



# Book of abstracts

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**XXXVIII-1. Mobilities and networks  
in old Oceania: archaeological and  
ethno-historic approaches.**

# The social organization of early Sahul migrants: envisioning a dialogue between anthropology, archaeology and evolutionary ecology

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The dialogue between anthropology and archaeology with respect to the possible social organization of early Sahul (Australia – Papua New Guinea) migrants 50,000 years ago has been close to inexistent. The reason lays in the fact that anthropology has implicitly or explicitly favoured symmetry and closeness (and reciprocity of exchanges) as being fundamental and historically ancient features of human social organization. Through the definition and ethnographic illustration of what I call "open" and "closed" systems, this paper illustrates that asymmetry and openness are far better adaptations in conditions where social and material resources are unpredictable. Engaging in an additional dialogue with evolutionary ecology, it is suggested that the distinction between "closed" and "open" systems also reflects a qualitative jump from inclusive fitness to indirect reciprocity. The combination of the anthropological analysis with archaeological findings and with theory of evolutionary ecology demonstrates that many Australian Aboriginal peoples know open systems that favour the diversification of interrelationships and resources, rather than the repetition of existing exchange relationships. This model is also more accurate to envisage the kinship structure and social organization of the early migrants to Sahul.

**Keywords:** Sahul, Australia, New Guinea, social organisation, First settlement

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\*Speaker

# Exchange Networks in the Western Solomon Islands

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As Nicholas Thomas (1991) has observed the 19th century cultures of the Western Solomon Islands illustrate the over simplification created by simple binary distinctions of gift economies and social exchange versus market based trade in commodities. In the Western Solomons shell ‘currencies’ were elaborated to a very great degree allowing the near commodification of exchange yet these ‘currencies’ were not simply units of social value. They were intricately entangled with systems of identity and symbolism. In this paper I review the archaeology and ethnohistory associated with these ‘currencies’ and consider how they differ from developments elsewhere in the Solomon Islands. Thomas, N. 1991. *Entangled Objects*. Cambridge: Harvard University Press.

**Keywords:** Pacific, exchange, Solomon Islands

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# Customary Stone Money Banks: new archaeological data on the import of "Rai" to Yap (Micronesia)

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The Island of Yap in Western Micronesia, is well known by Pacific archaeologists for its unique setting of "Stone Money Banks". These are characterized by the alignment on the edges of traditional dancing floors, of small and large flat carved stones of a rounded form, with a hole in the center, called *Rai*. Although most of these stones are less than 1m in total diameter, some can be over 2m tall and exceed one tone in weight. The *Rai* are made of a type of Calcite and were carved in the past mainly from the small Karst Islands of Palau, 500km to the southwest of Yap, before being transported by rafts tied to canoes on dangerous sea-journeys. The chronology of this complex traditional network of Western Micronesia, that extended eastward to Coral Atolls within the Sawai Network of shell and weaved items, has been reassessed through an archaeological program. This paper proposes to present the main results of the excavations done on three Stone Money Banks of Yap, allowing amongst other things, to tighten the main chronological timeframe of the use of *Rai* in Yap.

**Keywords:** Pacific, Micronesia, Yap, Stone Money, Rai, Networks, Archaeology

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\*Speaker



# Receiving and integrating : the other side of insular mobilities. A comparative approach for Melanesia and Polynesia (part2)

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Translocal relations are a meaningful trait of the socio-cosmic dimension of Oceanian societies. The latter integrate the utmost importance of external relations which are constitutive of the way island societies conceive and organise themselves. Receiving and integrating groups and people, exchange relations, marriage alliances are integral parts of their dynamics, lives and reproduction. We wish to pursue an approach which stresses two often neglected aspects of these dynamics: (i) the positioning of the receiving party with its implications for the dynamics of voyaging, arriving and integrating; (ii) the ceremonial procedures which elaborate relations during arrivals and receptions, reordering pre-existing configurations.

This will be a double communication with a comparative perspective. Denis Monnerie will deal with an insular Melanesian case, Arama in New Caledonia, and Sophie Chave-Dartoen’s case study will be Wallis, in Western Polynesia. Our perspective is not to oppose two types of societies and practices, instead we will deal with them together and *in fine* will stress their similarities. Having already identified the continuities in their social organisation (Monnerie 1998, 2001, 2003; Chave Dartoen 2017) we will focus on the ceremonial, ritual, dimensions of external relations and their implications on the dynamics of social recompositions. We will deal with the ceremonial form of arrivals and receptions, the status of arriving/strange entities and especially the dyadic organisation of these ceremonies with two groups facing each other performing ceremonial sequences involving the circulation of objects and speeches, with a shared meal eventually knotting the relations which have thus been elaborated.

## Bibliography

Chave-Dartoen 2017 *Royauté, chefferie et monde sociocosmique à Wallis (’Uvea). Dynamiques sociales et pérennité des institutions*, Publications Pacific-CREDO.

