

Squib

The Language of Lapita: Vanuatu and an Early Papuan Presence in the Pacific

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The languages of Vanuatu are uniformly Austronesian, but have long been described as “aberrant.” Blust (2005) points out a number of morphosyntactic features of the Vanuatu languages that might provide evidence for a Papuan element in their history. We add to that argument, presenting phonological evidence that links the languages of Vanuatu and New Caledonia with the non-Austronesian languages of New Guinea. Accepting that the earliest archaeological sites in Vanuatu are Lapita sites, we suggest that this implicates non-Austronesian speaking Melanesians in the earliest occupancy of the islands, calling into question assumptions that the Lapita expansion in the Pacific can be unproblematically associated with the expansion of Austronesian languages of the Oceanic subgroup.

1. THE QUESTION OF VANUATU.¹ Unlike the Solomons, where four non-Austronesian languages can still be found, or the offshore islands of Papua New Guinea, where a couple of dozen non-Austronesian languages survive, the linguistic landscape in Vanuatu is uniformly Austronesian. Further, and in contrast to the Solomons and regions to the west, there was no human settlement in Vanuatu prior to the earliest Lapita horizons (Bedford 2006), an event that has also been associated with the spread of Austronesian languages into the Pacific (e.g., Pawley and Green 1973; Pawley and Ross 1993; Ross, Pawley, and Osmond 1998; Summerhayes 2001; Lynch, Ross, and Crowley 2002; Bedford, Sand, and Connaughton 2007; and many more). On the other hand, a number of traits in the Austronesian languages of Vanuatu are not what would be expected of an Oceanic language.

Ray (1926), Capell (1954), Lynch (1981), and Wurm (1982) raised the possibility of there having been a Papuan presence underlying some of the language structures found in Vanuatu, noticing that many of the grammatical features of the Austronesian languages spoken there did not “fit” with the picture presented by other Austronesian languages of the Pacific. For instance, Capell (1950:99) sums up the situation as follows: “All the Mel-

1. This paper has benefited greatly from discussions with our colleagues. In particular, thanks are due to Robert Blust, who not only started the authors thinking about these questions but also provided important feedback on an earlier version of this paper; to Andy Pawley for an extensive discussion on the tying together of linguistics and archaeology in the Pacific; to Malcolm Ross for sharing opinions on developments in Oceanic; to Frank Lichtenberk for commentary that made us pull this article above the level of a short report; and to John Lynch for picking up on several infelicities we committed, helping us over others, as well as sharing his knowledge of the languages of Vanuatu and providing many leads. The viewpoint that we espouse here does not necessarily represent the views of these people.

anesian [referring to Vanuatu—MD and TD] languages are extremely aberrant,” and later notes that the languages of southern Vanuatu were “a group of Melanesian so completely apart that at one time the late S. H. Ray suggested a special name for them” (1950:105). Grace (1971:345) summarizes this position (without subscribing to it) as follows: (1) “none of the Melanesians originally spoke Austronesian languages,” and (2) “the present Melanesian languages are believed to represent pidgin languages resulting from contact ... involving two components: an Austronesian component ... and an indigenous component due to a particular Papuan language that has since become extinct.” Tryon (1982:245) notes that “the influence of existing Papuan populations must have been a factor,” and that “while it is not necessary to go as far as a wholesale acceptance of the “pidginisation” theory, it appears more and more likely that much of the diversity in present day Melanesian languages can be attributed to Austronesian contact with Papuan populations.” Lynch (1981:111) noted that “differences in phonology, morphology, and syntax, may be attributable, at least in part, to Papuan contact,” and later (1981:119–20) “it is not impossible, for example, that at least some of the aberrancies in the non-Polynesian languages of Southern Vanuatu, New Caledonia and the Loyalty Islands could be due to contact with pre-existing, and now extinct, Papuan languages.” Tyron (1982:245) alludes to “tentative” links between “the presumed ‘non-Austronesian’ vocabulary of the Austronesian languages in Melanesia and the East Papuan Phylum,” but does not provide details. Conversely, Pawley (2006) considers the hypothesis of a local Melanesian demographic component in the Lapita settlement to be “not ... at all far-fetched,” but argues against the need to assume a Papuan linguistic component.

