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

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## Résumé

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Recent genomic analyses have demonstrated that the earliest peoples reaching Remote Oceania – associated with the Oceanic-speaking Lapita culture – were almost completely South-east 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.

**Mots-Clés:** aDNA, population replacement, Vanuatu, demography, interaction, mobility

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