per se have been ignored by intellectual history. However, I would like to focus on one world region and islands up to a specific size: My contribution pursues the hypothesis that certain small Mediterranean islands have played a special role in the history of some European traditions of thought in modernity. Focusing on the importance of the Île de Ré for Denis de Rougemont (1933-34), of Ibiza for Walter Benjamin (1932-33), and the prison island of Ventotene, where the manifesto *Per un'Europa libera e unita* was written by Altiero Spinelli, Ernesto Rossi, and Eugenio Colorni (1941), I will show that Island Studies can also contribute to Intellectual History. By comparing concrete historical and geographical situations, my project aims to highlight – partly ex negativo – the importance of boundedness/narrowness, insularity/islandness and the Mediterranean for the thinking and writing of these intellectuals. To complete this comparative approach to intellectual geopoetics, Fernand Braudel's war captivity will also play a role. After all, the 'discourse founder' of Mediterranean Studies has repeatedly emphasised the connection between the 'vastness' of his historical perspective and the experience of 'narrowness' in the Stalags near Mainz and Lübeck, where he was imprisoned for years. My approach is less about such general questions as: What do islands do to thinking?; and how does 'Mediterraneanness' relate to intellectuality? Rather, I am interested in examining the traces of concrete insular and Mediterranean space (and time) experience in the texts of the aforementioned writers to carve out basic similarities and differences. My contribution is meant to be the first sketch of a larger tableau of small Mediterranean islands in 20th-century intellectual history.

Keywords: Mediterranean, Intellectual History, Geopoetics, Modernity

MULTIPLE ISLAND TEMPORALITIES – TEMPORAL TRANSFORMATIONS OF “ISLAND TIME” ON THE ADRIATIC ISLAND OF DUGI OTOK^{5*}

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The problem of time, its lack or abundance, along with the notion of ‘me time’, ‘free time’, ‘timetables’ or in the worst-case scenario, ‘doing time’, permeates our everyday communication but also reflects on our day-to-day business, and in many cases, overcrowded schedules. However, for those who seek the tranquillity of island life and their share of the Mediterranean sun, temporal rhythms seem to be slowing down in island settings, thus indicating different temporal frames. In the case of Dugi Otok, one of the islands of the Zadar archipelago, this non-islander’s perspective does not seem to be correlating with the islanders’ usages and perceptions of time. Islanders’ temporal experiences figure as heterogeneous and depend on age, gender, class, social and economic status, the unwritten rules of the community, and the connections with the mainland.

This presentation seeks to explore the notion of ‘multiple island temporalities’ within the community of Sali, the largest settlement on the southern shores of Dugi otok. Generally, temporalities are conceived as the mode and the rhythm of being, entangled within a thick web of social, cultural, spatial, economic, and ideological transformations. The concept of multiple temporalities, inspired by a time studies theoretical framework, points to the processes of overlapping, intertwining and coexistence of diverse temporal frames and rhythms. In the case of Dugi Otok, the effects of multiple temporalities are even more entangled in the complex web of historical, social, and spatial relations, thus producing various temporal phenomena. Therefore, the notion of multiple island temporalities does not refer to the exclusiveness of hegemonic linear temporality, nor does it entail the reductive, de-temporalized notions of exotic and static island time of a non-islander. Starting from the notion of time as a cultural construct, the concept of multiple island temporalities opens questions of a specific, island-triggered and socially performed temporal atmosphere rebranded for tourism and reframed within the ‘vocabulary of the present’.

Temporal transformations of ‘island time’ stirred by the concept of multiple island temporalities will be analysed within ethnographically grounded research conducted over several years in Sali, Dugi Otok. The methodology used in this research includes archival research, semi-structured interviews conducted with islanders, and discourse analysis. The focal point of the analysis starts from the usages of *linčarnica*, a gathering place of the local community and, from today’s perspective, a memorial to island time usually associated with *fjaka*. Situated in the port of Sali, *linčarnica* refers to the triangular slope part of the port, nowadays painted and decorated by local enthusiasts. From the local perspective, it is seen as time at a slower pace, usually associated with the Mediterranean lifestyle and island rhythm. However, through analysis of different usages and interpretations of *linčarnica*, its history as the gathering spot for the local youth, and contemporary rebranding processes that highlight tourist expectations, the presentation will show how contemporary experiences of ‘island time’ were the result of intense temporal transformations.

