Does Japanese have an Austronesian stratum?

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Some years ago I began to investigate the question of whether contact between Indonesia and Japan in the late prehistoric period was more important than has previously been realised. This was based on a perception of shared cultural and technological elements. Since these seemed to imply a relatively advanced civilisation, it seemed to me that the most likely time for this contact to have taken place was the Yayoi period (second half of first millennium B.C. to early first millennium A.D.), a period when significant innovations were made in agriculture, pottery and metalwork, and social organisation. This investigation I began used both physical evidence and cultural evidence, which seemed to fit together in a remarkable way. This was so for rice, where the genetic relationship between Japanese and Javanese rice was paralleled by the uncanny similarity of religious beliefs and royal ceremonies, and by correspondences in vocabulary items related to rice. It was also the case for weapons, where the correspondence in technique of production and in form is matched by a near identity in the ritual involved in the production and use of weapons and in the myths attached to them. Yayoi pottery and the dotaku also proved to have strong typological similarities in form and decoration with Javanese pottery and metalwork. My question was, did this indicate Indonesian influence?

I next turned to the ethno-historical field, and found that dental and cranial studies carried out by Japanese and non-Japanese researchers seemed to indicate that the Yayoi population had markedly Indonesian characteristics according to a number of indicators. One of the problems in Japanese ethno-history, however, is that studies of the human remains from the Jomon period, which preceded the Yayoi, revealed marked affinities with early Southeast Asian — indeed specifically Indonesian/Malayan — populations, and this fact is often used to explain any Southeast Asian characteristics in the modern Japanese population. In my opinion, this has tended to mask or discount the possibility of a later Southeast Asian element coming in during the Yayoi period. It is currently accepted that there was significant migration into Japan during the Yayoi period (after an earlier consensus of opinion that the Yayoi civilisation was an internal development from the Jomon) — but the most favoured source of this migration is Korea. Yet there seems to me no reason why Korea and Southeast Asia should necessarily be considered mutually exclusive sources, and indeed Dodo and Ishida's cranioscopic

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1 See e.g. the work of Horai et al. who extracted mtDNA from an ancient Jomonese bone the age of which is estimated at 6,000 years B.P. Complete sequence identity was found with two contemporary samples from Indonesia and Malaya respectively
studies also make the point that the Yayoi period may have been one when a number of different populations were competing with each other for their gene dispersion. While conducting this investigation I realised that any contact situation of sufficient intensity to bring about these innovations must have left its mark in the language. Thus I unexpectedly developed an interest in the Japanese language and its affiliations, which led me to read the works of such linguists as Miller, Murayama Shichiro, Matsumoto, Sakiyama, Shibatani, Benedict, Kawamoto and Vovin. Most of these works deal principally with the genetic affiliations of Japanese, rather than influence arising through language contact, which is my interest in this paper. However, the question of possible influence through contact has been raised recently by Alexander Vovin in his article, "Is Japanese Related to Austronesian?".

In this article Vovin criticises the attempts that have been made to establish a genetic relationship between Japanese and Austronesian. He sees these attempts as failing to maintain the requirements of the Comparative Method for shared basic vocabulary, with a significant number of examples having identical semantics, as well as for shared basic morphological markers, and regular phonetic correspondences. Vovin remarks that it is significant that almost none of the Proto-Japanese verbs in the Swadesh list has any parallels in Austronesian, though almost all of them do have Altaic parallels, and concludes that there is no genetic relationship between Japanese and Austronesian. He recognizes that this does not exclude the possibility that there are certain Austronesian elements in Japanese, though these would be limited to a substratum vocabulary. However, he has not seen any treatment of Austronesian elements in Japanese, with the exception of Murayama's works, that would persuade him that there is indeed a significant Austronesian substratum in Japanese. He is therefore extremely sceptical of many of the existing Austronesian etymologies for Japanese words. The purpose of this paper is to take up this question of possible Austronesian influence on the Japanese language.

To say that there is a significant Austronesian substratum in Japanese is to say that Japanese would have been subject to interference through shift. Such interference covers the phenomena known as substratum, superstratum and adstratum interference. Superstratum languages are typically those of victorious invaders. Thus the masses of French loanwords in English would indicate that French speakers were a superstratum

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3 See Bibliography for references to these authors.


even without historical knowledge, and this is confirmed by the clustering of French vocabulary into such semantic domains as law. 

