- ARTICLE -

What Is That Bird? Pros and cons of the interpretation of Lapita pottery motifs

Arnaud Noury¹

ABSTRACT

While Lapita pottery has fascinated researchers for more than half a century the interpretation of specific designs remains a difficult task that has only been rarely undertaken due to the speculative and contentious nature of such analysis. Here I attempt a tentative interpretation of a design that may help in the analysis of Lapita motifs. The example used is a relatively complex bird-shaped pattern, unidentified so far in the Lapita period, which it is argued may represent a number of specific species.

Keywords: Lapita pottery, motifs, birds, ceramic marker

INTRODUCTION

Lapita decorated pottery is the main archaeological marker of the Lapita Cultural Complex which developed in the South West Pacific between about 3,500 and 2,800 years BP (Denham et al. 2012). Lapita pottery has been the focus of studies relating to vessel form, decoration and chemical composition for over half a century and has been key in facilitating a better understanding of human settlement in this part of the world. The study of the geometric and easily recognizable designs has been undertaken in many forms since the first archaeological finds (e.g., Chiu 2003, 2005, 2007; Mead et al. 1975, Anson 1983; Green 1990; Noury 2005, 2011, Cochrane and Lipo 2010, Cochrane 2013). However, the emic understanding of their meaning has so far proved to be less amenable to interpretation. The fact is that many archaeologists have been frustrated in attempts at understanding the organization of the decorations, their spatial distribution within a site, or even their regional distribution, as the nature - both similar but also polymorphic - of the designs (along with the almost systematic absence of complete pottery) has made emic interpretation especially difficult, if not insurmountable. The problem is in itself quite simple: it is very difficult to determine what was a motif, an independent significant component, in the minds of Lapita people. Without knowing the specific uses of the decorated pottery, it is almost impossible to determine what the designs meant, and consequently, what was a specific motif and what was not. Thus, any analysis of Lapita decorations that attempts

Email: noury.arnaud@gmail.com

Submitted 30/08/2016, accepted 13/11/2016

to uncover emic meaning is necessarily biased as determination of the motifs appears arbitrary.

Since the discovery of the Teouma cemetery site in Vanuatu (Bedford et al. 2004, 2006, 2009), some earlier predictions have been confirmed (Spriggs 1990), namely that decorated pottery was involved at least partially in rituals and in the symbolic world of the Lapita peoples. At the same time, studies by Chiu and Noury have helped to develop recognition and definition of Lapita motifs (Chiu 2003, 2005, 2007, Noury 2005, 2011, 2013). Determining the motifs may be done by making assumptions about the meaning of the decorations in general and of particular motifs in the context of a symbolic ceremonial situations. This is undertaken with the reservation that these assumptions are reversible and reviewable. If motif determinations are perhaps not definitive, they can still be systematically classified, in terms of shape, form and transformation (in time and space) and ideally, this may lead to the identification of other motifs.

I propose in this article to define some Lapita motifs based on the a priori assumption, or interpretive hypothesis, that the motifs are meant to be birds. Obviously the danger of ethnocentric bias is present. Indeed who of us can claim to know how a Lapita potter imagined a bird or a range of bird species? However, while discussing the advantages and disadvantages of this a priori assumption, we will see that many Lapita motifs are not necessarily immediately clear and obviously visible to researchers, but that when one combines particular motifs with an interpretive hypothesis, the way of seeing decorated pottery and motifs can radically change. Conversely, the denial of a priori assumptions may lead us to overlook some motifs. My conclusion may not be acceptable to some, but the work has other benefits that do not make it less scientifically tenable. I will explain with the examples below.