On the one hand, the emergence of a fish factory at the beginning of the 20th century introduced a system of working hours with different time schedules than those usually practised in the predominantly fishing and rural island community (seasonal rhythms, lunar cycles, and the like). Further on, the development of tourism intensified the existing temporal rhythms, multiplying diverse temporal frames and experiences of temporalities. As a result, multiple island temporalities result from the collision, overlap, and remodelling of different time frames colliding, overlapping and remodelling the contemporary perceptions of ‘island time’.

Keywords: Multiple island temporalities, Dugi otok, Dalmatia, time studies, *linčarnica*

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BECOMING A SUB-NATIONAL ISLAND JURISDICTION: COMPARING CORSICA (FRANCE), OKINAWA (JAPAN) AND RODRIGUES (MAURITIUS)

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This paper sets out to deepen the study of SNIJs (sub-national island jurisdictions) via the comparative case study method. Numerous cases of SNIJs have been researched; however, almost all of these deal with highly autonomous or quasi-sovereign islands (e.g. Aland, Guam, Bermuda or Greenland). Scholars are encouraged to also look at less autonomous insular regions and examine the particular historical processes that led to their autonomy. This paper does so by focusing on three cases: Corsica (a French collectivity), Okinawa (a Japanese island prefecture in the Ryukyu archipelago) and Rodrigues (a Mauritian island region).

These three islands differ in their geographical, demographic and politico-economic situations and the history leading to their autonomy. However, there is a common “sub-nationality” based on historical or linguistic-cultural contexts. During the later half of the 20th century, Corsican and Rodrigues’ processes were “devolutionary”; while the Okinawan case is a “forfeit” of autonomy. The US Ryukyu Island Government (1947-1972) had its own formal executive, judicial, and legislative powers; however, when the US returned the archipelago to Japan, the Okinawa prefecture lost all former autonomous powers and became just another prefecture.

Corsica and Rodrigues gained their autonomy gradually. However, these two island regions differ in terms of the legal and political process of devolution. Corsica is not recognised as an autonomous region by the French legal system. Only in 1983 did a law on Corsica prescribe its status as a special region (*region à statut particulier*). Corsica also enjoys substantial “autonomy”, especially for the local economy, as well as culture, ecology, education, energy, industry, taxation, and traffic.

On the other hand, Rodrigues has a special status recognised by the Mauritius Constitution (Chapter VIA) and holds its own legislative and executive powers via the Rodrigues Regional Assembly Act of 2001. However, its autonomous status is often criticised as limited and dysfunctional.

Keywords: SNIJ, island region, autonomy, asymmetric integration

TRADITION AND “DEVELOPMENT” IN PACIFIC SMALL ISLANDS: THE CASE OF LAND TENURE IN SAMOA

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In the Pacific, the relationship between people and their land is often expressed in kinship: “we are the children of the land”. One consequence is the absence of private individual ownership of land. In Polynesia especially, this was a powerful pre-colonial value at the core of its social organization. It has remained alive in some archipelagoes, such as Tonga or Samoa, in Western Polynesia, where foreign powers did not take over complete control of land tenure. However, another threat is emerging in contemporary post-colonial times; foreign investors, called in by local governments, demand access to ownership or long-term leases of land as a guarantee for their investment. After discussing this specific relationship of being “children of the land”, this paper will consider the case of the State of Samoa (Western Polynesia), which has been independent since 1962. Deprived of mining resources, but with a relatively large area (3000 km²), Samoa has seen its government (Westminster-type parliamentary system) proclaim since the 1980s that the main resource for “development” could only be land, but that there was a double “problem” in implementing a strategy. The first issue is that 80% of the country is under the “customary” regime of “inalienable” land. The second issue is that the authority over each customary land is in the hands of a clan, therefore tens or hundreds of people, without a nominative representative legally empowered to sign contracts with investors. This paper will discuss the official local strategies facing this “problem”, the historical evolution going back over two centuries, and the recent political crisis which brought down a government accused of having gone too far in endangering the inalienable status of the “customary” land. The analysis is based on fieldwork data gathered on site and from official discourses relayed on various media.