More concretely, Blust (2005) cites the presence of nondecimal counting systems, cognitive artifacts that would not be unusual in the vicinity of the north coast of New Guinea, but which are unexplained in southern Oceania, where we find “reflexes of PMP [Proto–Malayo–Polynesian] forms for at least 2–10 in languages reaching from Mussau through the southeast Solomons to Micronesia and Polynesia” (Blust 2005:547). It is true that there are decimal systems in Vanuatu, and that we must reconstruct a decimal system for one of the Austronesian protolanguages of the area, Proto–North–Central Vanuatu (e.g., Clark forthcoming, Lynch n.d.), but not for the southern languages (Lynch 2001). The appearance of the base-10 systems closer to New Guinea reflects their greater proximity to the areas from which Austronesian-speaking peoples dispersed into Vanuatu.

Preempting the conclusions, we suggest that if the nondecimal systems were original to the area, their preservation on the southern fringe is, given principles of dialect geography (e.g., Anttila 1972), exactly what would be expected of a conservative feature. Nonetheless, there is still no explanation for the presence of this northern New Guinea typological feature this far out in the Pacific. As Blust notes, the presence of a nondecimal counting system is very rare in Austronesian languages, other than those in areas showing Papuan contact. Blust (2005:552) concludes that “the typological evidence from language ... suggests that Papuan languages were much more widely distributed in the Pacific during the early phases of AN [Austronesian] contact than they are today.” While this idea has not yet been popularly accepted, we believe that it deserves further consideration, in particular because of the implications it might have for Oceanic prehistory.

2. SUPPORT FOR A NON-AUSTRONESIAN ELEMENT. A number of additional linguistic affinities between Vanuatu and New Guinea, particularly northern and southeastern New Guinea, can be unearthed in the sound systems of the languages of these areas. The existence of contrastive p^w , $(m)b^w$, and m^w phonemes have long been recognized as one of the diagnostics that distinguish the Oceanic subgroup of Austronesian from its predecessors (see, e.g., Lynch 2002, Lynch, Ross, and Crowley 2002), yet their distribution in the Oceanic languages is striking for two reasons. First, these phonemes are only found erratically in the Polynesian languages, where at best some occurrences of $*m^w$ are reflected as η ; the only occurrences of m^w in Polynesian languages are in the Outliers, a group of languages that are in contact with non-Polynesian languages that have the phoneme m^w . Second, the appearance of these phonemes in the Oceanic languages coincides with the passage of the Austronesians over the north coast of New Guinea, where we find the largest concentration of Papuan languages with rounded labial phonemes (maps 1–3). Note the absence of these phonemes from the languages of New Britain and New Ireland in Papua New Guinea, and from most of the Solomons, indicating that these phonemes are less “stable,” a fact also confirmed by the ongoing loss of m^w in numerous languages of Vanuatu (John Lynch, pers. comm). It is true that many Austronesian languages of New Britain and New Ireland reflect Proto-Oceanic $*p^w$ and $*p$ differently, but the fact remains that they do *not* display rounded labial phonemes such as p^w , while the languages of Vanuatu, New Caledonia, and the southeast Solomons do. We suggest that the labiovelars found greater support in Vanuatu because of a stronger non-Austronesian substrate. Ross (1994) describes a similar process of a non-Austronesian substrate being reflected in the phonologies of modern Austronesian languages in New Ireland.

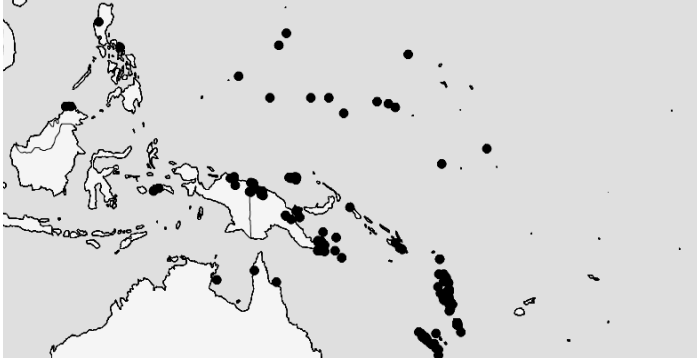
Note also the distribution of rounded labial fricatives; these have *not* been reconstructed for Proto-Oceanic, but are found in the same area in north-central New Guinea and then again in Vanuatu (map 3), where they reflect earlier stops (Clark forthcoming). (Note that, as Proto-Oceanic $*p^w$ is reflected as Proto-North-Central Vanuatu $*v^w$, occurrences of p^w in the modern Vanuatu languages are not continuations of Proto-Oceanic $*p^w$.) Labial fricatives show a strong correlation ($r = 0.42$) with the presence of rounded labial stops across the Austronesian and Papuan region. If the presence of this kind of phoneme in Vanuatu is not inherited from Proto-Oceanic, then the distribution in New Guinea and Vanuatu is unexplained as long as our reference is confined to a history of Austronesian language dispersal. We also note the presence of rounded oral and nasal stop phonemes in the Micronesian languages, but not (excepting Woleaian and Ulithian) the rounded labial fricatives or velar stops, and no instances of the “complicated labials” that are shown in map 4.³ The rounded oral and nasal stop phonemes were inherited from Proto-Oceanic, whereas the occurrences of p^w in Vanuatu do not represent such reten-