¹ Independent researcher

PROBLEMS AND METHOD

Thus far the definition of Lapita motifs has been controversial. As the composition of the designs are generally (but not always) made of horizontal friezes of various sizes, each drawing repeated in these friezes was identified as a motif. The main proponents of this method of analysis (Mead et al. 1975, Anson 1983) have thus managed to isolate hundreds of motifs. However, it soon became clear that differences in motif application, such as a stamping mistake or variation in the number of lines used to produce a motif, sometimes made it difficult to generate agreed definitions for different motifs. This lack of consensus lead to motif catalogs in which the number of entries could vary considerably. However, some motifs have been subject to a more detailed typology. These is the major category known as face designs which de facto provide an interpretation of the meaning, in that a face may represent an ancestor or a god. Spriggs (1990, 1993, 2002) proposed a chronological transformation in these motifs, from those labeled double faces to the New Caledonian long-faces with elongated noses. It is surprising that Spriggs' interpretation seems generally accepted, because his interpretation is based on somewhat questionable assumptions. The acceptance of Spriggs' interpretation is probably due to the complexity of the described motifs, with the assumption (perhaps unconscious) that the more complex, unusual, and repeated a motif, the greater the chance of it being an emically recognized. On the other hand, there is certain element of ethnocentrism in identifying the signifier as a face, and then proposing the signified as an ancestor or a god. It is well-known that in the vast majority of postcontact Pacific societies, most representations of human faces are not socially neutral. This suggests that it could be the same for Lapita ancestors. There is also the danger of pareidolia, where one perceives a familiar pattern of something where none actually exists. But one can also suppose that Lapita people may have had a tendency to represent their way of drawing things only with simple geometric or highly stylized figures. It may be noted that Spriggs' interpretation pre-supposes that some Lapita motifs had evolved over time or space or both, which had been proposed by Green (1978, 1979).

The problem may seem insolvable, and in a way it is. We will never know what really was the ideal and aesthetic world of Lapita potters. But the proposals of Spriggs (1990, 1993, 2002) and also Kirch (1997) allowed the development of research, especially on faces. For example, Sand, Chiu and others have often discussed Lapita faces (e.g., Chiu 2005, 2007; Sand 2015, Schechter & Terrell 2007, 2009). For motifs other than faces, Chiu (2003, 2005) and Noury (2005, 2011) independently proposed interpretations of symbols as group markers. These go even further in the interpretation and definition of motifs, but have not been rejected outright by other specialists. I propose to show that by taking a rather complex design on pottery, and then assigning to it an interpretation (an interpretation of what it can represent, not what it could symbolize), I have identified a quite unexpected, new motif. Once this motif was isolated, I took all of the graphic documentation on Lapita motifs at my disposal (Noury 2011 for the many references) to see if this motif is found elsewhere, and in what form(s) or variants. I proceeded in a manner similar to Spriggs (1990, 1993) who compared motifs that were slightly different, but still defined as faces. After this work of identification and comparison I assess the relevance of the defined motif by comparing the data to some ceramic and non-ceramic ideas or items.

ANALYSIS

Step 1: Defining a new complex motif

The reference design for the analysis is from a flat dish discovered at Teouma (Vanuatu) which has obvious faceshaped decorations (Figure 1). It has eyes, a long nose, hair or a cap. It is quite like the face motifs described by Spriggs, and has been classified as such in publications (Chiu 2015). It also has two medallions or 'ears' on each side into which are inserted geometric motifs. The horizontal repetition of these faces with medallions join the medallions to each other, forming a rather complex circular design. The decorative content of these medallions looks like an eye, but there are many other known variants (Figure 2). While the big face is rather obvious, we can possibly identify a second nested face formed by the juxtaposition of medallions (Figure 3).

But is that all? Are there multiple meanings to the decoration (polysemy)? One can notice for example that the second possible face may be linked also to designs I named composite-oblique type III (CO III). 'This suggests that the CO III motifs can refer to either anthropomorphic faces, bird faces, or both. In this case, beak shape (sharp for the type III, round for type II, for example) could be a determining factor when making decorations.' (Noury 2013: 247) The juxtaposition of two medallions draws a figure that is related to CO III decorations that could invoke a bird's beak viewed from the front.

By carefully observing the medallion another motif can be detected with a form that could look like a bird, at least in our ethnocentric view: a head with a pointed nose and one eye (somewhat anthropomorphic in form), a crest or plumage on top of the skull, the whole ball-shaped, and a curved body (Figure 4). The drawing seems is sufficiently specific and complex to be precisely determined and isolated as a bird motif. By labelling this a *bird* motif, we can search for and find other matching motifs.