The historical stages that will be retraced are designated as (1) the “traditional” system, then (2) that of the period opened by the arrival and installation of Europeans but before any formal colonization; this stage is the whole of the 19th century; during this period, there is an “archipelago of Samoa” which is not yet divided by colonization; next, (3) the period 1889-1914: the great colonial divisions drawn with rulers on a map in the European chancelleries, the division of the Samoan archipelago into German territory to the west and American territory to the east, and, in the west (“Samoa”), the short colonial period under German rule (1899-1914); then, we shall remain in “Samoa” in the sense of the Western Islands: (4) the long period of the international trusteeship given to New Zealand after the First War and extended by the United Nations after the Second World War, until 1962; (5) independence, with the establishment of a national Constitution that included fundamental provisions concerning “customary” land and its “inalienability”, (6) political developments and debates relating to “adjustments” of these fundamental provisions, up to (7) the April-July 2021 crisis.

Keywords: development, land tenure, Polynesia, Samoa

ILLEGITIMATE BIRTHS ON THE CROATIAN ISLANDS

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Within Europe, Croatia has always been noted for its low rate of births outside marriage. In relation to other European countries, only Greece, North Macedonia, and Bosnia and Herzegovina have lower extra-marital birth rates than Croatia. Croatia is particularly heterogeneous in terms of the extra-marital birth rate. An analysis of various settlements shows that the country is divided into two parts: the northwest part with Istria, where the extra-marital birth rate is significantly higher than the national average, and central and eastern Slavonia with central and southern Dalmatia, where the rate is the lowest. In this southern area, the island of Korčula stands out because of its very high extra-marital birth rate. Compared to the other islands, Korčula has a much higher rate, which increased steadily between 1971 and 2017 (from 12% to 38%). On the other islands (Rab, Krk, Pag, Ugljan and Pašman, Brač, and Hvar), the extra-marital birth rate during the same period ranged between 5% and 10%. Only Cres, Lošinj and especially Vis showed higher rates (25% on Cres and Lošinj, 32% on Vis).

The objective of this research was to analyze the trends of births outside marriage on the larger Croatian islands for nearly fifty years (1970-2019). Our research focused on the islands of Korčula (especially the western part - Vela Luka and Blato) and Cres and Lošinj, which stood out from the other islands throughout the observation period because of significantly higher rates of children born outside marriage. Along with data from the Croatian Bureau of Statistics about birth rates, information from 19th-century birth registers was also used to explain the reasons for births outside marriage. The extra-marital birth rates in Croatia and islands (1960-2019) could apply to other European countries. Also, this analysis may serve as a basis for further research into the sociological, anthropological, and ethnological character of the island.

Keywords: illegitimate births, extra-marital birth, births outside marriage, Croatia, islands

DOING ISLAND STUDIES: A METHODOLOGY PRIMER TAKES SHAPE

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A discipline deserves its own journal, its own handbook, its own association, its own conferences, and its own collection of recommended readings. It should also have its own ‘how to’ research methods primer. One that describes the particular challenges of doing research on (especially small) islands and on/about/for/by/with islanders. One that takes the ‘island as focus’ by the horns and locks in onto ‘the island condition’ – islandness – as an intervening variable which, in and of itself, does not cause anything; however, it can contour and nudge behaviours and systems in particular ways and directions. Hence, the dispositions toward economic monopoly, societal intimacy and political totality in small, often island, systems build an “ecology of smallness”.

Together, Elaine Stratford, Elisabeth McMahon and I are co-authoring a text that would hopefully and suitably fill this gap. *Rethinking Island Studies* proposes to become the ‘go to’ publication to throw some critical light – across all disciplines – on how to step into ‘island studies’ better aware, prepared and equipped for the predicament that lies ahead.

