

NOTES ON THE COMPARISON OF TWO LANGUAGES (WITH AND WITHOUT A GENETIC HYPOTHESIS)

By G. B. MILNER

In a suggestive article which appeared some years ago,¹ W. S. Allen, after reviewing the theoretical basis of comparative linguistics, analysing certain of its results in the Indo-European field, and stating the reasons which have led him to question the usefulness and the validity of assuming a genetic relationship between languages, sets out in the form of postulates the principles in accordance with which comparative studies should in future be conducted. Relationship, he claims, is not of languages but of systems. Relationship, moreover, is not a question of either-or but of more-or-less.²

There follows, in the remainder of the article, a number of suggestions proposing other lines of investigation for a new type of comparative study, free from the limitations of traditional comparativism while remaining systematic and open to examination within the safeguard of rigorous criteria.

A few years earlier Professor Holmer had made the following statement in an article dealing with relationship in the Amerindian field: 'It is essential to consider that any two languages commonly regarded as related are not comparable to offshoots of a main plant stem. Language is a complex system of far greater structural unity than either a plant or an animal, a fact which was entirely disregarded when the idea of the genetic relationship of languages was first propagated.'³

Similar warnings and reservations on the ground that the methods of traditional comparativism might prove to be less rewarding when they were applied to linguistic fields other than the Indo-European had been made at an earlier date. Thus Sweet had said even before the first World War: 'In applying the results of comparative Aryan grammar to other families of languages, it is evident . . . that we must . . . be ready to widen or modify our methods with the scope of their application.'⁴ Professor Gonda, one of our collaborators, has given the reasons which have led him to the conclusion that the traditional methods of comparative philology are not readily applicable to, or inherently suitable for, the Malayo-Polynesian field, in two articles.⁵

Other authorities, however, in the past and down to the present day, have

¹ 'Relationship in comparative linguistics,' *TPS*, 1953, pp. 52-108.

² *ibid.*, p. 92.

³ *Lunds Universitets Årsskrift* N.F. Avd. 1, Bd. 45, 4, 1949, p. 10.

⁴ *Collected papers of Henry Sweet, arranged by H. C. Wyld*, Oxford, 1913, p. 64.

⁵ 'Opmerkingen over de toepassing der comparatieve methode op de indonesische talen, voornamelijk in verband met hun woordstructuur,' *BTLV*, 99, 1940, pp. 397 ff. (esp. pp. 399-429-34); 'The comparative method as applied to Indonesian languages,' *Lingua*, 1, 1953, pp. 86-101.

held up the methods of Indo-European philology as a model for other fields.¹ Dempwolff recognized that Austronesian linguistics must also develop its own specially adapted techniques if the best use was to be made of the kind of material and of the particular conditions prevailing in that field.² Within the last ten years several articles and monographs have appeared, including several by Professor Kähler, which are in the tradition of Dempwolff and may be said to continue his studies.³ They all appear to accept implicitly the validity of the genetic hypothesis of the neo-grammarians.

The purpose of the present paper is not primarily to take up arms and do battle as a protagonist of this or that school of thought. Rather is it inspired by the wish to illustrate the wide discrepancy between the results likely to be obtained by setting out from different premises. For this purpose two languages with which the writer is acquainted at first hand have been selected: Samoan, a representative of the Polynesian group, and Fijian, the exact status of which has long been queried, but which is generally regarded as Melanesian with a strong admixture of Polynesian elements. Both languages have interested comparative philologists since the end of last century.⁴

PART I: PHONOLOGY

It will be recalled that Dempwolff, in his *Vergleichende Lautlehre*, set up an inductive reconstruction of Proto-Indonesian (*Urindonesisch*) which was based on the results of a detailed examination of Javanese, Toba-Batak, and Tagalog. After testing the validity of his reconstruction by examining three other Indonesian languages (Hova, Ngadju-Dayak, and Malay) he was satisfied that his reconstruction was sound and his original hypothesis justified. He next turned his attention to two Melanesian languages (Fijian and Sa'a) and to three Polynesian dialects (as he called them), Tongan, Samoan, and Futuna. He found both in Melanesian

¹ A. Meillet, *Linguistique historique et linguistique générale*, Vol. 2, Paris, 1936, p. 69; O. Dempwolff, *Induktiver Aufbau einer indonesischen Ursprache (IA)*, Berlin/Hamburg, 1934, pp. 17-20.

² *op. cit.*, p. 23.

³ H. Kähler, 'Untersuchungen zur Morphologie polynesischer Dialekte,' *Afrika und Übersee*, 36, 1951-2, pp. 145-60; 37, 1952-3, pp. 35-48, 119-42; 38, 1953-4, pp. 73-88, 165-86; 39, 1954-5, pp. 129-45; I. Dyen, *The proto-Malayo-Polynesian laryngeals*, Baltimore, 1953; W. Milke, 'Zur inneren Gliederung und geschichtlichen Stellung der ozeanisch-austronesischen Sprachen,' *Ztschr. f. Ethn.*, 83, 1, 1958, pp. 58-62; G. W. Grace, *The position of the Polynesian languages within the Austronesian (M.-P.) language family*, Baltimore, 1959.

