BURLEY, D. V. (2023). *The Birth of Polynesia: An Archaeological Journey Through the Kingdom of Tonga*. SFU Archaeology Press. 371 p. ISBN 979-8378474882. https://doi.org/10.21810/archpress.73 https://doi.org/10.31577/aassav.2024.33.2.07 CC-BY

Since the time when the first reports by European explorers arrived on the shores of Europe, Polynesian culture has been a source of interest and fascination. Over time, numerous theories have emerged regarding the origins of the Polynesian homeland, at times even with mythical connotations. It was not until the beginning of this century that Kirch and Green (2001) put forward the idea that ancient Polynesian culture had evolved in situ, within the islands and archipelagos that now comprise Western Polynesia. The book The Birth of Polynesia: An Archaeological Journey Through the Kingdom of Tonga continues the exploration of this captivating topic. Written by the esteemed scholar Professor David V. Burley, from the Department of Archaeology at Simon Fraser University, this work meticulously depicts prehistorical societies that have left their cultural imprint through archaeological artefacts systematically unearthed since the 1920s, commencing with the research endeavours of W. C. McKern (1929) and E. W. Gifford (1929). Numerous scholarly papers have explored Tongan prehistory since; nonetheless, a comprehensive review covering diverse archaeological domains was noticeably absent or obsolete in relation to newly discovered realia. With the publication of his book in 2023, D. Burley has successfully addressed this gap. His thorough exploration of Tonga's prehistoric past over three decades positions him as a key contributor within this realm, someone who has extended our understanding of it probably more than any other scholar. His fieldwork in Tonga started in 1989 and included extensive research throughout the Tongatapu, Ha'apai group, Vava'u group, as well as projects further north in the neighbouring Samoan islands. In the preface to his publication, D. Burley speaks of his desire to write this book as dating back to 1997. He highlights the alignment of its writing with the data collected from various research projects in Tonga and other Pacific regions. These diverse sources of information have enabled scholars to draw significant conclusions that either deviate from or supplement previous findings, making the content of this book the most up-to-date overview of Tongan prehistory.

The book's utilisation of a semi-narrative style is designed to appeal to a broad audience while upholding high academic standards. Non-academic readers are taken to the captivating realm of tropical island life, where some of the narratives shared by Professor Burley offer a glimpse into a traditional lifestyle, unique cultural practices, customs, art, and also personal experiences. Conversely, readers of a scholarly bent are presented with a wealth of factual information, up-to-date theses, analyses, and inferences, all supplemented by extensive sources and references located at the end of each chapter. The text is complemented by a variety of photographs that provide additional context to the narratives, as well as by charts, tables, maps, and diagrams intended for an academic audience. The figures are summarised in a list that follows the book's content. Apart from the preface, the book is structured into eight chapters. Among these, five chapters predominantly trace the chronologically structured events that have formed prehistoric

Tonga. These chapters also delve into its geographical expansion, commencing with the village of Nukuleka and the rest of the island of Tongatapu in the south and progressing through the Ha'apai group, Vava'u group, Niuatoputapu, and Tafahi in the north, with additional insights drawn from Samoa. The chapters are very well structured, with each divided into several subchapters dealing with a variety of topics, from unearthed objects and their inferred chronology to the lifestyle of Tongan ancestors, and the environmental context in prehistoric times.

The first chapter offers autobiographical insights into Professor Burley's extensive academic career, outlining some of his most significant research projects and archaeological expeditions related to the Tongan archipelago. In addition to portraying the experiences of the young and ambitious archaeologist at the beginning of his career, it further reveals his remarkable discoveries from subsequent research endeavours. The chapter also provides guidance to readers on how to approach the book and what to expect from its content.