Figure 1: Decorated potsherds discovered at Teouma (Vanuatu). Photograph by the author at the exhibition "Lapita" at the Musée du Quai Branly (Paris, 2010). The design was published and commented on by Bedford *et al.* 2009: Fig. 10.4 b.

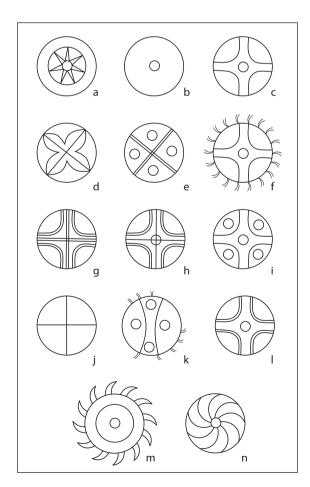


Figure 2: Known variants of medallion fillings. After Noury 2011, 2013: 122 Fig.129

Step 2: Looking for possible recurrences of this motif.

Mussau (ECA)

To test our hypothesis, a single example is not sufficient. The Lapita designs are so geometrically complex that isolating a single design portion that suits our interpretation is inadequate. We need to look for all possible occurrences of this motif which have not been identified to date. If no other examples can be found, we must abandon the hypothesis, at least temporarily. But eventually, and that is the whole point, the bird interpretation may help us to identify potential candidates. One potential candidate, the most interesting perhaps, is a design on a pedestal stand discovered by Kirch in Mussau (ECA) in the 1980s and reported by Sand (2015:142 Fig. 16). I reproduce it here (Figure 5) with isolated key-details of the overall decoration (A, B, C and D).

[Figure 5]

Once again the main decoration presents an elongated nose in its center and a very round medallion. It is reminiscent of face designs with classical medallions, even though it's eyes are missing. But one can also identify a form (Figure 5: B) familiar to us: beak, head, eyes, rounded body pointing upward. It is also in exactly the same position as is the proposed bird of Teouma: inside the medallion, the back of the motif being completed or defined by an elongated nose. Some details are different, including the presence of a 'pupil' in the eye, and a unique motif (A) above the head. The 'feathers' on the ridge were not forgot-

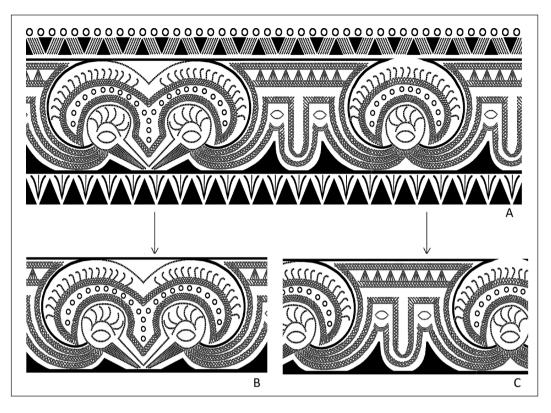


Figure 3. Graphical representation of Teouma design where we can see a medallion face (C) or possibly a second face formed by two adjoining medallions (B). After Bedford *et al.* 2009 fig.10.4 b-ii

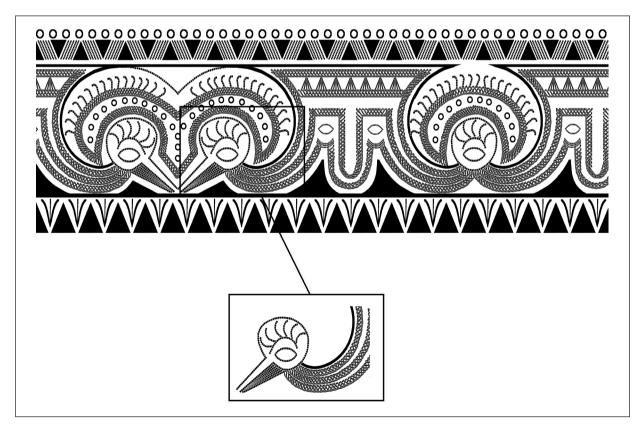


Figure 4. Hypothesis of a bird motif on a sherd from Teouma.