⁴ cf. H. Kern, *De Fidjitaal vergeleken met hare verwanten in Indonesië en Polynesië*, Amsterdam, 1886; W. Schmidt, 'Über das Verhältniss der melanesischen Sprachen zu den polynesischen und untereinander,' *Sb. k. Akad. Wiss. Wien*, phil.-hist. Kl., 141, 1899, pp. 1-93; O. Dempwolff, *Deduktive Anwendung des Urindonesischen auf austronesische Einzelsprachen (DA)*, Berlin/Hamburg, 1937.

and Polynesian certain regular correspondences and he considered them to be reflexes of the Proto-Indonesian sound system which he had reconstructed. He consequently posited a Proto-Melanesian and a Proto-Polynesian sound system, both of which he regarded as being directly descended from Proto-Indonesian. He thus felt himself entitled to call the latter Proto-Austronesian.¹

It is instructive to examine in detail the premises upon which Dempwolff's work is founded as well as the conclusions drawn from its results. Austronesian (or Malayo-Polynesian) languages, he states,² do not have a homogeneous grammatical structure like Semitic or Bantu languages, but they do have a *common vocabulary* (his italics) comprising several hundreds of words. Therefore in his monograph he is only incidentally concerned with grammatical correspondences and its scope is restricted to the comparative analysis of words, and primarily to their sound correspondences.

Having established and confirmed his Proto-Indonesian system, he then investigates approximately fifty other Indonesian languages by the same method and he is able to establish in each individual language a few hundred words which regularly reproduce equivalents of Proto-Indonesian sounds.³

Also by the same method, having identified the Fijian and Sa'a reflexes of Proto-Indonesian sounds, he can establish between 300 and 400 words in both languages in regular correspondence, out of a total of approximately 1,900 words claimed as being of Proto-Indonesian origin. Since, he claims, the proportion of common Proto-Indonesian words in modern Indonesian languages is often higher than in Fijian and Sa'a, he is satisfied that it is enough to establish a connection in time and space between Fijian, Sa'a, and Proto-Indonesian.⁴ When other Melanesian languages are examined, however, he finds that the number of common words may fall to between 100 and 200 words. There is also the consideration that certain features occur in Melanesian and not elsewhere, notably initial nasal clusters which correspond to medial clusters in Indonesian, and prenasalization as a vestigial element instead of as an active morphological process.⁵

The low proportion of words ascribable to PI starred forms which he has found in many Melanesian languages, together with their irregular treatment of nasal clusters (irregular, that is, from an Indonesian point of view), would, he might have expected, have made it necessary to re-examine the assumption that present-day Melanesian languages are directly descended from PI and that the latter can be equated with Proto-Austronesian. Dempwolff, however, draws the conclusion that Melanesian is 'aberrant' from the PI norm. That is to say

¹ *IA*, p. 24; *DA*, pp. 193-4.

² *IA*, p. 13.

³ *DA*, p. 123.

⁴ *ibid.*, p. 163.

⁵ *ibid.*, p. 165.

became separated from Proto-Indonesian before the latter split up into its various modern representatives.¹

The same process of reasoning is applied to Polynesian; i.e., Polynesian 'dialects' may be regarded as a particular branch of Austronesian which enables one to reconstruct a Proto-Polynesian (PPn) sound system.² Moreover, certain similarities in the PPn and Proto-Melanesian (PMn) sound systems make it likely that at one time both groups constituted part of the linguistic stock of a single people.³

Since Dempwolff does not ignore the important divergences between Melanesian and Indonesian, as evidenced by the treatment and distribution of nasal clusters and the relatively low proportion of Indonesian starred forms in many Melanesian languages, it is somewhat strange that he should not have attached more importance to the cases where, as he noted himself, certain Fijian and Samoan sounds cannot be reconciled with his PI hypothesis. It is possible that his purpose might have been better served if, instead of referring each modern Melanesian and Polynesian language directly to PI, he had attempted to reconstruct internally congruent starred systems for both Melanesian and Polynesian. Had he done so, however, it might ultimately have proved very difficult to reconcile PI with a full-scale reconstruction of PMn and PPn. Having set up his PI system, Dempwolff seems at times to be the prisoner of his own creation, particularly when any data, especially in Melanesian, obstinately refuse to conform with the original hypothesis.⁴ Perhaps the best illustration of the results of that tendency is found in the treatment of certain consonants in Fijian and Samoan *quā* reflexes of PI consonants reconstructed by Dempwolff.

It will be recalled that among the consonants of PI he posited four palatal stops which he writes *k' g' t' d'*.⁵ Later he establishes the occurrence, under certain conditions, of an optional (homorganic) nasal accretion (*fakultativer nasaler Zuwachs*) for each of those consonants (written *ɲk', ɲg', nit', nid'*), adding a suggestion that the option of a preceding homorganic nasal before medial consonants might originally have been a morphological process (as of course it still is in the case of initial nasal clusters in modern Indonesian),⁶ but no longer functioning as such in modern Melanesian.⁷

In so far as Fijian and Samoan are concerned, the history of those two groups

¹ *ibid.* cf. Kern, *op. cit.*, pp. 3-4.

² *DA*, p. 191.

³ *ibid.*, p. 193.

⁴ *ibid.*, p. 124, § 119 a, 5; p. 125, § 121 a; pp. 135-6, § 128 b and c. See also Allen, *op. cit.*, p. 53.

⁵ *IA*, p. 64.

⁶ cf. R. H. Robins, 'The phonology of the nasalized verbal forms in Sundanese', *BSOAS*, 15, 1, 1953, pp. 138-45.

⁷ *IA*, p. 109.

of consonants is assumed to have been as follows (*Deduktive Anwendung*, pp. 1241, 166, 170–90, 192) :

Fijian :	δ \uparrow	s \uparrow
Proto-Melanesian :	d' \uparrow	nd' \uparrow
Proto-Indonesian :	<hr style="width: 100%;"/> $k' g' t' d'$	<hr style="width: 100%;"/> $\eta k' \eta g' n t' n d'$
Proto-Polynesian :	\downarrow s	\downarrow h
Samoan :	\downarrow s	\downarrow \emptyset

Dempwolff regards Fijian δ and Samoan s as the reflexes of the non-nasal set of consonants on the grounds that they both occur in the final syllables (especially in the third consonant position in words of type CVCV(CV), corresponding to the final consonant in Indonesian words of type CVCVC). Fijian δ and Samoan s can therefore hardly be regarded as the reflexes of nasal clusters, which do not occur in final position in Indonesian (cf. **tanit'* with *tanida* in Fijian and *tanin* in Samoan ; *Deduktive Anwendung*, pp. 137–8 and 181–2).