The second chapter delves into content similar to that found in other books exploring the prehistory of the Pacific region. It primarily focuses on providing a comprehensive overview of the Lapita cultural complex, presenting data from recent research in the fields of archaeology, linguistics, anthropology, and population genetics, set in the context of the paleo-environmental framework of prehistoric Oceania. The chapter begins with a brief exploration of the history of research in the Southern Pacific, referencing works of comparable significance but more general in scope by fellow contributors like P. Kirch and his detailed book (2017), as well as M. Carson's archaeological account of Pacific archaeology (2018). The history of research unfolds with the research attributed to esteemed scholars who have significantly contributed to our understanding of Pacific prehistory. These sections culminate with the findings attributed to academics specialising primarily in the natural sciences, especially physical anthropologists, geneticists, and paleo-environmentalists as their insights are indispensable for drawing accurate and well-supported conclusions.

The third chapter focuses on the initial settlement of Tonga, which is believed to be located in Nukuleka, part of today's Tongatapu island. D. Burley here emphasises that in prehistoric times, Nukuleka was an island positioned at the entrance to the lagoon, aligning with the usual Lapita settlement pattern also characterised by stilt houses overlooking lagoons. A significant portion of the chapter is devoted to the re-excavation of the Moala site, revealing marine shells, molluscs and coral material along with charcoals, exclusive to the Lapita period. The discovery of a few corals from the bottom layers of the pit played a crucial role in determining the dating of the oldest settlement. By utilising the U/Th method on these coral specimens, the resulting dates of 896–880 BC (D. Burley et al., 2012) are now established as precise dates for the first settlement of Tonga. Another significant aspect of this chapter involves the analysis of specific Lapita sherds, which reinforces the assertion that Nukuleka is the oldest settlement. These sherds are among the only ones in Tonga that match the Western-style Lapita type. The remainder of the chapter explores the Hopoate site – an aroid planting pit excavated in 2014, providing insights into the subsistence practices of the Lapita people within the context of Eastern Lapita regions.

The next three chapters explore the expansion of Lapita culture to various parts of Tonga and Samoa. The fourth chapter focuses on Tongatapu, the fifth on the Ha'apai group, and the sixth on the Vava'u group, the northern frontier, and Samoa. Understanding the story of Lapita dispersal in the context of Tonga and Samoa is not only intriguing but also essential for providing insights into the mobility of the Lapita people, their social structures, and implications related to voyaging and canoes. In contrast to the Bismarck archipelago, the population in Tonga and Samoa, particularly during the Lapita period, was relatively small. D. Burley presents arguments based on various factors, referencing his earlier works on this topic (2007). These arguments suggest an annual population growth of approximately 0.8%, resulting in a total population of around 600-700 individuals by the end of the Lapita era, with a suggested founding population of 100 individuals or fewer (p. 288). Given that the populations of the Ha'apai, Vava'u groups, and Samoa were well-established around 800 BC, it is plausible that by that time, about 200 individuals would have dispersed across the archipelagos over a vast area, which seems unlikely. Thus it is plausible to suppose that either additional people, possibly from the Lau group in Fiji, settled in Tonga, or the initial population growth was more substantial, (possibly due to the initial availability and abundance of food resources), as proposed by A. Di Piazza and E. Peartree (1999) in their simulation, gradually tapering off to smaller numbers. D. Burley further emphasises Ardrey's concept of the territorial imperative (Ardrey, 1966), which suggests that an evolutionarily driven hunger to extend, conquer, and defend one's territory was a primary motive. This concept is further discussed in the final chapter of the book (pp. 334-335).

Another topic worthy of attention, which is explored in chapter four is the Talasiu burial site (2023, pp. 134-143), based on research by F. Valentin at al. (2020). This site constitutes the oldest burial site in Western Polynesia and is particularly notable for the substantial number of preserved human remains, totalling 49 individuals. Alongside the Teouma burial site in Vanuatu, it holds a unique position among all the Lapita regions. Human remains are crucial for studying genetic affinities but are often rare in Lapita sites. Due to this importance, a more extensive coverage of the Talasiu burial site in the book could be valuable. However, this expanded coverage may lead to an imbalance of information in favour of certain aspects, requiring a careful evaluation of the trade-offs for the final presentation. Curious readers can refer to the cited works to explore additional details briefly depicted in the book. Nevertheless, D. Burley presents a well-argued outline of the key insights derived from the research on the Talasiu burial site.