Monnerie, Denis 1998 ”Oceanian Comparison Reconsidered. The Mono-Alu problem.” in *Social Anthropology* 6, 1: 91-107.

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Monnerie, Denis 2001 "Représentations de la société, statuts et temporalités à Arama (Nouvelle-Calédonie)." in *l'Homme* n° 157: 59- 85.

Monnerie, Denis 2003 "Social Organisation and the Naming System. A New Caledonian Case: Arama." in *Zeitschrift für Ethnologie* (Allemagne) 128: 249-268.

**Keywords:** Oceania, Polynesia, mobility, welcoming ceremonies, exchanges, ritual

# Prehistory May Not Be What It Seems – Using Network Analysis as a Research Tool in Historical Studies

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In his book *Reality is Not What It Seems – The Journey to Quantum Gravity* (2017), the physicist Carlo Rovelli does a skillful (although at times obscure) job of showing us that many of our fundamental ideas about space, time, and the universe are simply cognitive and cultural constructs rather than substantive statements about the true nature of things and events. Ever since Thomas Kuhn’s influential book *The Structure of Scientific Revolutions* (1962) challenged the notion that science advances by the steady accumulation of facts and theories, it has been accepted by many that “plugging” new finds and discoveries into already accepted interpretations—however seemingly well-established—can get in the way of learning anything new about the world around us, today and in the past. We have been devising network methods to examine the likely spatial and temporal structuring of the transport of obsidian in Near Oceania before, during, and after the appearance of pottery in the Lapita style in Oceania. Using only geospatial information and a set of basic assumptions about plausible alterations in the structuring of longer-distance connections, we have been able to model and reproduce observed changes in the distribution of obsidian from source areas on New Britain and in the Admiralty Islands for the period between 6000 BP and the present. Contrary to expectations often voiced in reconstructions of Pacific prehistory during the Holocene, a few fundamental network considerations can be used to summarize the patterning of archaeological data without having to assume there were major transformations in network ties among communities in the New Guinea region during the mid Holocene. Said less formally, our analyses of the distribution of obsidian around the Bismarck Sea suggest that the everyday lives of those living in this part of the world were little changed by the greater integration of coastal and offshore island communities following the introduction from island Southeast Asia of new canoe-making skills and voyaging know-how.

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**Keywords:** Pacific Islands, networks, obsidian distributions, modeling, data analysis, social fields, interaction sphere, Bismarck Sea

# Pofatu: An open-access database for provenance analysis of stone tools in the Pacific

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Inter-community and inter-island mobility was an important aspect in the settlement process of Pacific islands, as well as a decisive feature in the evolution of Pacific island societies through time. Following the first attempts to infer historical interactions based on stylistic and typological similarities in material culture, scholars have started applying petrographic and geochemical techniques to investigate the composition of artefacts in order to identify the natural origin of raw materials and trace patterns of exchange among intra- or inter-island interaction networks. While these analyses are increasingly used to document elemental and isotopic compositions of geological sources and artefacts, a growing body of data must be used by researchers to better constrain the origin of new assemblages.

In this paper we introduce *Pofatu*, the first online and open-access database of published geochemical data on stone artefacts and quarries in the Pacific. The data repository includes meta-data about archaeological and chronological contexts as well as geographical locations, which will be used to document and quantify patterns of change in stone material distribution among Pacific societies through time.

While most prehistoric quarries and surface procurement sources have yet to be identified, provenance studies must also rely on the acquisition of wide and reliable geological data related to the geological setting of each archipelago. For this reason, *Pofatu* additionally provides a direct access to the comprehensive collection of geological data available from the GEOROC database (<http://georoc.mpch-mainz.gwdg.de/>).

We show how this integrated and exhaustive presentation of published archaeological and geological data will help assigning reliable and unambiguous provenance to specific artefacts using a common reference dataset.

**Keywords:** Pacific islands, Provenance studies, Geochemistry, Stone tools, Artefact distribution, Interisland voyaging, Interaction

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# Late prehistoric drill points; a case study from Motupore Island, Papua New Guinea

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Motupore is the name of an island and the archaeological village site located upon it. The prehistoric occupants of the site have been described as specialist manufacturers of earthenware clay pots. During the late 1800s and early 1900s ethnographers recorded up to 15 different pot types although only two were dominant. The pots were transported by voyaging canoe to the Gulf of Papua and exchanged for primarily for sago and also for other items. This exchange network began with the earliest occupation of the site about 800 years ago and is known as the *hiri*.

During the field season 2016, a recent excavation on Motopure Island (Central district, Papua New Guinea) led by M. Leavesley with T Beni, found a series of 97 lithic pieces with relatively standardized dimensions. These pieces were collectively categorized as "drill point" based on a preliminary apparent homogeneity.