Unfortunately (and Dempwolff was well aware of it), this arrangement presents almost as many problems as it solves :

As regards Fijian s (*Deduktive Anwendung*, pp. 137–9) :

(a) (i) instead of δ (e.g. *savui*), and (ii) in addition to δ (e.g. *vusa-vuda*) may be a reflex of **t'* (§ 128 g, 2) ;

(b) (i) instead of δ (e.g. *sau*, § 128 g, 3), and (ii) in addition to δ (e.g. *musa-uvusa*, § 128 g, 2), it may be a reflex of **d'* ;

(c) in addition to δ (e.g. *vosota-vođota*, § 128 g, 2), it may be a reflex of **g'* ;

(d) instead of δ (e.g. *vosa*, § 128 g, 2), it may be a reflex of **k'*.

As regards Samoan \emptyset (*ibid.*, pp. 181–2) :

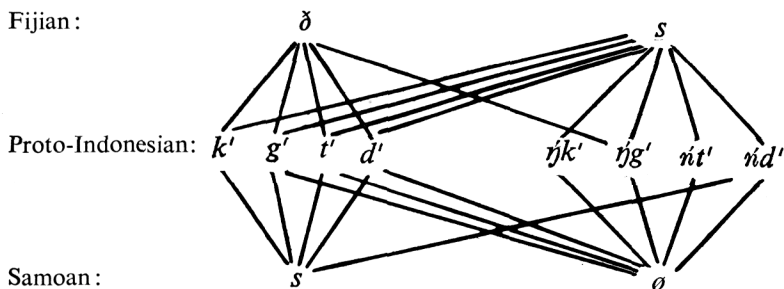
(a) instead of s (e.g. *tai*, § 153 d, 2), it may be a reflex of **t'* ;

(b) instead of s (e.g. *moe*, *ibid.*), it may be a reflex of **d'* ;

(c) instead of s (e.g. *fia*, *ibid.*), it may be a reflex of **g'*.

Conversely, Fijian δ may be a reflex of an optional nasal cluster (e.g. *tađi*, § 153 d, 2 and *Austronesisches Wörterverzeichnis*, p. 12), and Samoan s may be a reflex of a nasal cluster (e.g. *tusi*, § 152 a, 6, and § 153 d, 3).

The diagram given above must therefore be considered as being subject to considerable modifications and might be given more realistically, if conveniently, in the following form :



Nevertheless Dempwolff specifically and more than once rejects the desirability of making a revision of his original hypothesis. If a nasal cluster is attested from Fijian alone, that is not considered a sufficient ground for modifying a non-nasalized form in PI, since Fijian clusters are attested initially as well as medially. Conversely, the occurrence of a non-nasalized form in Fijian as the reflex of a nasalized form in PI is insufficient for a revision of the hypothesis.¹ Likewise in Samoan the words which do not conform do not constitute a sufficiently good reason for revising the starred forms of PI.²

We are indebted to an American scholar, Dyen, for a possible solution of the problem which baffled Dempwolff.³ Dyen proposes that in addition to the series $k' g' t' d'$ and $\eta k' \eta g' \eta t' \eta d'$, which he prefers to write $c j s z$ and $Nc Nj \tilde{n}s \tilde{n}z$,⁴ an additional starred phoneme or proto-phoneme Z should be reconstructed with an optional prenasalized counterpart nZ . The reflexes of these starred forms would then be :

	*Z	*nZ
for Fijian :	δ	s
for Samoan :	s	\emptyset

This enables him to reconstruct $*peZem$ leading to Fijian *moðe* 'sleep' on the one hand and on the other hand $*penZem$ giving Samoan *moe* 'sleep'. The occurrence of Samoan *ala* 'path, road' instead of an expected $*sala$ from a starred form $*Zalan$, however, immediately raises difficulties, as does the Fijian counterpart *sala* 'path, road' instead of an expected $*ðala$. To resolve the contradiction Dyen suggests in a footnote that in that case Fijian and Samoan must reflect a nasal cluster. For an explanation we are referred to another article, where a somewhat abstruse account may be found of the circumstances in which this apparent anomaly has developed.⁵ The same suggestion also applies to the fact that contrary to Dyen's expectation Fijian *s* may also be the reflex of *Z.

¹ *DA*, pp. 135-7, § 128 b, c, and d ; p. 182, § 153 d, 3.

² *ibid.*, § 153 d, 2 and 3.

³ 'Proto-Malayo-Polynesian *Z', *Language*, 27, 4, 1951, pp. 534-40.

⁴ See *The Proto-Malayo-Polynesian laryngeals*, p. 50.

⁵ *Language*, 27, p. 536, n. 9, citing Dyen, 'On the history of the Trukese vowels', *Language*, 25, 4, 1949, pp. 420-36, § 26.3.