2. Blust (2005:552) also cites the presence of serial verb constructions in Vanuatu languages as a Papuan trait. While it is true that some serial verb constructions must be reconstructed to Proto-Oceanic (Lynch, Ross, and Crowley 2002), thus apparently weakening the claim that they represent a glaring Papuan substrate, this counter-argument merely begs the question of why Austronesian languages started to regularly acquire and employ large numbers of serial verb constructions just, and only, when they came into contact with other language families in and near New Guinea that robustly and routinely employ them.

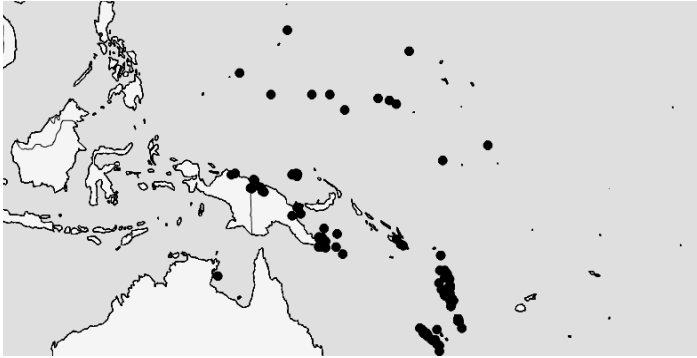
3. In map 4, labial-velars are marked with circles, linguolabials (confined to Vanuatu) with diamonds, and bilabial trills (north-central New Guinea, Manus, and Vanuatu) with squares.

tions. Because the Micronesians represent a fringe group with little contact south, they are in exactly the area where we would expect to find conservative retentions of otherwise unstable Proto-Oceanic segments.

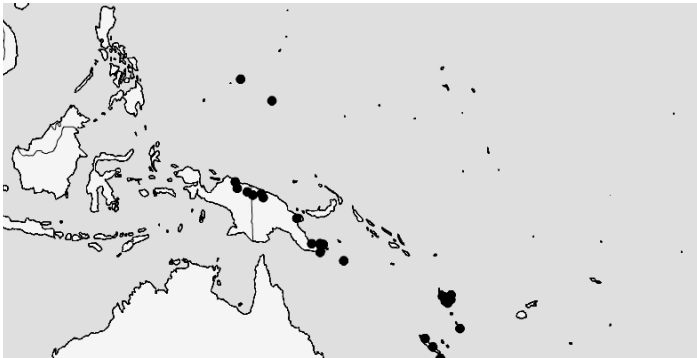
MAP 1. LANGUAGES WITH A ROUNDED BILABIAL STOP (p^w , b^w , OR mb^w)



MAP 2. LANGUAGES WITH A ROUNDED BILABIAL NASAL (m^w)

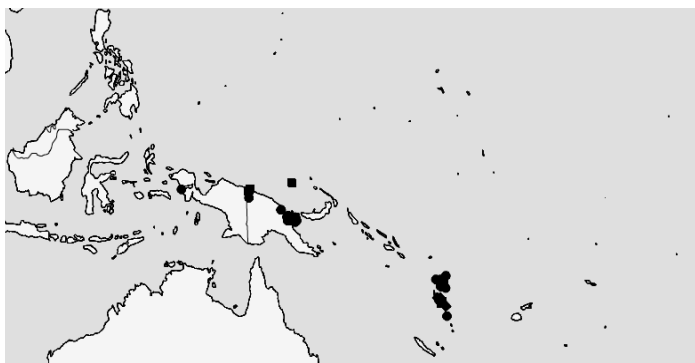


MAP 3. LANGUAGES WITH A ROUNDED BILABIAL FRICATIVE (f^w , v^w , etc.)