The objective of this study was to investigate whether the broader trends in point production follow those exhibited in pot manufacture? Are there are wide variety from which only a few were dominant or was there simply one dominant type of point produced? Using a morpho-typometric approach, based on the presence/absence of quantitative and/or qualitative characteristics, five morphotypes were identified: truncation, shouldered piece, triangle, bor and point.

In addition, we proposed hypotheses regarding the functional use of these "drill points" based on the macroscopic observations of stigma on the surface of pieces.

**Keywords:** Lithic, Motopure, Papua New Guinea

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# Population Adaptation in Papua New Guinea

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Papuan populations have an exceptional biological diversity. For decades, anthropological studies have established the large spectrum of phenotypes present in Papua New Guinea such as stature, with individuals showing ‘pygmy’ features, or hair color, with blond-haired individuals. This diversity is a result of a long-standing geographical isolation, since their first arrival 50,000YBP, a strong cultural structure, with the highest linguistic diversity of the world, and unique admixture patterns, notably with an archaic hominin, Denisova. However the role of Selection is so far poorly understood in shaping the genetic and phenotypic diversity observed today.

Combining whole genome sequencing data with an extensive set of phenotypic and geographic data for 100 Papuan individuals, we are presenting a large-scale study on the impact of Selective pressure on the Papuan genetic and phenotypic diversity. Our approach is based on (1) defining potential structure of diverse phenotypic variations (i.e. BMI index, height, blood pressure, skin color, hair structure, etc.) according to the cultural and geographical patterns; (2) characterizing genetic locus showing signal of Selection (i.e. iHS, nSL, XP-EHH, etc.); (3) identifying genetic associations with phenotypes. It produces an in-depth insight into the Selective pressure

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that has shaped the Papuan biological diversity.

**Keywords:** Papua New Guinea, Adaptation, Phenotype, Genotype



# Modified canines: Circular pig's tusks in Vanuatu and the wider Pacific.

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Pig tusks are used widely across the Pacific as tools, adornment, valuables and to denote status. Modified canines which can ultimately be full-circle at least once, sometimes twice and more rarely three times, are very much associated with Vanuatu custom. They have a wider geographic spread, from New Guinea to Tonga, which in some areas is likely to have some antiquity and in others relates to historic exchange. This papers looks at their history, spread, symbolism and appropriation as representations of national identity in the twentieth century.

**Keywords:** modified pig canines, Vanuatu, Pacific, symbolism, identity

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\*Speaker

# Human-mediated dispersal routes of paper mulberry in the Pacific.

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The colonization of Remote Oceania in prehistoric times was a complex process involving the intentional transport of animal and plant species to resource - poor islands. One of these transported species was paper mulberry, a fiber crop native to East-Asia. A former study of our group on chloroplast haplotypes linked Pacific paper mulberry to Taiwan, providing the first genetic proof for the "Out of Taiwan" hypothesis of Austronesian expansion. Building upon this data in this presentation we will address the genetic diversity and structure found within Oceania in both contemporary plants and herbaria samples, using a set of microsatellites. Our data reveal three main nodes separating West, Central and East Polynesia, a dispersal pattern that may reflect the routes of prehistoric Austronesian voyagers during migration and settlement of Remote Oceania.

**Keywords:** *Broussonetia papyrifera*, genetic structure, — Polynesia, microsatellites, phylogeography, — herbaria

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# Receiving and integrating : the other side of insular mobilities. A comparative approach for Melanesia and Polynesia. Part 1.

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Translocal relations are a meaningful trait of the socio-cosmic dimension of Oceanian societies. The latter integrate the utmost importance of external relations which are constitutive of the way island societies conceive and organise themselves. Receiving and integrating groups and people, exchange relations, marriage alliances are integral parts of their dynamics, lives and reproduction. We wish to pursue an approach which stresses two often neglected aspects of these dynamics: (i) the positioning of the receiving party with its implications for the dynamics of voyaging, arriving and integrating; (ii) the ceremonial procedures which elaborate relations during arrivals and receptions, reordering pre-existing configurations.

This will be a double communication with a comparative perspective. Denis Monnerie will deal with an insular Melanesian case, Arama in New Caledonia, and Sophie Chave-Dartoen's case study will be Wallis, in Western Polynesia. Our perspective is not to oppose two types of societies and practices, instead we will deal with them together and *in fine* will stress their similarities. Having already identified the continuities in their social organisation (Monnerie 1998, 2001, 2003; Chave Dartoen 2017) we will focus on the ceremonial, ritual, dimensions of external relations and their implications on the dynamics of social recompositions. We will deal with the ceremonial form of arrivals and receptions, the status of arriving/strange entities and especially the dyadic organisation of these ceremonies with two groups facing each other performing ceremonial sequences involving the circulation of objects and speeches, with a shared meal eventually knotting the relations which have thus been elaborated.