Dempwolff had explained these inconsistencies by assuming that the different reflexes, sometimes found within the same language, sometimes found by comparing one language with another, were evidence of the former existence of proto-doublets (*Nebenformen*).¹ Dyen, however, rejects that assumption on theoretical grounds.² One may question the usefulness of reconstructing yet another starred 'phoneme', bearing in mind the already rather unwieldy structure posited by PI by Dempwolff³ and even allowing for the fact that, as Allen has pointed out, one is dealing with 'systems set up by linguists for the description of language structures, and not anything inherent in the language as such'.⁴ Moreover, to posit two starred forms with the same proto-phoneme, one with a nasal cluster and one without, does not tax the imagination unduly in the case of words which might originally have denoted 'road' or 'sleep' or 'rain'. It is perhaps less easy to accept the possibility that there were once two forms of the word for 'nir' (Fijian *ḍiwa*, Samoan *iva*) or of the word for 'who?' (Fijian *ḍei*, Samoan *iva*) and that but for the optional nasal element they were identical.⁵ Similar difficulties arise in the case of words for plants, which tend to be grammatically even less flexible.⁶

Reading over the materials used by Dempwolff and Dyen, one is struck, first, by the fact that the languages on the evidence of which elaborate reconstructions are made were originally chosen for comparative purposes almost solely as a result of the 'accident' that they were better attested than their neighbours, i.e. that more comprehensive dictionaries and grammars were in existence for certain languages than for others which might have served as a basis for the comparison and on the basis of which different results might have been arrived at. Secondly, it is mainly by the process of culling isolated words from dictionaries and comparing word against word that results have been achieved. Modern phonological studies, such as that published for Fijian by Scott,⁷ have been neglected where they existed, and the comparison of phonological systems as opposed to that of single items has hardly begun. Thirdly, reconstructions often seem to have been made without taking into account other 'accidents', such as cultural contacts or 'acculturation', and other considerations of a synchronic character the importance of which increases in inverse ratio to the proportion of the vocabulary which in each language may be said to be common Austronesian, that is, relevant to the purpose of the comparative inquiry.

¹ cf. *DA*, § 153 d, and *Austronesisches Wörterverzeichnis (AW)*, Berlin/Hamburg, 1953, p. 157, **v'ulih*; p. 158, **tuḷup*, etc.

² *Language*, 27, p. 536, and p. 540, § 24.

³ *DA*, p. 7.

⁴ *TPS*, 1953, p. 90.

⁵ cf. *DA*, p. 106, § 112 b; *AW*, p. 155; *DA*, p. 144, § 132 b; *AW*, p. 147.

⁶ cf. *AW*, p. 45, **d'ayaṅav* 'turmeric' (Fijian *ḍago*, Samoan *ago*); p. 46, **d'alataṅ* 'nettle' (Fijian *salato*, Samoan *salato* 'tree-nettle, *Laportea* sp.).

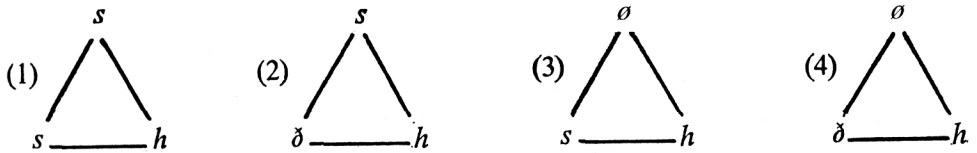
⁷ N. C. Scott, 'A study in the phonetics of Fijian', *BSOAS*, 12, 3-4, 1948, pp. 737-52.

Thus, the peoples who inhabit the geographical area of Fiji, Tonga, and Samoa have for many centuries had external contacts (both of a peaceful and warlike character) which have had a profound effect on the mythology, material culture, and social organization of all three island groups. It would be anomalous if those cross-currents had had no effect on the languages and dialects of the area. For instance, it is in a sense 'accidental' that Fijian should have a reflex *s* for Dempwolff's **d*' in **d'alan* 'path, road' instead of an expected *ð* in certain words such as *sala* 'path, road'. To discover that, however, one may need to look at each language from a synchronic point of view.

For what is known to comparative philologists as Fijian is in fact a lingua franca which has developed from a single dialect (Bauan) and which has still not entirely displaced other dialects. It can therefore give only a partial picture of the whole Fijian complex. In some of the dialects of Western Viti Levu, for instance, some of the words which unexpectedly reflect Dempwolff's non-nasal set with an *s* are found with a 'regular' *ð* (as Kern predicted might be the case). Thus Western *ðā levu* 'path, road', *ðuðu* 'milk', and *ðiði* 'snail' instead of Bauan *sala, suðu, and siði* respectively.¹ That is to say, it may well be Bauan which is 'aberrant' for purely local or accidental reasons.

Let us suppose, on the other hand, that we abandon the genetic hypothesis, and instead of trying to reconcile the distribution of spirants in Fijian and Samoan with the reconstructed forms of PI, look at those two languages, with the addition of Tongan, as languages which have, at some stage in their history, been in contact. Given that assumption, we can endeavour to see if, to use Holmer's expression, 'the conglomeration of phonetical, morphological and syntactic elements constituting a language should perhaps with greater advantage be classed with regard to relative age than to provenance.'²

The following correspondences can be established. In each case the Samoan member is at the apex of the triangle, the Fijian at the left, and the Tongan at the right :



e.g. (1) Fijian *sele* 'knife', Samoan *sele*, Tongan *hele* ; Fijian *suasua* 'wet', Samoan *susū*, Tongan *hūhū* ; Fijian *salato* 'tree-nettle (*Laportea* sp.)', Samoan *salato*, not recorded from Tongan.

(2) Fijian *ðala* 'be wrong', Samoan *sala*, Tongan *hala* ; Fijian *maða* 'be dry, empty', Samoan *masa*, Tongan *maha*.

¹ cf. Kern, op. cit., p. 13 ; *AW*, p. 46, **d'alan* ; p. 155, **t'it'ik*¹ ; p. 158, **t'ut'u*.

² *Lunds Universitets Årsskrift* N.F. Avd. 1, Bd. 45, 4, p. 11.

(3) Fijian *sala* 'path, road', Samoan *ala*, Tongan *hala*; Fijian *savu* 'waterfall', Samoan *āfu*, Tongan *hafu*.