In this presentation, I will be able to discuss the rationale behind the book and its contents (as they take shape) and the particular challenges that the authoring trio have faced.

Keywords: island studies, research methods, epistemology, islandness, research ethics

CONNECTING THE DOTS - A CRITICAL FEMINIST DISCOURSE ANALYSIS OF INTER-CONNECTING INFRASTRUCTURE PLANNING ON THE FAROE ISLANDS

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This paper examines the foundation and reasoning behind the spatial planning of the Faroe Islands, the discourses that further these plans and their future. On the islands, the attitude that any peripheral, dying place is no farther than a tunnel away from a salvaged future is prevalent, reflecting how the archipelago manages what is locally perceived as a disadvantageous natural environment. The Faroe Islands currently house the only sub-sea roundabout and are planning the longest sub-sea tunnel route in the world. These infrastructural megaprojects of vast urban expansion make the archipelago a modern infrastructural project in itself. However, the current trajectory towards expanding an inter-island urban experience foregoes considerations of intersecting identities and social circumstances. Such infrastructural planning based exclusively on numerical data and quantitative planning models does not consider contextual variables or the social construction of space, which results in a (re)production of unequal access and mobility.

This session will be a journey through the sub-sea tunnels connecting the islands and the discourses upon which these interconnecting infrastructure projects are built. The research comprises a critical feminist discourse analysis of public planning reports on inter-connecting infrastructure development by the Faroese Agency for Public Works (Landsverk) and interviews with infrastructure planning professionals working in this field.

Infrastructure development does not automatically result in increased mobility and access. Instead, it is intertwined with hegemonic power relations resulting in unequal gendered outcomes, including increased time poverty and enhanced gendered private-public divide. International attention to this issue is growing, with academic, public and organisational voices stressing the need for gender-sensitive and inclusive infrastructure planning and decision-making processes. Previous studies have found that infrastructure planning following technical rationality aiming for maximised utility is not neutral but full of assumptions and biases which risk direct and indirect adverse outcomes. With the spatial composition of the archipelago impacting its socio-economic environment, mobility and access are crucial resources. Examining the motivations and processes of infrastructure planning for expanding the Faroese archipelago's urban area is crucial for its future success.

This paper argues that infrastructure planning policies and processes based solely on technical rationality leave out socio-economic realities impacting gendered mobility and access, which previous studies have found on the Faroe Islands. Approaching spatial planning from the technical standpoint found in the infrastructure planning policies on the Faroe Islands follows what has been termed by feminist geographers as a masculinist approach. That is, an approach blind to diverse and plural experiences, needs, social positions, and identities. Amongst others, infrastructure planning needs to consider access beyond economic activity, including unpaid labour activities such as various care-work and mobility constraints beyond vehicle usage.

Thus, this paper finds that the public infrastructure planning discourse on the Faroe Islands is of a masculinist nature that follows technical rationality and is not applying the more adaptive and inclusive planning trajectory that is becoming a recognised planning approach applied throughout the world.

Lastly, this session will discuss commencing an academic journey as an islander and a woman. It will touch upon experiences, reflections and observations made in academic and island spheres—two sometimes clashing spaces that continuously challenge what it means to be an islander: identifying as a woman striving towards doing research and having a say in what future lies at the end of the tunnel.

Keywords: critical feminist methodologies, gender-infrastructure nexus, gendered islandness, inter-connecting infrastructure development, urban archipelagos

A REFLECTIVE JOURNEY THROUGH FEMINIST ETHNOGRAPHIC METHODOLOGIES ON THE ISLANDS

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*“Your methods are a reflection of what you think about people, what you think about knowledge” –
Linda Tuhiwai Smith*