Studying the Lapita culture from the perspective of subsistence requires lot of collaborative effort, as the subject of study requires a multidisciplinary approach. D. Burley highlights some of his work within this domain, conducted together with other collaborators. Their outcomes are mostly presented in the three chapters mentioned earlier. Subsistence practices can be categorised into two main groups: the first includes the intake of calories from hunting wild animals (the consequence of which was the extinction of many of them) and gathering marine resources, while the second involves the cultivation of crops and animal husbandry. Both are addressed in detail in the book, with particular emphasis on the research conducted at Lotofoa and Finemui swamps. As palynological analysis results have indicated a limited to negligible role of intensive horticultural production during the Lapita era, this evidence adds weight to the scholarly

discourse on Lapita subsistence, aligning with the strandlooper concept initially proposed by L. Groube (1971). Although aroid planting pits, played an important role during the initial phases of colonisation, the lack of intensive horticultural activities together with the absence of pig remains, except for some questionable findings at Lolokoka site on Niuatoputapu island, suggest that intensive agricultural activities and animal husbandry were introduced at a later stage. For the Lapita people as well as during much of a Polynesian plainware phase in Western Polynesia, these practices may have been restricted to certain regions within the Lapita realm rather than being a widespread phenomenon, as evidenced in Tonga. The topic of subsistence, a crucial and hotly debated element that influences other aspects of the lives of Lapita people, is interwoven throughout the book and also plays an important concluding part of the final chapter.

Chapter seven of the book delves into the Ancestral Polynesia and Polynesian plainware phase. The initial section of the chapter examines the abrupt cessation of the intricate dentate stamping decoration of Lapita pottery, presenting several hypotheses put forward by other scholars or proposed by Professor Burley himself. Subsequent subchapters examine the typology of plainware, noting minimal distinctions from the undecorated Lapita ware in Tonga. D. Burley speculates on the intended use of these pots, highlighting the absence of signs indicating their usage for cooking, unlike those found at Sigatoka in Fiji (p. 281). The final section of the chapter focuses on the ancestral Polynesian society and the long pause before the dispersal of humans to Central and Eastern Polynesia, where a few centuries later monumental stone structures began to emerge. The chapter acknowledges the challenges in drawing definitive conclusions for a period labelled the "Polynesian dark age" (Davidson, 1979). D. Burley further challenges the idea of ancestral Polynesia as a culturally unified region, drawn from linguistic research. He underscores the material culture differences between Tonga and Samoa, such as ceramic plainware, fishing hooks, and stone adzes, which contradict this idea. Additionally, he challenges the perspectives presented by P. Kirch and R. Green (2001) in their work Hawaiiki, Ancestral Polynesia: An Essay in Historical Anthropology and proposes a chronology for the plainware phase in Tonga, suggesting a timeframe between 700 BC and 400 BC, which contrasts with its occurrence in Samoa at a much later date (p. 305). In the debate surrounding Ancestral Polynesia, a perspective put forward by D. Addison and L. Matisoo-Smith (2010) in their work is notably absent from the book's content. Their hypothesis, based primarily on genetic evidence, suggests that an additional wave of migrants travelled from Island Southeast Asia through the Micronesian islands to Western Polynesia, primarily Samoa, and intermixed with the local population some 1500 years ago. While this hypothesis raises further questions and evidence upon which the theory is based was contested (i.e., Davidson, 2012), its potential verification could alter existing perspectives on Ancestral Polynesia and its culture. An argument of such significance deserves at least a brief mention in a book that extensively covers the prehistory of Western Polynesia.

In the final chapter titled "In the Rear-view Mirror", D. Burley delves into the periphery of the Tongan isles, emphasising the potential interconnectedness between the Tonga and the Lau group located 400–600km westward. Burley suggests the occurrence of regular voyages or even an integrated community based on archaeological and linguistic evidence (p. 323). Further in the chapter, Burley challenges the notion of a

northern migratory route during the Lapita era from Fiji to Samoa, a theory put forward by P. Kirch (1988), based on his research on Niuatoputapu. acknowledging that the lack of accessible data at the time of publication of Kirch's book is a significant factor in contesting this theory. The last part of the chapter summarises author's efforts spanning a period of over 30 years of research, referencing the ever-present connection to the past and its influence on contemporary Tongan society and culture.