(4) Fijian *ḍiwa* 'nine', Samoan *iva*, Tongan *hiva*; Fijian *moḍe* 'sleep', Samoan *moe*, Tongan *mohe*.

The existence of the four tripartite correspondences set out above need perhaps not present any insuperable difficulties and can be accounted for relatively simply if instead of starting from a genetic hypothesis we regard all three languages as having been in contact and if we concern ourselves only with certain circumscribed features or sub-systems, abstracted from the total mass of each language and of different age or origin or provenance.

Granted that we accept Fijian as Melanesian, and the other two languages as Polynesian (on any one of a number of possible linguistic grounds such as the fact that Fijian possesses voiced stops whereas Samoan and Tongan do not), the correspondences between Samoan and Tongan can be considered first. After looking at a number of Polynesian consonant systems (on the basis of, admittedly incomplete and, sometimes, obsolete information) one is inclined to agree (subject to the possible appearance of fresh information) with the view taken in a fairly recent analysis of the problem that 'the most complex and archaic language phonemically is Tongan'¹ and that 'the order of increasing sparseness of form is then Tongan, Samoan and the East'.²

Let us say, then, that the present-day languages spoken in Samoa and Tonga were at one time in contact (without considering exactly where or when) and that of the two it is Tongan which exhibits the more archaic features. One could then point to the absence of those features in Samoan, together with the close correspondences in the remainder of the two consonant systems, as evidence of the contact between the two languages.

If, however, we put the consonant system of Samoan side by side with that of Fijian, we then no longer find close correspondence, but over a limited section one can see a correlation between the two which is not shared with Tongan, notably Fijian *s*—Samoan *s*, Fijian *ḍ*—Samoan *s*. This would seem to constitute evidence of contact between Fijian and Samoan. The question whether Tongan participated in that contact also, although no longer appearing to do so because of its own subsequent history, will be considered presently.

Thirdly, certain correlations can be established for Fijian and Tongan only, namely Fijian *s*—Tongan *h*, and Fijian *ḍ*—Tongan *h*, giving evidence of contact between Fijian and Tongan.

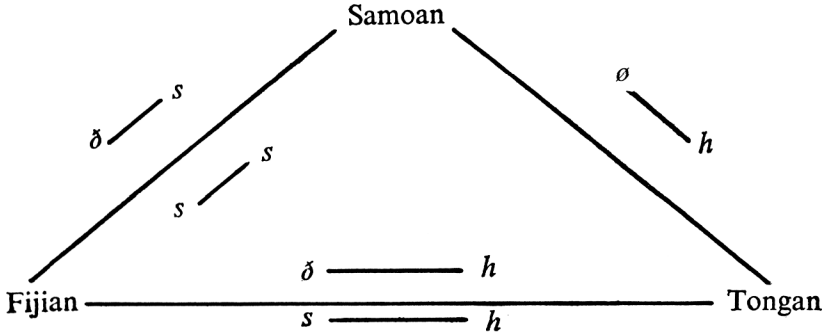
One can, on the basis of that knowledge, posit contact between Fijian and Samoan at a different level from that already established, i.e. through the 'medium' of Tongan, namely Fijian *ḍ*—Samoan *ø* and Fijian *s*—Samoan *ø*.

¹ S. H. Elbert, 'Internal relationship of Polynesian languages and dialects', *SWJA*, 1953, p. 163, and cf. table on p. 154.

² *ibid.*, p. 164.

The opposite assumption, namely that Tongan was in contact with Fijian through the medium of Samoan, could be argued on the strength of Fijian *s*—Tongan *h* (via Samoan; e.g. *sele*—*hele* ‘knife’), but contradicted by the necessity of assuming also Fijian *s*—Tongan *h* (via Samoan \emptyset ; e.g. *sala*—*hala* ‘path, road’) and Fijian δ —Tongan *h* (via Samoan \emptyset ; e.g. *mo\delta e*—*mohe* ‘sleep’).

One may therefore posit the following correspondences as being due to ‘immediate contact’:



Consequently one can contrast Fijian δ —Samoan *s*, and Fijian *s*—Samoan *s*, which represent ‘immediate’ or at any rate a more immediate contact, with Fijian *s*—Samoan \emptyset , and Fijian δ —Samoan \emptyset , which represent ‘mediate’, that is to say a less direct, contact.

The evidence which has been made available so far for Rotuman¹ does not seem to contradict and appears to support the present hypothesis. The Rotuman equivalent of both Fijian δ and *s* is in all cases *s*. Thus :

- (i) Fijian *su\delta u* ‘breast’, Rotuman *susu*, Tongan *huhu*, Samoan *susu* ;
- (ii) Fijian *\delta ala* ‘miss, wrong’, Rotuman *sara*, Tongan *hala*, Samoan *sala* ;
- (iii) Fijian *sala* ‘path, road’, Rotuman *sala*, Tongan *hala*, Samoan *ala* ;
- (iv) Fijian *mo\delta e* ‘sleep’, Rotuman *mose*, Tongan *mohe*, Samoan *moe*.

Certain deductions can therefore be made :

On the basis of (i) and (ii) above one may assume immediate contact between Rotuman and Fijian on the one hand and Rotuman and Samoan on the other.