How has the figure of the (feminist/matriarchal) island transformed our research? This talk is a collaborative exercise of reflexivity and positionality in action: critically dissecting ethnographic research methods from an intersectional feminist perspective, constituting part of our island research in the past decade. Despite the much-needed diversification of today's anthropology, its theoretical, methodological, and ethical canons continue to be constructed based on hegemonic masculinity (i.e., based on privileges, attitudes, behaviours and biases: who decides what counts as knowledge and how it should be acquired). Such traditions are often at odds with the situated research the discipline aims to produce- the power relations it constructs present a challenge for female researchers sitting outside the anthropological canon. At the same time, in social anthropological research, every day is centred as constitutive of other realms, such as the state. In its essence, the realm of everyday is extremely diverse and representative of particular power relations and systems. Thus, the anthropological canon's hegemonic masculinity (regulated by certain classes, ethnicity, and ability ceilings) continues in tension with the focus of its own research: the everyday. Today's researchers struggle with conventional research designs due to their fixation on textual, visual, audible, and formalised ethics. In a twist of what is possible, we learn to read and experience the island through other senses, such as dreams, touch, smell, and body sensations. Our journeys shift, and we start to navigate and read island spaces more coherently. An understanding of knowledge (production) as embedded and situated in socio-cultural structures and processes and relating to 'nature' as a living entity also includes bodily experience, ancestry, and the dead. Bodies are not taken for granted or 'naturally' given but are socially produced through power relations and hegemonic readings of the island as detached from 'the body' (emotions, feelings, sensations, and the like). Research is an embodied experience (in practice) yet a dislocated experience (in theory) where particular readings of island spaces and places determine the journeys we undertake. In our talk, we reflect on the complexity of learning throughout our research journeys by discussing issues of hierarchy, access, agency, interpretation, knowledge production, and representation from an intersectional feminist ethnographic perspective. Here, we understand feminist ethnography as a power sensitive approach that can contribute to deconstructing power relations (also within academic knowledge production) and (methodological) canons that maintain them. Against the background of our empirical data, we refer to island places as multi-faced and regulated by different water relations, as well as researching bodies as mediums for knowledge production: from matriarchal water powers, water barriers and pathways, and the beach as a transition. At the same, we discuss issues of female-female access and collaboration as regulated by masculine/paternalistic/patriarchal constructions of islandness within disciplinary canons that inspire certain fieldwork politics.

Keywords: reflexivity, water, feminist ethnography, islands, senses

A WALK DOWN MEMORY LANE: REVIEW OF ISISA NEWSLETTERS (2012 – 2021)

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The International Small Islands Studies Association was founded in the early 1990s, and it has since been going strong for three decades. As the Editor of the ISISA Newsletter for the past ten years, I will present a colourful history of the Association through a content analysis of the past newsletters, which have been in circulation since 1994. The analysis will look at the *quality/nature* of the contributions; the *background* of the persons who made contributions; the *theme/content* of what the contributions dealt with, and how they changed over time. A timeline of the ISISA past conferences will also be presented.

These newsletters, which can also be found on our website: <https://isisa.org/index.php?c=ISISA-newsletters>, do not only serve as a legacy of ISISA but also of its members who keep it alive with their contributions. This presentation is sure to bring a smile or a memory to many of our members, while new members will have a sneak peek at what they have enrolled in.

Keywords: ISISA, Newsletters, Conferences

COMET CLUSTER: AN ONLINE PLATFORM SHARING ISLAND RESEARCH

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The research cluster COMET: Communicating, Observing, Mapping Environments and Tolerance aimed to collect, document, and map narratives, heritage, and places to consider cultural and sustainability problems on islands and propose solutions engaged through art, design and craft strategies. These strategies introduce traditional tools and experiment to bridge new technologies and introduce potential prototypes for art processes and outcomes.

The cluster uses several terms related to astronomy as an indicator of historical navigation mapping through star observation and as conceptual inspiration for mapping the future research of COMET. The research developed through two projects: (1) Mapping & Re-envisioning Islands research and a practice-based creative project that will combine primary and secondary research on the history, heritage, and environment of Sir Bani Yas Island, United Arab Emirates; (2) Typographic Matchmaking for a Region/Place/Location, a craft-based creative project, that uses the data collected to develop branding further or present a place and identity through the framework of heritage and sustainability. The projects were piloted through workshops with students and classroom assignments. Two field trips were taken to document and learn about Sir Bani Yas, followed by investigations using interviews and visual images.