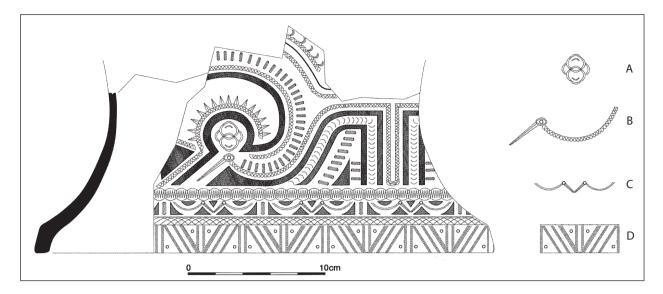


Figure 5. Design from the ECA site (Mussau) discovered by Kirch (1987) and published in Sand 2015: 142 Fig. 16. The units A, B, C, D are the main motifs isolated from their context.

ten, but they are less exuberant than those of Teouma. It seems therefore that this is a variant of the same motif. Indeed this seems to be confirmed with the lower frieze (*C*) showing the pattern of birds, beak to beak and separated by a vertical line with rounded ends that seems to recall the motif of the long nose. There are other examples of friezes under large decorations where the frieze motifs are derived from the large decoration which derive their main motifs by simplifying them is not a novelty (see Noury 2011, 2013). This seems to confirm that the bird motif was a real motif for a Lapita potter who would reproduce it, in simplified form, in small frieze.

Kamgot (ERA)

A third example of this pattern is found on a pedestal stand (as in Mussau) at the site of Kamgot (Sand 2015:144 Fig.19) There is no doubt that this is a bird motif (Figure 6: B, C): eye, nose and rounded body pointing upward, and vertical separation pattern of the tail. The fundamental difference in this example is that it is not part of a complete face-medallions motif. The main design is built only of bird motifs facing beak to beak. Although it is less clear here, we may understand the vertical separation as tail only because we have inferred it from previous examples. Above the bird motif, there is a circular pattern which echoes quite clearly the rounded shape of the head of the bird from the Teouma example, and the circular motif (Figure 5: A) of the Mussau example.

A bird motif seems to be well reflected in each of these examples with the same constituent elements, each of the same design. Obviously they are not strictly identical and there are differences in certain details. These differences may originate from potter choice, or different Lapita groups, or evolution of the motif over time (Noury 2005, 2011, 2013). That said, there are very few other examples of

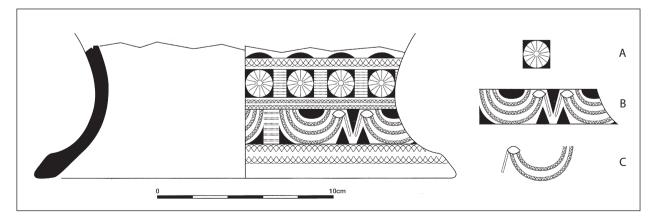


Figure 6. Design from the ERA site (Kamgot, Babase island). After Sand 2015: 144 Fig.19.

this motif (Figure 7). This is not surprising because other Lapita motifs are often found on one site or only a few sites. Amongst the examples identified, only one, from Naigani island (Fiji) (Figure 7: A) is clearly similar to the motif of Figure 5: C from Kamgot. The other two are sufficiently fragmented or too stylized to make a direct and formal link.

RESULTS

- 1. This series of examples highlights the existence of a Lapita motif which has the same constituent elements. These can vary (number of lines drawn, some details more or less emphasized), but overall, the motif seems to have been conceptualized and specifically applied by Lapita potters, with at least four variants (Figure 8). It is unknown if there was a simplification, or an increase in complexity across the variants over time and space, although the examples from Mussau appear the most simple.
- 2. This identification does not necessarily come at the expense of other interpretations. There could have been multiple meanings. The identification as (human) face motifs as in Mussau and Teouma is always possible. However, it seems much less likely in the case of the sample from Nenumbo (Figure 7: C).
- 3. The amount of copies recognized is minimal. This motif may have evolved in a form that is not well understood, or it may have been restricted to some Lapita potters only. It also seems very rare in Late Lapita and the Eastern Lapita Province.
- 4. The bird motif could also be reflected (i.e., beak to beak). The graphic result can be an impressive design, as is the case in Teouma, in which one can recognize a second face.