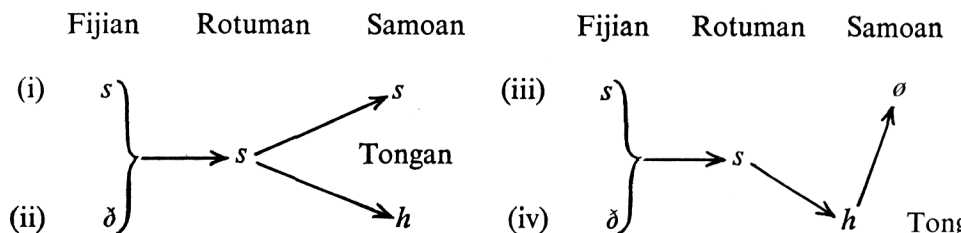
On the basis of (iii) and (iv) above one may assume immediate contact between Rotuman and Fijian on the one hand and Rotuman and Tongan on the other, Rotuman representing an intermediate stage (through which Tongan may have passed) at which δ and *s* had coalesced into *s* but antedating the shift to *h* which took place in Tongan.

It is perhaps worth noting that those correspondences can also be illustrated from words which are attested for Fijian and Rotuman only (e.g.

¹ C. M. Churchward, *Rotuman grammar and dictionary*, Sydney, 1940, pp. 159–66 *et passim*.

Fijian *yāḍa* 'name', Rotuman *asa*) or for Rotuman and Tongan (with Samoan only (e.g. Rotuman *siŋoa* 'namesake', Tongan *hiŋoa* 'name', Samoan *iŋoa* id. Rotuman *soŋe* 'famine', Tongan *hoŋe*, Samoan *oŋe*).

The following diagrams retain the essential features of the tripartite series of immediate and mediate correspondences already set out, while also taking into account the evidence of Rotuman :



Such an analysis would enable one to account for the existence of doublets in Samoan without positing proto-doublets as Dempwolff did or additional proto-phonemes as proposed by Dyen. Thus :

Fijian	Samoan
<i>saku</i> 'sword-fish (of various kinds)'	<i>a'u</i> 'fish (<i>Strongylura</i> sp.) with long snout <i>sa'u-</i> as in <i>sa'ulā</i> and <i>sa'ulele</i> 'sword-fish' and 'saw-fish'
<i>suli</i> 'banana or taro sucker'	<i>uli</i> 'small corm of a taro sucker'
<i>ḍoka</i> 'pierce, spear'	<i>suli</i> 'banana sucker'
<i>ḍola</i> 'live' (Western dialects)	<i>o'a</i> 'husk a coconut'
<i>ḍuru</i> 'enter, go through'	<i>so'a</i> 'spike, transfix'
	<i>ola</i> 'live'
	<i>sola</i> 'escape (with one's life)'
	<i>ulu</i> 'go in, enter'
	<i>sulu</i> 'put in, insert'

A number of other doublets exist in Samoan for which no Fijian equivalent can be found. The method of approach suggested above does not, of course, rule out the possibility of mediate and immediate contact between Samoan and other languages. The case of *ḍola*, found in a number of Western dialects of Fijian but not in standard Fijian (Bauan), and corresponding to Samoan *ola* and *sola* is a possible indication that both Tongan and Samoan may have in their traditional vocabulary other evidence of having been in contact with languages regarded as Melanesian. Among other Samoan synonyms and part-homonyms are the following : *aga* and *saga* 'face', *ao* and *sao* 'collect, assemble' (cf. *ao* 'daylight' and *aso* 'day', mentioned by both Dempwolff¹ and Dyen²), *i'u* 'end ; tail

¹ *AW*, p. 11, **a(n)dav* and p. 60, **ha(i)g'av*.

² *Language*, 27, pp. 539-40, § 20-1.

a fish' and *si'u* 'tip; tail of a land animal', *ati* and *sati* 'attacked by insects', *ui* and *usi* 'dark' and 'greenish blue' respectively, said of plants and animals.

As our synchronic knowledge of each language increases, both qualitatively and quantitatively, it will be possible to pursue other lines of investigation, notably to establish whether there is evidence that the same sound shifts have occurred independently in a number of different areas.¹ In the article referred to earlier on, Holmer takes the almost paradoxical but tenable view that in a sense all languages are mixed languages and all words loanwords. One of the most strongly held beliefs of the late J. R. Firth was that languages were polysystemic and not monosystemic. It cannot be doubted that there is a need for a wider application and a special adaptation to individual problems of new techniques, described some years ago by Miss Henderson,² for the identification of loanwords.

PART II : MORPHOLOGY AND SYNTAX

Among the suggestions made in Allen's paper referred to in the preamble of this article is a reference to the desirability of trying to relate systems of pronouns, 'the terms of which would be identified by their function in indicating such contextual features as relative status of speaker and hearer, inclusion and exclusion of the hearer or a third person, and so on.'³

In a recent article one of our French collaborators, M. Haudricourt, has already put this suggestion into effect and compared *inter alia* the pronominal systems of Fijian and Samoan, with particular reference to the interesting problem of a *case vide* in Fijian which is occupied in Samoan.⁴ I am referring to the problem which arises when two grammatical categories appear to conflict with common sense, as for instance when on the one hand there is a distinction between singular and plural, and on the other between inclusion as opposed to exclusion of the person addressed.

One would have expected on grounds of 'common sense' the latter distinction to be 'neutralized' in the singular. In point of fact Fijian has one form only but Samoan has two. It is interesting to note that Allen, being at that stage of the argument no longer concerned with the need to establish genetic identity, does not even require a necessary phonemic identification of the pronominal forms, and declares himself satisfied with symbols such as *x* and *y*.⁵ An attempt has accordingly been made to represent two of the pronominal subsystems (one in Fijian and the other in Samoan) by means of symbols, with a value established

¹ cf. A.-G. Haudricourt, 'Variations parallèles en mélanésien', *BSLP*, 47, 1951, pp. 152-3.

² E. J. A. Henderson, 'The phonology of loanwords in some South-East Asian languages', *TPS*, 1951, pp. 131-58.

³ *TPS*, 1953, p. 99.