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**Keywords:** Oceania, Austronesian, Mobility, Interactions, Networks, ceremony

# Circuler, partager, échanger hier et aujourd'hui aux Tuamotu (Polynésie française)

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L'archipel des Tuamotu, qui est l'un des cinq groupes d'îles composant l'actuelle Polynésie française, offre la particularité de n'être composé que d'atolls dispersés sur un immense espace maritime. Si des recherches en archéologie, anthropologie et linguistique furent entreprises dans l'archipel dès la fin des années 1920 sous l'égide du P. Bishop Museum d'Honolulu, l'histoire pré-européenne des Tuamotu reste à ce jour l'une des moins bien connues de la Polynésie orientale. Cette présentation propose d'examiner la question des communications et échanges intra et inter-insulaires durant la période dite des " premiers contacts ", en s'appuyant à la fois sur les rares données archéologiques existantes, sur les informations transmises par les premiers observateurs européens et, surtout, sur un riche matériel traditionnel, encore peu exploité à ce jour (toponymie, chants, généalogies). Les traditions indiquent notamment l'existence d'échanges matrimoniaux à courte, moyenne et longue distance, la présence de contacts avec les îles hautes environnantes et l'existence d'un véritable " nomadisme cérémoniel ". J'examinerai dans un deuxième temps l'évolution post-européenne des processus d'échanges et leurs modalités et significations contemporaines. Aux Tuamotu, les progrès vertigineux des communications et l'économie monétaire ont profondément transformé les modes d'interaction intra et inter-insulaires, avec une accélération au moment de la création du Centre d'Expérimentation du Pacifique au début des années 1960. A partir de l'exemple de l'atoll de Reao, je montrerai qu'individus et groupes de parenté continuent de circuler intensément et de s'engager dans des processus d'échanges impliquant des biens alimentaires, des matières premières, mais aussi des personnes et des services, dont les rôles sociaux sont multiples : ces échanges et voyages permettant notamment l'affirmation des droits individuels sur les terres, l'acquisition de biens introuvables sur les îles basses, la formation d'alliances matrimoniales socialement acceptables et la reconstruction de liens familiaux constamment menacés par les conflits fonciers.

**Keywords:** Tuamotu, Polynésie, échanges, mobilités, réseaux

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# Long-distance mobility and networks of exchange in Polynesia: the importance of linguistic evidence

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Archaeology and historical linguistics have a long tradition of providing mutually corroboratory inferences, however based on very different kinds of data. Where archaeology presents concrete evidence of the material past, shared linguistic features between languages show important non-material evidence of the cultural past. This relationship is equally prominent in the realm of exchange – whilst archaeology can uncover the physical products of exchange between communities, linguistic features offer keys to understanding the nature and the path of exchange. In Polynesia, the linguistic record is of particular importance in understanding and uncovering past networks of exchange between islands. Here, the "one-island, one-language" historical linguistic situation, in which each island had its own unique speech variety with marked linguistic variables, provides historical linguists an exceptional opportunity to view exclusively shared linguistic features between certain island communities. In this talk, I will first describe how comparative historical linguistics can provide strong evidence of past mobility between established cultural groups, and I will demonstrate how linguists can identify whether a shared feature is due to a shared inheritance (implying shared origin) or due to exchange (implying post-settlement contact). Second, I will provide linguistic evidence for specific networks of exchange in Polynesia, focusing on networks that demonstrate long-distance mobility: Ra'ivavae in southeast Polynesia and Rennell in the Solomon Islands; Rapa Nui and Rapa Iti; Hawai'i and New Zealand; the Marquesas and Mangareva; Niue and the region of central-east Polynesia. Third, and finally, I will discuss the tradition of linguistic and archaeological collaboration in understanding pre-European Polynesian history, and I will emphasise the necessity of viewing linguistic and archaeological data in parallel, in order to paint a more complete picture of the deep Polynesian past.