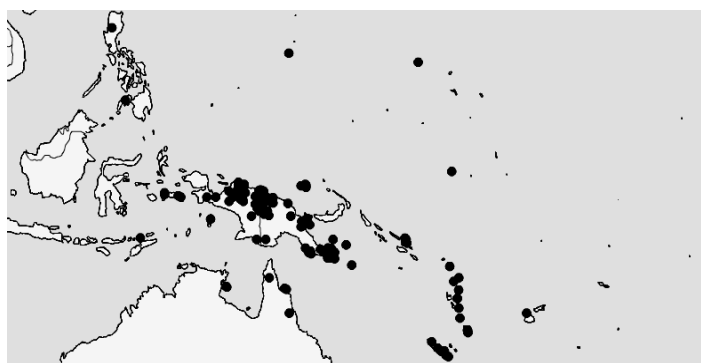


Another note on “complicated labial” phonemes involves labial-velars, linguolabials, or bilabial trills. Many of the “labiovelars” of Vanuatu languages do, in fact, involve double labial and velar stopping ([kp] or [kp^w]), something that is definitely not common in the articulation of erstwhile rounded labial (or velar) phonemes outside Vanuatu. At the same time, we find the very rare linguolabial phonemes, which are confined exclusively to Vanuatu, and a high proportion of languages with bilabial trill phonemes: five of the thirteen languages (38 percent) in the 1,500 language sample of Pacific languages to be found in Donohue (n.d.) with bilabial trills are in Malakula, while only 4.5 per cent of the languages in the database are in Vanuatu. The distribution of these three phoneme types are shown in map 4. Map 5 shows the distribution of rounded velar stops, and their likely derivatives.⁴ This has been included because there are numerous reports of phonemes that vary, either allophonically or dialectally, between “true” labial-velars and rounded velars

MAP 4. LANGUAGES WITH LABIAL-VELARS, LINGUOLABIALS, AND BILABIAL TRILLS



MAP 5. LANGUAGES WITH ROUNDED DORSAL STOPS (OR LIKELY DEVELOPMENTS FROM THEM)



4. While 150 languages in the database have rounded velar stops (predominantly k^w , g^w , or $ŋg^w$), there are some others with, e.g., $ɽ^w$ or h^w . These have been included here, as they are likely to represent debuccalization of an original velar, such as $*k^w > ɽ^w > h^w$ in the Skou languages (Donohue 2002).

(e.g., Toqabaqita and many languages of Vanuatu for the allophonic variation, and Southwell [1976] among others for dialectal variation). While these phonemes are more widespread, especially in north-central New Guinea, they follow the same distribution that has already been plotted with the rounded and unusual labial phonemes in maps 1 and 4.

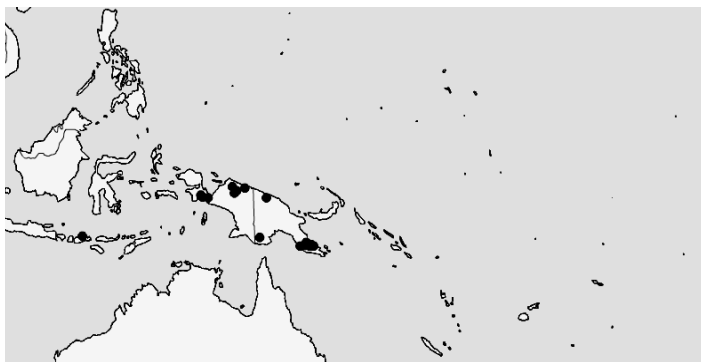
Another relevant linguistic feature is not found in any modern language of Vanuatu, but has been reconstructed for Proto-North-Central Vanuatu—the language ancestral to the languages of most of Vanuatu. This involves an asymmetrical plosive system with gaps for both *p* and *c* (Clark forthcoming; see table 1, based on Maddieson [1984], and map 6).⁵ While a gap for *c* is not that unusual cross-linguistically, a gap for *p* is marked. Maddieson (2005) notes that such a gap is rare, being found in large numbers in the Sahara region, but that “only a few cases occur outside this area, most notably a small group in New Guinea,” and that there appear to be “locale- or language-specific [factors]” that “[tend to] exclude /p/ from consonant inventories,” within linguistic areas that favor this pattern. The increased sample size of languages reported here shows that a gap for *p* is strongly associated with New Guinea (map 6), with extension west into the area known to have Papuan languages away from New Guinea, and extension east into the Solomons in a small way, and Vanuatu and Fiji in a more prominent fashion. The absence of fricatives in reconstructions of the phonological inventory of Proto-Oceanic other than *s, and the presumed fricative status of the phonemic stops in certain positions, might lead us to suppose that the development of a gap for /p/ is more-or-less “natural” in Oceanic languages due to the phonemicization of these allophones. This misses the point that, of 360 Oceanic languages surveyed, only 11 percent (41) show a gap for /p/, while 27 percent of languages in Vanuatu do (20 of the 77 languages surveyed), producing the very uneven distribution of this trait that is shown in map 6. Gaps for both *p* and *c* are in this part of the world exclusively confined to New Guinea (map 7).⁶ These statements are based on the sample in Donohue (n.d.); the only exceptions in the Asia-Pacific area to the New Guinea locus for the double gap discussed here are Tambora, a far western Papuan language (Donohue 2007a), and Proto-North-Central Vanuatu. The appearance of a double gap in older Vanuatu is an enigma, unless we posit an earlier Papuan substrate in the area that influenced the development of the Austronesian languages that later arrived in Vanuatu. Over time, the languages of Vanuatu have refilled the gap, but the earliest reconstructions of Austronesian systems in Vanuatu display it.