⁴ 'La première personne inclusive du singulier en Polynésie,' *BSLP*, 54, 1959, pp. 130-5.

⁵ loc. cit.

by contextual situation, and abstracting two grammatical categories only, person and number. The justification for equating two systems which might be said to have been arbitrarily abstracted from two different grammatical complexes will be discussed presently.

Let x , then, represent the person(s) addressed, y the person(s) referred to, and z the speaker(s). Let 1 represent the singular and 2 the dual. Let 3 represent the plural, 3a being the trial, that is, a plural appropriate for three or a small number of people, and 3b being an unlimited plural. The following could then be used to represent the two sub-systems :

Fijian				Samoan			
x1	y1	zy1	ø	x1	y1	zy1	zx1
x2	y2	zy2	zx2	x2	y2	zy2	zx2
x3a	y3a	zy3a	zx3a	x3	y3	zy3	zx3
x3b	y3b	zy3b	zx3b				

If one has postulated a genetic relationship, one will presumably be concerned with the history of the divergences of two systems such as these from an original to be reconstructed. Haudricourt, for instance, takes the view that Samoan has lost category 3b with the exception of the exponent for $zx3b$, which survives in vestigial form as $xz1$.¹ As he points out, discrepancies such as may be found between the Fijian and Samoan systems illustrated above can be brought into greater clarity by considerations of a synchronic as well as of a diachronic nature. One might add that as an illustration of that point in Fijian, it is not only 'contextual' number which determines the choice between categories 2, 3a, and 3b, but the status of the speaker(s) relative to that of the person(s) addressed referred to.

In Samoan, where the linguistic expression of the relative status of speaker and hearer (or person referred to) is to be found mainly at the lexical level (i.e. the existence of an elaborate system of terms of respect), that consideration applies only to forms $zy1$ and $zx1$, and to a lesser extent to forms $x1$ and $x2$. That is to say, one can elevate a person whom one addresses (a) by using an $x2$ form, 'you two,' or (b) achieve the same effect by 'lowering' oneself, i.e. by using a form $zy1$ which has a connotation of self-disparagement together with an appeal for sympathy or pity (i.e. 'I in common with you', 'I who have a claim on your interest, affection, or sympathy' as opposed to 'I alone' ($zy1$) and 'you and I together' ($zx2$)).

One can see therefore that, bearing in mind these considerations, the two systems are in fact in closer agreement than would appear if one was concerned merely with finding evidence of phonemic identity, or, failing that, with a one-to-one agreement for person and number. In other words, where the two systems

¹ *BSLP*, 54, pp. 134-5.

differ one can, instead of positing a 'starred system', ascribe those differences to considerations of a synchronic order which have an effect on the equilibrium of each system.

Perhaps an even more suitable problem for comparison (without the prerequisite of a genetic hypothesis) is that provided by the existence of four nominal classes in the Fijian pronominal system and two in the Samoan. There is no obvious and immediate similarity between the two, either from the point of view of a search for phonemic identity or from their distribution and what one might call the notional and sociological correlation of those classes.

Thus, while in Fijian classes 1-4 are associated respectively with people and things in general; food and appurtenances; drink; parts of a whole, such as parts of a plant, parts of the body, terms of kinship, in Samoan classes 1 and 2 are associated with people, objects, and activities over which the speaker (or person addressed or person referred to) respectively does or does not exercise control. Thus in Fijian:

Class 1	<i>na nomu wanga</i>	your boat
Class 2	<i>na kemu uvi</i>	your yam (to eat)
Class 3	<i>na memu tī</i>	your tea (to drink)
Class 4	<i>na liqamu</i>	your arm

and in Samoan:

Class 1	<i>'o lau lāuŋa</i>	your speech
Class 2	<i>'o lou nu'u</i>	your village. ¹

To compare a four-term system with a two-term system would, *prima facie*, appear to be a somewhat questionable undertaking. Moreover, the notional and semantic categories one can establish, with greater or lesser exactitude, may seem to be of very limited usefulness, and furthermore applicable only to the language for which they have been devised. Thus terms of kinship (class 4 in Fijian) are in Samoan divided between classes 1 and 2. Having 'justified' their membership of class 4 in Fijian on the grounds that they can be considered to be 'parts of a whole', one would then have to account for the fact that in Samoan they are subject to the dichotomy between control and lack of control. For instance, one might even have to argue that the word *āvā* 'wife' (class 1) implies control exercised by a husband over his wife, while the word *to'alua* 'spouse' (class 2), when used by or apropos of a husband, implies lack of control over his wife. Similarly many words of class 1 in Fijian have semantic or lexical equivalents which are distributed between classes 1 and 2 in Samoan.

Yet in a special grammatical sense classes 1 and 2 in Fijian and classes 1 and 2 in Samoan correspond exactly. In addition to the nominal particles which occur

¹ cf. Churchward, *A Samoan grammar*, 2nd ed., Melbourne, 1951, pp. 46-9; Milner, *Fijian grammar*, Suva, 1956, pp. 64-5, 71-2.

in some of the pronominal systems of Fijian and Samoan, there exist also ‘genitive’ particles which have the same distribution. Thus in Fijian :

<i>na nona wanga</i>	his boat	or	<i>na wanga nei Tui</i>	Tui’s boat
<i>na kena madrai</i>	his bread		<i>na madrai kei Tui</i>	Tui’s bread
<i>na mena tī</i>	his tea		<i>na tī mei Tui</i>	Tui’s tea
<i>na lijana</i>	his hand		<i>na lija i Tui</i>	Tui’s hand

The same feature is found in Samoan :

<i>'o lana lāurja</i>	his speech	or	<i>'o le lāurja a Pai</i>	Pai’s speech
<i>'o lona nu’u</i>	his village		<i>'o le nu’u o Pai</i>	Pai’s village

It is possible for a given word to belong to more than one category according to the relationship of the two terms of each phrase :

Fijian	Samoan	English
<i>na nona itaba</i>	<i>'o lana ata</i>	his photograph (i.e. taken by him or belonging to him)
<i>na kena itaba</i>	<i>'o lona ata</i>	his photograph (i.e. the photograph of him, likeness)
<i>na nomu itukutuku</i>	<i>'o lau tala</i>	your story (i.e. the story you have told)
<i>na kemu itukutuku</i>	<i>'o lou tala</i>	your story (i.e. the story about you) ¹

This correlation between classes 1 and 2 in Fijian and Samoan is of importance in the analysis of certain features of the verbal systems of the two languages.