- 5. The design formed by the arrangement of the reflected motifs suggests the possibility of similar patterns on other incomplete sherds (Figure 9). The previously identified CO III design can now also be interpreted to represent bird beaks, but seen in front view (see Noury 2013: 247 and 286).
- 6. The examples from Mussau and Kamgot indicate that motif components that are often considered elongated noses of faces could be the back or tail of bird motifs. Again, there may be multiple meanings or rather an integration of two quite ingenious, graceful and complex motifs.
- 7. The head of the bird motif is circular (as at Teouma) or it is topped by a circular pattern (as at Mussau, Kamgot) that is reminiscent of the markers which probably designated different Lapita groups (see Noury 2005, 2011, 2013). This agrees with the proposition that the medallions of face motifs are group markers.
- 8. Finally, above the eye or bird head there may be decorations (as at Teouma and Mussau).

These findings derive from a motif that might represent a bird. Indeed without proposing a bird motif, we would not have seen it. We can now ask the question: is it really a bird? What other information is there?

DISCUSSION

The association of birds and Lapita decorated pottery is not a completely new story. Early in the history of Lapita archeology, Green found a modeled ceramic figure at the RF-6 site (Santa Cruz) which was identified as the head of a bird (Donovan 1973:138. See also Sheppard 2010:114 fig.6). At the site of Teouma a well-preserved vessel has modeled birds on its rim. The heads are turned inward of

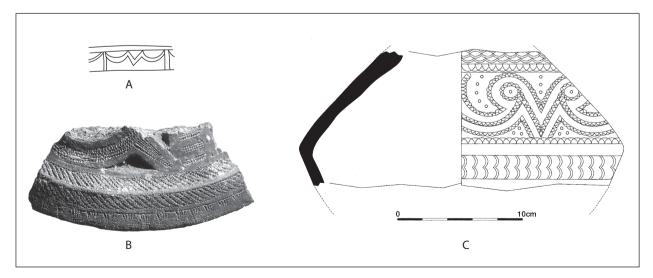


Figure 7. Other possible examples of the bird motif. A: Naigani (Fiji) after Best 2002: 44 Fig. 18, B: Makue (Vanuatu) after Bedford 2015: Fig. 3, C: Nenumbo / RF2 (Santa Cruz) after Sand 2015: 155, Fig. 32.

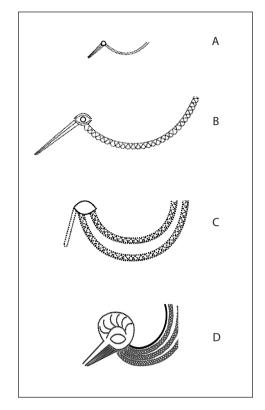


Figure 8: Four variants of the bird motif recorded to date. A-B: ECA (Mussau), C: ERA (Kamgot), D: Teouma (Vanuatu).

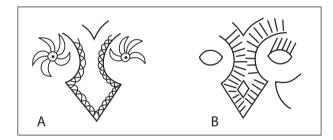


Figure 9: Design that may be derived from a representation of two bird motifs, beak to beak. This is similar to very frequent Lapita motifs Composite-Oblique type III (CO III, see Noury 2011). A and B are from FEA (Boduna).

the pot (Bedford and Spriggs 2007). The authors of this discovery have reported ethnographic examples related to birds. Given these examples, it would not be surprising to find dentate-stamped motifs of birds.