The culmination of the projects, and original data, is designed and stored on an online platform that will be used to share and disseminate its research and connect other island researchers, thus forging a STEAM community. It aspires to be an experimental platform to share and discuss data on island research globally. In Spring 2022, the cluster will kick off its platform with a think-tank to engage various researchers in a cross-cultural context and discuss frameworks engaging art and science to research the future of islands—from ecology to tourism. We will conclude with a discussion with interested researchers on how to expand knowledge sharing and collaborative models on island research.

Keywords: art, culture, sustainability, heritage, mapping

THE FUNERARY CAVE OF BINIADRÍS: AN INTERDISCIPLINARY APPROACH TO MENORCAN PREHISTORY

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The Balearic Islands were first inhabited during the Late European Prehistory. Since then, the islands, specifically Minorca, have been connected with their neighbouring islands and continental sites throughout the Mediterranean. This paper aims to explain the concept of isolation and connection within the framework of Island Archaeology during Prehistory throughout the case study of Biniadrís cave.

Since its discovery, Biniadrís cave has provided exceptionally well-preserved material of all kinds and represents a unique funerary cave (with the remains of at least 80 human bodies) without any human disturbance for over 3000 years.

The results from this site were then compared with the other three funerary caves discovered in Minorca to better understand population dynamics and lifestyle.

The carbon ($\delta^{13}\text{C}$) and nitrogen ($\delta^{15}\text{N}$) stable isotope values based on 33 human individuals and 76 fauna samples showed a protein diet based on domesticated terrestrial animals such as pigs, goats and cows and a total lack of use of marine resources. These results were fascinating and pushed the idea of comparing island economies to decipher husbandry and farming strategies during Prehistory.

Due to the exceptional preservation of Biniadrís material culture and the anthropological remains, this example is distinctive for reconstructing social identity during the pre and protohistory, making a comparative analysis within the Western Mediterranean and as a first approach to understanding the Balearic Paradox.

Keywords: Bronze Age Bioarchaeology, Bioanthropology, Isotopic studies, West-Mediterranean Prehistory, Island Archaeology

MONSTERS, MYTHICAL CREATURES AND ISLAND HOPPING IN SEYCHELLOIS FOLKTALES

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The folktales of the Southwest Indian Ocean islands are described as a common stock of stories that have followed an Eastwards diaspora from Central Africa and the Eastern African Coast to the islands. These stories have sometimes merged with or been reinterpreted in the creolization process from Malagasy myths and legends originating from 9th-century maritime migrations from Indonesia. This is part of the *Indian Ocean World* inheritance of islands that predate colonialism. A very intriguing aspect of this heritage is monsters and mythical creatures traced back to East Africa and Madagascar. In Seychelles, the extremes of insularity, hybridization, and the imbalance of power caused by slavery have caused these creatures to be rationalized and simplified and given new names in a more acceptable language to those in authority. Thus, the East African Hyena spirit or swallowing monster has become the Malagasy *Lolo*, a spirit, and then transformed into the French *Le Loup* (Wolf) and further creolized to *Lelou* or *Loulou* in the Creole islands.

This paper will discuss how mythical creatures in Seychellois folktales have ‘island hopped’ across the Indian Ocean and their transformation in the creolization process. These mythical creatures include *Loulou*, the Queen of the Sea, the *Mamiwata* and the seven-headed monster. The samples for this study have been extracted from the dataset for a broader study on folktales and creolization in Seychelles. A mixed methods approach is being used for this more comprehensive research, involving the creation of a folktale database for Seychelles and qualitative and quantitative analyses of the data using Google Sheets and Nvivo. For this particular segment of the study, an on-line search has been made with regards to the origins of Seychellois Creole stories, employing a comparative analysis of existing databases such as the Aarne Thompson and Uther (ATU) index and the Ashliman repertoire of stories, as well as data obtained from the literature review, especially with regards to regional folklore.