As will be recalled, both in Fijian and Samoan certain words of type CVVCVCVCVCV (or other patterns which may be subsumed under the same formula) may in certain circumstances be followed by monosyllabic or disyllabic suffixes generally of the pattern CV or CVCV (also CVV in the case of Samoan). The consonants of these suffixes have been of particular interest to comparative philologists, who wanted to establish whether or not those consonants could be regarded as the reflexes of Proto-Indonesian final consonants.²

In Fijian the final vowel may be either *-a* or *-i*. *-a* denotes active transitivity between a (usually) verbal form and its object when the object is ‘commemorable’. Thus :

au nanuma na koro I remember the village

-i denotes, *inter alia*, (i) active transitivity between a (usually) verbal form and its object when the object is ‘proper’. Thus :

au nanumi koya I remember him

(ii) passive transitivity between a verbal form and its subject :

e nanumi na koro the village is remembered
e nanumi ko koya he is remembered

¹ See also Churchward, *Tongan grammar*, London, 1953, pp. 78–81 ; J. E. Buse, ‘Rarotongan personal pronouns : form and distribution’, *BSOAS*, 23, 1, 1960, pp. 130–2.

² Kern, *op. cit.*, chap. 5, pp. 63–102 ; *DA*, p. 133, § 127 a, 6.

An important reservation in the use of the word 'passive' is that no 'agent' can be expressed. It is a characteristic of Fijian that one can nominalize a great number of verbal forms by substituting for the verbal pronoun a nominal pronoun of the corresponding person and number. It is here that one can observe a kind of concordance between, on the one hand, class 1 nominal pronouns and active forms (in *-a*), and on the other hand class 2 nominal pronouns and passive forms (in *-i*). Thus :

na noqu nanuma na koro my remembering the village
na kena nanumi na koro the 'being remembered' (i.e. the remembrance, the memory) of the village.

In Samoan, however, where there is also a system of verbal suffixes and where it is also possible to nominalize verbal forms, efforts to establish a concordance between suffixes and nominal pronouns as in Fijian have not been successful, much of the evidence being apparently conflicting. The central difficulty would seem to be whether the CVV suffixes of Samoan can be described as active or passive.

The question whether those two terms are applicable to, and meaningful for, Malayo-Polynesian languages is of course a very complex one. After giving rise to a prolonged controversy among Dutch scholars at the end of last century, it was re-examined in considerable detail by Professor Gonda.¹ Many persistent illusions and misconceptions were then removed. A similar controversy apropos of Samoan and Polynesian in general developed in 1928 in Australasia.² Some of the chief protagonists were evidently unaware that what was essentially the same problem had already been discussed at length apropos of Indonesian languages.

A re-examination of this problem in so far as it affects Samoan would fall outside the limits of the present study. The present writer has made some progress towards a solution, and has discussed it elsewhere.³ It would seem that a comparative approach to syntax, freed from the preoccupations that stem from a desire to account for differences by reference to a common origin, would throw a good deal of light on the grammatical problems of each language. Even if in the last resort each syntactical problem proves to be soluble mainly by reference to a synchronic set of relations, the comparison of integrated systems of morphology and syntax (as opposed to the comparison of separate morphemes linked

¹ 'Een onbevredigend behandeld punt in de maleise grammatika', *BTLV*, 97, 1938, pp. 515-41; 'Over indonesische werkwoordsvormen', *BTLV*, 105, 1949, pp. 334-79, 381-421.

² Churchward, 'On the origin of the Polynesian passive', *JPS*, 37, 1928, pp. 300-5; H. W. Williams, 'A new Samoan grammar' (review), *JPS*, 36, 1927, pp. 194-7; id., 'Some observations on Polynesian verbs', *JPS*, 37, pp. 306-17; A. Lafeber, 'The grammatical value of constructions with *e* in the Polynesian dialects compared with similar cases in Indonesia', *JPS*, 37, pp. 403-25.

³ G. B. Milner, 'Active, Passive or Perfective in Samoan: A Fresh Appraisal of the Problem', *JPS*, 71, 1962, pp. 151-61.

by a sometimes tenuous phonemic identity symbolized by starred morphemes may also be rewarding.

It would, for instance, be possible to devise a grammatical framework of reference within which both the Fijian and the Samoan verbal systems might be studied synchronically. For that purpose some of the transformation techniques which have been suggested recently by Chomsky¹ could be adapted to the problem outlined above. One could, for instance, study the effect of substituting a pronoun for one of the two members in a Samoan transitive or intransitive construction. One could also study the different syntactical relations which result from the possibility, where it arises, of using a pronoun before a verbal form (with or without a suffix), after the verbal form, or both before and after, as well as the limitations to which those transformations are subject. It is probable that an independent analysis of the verbal system in both Fijian and Samoan is necessary before the two suffixation processes can be studied as a whole and before an understanding of one may be said to throw the other into better perspective.

¹ N. Chomsky, *Syntactic structures*, 's-Gravenhage, 1957.