Table 1 shows a typical modal stop system. For each of the primary places (*p*, *t*, *k*) there is a corresponding nasal (*m*, etc.). For each place used, there is both a voiced and voiceless stop (e.g., *b* vs. *p*). The symbol *f* represents a voiceless palato-alveolar affricate or a palatal stop, and *ɟ* its voiced equivalent.

5. A language has been counted as having a gap for *c* only if it both attests palatal(-like) plosives, and has more than one series of stops. Thus Eastern Fijian, with the plosives *mb t nd k ŋg* and *ʔ*, is not considered to have a gap for *c*. On the other hand, a gap for bilabial *p*, a “primary place of articulation” (Maddieson 1984, Donohue 2006) is apparent regardless of the presence of more than one stop series, as in Mor, for which the entire plosive system is *t k ʔ*, or Bewani with just *t k*, or Wuvulu (and equally Gimi) with *p b t d ʔ*. Further afield we have examples such as *t k q* in Aleut, and variants of *t f k ʔ* in Iroquoian languages. See also Donohue (2007) for discussion of the *p-c* double-gap in East and Southeast Asia.
6. Gaps for both /p/ and /f/ are confined to Papuan languages, almost all along the north coast of New Guinea, other than the Papuan language Tambora in the west, and Proto-North-Central Vanuatu (shown as a square) in the east.

Table 2 shows the Proto–North-Central Vanuatu stop system. In addition to the labio-velar series there are gaps for voiceless stops corresponding to *mb* (and *mb^w*) and *ɟʒ*. Note that the contrast is voiceless vs. prenasalized, rather than voiceless vs. voiced, though the palatal stop is not prenasalized. The modal system in modern Vanuatu languages is identical except for the addition of *p*, and the absence of (*n*)*ɟʒ*, which is found in only 20 per cent of the modern languages.

MAP 6. LANGUAGES WITH A GAP FOR BOTH /p/ AND /c/



MAP 7. LANGUAGES WITH A GAP FOR /p/

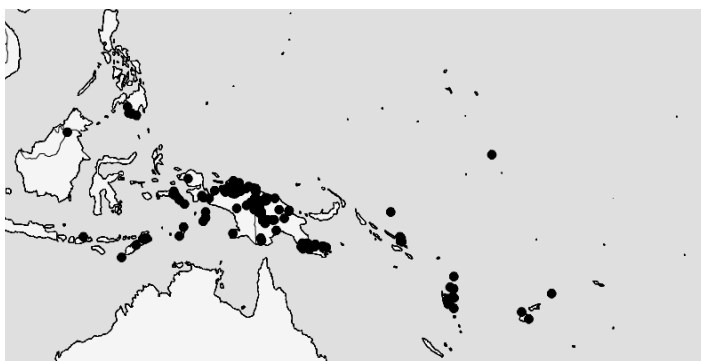


TABLE 1. A TYPICAL MODAL STOP SYSTEM

p	t	tʃ	k
b	d	ɟʒ	g
m	n	ɲ	ŋ

TABLE 2. THE RECONSTRUCTED STOP SYSTEM OF PROTO–NORTH-CENTRAL VANUATU

[]	[]	t	[]	k
			ɟʒ	
mb	mb ^w	nd		ŋg
m	m ^w	n		ŋ

Gaps for *p* and *c* are found across a range of unrelated languages in New Guinea, as illustrated in table 3. (In Mairasi the *k*, still attested as a velar stop in related languages, is represented by the glottal stop *p*.)