Can we suggest that the motif represents a bird? I think so, because the motifs identified have distinctive characteristics: similar overall shape, beak, likely crest or plumage on the top of the skull, and possibly a long neck. In any event, the motif does seem intentionally produced: it is too complex to be due to chance. At least it is more complex than some simpler motifs that Donovan (1973), Anson (1983), Chiu (2003, 2005) and Noury (2005, 2011) were able to identify and are generally accepted.

On the other hand if the will of Lapita potters was to represent a bird, this does not necessarily reflect the meaning of the motif. A cross may designate Catholicism, or a *'priorité à droite'* when driving a car in France, and so on. The meaning is not necessarily the signified. And a signifier can induce several signified. For example, a Lapita face was perhaps perceived as both an ancestor, a precise individual, or a turtle face (Terrell & Schechter 2007). Identification and interpretation of one motif is not an end in itself. But it can help in understanding the organization of pottery decorations and assist in the understanding of the intangible world of Lapita.

The geographical distribution of examples currently identified suggests a relatively limited spread across space. At the very least, given the other designs on the same pottery, including group markers, I strongly suspect that this is a representation (a motif) limited to a particular Lapita group, which mainly circulated only in Melanesia, or it may also simply be temporal associated with the earliest communities.

Gosselain (2010) suggested that pottery decorations were often seen as ethnic delimiters (contra David et al. 1988) and called this the 'democratization of the sacred'. Clearly, the symbolic dimension also has its limitations and it now seems that the study of ceramic decorations must be made case by case, and with caution. Gosselain specifies "meaning' does not pre-exist: it is built in situational practice, and therefore constantly changes from an individual, a place and a time to another' (Gosselain: 2010: 10). As the decoration of pottery varies both from one group to another, as well as over time, it is difficult to make an interpretation that covers all groups and times. The difficulty is also exemplified by contemporary populations. Gosselain recalls the example of Luo communities in Kenya where 'the micro-ornamental styles correspond to domestic units dispersed in space and they are perpetuated, paradoxically, by women from other units and subjected to a process of post-marital resocialization. The evolution of the individual against these micro-styles (maintenance, rejection, loan modification), however, depends on the life trajectory of potters and emotional ties forged after their marriage' (Gosselain 2010:12).

That the meaning of the bird motif may change in different contexts is suggested by avifauna from Teouma where there may have been an imported species of bird found in funerary contexts. Worthy *et al.* (2015:236) state: 'All Teouma specimens come from the Lapita midden area or Lapita cemetery layers. As for the hornbill bones, the rarity of these *Eclectus* bones could be explained by their being brought as prized captive birds from, for example, the Solomons, rather than that they represent a resident *Eclectus* population in Vanuatu...'. The case of the hornbill is very interesting because it is a species that is still imbued with an important symbolic significance in some areas of New Guinea (Swadling 1996). In particular one can think of mallangan ceremonies where ritual bird mouthpieces

are carried by leaders also holding shell rattles and hornbill pieces (Gunn & Peltier 2006: 240) But other species of birds are also possible, especially seagulls (with many representations of in the Solomon Islands), and of course the frigate bird. Each species does not exclude the other, for the bird motif could very well represent any kind of bird depending on details of the motif or context. In all cases, it is likely that one or more species of birds have been represented in the Lapita decorations, not only by modeled clay.

CONCLUSION

The joint study of Lapita decorations and some assumption of their meaning can provide a working background for defining Lapita motifs hitherto unrevealed. This applies especially to fairly complex motifs, even if they comprise several slight variants. Moreover, the variants may allow us to better understand the organization of decorations, such as items that could vary and items that are always similar.

I suggest that the motifs identified here could be interpreted as a bird, without regard to a symbolic meaning, or a particular species. This would correspond quite well to other data on the relationships between the Lapita people and birds, but also to other bird elements, primarily modeling found on some pottery.

If this interpretation is confirmed, it would be interesting to compare the geographical distribution of bird motifs to the species found in Lapita archaeological sites. Though again, no definitive link can be truly established.