**Keywords:** historical linguistics, Polynesia, long distance mobility, exchange networks

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\*Speaker

# Polynesian (biological) exchanges in South Melanesia

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Today, some South-Melanesian communities, known as Polynesian Outliers, display Polynesian cultural features and speak Polynesian languages. This situation is explained by linguists, ethnologists and archaeologists as a result of a process of "polynesianisation" that occurred in the Central Pacific. This process involved multidirectional human dispersals dating from about 1000 BP. While the general principle of this phenomenon is more or less archaeologically defined, the modalities of formation of these Polynesian outliers colonies/establishments are still unclear and under-documented. Two principal hypotheses are suggested. One is that at least some of the islands or localities of settlement would have been empty of human presence before the Polynesian colonists arrived. The second is that the colonized islands would have been already settled as part of the earlier and larger Lapita movement that occurred 3000 years ago, encompassing South-Melanesia and West Polynesia. The first hypothesis implies the presence of human groups showing mainly Polynesian affinities while the second implies populations with mixed affinities resulting from interbreeding with existing populations. We present here the first results of an archaeo-anthropological study of human remains from the island of West-Futuna, which, with the island of Aniwa, is one of the two Polynesian Outliers in South Vanuatu. Comparative statistical analysis (Principal Component Analysis and Linear Discriminant Analysis) were applied to mandibular measurements recorded in five individuals from Futuna, excavated in 1964 by the Shutlers and dated respectively c. 1300 and c. 275 BP, and in 9 modern series from South-East Asia and Oceania. The results indicate the presence of individuals showing mainly Melanesian affinity with a South-Melanesian specificity. These results, which do not fully match expectations from the proposed models, will be discussed in conjunction with our new archaeological data.

**Keywords:** Polynesian Outliers, West Futuna, phenotypes, Pacific settlements

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\*Speaker

# Waves of history in Remote Oceania: a complex population replacement with language continuity in Vanuatu

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Cosimo POSTH, Kathrin N'AGELE, Heidi COLLERAN, Frédérique VALENTIN, Stuart BEDFORD, Mary WALWORTH, Russell GRAY, Johannes KRAUSE & Adam POWELL Recent genomic analyses have demonstrated that the earliest peoples reaching Remote Oceania – associated with the Oceanic-speaking Lapita culture – were almost completely Southeast Asian, carrying no detectable Papuan ancestry (Skoglund *et al.* 2016). Yet a Papuan genetic component is found across present-day Pacific populations, indicating that Papuan peoples have played a significant – but largely unknown – ancestral role. Here, new ancient genome-wide data provides the first direct evidence of a so-far undescribed Papuan expansion into Remote Oceania, showing far earlier arrival than previously estimated but in line with a model from historical linguistics (Blust 2008). Our genome-wide data from present-day ni-Vanuatu demonstrates a subsequent and almost complete replacement of Lapita-Austronesian by Papuan ancestry. But despite this massive demographic change, incoming Papuan languages did not replace local Oceanic languages. This process of population replacement with language continuity is extremely rare – if not without precedent – in human history. Our analyses provide a compelling explanation, demonstrating that rather than a single large-scale event the process was incremental and complex, comprising repeated waves of migration and sex-biased interactions with peoples from the Bismarck Islands. This direct evidence of early long-distance movement and interaction of peoples supports the possibility that the process of cultural fragmentation at the end of the Lapita period was exacerbated – or even triggered – by the geographically heterogeneous arrival of Papuan peoples in Remote Oceania. Our analyses also provide a means to better understand the long-lasting post-Lapita demographic processes that drew Vanuatu into the Melanesian ethnocultural sphere.

**Keywords:** aDNA, population replacement, Vanuatu, demography, interaction, mobility

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§Speaker



**XXXVIII-2. Monumentality in the  
Pacific Islands: archaeological  
contexts.**

# Easter Island and the monumental transformation of a sacred landscape: A case study from the Quebrada Vaipú

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Easter Island is widely known for its monumental statuary in round and its ceremonial platforms. Beyond sculpture and architecture, however, monumentality is a concept that was also applied to landscapes. The Quebrada Vaipú leading from the crater lake of Rano Aroi to the south coast at Opipiri is one of the very few small creeks that drain the island. Since 2008 the streambed is the subject of an archaeological study devoted to the use of fresh water by the pre-contact Rapanui elites. The creek does not only represent a hydraulic system but also a single coherent cultural landscape with several hydraulic installations along its course. Excavations at its most prominent wetland site Ava Ranga Uka A Toroke Hau provide evidence for at least two monumental dam-like barrages, basins and troughs, embankments and terraces immediately next to the remains of a narrow paved road and a small ceremonial platform, the Ahu Hanua Nua Mea. The central part of the site is occupied by a very extensive pavement, which is interrupted by several circular plantation pits once used for the growing of palm trees. Most likely the palm trees were once not only integrated components of monumental architecture but also formed a grove that was part of a water and fertility sanctuary as it was previously unknown on the island. It is beyond doubt that similar sanctuaries have once existed on several other islands of Eastern Polynesia

**Keywords:** Easter Island, monumental landscape transformation, sacred landscape, hydraulic architecture, wetland archaeology