TABLE 3. THE STOP SYSTEMS OF FOUR LANGUAGES OF WESTERN, CENTRAL, AND SOUTHEASTERN NEW GUINEA

	MAIRASI (WEST)					ABINOMN (NORTH-CENTER)			
[]	t	[]		?	[]	t	[]	k	k ^w
		dʒ			b	g	dʒ	g	g ^w
mb	nd		ŋg	ŋg ^w					
m	n				m	n			
	NEME (SOUTH-CENTER)					YAREBA (SOUTHEAST)			
[]	t	[]	k	k ^w	[]	t	[]	k	
b	d	dʒ	g	g ^w	b	d	dʒ	g	
mb	nd	ndʒ	ŋg						
m	n				m	n			

Blust (2005:554) points out a number of ethnographic traits, including the use of penis sheaths and large nasal ornaments, which are unattested in the Pacific except in Vanuatu and New Guinea. The appearance of these traits is not necessarily of itself significant, though their presence in Vanuatu does beg explanation; in combination with the linguistic affinities mentioned above, however, the presence of these traits in New Guinea and in Vanuatu, and nowhere else in the Pacific, is significant. Furthermore, recent genetic work on modern ni-Vanuatu (e.g., Capelli et al. 2001, Friedlaender et al. 2005) shows that the people of Vanuatu share most molecular markers with the Melanesians of northeast Papua New Guinea, and not with the peoples of insular Southeast Asia or Polynesia. We await full publication of the osteoarchaeology of the early Lapita cemetery at Teouma (Bedford, Spriggs, and Regenvanu 2006), which should help resolve questions concerning the origins of the early colonizers of Vanuatu. Statements such as “it [Teouma] contains, predominantly, robust males and gracile females” (Stuart Bedford, pers. comm., cited in Pawley 2006:251) are highly ambiguous. How can the appearance of apparently non-Austronesian traits in Vanuatu be reconciled with the uniformly Austronesian linguistic profile of contemporary Vanuatu, and the lack of evidence of any pre-Lapita settlement?

The key lies in examining the assumptions that link the Austronesian expansion in the Pacific with Lapita sites. The coincidences in timing and artifacts are too great to deny the idea that the appearance of Lapita pottery is linked to the red-slipped pottery tradition attested west of New Guinea (Bellwood 1979, Spriggs 2003b, and others). On the other hand, were the makers, or at least bearers, of these pots Austronesian speakers? We have seen a number of lines of evidence that suggest that Vanuatu does in many ways, linguistically and ethnographically, “group” with the non-Austronesian-speaking peoples of (northern) New Guinea. Is it possible that the Lapita horizon in Vanuatu had a linguistically “Papuan” component? This could be imagined in one (or both) of two ways (drawing on arguments presented in Blust 2005).

While Lapita pottery was clearly dispersed, the identity of those dispersing it is less certain. We suggest that it is just as likely that Papuan-speaking Melanesians, occupying the islands out to the end of the main Solomons chain for at least 30,000 years and having

settled Manus by 20,000 years ago (Spriggs 1997), would have participated in the maritime expansion that accompanied the spread of Lapita (cf. Spriggs 2003a, Pawley 2007). These people were the owners and users of the preexisting trade networks in the Bismarcks and Solomons, as well as the adopters of “new” maritime technologies that allowed for travel beyond previous limits. It is quite reasonable to hypothesize that the advent of new ceramic technologies in Island Melanesia was greeted with widespread imitation and wide-faring dispersal by both the immigrants and the indigenous adopters. The linguistic evidence shows that Proto-Oceanic (or, at least, a linguistic variety intermediate between Proto-Eastern Malayo-Polynesian and the Oceanic dispersal) underwent a significant period of consolidation, in which a number of distinctive sound changes accumulated; this suggests that we should not associate the distribution of Lapita sites with the dispersal of Austronesian languages too closely.