References

- Anson, D. 1983. *Lapita Pottery of the Bismarck Archipelago and its Affinities*. Ph.D. thesis, University of Sydney, Sydney.
- Bedford, S. 2015. Going beyond the known world 3000 years ago: Lapita exploration and colonization of Remote Oceania. In Sand, C., Chiu, S., and Hogg, N., (eds) *The Lapita Cultural Complex in time and space: expansion routes, chronologies and typologies*. Noumea: Archeologia Pasifika 4.
- Bedford, S., Hoffman A., Kaltal M., Regenvanu R., Shing R. 2004. Dentate-stamped Lapita reappears on Efate, Central Vanuatu: a four decade-long drought is broken. *Archaeology in New Zealand* 47 (1):39–49.
- Bedford S., Spriggs, M., Regenvanu, R. 2006a. The Teouma Lapita site and the early human settlement of the Pacific Islands. *Antiquity*, 80:812–828.
- Bedford, S., Spriggs, M., Buckley, H. Valentin, F., Regenvanu, R. 2009. The Teouma Lapita Site, South Efate, Vanuatu : A Summary of Three Field Seasons (2004–2006). In Sheppard, P.J., Thomas, T. & Summerhayes, G.R. (eds) *LAPITA*: Ancestors and Descendants. NZAA Monograph 28. New Zealand Archaeological Association: Auckland. pp.215–234.
- Bedford S., Spriggs M. 2007. Birds on the rim: a unique Lapita carinated vessel in its wider context. *Archaeology in Oceania*, 42:12–21.

- Best, S. 2002. *Lapita: A View from the East*. Auckland: New Zealand Archaeological Association Monograph No. 24
- Chiu, S. 2003. The Socio-economic Functions of Lapita Ceramic Production and Exchange: A case study from WKO013A, Koné, New Caledonia. Unpublished PhD, University of California, Berkeley.
- Chiu, S. 2005. 'Meanings of a Lapita Face: Materialized Social Memory in Ancient House Societies'. *Taiwan Journal of Anthropology* 3:1–47.
- Chiu, S. 2007. Detailed analysis of Lapita Face Motifs: Case Studies from Reef/Santa Cruz Lapita Sites and New Caledonia Lapita Site 13A. In *Oceanic Explorations: Lapita and Western Pacific Settlement*. Terra Australis 26:241–264
- Cochrane, E.E. and Lipo, C.P. 2010. 'Phylogenetic analyses of Lapita decoration do not support branching evolution or regional population structure during colonization of Remote Oceania.' *Philosophical Transactions of the Royal Society B: Biological Sciences* 365(1559):3889–3902.
- Cochrane, E.E. 2013. Quantitative Phylogenetic Analysis of Lapita Decoration in Near and Remote Oceania. In G.R. Summerhayes and H. Buckley *Pacific Archaeology: Documenting the Past 50,000 Years*. Dunedin, University of Otago: 17–42.
- David, N., J. Sterner, et K. Gavua. 1988. Why pots are decorated. *Current Anthropology* 29: 365–389.
- Denham, T., Bronik, C., Specht, J. 2012. 'Dating the appearance of Lapita pottery in the Bismarck Archipelago and its dispersal to Remote Oceania'. *Archaeology in Oceania*, 47: 39–46,
- Donovan, L.J. 1973. A study of the Decorative System of the Lapita Potters of the Reefs and Santa Cruz Islands. Unpublished MA Thesis, University of Auckland.
- Gosselain, Olivier P. 2011. Pourquoi le décorer? Quelques observations sur le décor céramique en Afrique >, *Azania: Archaeological Research in Africa*, 46:1, 3–19
- Green, R.C. 1978. New Sites with Lapita Pottery and Their Implications for Understanding the Settlement of the Western Pacific. Auckland: Working Papers in Anthropology, Archaeology, Linguistics, and Maori Studies, University of Auckland.
- Green, R.C. 1979. 'Lapita', In J.D. Jennings (ed.) *The Prehistory* of *Polynesia*. Cambridge, Mass.: Harvard University Press, 27–60.
- Green, R.C. 1990. Lapita design analysis. The Mead system and its use: a potted history. In M. Spriggs (ed.) *Lapita design, form* and composition: Proceedings of the Lapita design workshop, Canberra, December 1988, pp.33–52. Occasional Papers in Prehistory No. 19. Canberra: Department of Prehistory, Research School of Pacific Studies, The Australian National University.
- Green, R.C. 1991. Lapita design analysis: the Mead system and its use-a potted history. Unpublished report, Auckland.
- Gunn, M. and Peltier, P. (ed.) 2006. New Ireland: art of the South Pacific. St. Louis Art Museum.
- Hawkins, S. 2015. Human behavioural ecology, anthropogenic impact and subsistence change at the Teouma Lapita site, central Vanuatu, 3000–2500 BP. Unpublished PhD, The Australian National University.
- Kirch, P.V. 1987. 'Lapita and Oceanic Cultural Origins: Excava-