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\*Speaker

# Fesaonga ta Fatu (the Story of the Stone): Archaeological Survey of Futuna, Vanuatu

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Preliminary archaeological survey was undertaken on Futuna (West Futuna) Island in 2017, a small (13 km<sup>2</sup>) ‘Polynesian Outlier’ in South Vanuatu. Futuna is linguistically and culturally distinct from its closest and much larger ‘Melanesian’ neighbours. Futuna’s physiographic variation, limited area of land lacking alluvial plains or valleys, and physical isolation located 80km east of Tanna Island, resulted in massive landscape alteration and innovative agronomy in the form of irrigated and dry land agricultural development. In contrast to other Oceanic societies, where monumental stonework is often associated with religious architecture and political power as well as activities of economic nature, on Futuna it appears to be almost entirely associated with food production and land management with little investment in ritual and political spaces. What can such large-scale, apparently secular stonework, tell us about Futunese sociopolitical organisation, religious investment and adaptation to Futuna’s environment? Additionally, does the archaeology reveal cultural parallels between Futuna and its neighbours Tanna, Aneityum and Aniwa? Here we present excavation and mapping data from the initial field season, as well as the first radiocarbon dates for Futuna’s agricultural systems. This new information will be assessed against orthodox models concerning transformative histories and socio-political complexity in Oceanic societies. This study represents the first extensive archaeological research on Futuna since pioneering work conducted by the Shutler’s in the 1960s and will contribute important information concerning the settlement histories of Polynesian speaking groups, long-distance exchange, and cross-cultural interaction in the region.

**Keywords:** monumentality, Pacific, agriculture, intensification, innovation, irrigation, landscape, economy, sociopolitical, religion

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# Labor Mobilization Strategies and Monumental Tomb Construction on Pohnpei, FSM

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Examinations of architectural change over time may indicate major shifts in a society's developmental trajectory, particularly with respect to social hierarchy and inequality. Studies of monumental constructions in the Pacific have discussed apparent social hierarchy, the development of architectural styles, and correspondence between the archaeological record and traditional histories. Yet, little attention has been paid to the labor and management invested in the construction of monuments. In part, this is due to the wide range of variables and in-built assumptions associated with labor investment estimates, but challenges in estimating labor investment should not restrict considerations of labor mobilization. This paper examines labor investment and possible labor mobilization strategies used in the construction of mortuary structures on Pohnpei. The structures date to a time when socio-political power was centralized at the site of Nan Madol, and were constructed across the island. The analyses of architectural data associated with mortuary monuments provides information on relative status of architectural features, the management required to construct these structures, and differences between sites. The results will then be used to discuss the possibility of the use of coercive labor mobilization strategies in building construction, and the wider social implications of the use of coercion in architectural projects.

**Keywords:** Micronesia, monuments, labor investment

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\*Speaker

# Living Eyewitnesses of the Past – Sacred Trees as Parts of Ritual Architecture in Eastern Polynesia

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The concept of sacred trees is something that appears in many different cultures of the world. In Polynesia, trees are known to have been of great importance. Much of the vegetation on the different islands has been introduced by the Polynesian settlers who carried seedlings and seeds of many plants with them and changed their new environments significantly. While many of the introduced species were agricultural crops, we know of various tree species that had a religious significance. A number of species are known to be sacred and connected to specific deities of the Polynesian pantheon. They were planted as parts of ritual architecture and considered emanations of the respective god. The trees played an important role in funerary rites and attracted birds that were considered to be messengers of the gods. Thus, the sacred trees were seen as a bridge to link the world of the gods to the world of man.

Despite this information from early ethnographic sources, many aspects of sacred trees are still unknown, especially when it comes to them being elements of an architectural ensemble. This paper presents the first results of a survey and mapping project on Nuku Hiva, Hiva Oa, and Tahuata in the Marquesas group, where there are still many sites with giant and seemingly old trees. Considering the biogeography of the different tree species and possible natural agents of seed dispersal, there is no doubt that the trees documented during our survey could only have been planted by man.

Since in the tropics the size of a tree alone is not enough to infer its age, we took core samples of living trees on a number of sites for dendrochronological and <sup>14</sup>C-dating to establish the contemporaneity of the trees and the use of the sites where they grow. Detailed mapping of the sites using terrestrial and 3D-documentation techniques allowed us to register certain patterns in the different components defining the sites and the trees that grow within them, the location of trees within the sites, and the species of trees on the different kinds of sites.

The dates derived from the core samples are most significant also in the discussion about inbuilt age for charcoal samples on the Pacific islands – some of the dated trees are over 300 years old. Thus the sacred trees today are living "eyewitnesses" of the ceremonies performed at the sites where they constituted an integral part of the architecture.

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\*Speaker

**Keywords:** Polynesia, Marquesas, Ritual Architecture, Sacred Trees, Dendrochronology, Inbuilt Age

# Micronesian Islands and Archaeological Issues of Monumentality

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Micronesian Islands and Archaeological Issues of Monumentality  
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for

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Abstract

Monumentality in the Pacific Islands represents a significant aspect of the cultural past as seen in oral history and archaeology, and one that continues even into contemporary life. Studies thus far have focused on social and political links to stone and earth monuments in small-scale, island societies, often without clarification of the term "monumentality." They highlight the diversity of this pan-Oceanic tradition as well as its significance for understanding political centralization and social status differentiation in the broader world sphere.