*substratum* languages are those of conquered or at least socio-politically subordinate indigenous populations and immigrants; 

*adstratum* languages are those of invaded or invader groups that are neither dominant nor subordinate in the contact situation (some linguists reserve the term for a group that is only a part of the speech community they are shifting from).

It is the second category, the substratum, that Vovin suggests may be the cause of an Austronesian element in Japanese.

Thomason and Kaufman make a clear distinction between interference through shift and borrowing. Interference through shift arises through imperfect learning of a language (the "target language") by a group of non-native speakers, whereas borrowing is defined as the incorporation of foreign elements into the speakers' native language. A principal contrast between the two phenomena is that borrowing begins with vocabulary, but interference does not. Syntactic and phonetic changes, which are among the most expected shift-induced changes, will be among the last borrowed features. Therefore a prime question to be answered in investigating the question of an Austronesian substratum in Japanese is, whether this substratum brought about syntactic and phonetic changes. This immediately comes up against the difficulty of our lack of knowledge of the syntactic and phonetic structure of Japanese prior to the hypothesized interference through shift via an Austronesian substratum. However, Thomason and Kaufman acknowledge that while interference through shift begins with syntactic and phonetic change, it often goes on to contribute lexicon to the language, that is, if the degree of contact is sufficiently intense. So in this sense Austronesian lexicon in Japanese could *either* be part of the influence of an Austronesian substratum, *or* alternatively, represent a case of borrowing. Therefore this paper will take up this question of Austronesian lexicon in Japanese.

In the word-list (see Appendix) I have compared Old Javanese lexemes, as attested in their literary form, with Old Japanese.\(^7\) The rationale for using Old Javanese is a) as a representative of Western Austronesian b) because some of the critical items seem only to appear in literary Old Javanese or in the Javanese kawi vocabulary. Thus to use forms reconstructed for Proto-Western-Austronesian would be to neglect this key evidence.

Note that no Sanskrit words have been included, since current wisdom is that these did not enter Javanese until a later date than the period under investigation here.

Bearing in mind Vovin's point about the absence of Austronesian equivalents for Japanese verbs, the vocabulary list is divided into different parts of speech.

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\(^7\) The dictionaries and orthographies used are those of Zoetmulder and Ohno (see Bibliography), except that Zoetmulder's *is* not used.
Discussion of data.

Tryon's dictionary was used to determine the distribution of the items in this list in other Austronesian languages. However, many items in the list are not to be found there: hardly surprising since a) by no means all Old Javanese forms are preserved in the modern language and b) the number of synonyms in Javanese, even for basic vocabulary, is very large, and only one of the possible choices is listed in the dictionary. Of those items in the list that are to be found in Tyron's dictionary, it is striking that almost all are represented solely in languages of present-day Indonesia, with only three items also represented in Austronesian languages spoken outside Indonesia. The only areas in which these latter languages are located are 1. the Philippines (in the case of *lusung*, rice mortar) and 2. Taiwan (for *cucuk* and *we*, which are represented in Paiwan and Atayal). None are found in Austronesian languages outside this Indonesia- the Philippines- Taiwan axis. Furthermore, of the items found in Tryon's dictionary nearly half are specific to Javanese or to Javanese and one of its immediate neighbours (Sundanese, Madurese and Balinese).

This is very curious and interesting, given current opinion re the historical depth of Javanese, which is not thought to have existed as a separate language as early as the period in question here.

Semantic relationship of pairs

Vovin speaks of the requirement for "identical semantics" in the establishment of genetic links via the Comparative Method. Of course, it is not actually easy to establish identical semantics beyond doubt. But in the case of the pairs presented here, there is no doubt that they are semantically very close indeed. As a rough index, it is the case that for about half the pairs, the two dictionaries used have separately translated one half of the pair with the same English word. I would argue that there is a close semantic relationship between the remaining pairs as well (this is in contrast to Murayama's work, in which the semantic links between a Japanese word and its hypothesized Austronesian origin have to be argued rather carefully).

It also seems to me interesting and significant that there appear to be a number of semantic contrast which are found in both languages, e.g.:

near vs. far: *dakêt* and *dêkêt* vs *doh*, and *tikasi* vs *to2*

clear vs. indistinct/vague: *samar* vs. *kati* and *sama* vs. *kata*

over here vs. over there: *ika* vs. *iko* and *ka* vs. *ko*

Phonetic relationship of pairs