The Birth of Polynesia: An Archaeological Journey Through the Kingdom of Tonga is the culmination of fieldwork of numerous research projects in the region of Western Polynesia. Readers are encouraged to approach it according to their expertise in the field. The reader with significant expertise in this domain and a keen eye on new research activities is unlikely to find new information in the book. Instead, he will find a meaningfully structured collection of texts with a chronologically coherent presentation of events that represents the current state of our knowledge, based on numerous research studies, many of which were conducted by the author. For novice academic readers exploring the archaeological past of the Pacific, especially focusing on ancestral Polynesia, this book serves as a highly inspirational resource. It offers insights into the methods used to address key issues, the development of theories, thorough analyses, and a wealth of information with bibliographical references. Non-academic readers will appreciate the engaging narrative that connects them to prehistoric cultures, providing insight into how the prehistoric past is reconstructed. Overall, this book is a valuable addition to the personal library of anyone interested in the subject. It can also be downloaded from the website of SFU Archaeology press from the following link: https://archpress.lib.sfu.ca/index.php/archpress/catalog/book/73

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REFERENCES

- Addison, D. J., & Matisoo-Smith, E. (2010). Rethinking Polynesians Origins: A West-Polynesia Triple-I Model. *Archaeology in Oceania*, 45(1), 1-12. https://doi.org/10.1002/j.1834-4453.2010.tb00072.x
- Ardrey, R. (1966). The territorial imperative: A personal inquiry into the animal origins of property and nations. Atheneum.
- Burley, D. V. (2007). Archaeological demography and population growth in the Kingdom of Tonga 950 BC to the historic era. In *Long Term Demographic History in the Pacific Islands* (pp. 177-202).
- Burley, D. V. (2023). The Birth of Polynesia: An Archaeological Journey Through the Kingdom of Tonga. SFU Archaeology Press. https://doi.org/10.21810/archpress.73
- Burley, D., Weisler, M. I., & Zhao, J. (2012). High Precision U/Th Dating of First Polynesian Settlement. *PLoS ONE*, 7(11), e48769. https://doi.org/10.1371/journal.pone.0048769
- Carson, M. T. (2018). Archaeology of Pacific Oceania: Inhabiting a sea of islands. Routledge.

- Davidson, J. M. (1979). Samoa and Tonga. In J. D. Jennings (Ed.), *The Prehistory of Polynesia* (pp. 82-109). Harvard University Press. https://doi.org/10.4159/harvard. 9780674181267.c5
- Davidson, J. M. (2012). Intrusion, integration and innovation on small and not-so-small islands with particular reference to Samoa. *Archaeology in Oceania*, 47(1), 1-13. https://doi.org/10.1002/j.1834-4453.2012.tb00110.x
- Di Piazza, A., & Peartree, E. (1999). The spread of the "Lapita people": A demographic simulation. *Journal of Artificial Societies and Social Simulation*, 2(3). https://Econ Papers.repec.org/RePEc:jas:jasssj:1999-4-1
- Gifford, E. W. (1929). Tongan society.
- Groube, L. M. (1971). Tonga, Lapita pottery, and Polynesian origins. *The Journal of the Polynesian Society*, 80(3), 278-316.
- Kirch, P. V. (1988). *Niuatoputapu: The prehistory of a Polynesian chiefdom*. Burke Museum.
- Kirch, P. V. (2017). On the road of the winds: An archaeological history of the Pacific islands before European contact (Revised and expanded edition). University of California Press.
- Kirch, P. V., & Green, R. C. (2001). *Hawaiki, ancestral Polynesia: An essay in historical anthropology*. Cambridge University Press.
- McKern, W. C. (1929). Archaeology of Tonga (Vol. 60). Museum.
- Valentin, F., Clark, G., Parton, P., & Reepmeyer, C. (2020). Mortuary practices of the first Polynesians: Formative ethnogenesis in the Kingdom of Tonga. *Antiquity*, 94(376), 999-1014.