This paper represents a continuing effort to understand cultural developments on Pohnpei Island, Federated States of Micronesia, that resulted in early and unusually elaborate ritual and chiefly megalithic construction at several coastal sites or centers, especially at Nan Madol, with its core area of more than 1 km<sup>2</sup>. Archaeological and historic preservation projects, which I did in conjunction with the island's historic preservation office, have produced data relevant for testing models that trace ideological changes in how status and power were marked. When and how monumental stone constructions began to characterize these island traditions is at issue, as is the inter-island and extra-areal uniformity of ways to resolve the means for signifying social hierarchy. The sequence for the Nan Madol complex has clarified the site's position in the broader geopolitical landscape, one also reflected in oral history. The earliest settlement of Pohnpei took place at least 2000 years ago; available evidence shows that Nan Madol began as a ritual center more than 1000 years ago, followed by three main building periods. A structural model to trace the escalation and retrenchment of building manifestations in terms

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\*Speaker

of construction scale and methods, building material types, and labor investment also provides a way to compare these variables in other Pacific cases. Here, I focus on the nature of initial site development, organizational frameworks, and functional interpretations. I also examine the magnitude of extra-island exchange goods that serve to mark social differentiation in the context of Pohnpei's ritual sites and mortuary complexes.

**Keywords:** monumentality, Pacific Islands, archaeology and oral history, Micronesia, megalithic, stone architecture



# Monumental Architecture, Inequality, and Social Organization in the Pacific

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The highly conspicuous megalithic and monumental traditions in the Pacific, including latte stones in the Marianas, the vast columnar basalt complexes of Central Micronesia built atop artificial islets, Yap's famous stone money, Palau's vast earthwork formations, and the well-known marae and moai of East Polynesia, are but a few examples of the variety and extent of impressive construction that for centuries have piqued the interest of scholars and laymen alike. But how and why did such a diverse array of unique and elaborate monuments, architectural features, and earthworks develop in the Pacific and from populations that in some cases shared no ancestral connection? And why did so many develop within just a few centuries after colonization? In attempting to answer these questions, researchers have explored a number of different theoretical approaches. Some have suggested that these monuments are indicative of status competition between emerging and increasingly territorial conical/chiefly units. But this likely masks other variables that were equally or even more important toward encouraging, coercing, and/or forcing people to expend time and critical resources for their construction. To examine these issues, we explore the problem from the perspective of how governance is maintained and projected through environments, arguing that intrinsic fragmentation and relative marginality both encourages emergent inequalities, but may prohibit the development of more stratified social institutions. This has implications for how we understand social evolutionary trajectories both inside, but also outside of the Pacific.

**Keywords:** Archaeology, Pacific, Micronesia, monuments, earthworks

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# Monumentality and the Chiefly Sport of Pigeon Snaring in the Dynastic Tongan Chieftdom

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The Tongan dynastic chieftdom was among the most complex in Polynesia, arguably bordering on the level of an archaic state, and extending across an archipelago of 169 islands. Beginning AD 900, this complex and emerging socio-political configuration is reproduced on the landscape through administrative centres, sepulchral architecture, chiefly bathing wells and other monumental features identifying rank and privilege. By no later than AD 1450 the suite of markers incorporates large flat-topped mounds with central depressions for the chiefly sport of pigeon snaring. Previous archaeological study has identified and mapped several of these mounds across multiple islands in the central Ha'apai island group. Some are substantial investments of labour, the largest measuring 52 m diameter across at its base, 7 m high and with upwards of 9000 m<sup>3</sup> of fill in its construction as well as large beach rock slab retaining walls and access ramps. Early historic accounts and traditional histories provide insight into the sport and its importance as a chiefly endeavor. Recently available LiDAR data provides new insight into the distribution and nature of these mounds as they occur on the southern island of Tongatapu, the administrative centre for Tonga's paramount chiefs. Comparative analyses of the Ha'apai and Tongatapu data sets facilitates discussion of monumentality, privileged behaviors and our abilities to read socio-political complexity and its scale on the Tongan landscape.

**Keywords:** field monuments, chieftdom, LiDAR, social reproduction, chiefly sport, Polynesia, Tonga

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# Palau's Monumental Earthworks: The Political Economy of Landesque Capital

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Monumental earth architecture forming contiguous modified terrain covers a minimum of 20 percent of Babeldaob, the largest island in the Palau archipelago in western Micronesia. This impressive and diverse earth architecture supported the majority of community activities and defined socio-political districts for over 1200 years of Palau's history. Through the lens of political economy and landesque capital, a model for the formation and of this monumental earthwork landscape is proposed. The variables involved in land innovations and labor investment, and how these mechanisms were motivated by, and shaped and supported, socio-political and economic processes are explored. Within this framework, it is proposed that Palau's monumental earthwork landscape embodies a complex merger of energy investment, ancestral ties, ritual association, staple wealth, and social bonding.