One possible scenario for a Papuan influence on the linguistic ecology of Vanuatu would be that the early Lapita horizon reflects settlement by people whose ancestors had been resident in Melanesia for many millennia, and who adopted various aspects of a new immigrant culture, including an Austronesian language. The language of these first colonizers exhibited a number of structural features inherited from pre-Austronesian language(s) in New Guinea, and these features were borne, more-or-less undiluted, to Vanuatu. These colonizers did not stay around in areas with a strong Austronesian influence long enough for their Papuan “accent” to be moderated.

Another possible scenario for Papuan influence on the languages of Vanuatu would posit that the settlers were Papuan-speaking peoples who arrived with Lapita pottery (and other technologies), but without an Austronesian language. Accordingly, a linguistically Papuan group became the first settlers of Vanuatu, but these people were later swamped by the expansion of Austronesian language-speaking groups and their languages (we note that Codrington [1885:31–35] presents an almost identical scenario). Being yet further from the established trade routes near New Guinea, and being more precariously founded only recently in Vanuatu themselves, they did not survive as distinct lineages to the present day. Rather, they were relatively quickly submerged in the developing Austronesian linguistic milieu, though not without leaving traces of their passing in the phonology and semantic organization of the languages (possibly including lexical items, as noted by Tryon 1982), as well as preserving many aspects of their original ethnic identities.

The second scenario seems more likely, because the “Papuan” traits that are found are not uniformly represented in the languages of Vanuatu. They are attested among other languages with a more typical Austronesian profile, suggesting either a linguistically complex initial settlement or a complex postsettlement linguistic ecology (or both). The languages of southern Vanuatu have been described as most “aberrant” (see Capell’s summary of Ray’s position), which suggests a greater persistence of the traits that are atypical for Oceanic languages in that area. For instance, the appearance of echo subject agreement mirrors the switch reference systems that proliferate in mainland New Guinea, especially in the east; it should be noted that most of the phonological traits discussed earlier are not characteristic of the languages of southern Vanuatu, implying that different social processes have resulted in the different kinds of contact-induced change that we are positing (see especially Lynch 2001, which unravels the complex phonological histories

of these languages, showing how the modern diversity can be derived from earlier, more “exemplary,” Austronesian forms from a series of remarkable but semiregular changes. As noted earlier, it is likely that the “second wave” of Austronesianization was felt less strongly in the south (the same area for which Capell [1962:383] noted that the languages “diverge most of all from the rest of the New Hebrides”), which was further from the source of the expanding Austronesian linguistic hegemony. We further note that, in Vanuatu, verb-initial clausal order, the original order for Proto-Oceanic, is found only in the far south, indicating that a later spread of SVO order was less successful in the south than in the rest of Vanuatu. Donohue (2005, 2007b) points out that the innovation, for Austronesian languages, of SVO order is strongly associated with contact, and that the extensive appearance of this order in eastern Indonesia and Oceania reflects the use of this dominant order in Papuan languages of those areas.⁷

3. CONCLUSIONS. There is no *direct* evidence that unambiguously suggests a Papuan presence in the Pacific beyond Near Oceania. There is, however, enough indirect evidence, both linguistic and ethnographic, corroborated by work in human genetics, to make the hypothesis that the first Lapita horizon in Vanuatu was associated with colonizers who were not predominantly descendants of peoples who were relatively recent Austronesian-speaking immigrants to Melanesia. We must at least posit a Papuan influence on the Austronesian languages that later came to dominate the Vanuatu region, and that this influence was most likely supported by an *in situ* Papuan presence in Vanuatu. The absence of records of non-Austronesian languages in historical times in Vanuatu merely reflects the fact that for the last 3,000 years the dominant languages have been Austronesian. The social nature of this non-Austronesian-speaking element cannot be determined, but it is clear that many of the phonological traits that are typical of northern Papuan languages came to be associated with Proto-North-Central Vanuatu—that is, we have an Austronesian protolanguage with a Papuan “accent.” The early Lapita sites, which have been so closely linked to the spread of Austronesian languages and an associated cultural complex across the Pacific, might have represented more than just a single cultural spread. It is dangerous, as Hughes (1992) reminds us, to equate artifacts with a particular ethnolinguistic group; to do so is equivalent to assuming that “driving a Volvo makes you a Swede,” a clearly false premise. Similarly, the presence of Lapita pottery is not necessarily an indicator of Austronesian languages.

7. Even more dramatically, the Oceanic languages of the Papuan tip of Southeast Papua New Guinea have acquired SOV order from the Papuan languages there, in which SOV is the dominant clausal order (Lynch, Ross, and Crowley 2002).

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