Keywords: folktales, mythical creatures, Eastern Africa, Indian Ocean islands, Seychelles

FEMALE ISLAND YOUTH IN PARTS PER MILLION (PPM) VOLUMETRIC VOICES: SUSTAINABLE DEVELOPMENT THROUGH THE ISLANDNESS OF LUCY MAUD MONTGOMERY, AUTUMN PELTIER, AND GRETA THUNBERG

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Through the lens of popular culture and islandness, this paper demonstrates how the literary works of Prince Edward Island author Lucy Maud Montgomery, juxtaposed with two world-renowned leading global youth environmental activists, Autumn Peltier, Anishinaabe water-rights advocate and Anishinabek Nation Chief Water Commissioner from Wikwemikong Unceded Territory, Manitoulin Island, Ontario and Greta Thunberg, an environmentalist from Stockholm, Sweden, becomes intertwined with the Sustainable Development Goals for Water and Climate Change. Montgomery's biosphere observations transcend several generations, connecting with Peltier and Thunberg, and creating a network with global youth through the rhetoric found in various media platforms, brands, and influential spokespeople. Their exhortation aims to revolutionize capital wealth to natural wealth as a contributing resolution for our future collective welfare, as put forward in the 1987 Brundtland Report. This presentation takes a comparative feminist perspective approach to explore commonalities of time and space through a mimetic analysis of these three leading voices. The framework will guide further research on sustainable development comparisons with Canada's oceanic and freshwater islands.

Keywords: islandness, female perspectives, sustainable development, Brundtland Report, pop culture