**Keywords:** monumental architecture, earthworks, Micronesia, Palau

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\*Speaker

# Rano Raraku. The archaeological story of a twin monument

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From the study of Thomson (1892), majority of scholars esteem that the isolated images scattered along the ancient paths, but also complete or unfinished statues staying at the Rano Raraku were abandoned during or before their transportation. Concerning the isolated *moai*, recent studies given some arguments to prove that they were erected before the 17th century along the processional roads that not leave the Rano Raraku but lead to the famous volcano. On this sense, Rano Raraku was as a monument (for a "sacred" raw material?) during its exploitation as a quarry. But today we know also that the complete or unfinished statues yet preserved at the Rano Raraku were carved in the course of the 18th century and maybe during the first half of the next one. Definitively, the big *moai* of the Rano Raraku were made to remain on the slopes of the Rano Raraku, and they have nothing to do with a latent transport. Concerning the hundreds of 'sketches', they are in fact "unfinishable". It seems that the aim of the last sculptors was to populate the volcano with human figures, and to transform the volcano as a full cult site, second stage of the "monumentality" of the Rano Raraku.

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**Keywords:** Easter Island Rano Raraku Monumentality

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\*Speaker

# Ritual architecture in stone, wood and bamboo on the islands of Malakula, Vanuatu, South-West Pacific.

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This paper presents results of research focusing on recording ritual architecture on the island of Malakula, Vanuatu, South-West Pacific. The research has begun to establish the historical trajectory, form and spread of these spectacular sites across the island. The study provides rare comparative data from the Melanesian region, which can then be assessed against the long-established models of the role of such structures in socio-political change which have been generated for much of Polynesia and to a lesser extent Micronesia.

**Keywords:** ritual architecture, Vanuatu, south west Pacific

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# Royal tombs and ritual stones in Tonga

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The royal tombs of the ruling Tu'i Tonga lineage (CE 1200-1800) of Tonga are imposing structures that individually epitomize the power of the paramount and as a collective manifest the stability of chiefly rule. The tiered royal tombs of Tonga were built from quarried slabs of carbonate rock were the venues for elaborate ceremonies involving large numbers of people. This paper examines the architectural elaboration of tombs that included the addition of decorated carved slabs and volcanic pebbles to mark chiefly graves. The geochemistry of grave pebbles and slab designs throw light on the antiquity of funerary behaviour and the different roles of men and women in constructing and decorating tombs. The mortuary activities also illustrate the chiefly networks that underpinned the Tongan state.

**Keywords:** Pacific, tomb, monumentality, Tonga

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\*Speaker

# “When words are not enough’ - the rise of the monument building in Samoa.

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The Independent State of Samoa (Upolu, Savai’i and Manono + islets) has a human history that span over around 3000 years. The initial colonisation brought Austronesian speaking people who carried so-called late Eastern Lapita pottery to the Island. After 2000 years of settlement there is evidence that the mound-building of large size emerged. These sites probably functioned as a high chief’s residence (*maota*) but were also likely meeting-grounds/ceremonial sites for groups of orator chiefs (*tamua* and *pule* institutions). In this paper, I discuss this monumentalisation as a sign of stratification and the rise of a more complex society where the orators usurped the rights from the families to bestow the highest titles. I suggest that this monumentalisation and mound building show that power had to be manifested in material form when ”words are not enough”.

**Keywords:** ancient monument, Samoa, Oceania, social stratification

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# ”Monumentality” in the Pacific Islands : an assessment of its diversity and chronology

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Behind the exotic vision of white sand beaches and their associated palm-trees facing a blue lagoon, Pacific Islands encompass a unique diversity of ”monuments”, poorly known apart from a few emblematic examples like the Moai of Rapanui. These buildings are sometimes of a megalithic character (like fortifications, extended shrines and walled cities), often of a seemingly more mundane typology (like wide horticultural terraces or large village settings). They are testimony of hard collective labor, hierarchical inequalities, and diverse social objectives in their building. Their approach by archaeological studies, which started in some cases as early as the 19th Century, has often been framed into two main analytical visions: one highlighting locality, the other clearly positioned in a pan-regional approach. This paper proposes to assess what the recent archaeological researches in different parts of Oceania have brought to our understanding of ”monumentality” in the Pacific. Questions of overall similarity and diversity, associated to a more robust chronological background for the building periods, will be confronted, be it in monuments mainly with a socio-political character, religious shrines, fortifications etc. As an introductory paper for the session ”Monumentality in the Pacific Islands: archaeological contexts”, this will allow to propose a regional overview of what archaeologists understand of this part of the traditional societies of Oceania.

**Keywords:** Pacific, Monuments, Assessment, Archaeology

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\*Speaker