tions in the Mussau Islands, Bismarck Archipelago, 1985, *Journal of Field Archaeology*, 14: 2, pp.163–180.

- Mead, S.M., Birks, L., Birks, H., Shaw, E. 1975. *The Lapita Pottery Style of Fiji and Its Associations*. Wellington: Polynesian Society Memoir 38.
- Noury, A. 2005. Le reflet de l'âme Lapita. Essai d'interprétation des décors des poteries Lapita en Mélanésie et en Polynésie Occidentale entre 3300 et 2700 avant le présent. Versailles : Noury éditions.
- Noury, A. 2011. *De la poterie Lapita à la Parole des premières sociétés d'Océanie : les décors et la société Lapita*. Thèse de Doctorat, Université de La Rochelle, La Rochelle.
- Noury, A. 2013. Le Lapita. A l'origine des sociétés d'Océanie. Paris: lulu.
- Sand, C. 2015. Comparing Lapita pottery forms in the Southwestern Pacific: a case-study. In Sand, C., Chiu, S., and Hogg, N., (eds) *The Lapita Cultural Complex in time and space: expansion routes, chronologies and typologies*. Noumea: Archeologia Pasifika 4. pp.125–71.
- Sheppard, P. J., 2010. Dans le Grand Océan : l'arrivée des Lapita en Océanie lointaine. In Sand et Bedford (dir.) : *Lapita, ancêtres Océaniens*. Editions Somogy/Musée du quai Branly, Paris.
- Spriggs, M. 1990. The Changing Face of Lapita: Transformation of a Design, in M. Spriggs (ed.) Lapita Design, Form and Composition: Proceedings of the Lapita Design Workshop, Canberra, December 1988, pp.83–122. Occasional Papers in Prehistory No.19, Department of Prehistory, RSPacS, ANU.
- Spriggs, M. 1993. How much of the Lapita design system represents the human face? In P.J.C. Dark and R.G. Rose (eds), *Artistic Heritage in a Changing Pacific*, pp.7–14. Honolulu: University of Hawaii Press.
- Spriggs, M. 2002. They've Grown Accustomed to Your Face. In S. Bedford, C. Sand, and D. Burley (eds), *Fifty Years in the Field. Essays in Honour and Celebration of Richard Shutler Jr's Archaeological Career*, pp.51–57. Auckland: New Zealand Archaeological Association Monograph 25.
- Swadling, P. 1996. Plumes from paradise: trade cycles in outer Southeast Asia and their impact on New Guinea and nearby islands until 1920. Boroko: Papua New Guinea National Museum in association with Robert Brown & Associates (Qld) Pty Ltd.
- Terrell, J., Schechter, E. 2007. 'Deciphering the Lapita Code: the Aitape Ceramic Sequence and Late Survival of the "Lapita Face". *Cambridge Archaeological Journal* 17 (1): 59–85.
- Terrell, J., Schechter, E. 2009. The meaning and importance of the Lapita face motif. *Archaeology in Oceania* 44(2):45–55.
- Worthy T.H., Hawkins S., Bedford S., Spriggs M. 2015. Avifauna from the Teouma Lapita Site, Efate Island, Vanuatu, Including a New Genus and Species of Megapode, *Pacific Science*, vol. 69, no. 2: 205–254 doi:http://dx.doi.org/10.2984/69.2.6