IS SOMEONE IN A HURRY TO GET HOME? RESEARCHING TEMPORALITY THROUGH THE RELIGIOUS PRACTICES OF SALI, DUGI OTOK^{6*}

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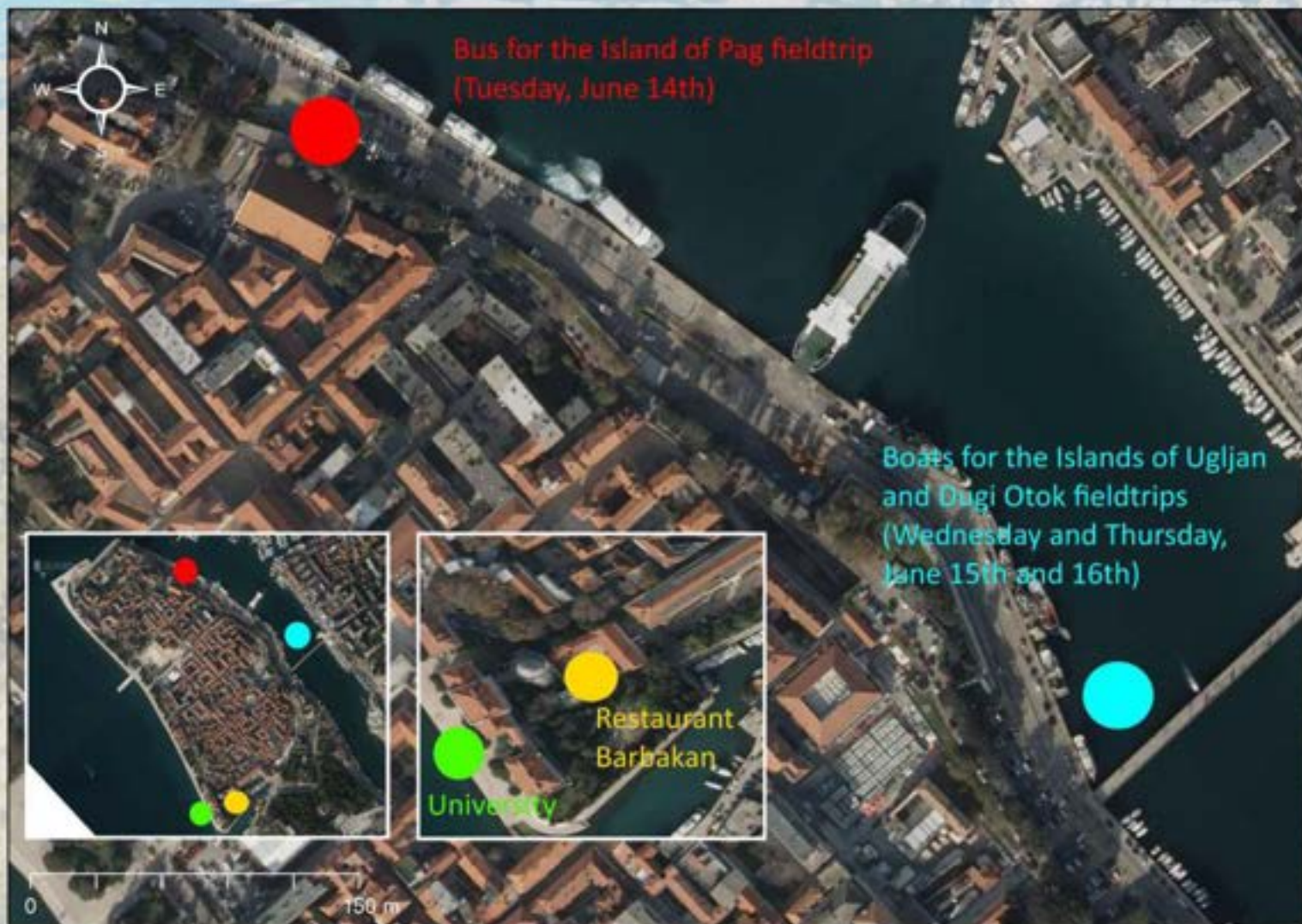
The modern burden with schedules and haste gives the impression that time is taking shape within a capitalist social system inherent in the continuous and growing encouragement of consumerism. Unlike the pre-industrial period, when time was shaped by the cyclical alternation of natural intervals, agricultural seasons, and religious periods, it is now predominantly shaped by multiple schedules and timetables that are mostly dictated by the rhythm of social life. Accordingly, today the entire Adriatic coast, including the islands, reframes its entire yearly cycle according to the “two seasons” initiated by tourism, the summer tourist season and the winter season. Due to the sharp increase in the number of people on the island and with the majority of the local population directly or indirectly employed in tourism, life in Sali, Dugi Otok, becomes quite hectic during the summer season. Sali is a small settlement of around 600 inhabitants situated at the southern end of Dugi otok at the entrance to the Kornati archipelago and consists of over 100 islands and islets. The island location makes Sali an important nautical port. Although it is not one of the heavily touristed areas, the island economy depends on tourism, and its infrastructure quickly gets overloaded.

Consequently, the island population becomes burdened with multiple additional jobs and chores, which contributes to the fact that, generally, their daily lives do not correlate with the notion of ‘island time’ at its slower pace. This notion was coined to respond to the need to escape from the hustle and bustle of everyday life and its tourism-induced hectic temporal rhythm, and is now readily accepted in public discourse even by the islanders themselves. With this in mind, *temporality* can be defined as a rhythm of existence reflected in the social, cultural, spatial, and ideological transformation. Although there are multiple temporalities at work simultaneously, this presentation [1] will focus on the perception of time within the local religious practices of Sali.

The assumption is that this relatively new tourism-based yearly schedule directly affects local religious practices. The hypothesis is that, for the local community, religious practices occurring during the summer months are becoming practices of “slowing” time, simultaneously opening the possibility of “time distortion” in the everyday lives of the local population within the hectic tourist season. This presentation will deal with one specific pilgrimage from Sali to Piškera, a bay located in the Kornati archipelago, at the end of July. This topic was explored using ethnographic methods such as observation and participation in the community, semi-structured interviews, studying the available material, and discourse analysis.

Keywords: island, temporality, religious practices, tourism, Sali

* This presentation is the result of a competitive research project *A Network of Island Temporalities: Multidisciplinary Research of Temporalities on Dugi otok and Kornati islands*. The project is funded by the University of Zadar for the period of 2021-2023 (project code IP.01.2021.13)



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