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ETHNOLOGY OF THE INDO-PACIFIC ISLANDS.

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LANGUAGE.

PART I.

CHARACTERS OF THE INDO-PACIFIC LANGUAGES.

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Chap. I.

GENERAL CHARACTER OF THE INDO-PACIFIC LANGUAGES.

SEC. I. PHONOLOGY.

Elementary Phonology. The insular languages present similar contrasts of harsh and soft phonologies to those that are found in every considerable region in other parts of the world. But their prevailing character is vocalic, harmonic, and flowing. This is

* Introductory Note. As the publication of the various sections of my review of the ethnology of the Indo-Pacific islands must necessarily occupy a considerable period, I thought it advisable to proceed at the same time with the separate notices of each tribe. After some trials I found it would be impossible to convey a clear idea of the ethnologic results afforded by the languages of particular tribes, without the constant repetition of references to the general characteristics of the insular languages. In order to avoid this I propose to take a rapid review of all the known languages of Oceania, and to compare their leading traits with those of other families of language around the eastern Ocean. I hope to be enabled at some future period to offer a more complete view.

The following arrangement has been adopted. A brief sketch of the general characteristics of the Oceanic languages is first given. This might perhaps have been advantageously enlarged, but it has appeared to me sufficient for ethnological purposes. It would be difficult, without undesirable amplification, to give a more exact view, while continuing to avoid any anticipation of ethnic comparisons and conclusions. When I endeavour to trace the relations of the insular languages to those of the continent, the comparative character of the former will be more clearly indicated. The second chapter is a general classification of the Oceanic languages according to their leading phonetic and ideologic characters. The subdivisions must be postponed until we come to glossarial comparisons. In the third chapter each of the groups established in the second, is separately considered, not with the object of observing its structure fully, but to seize on its more prominent peculiarities and affinities. This is followed by a comparative view of the formatives, definitives, pronouns, possessives and directives. I have thrown into the form of a Supplement to chap. III. a multitude of details and illustrations which if incorporated in the text would have defaced my object in making it brief, but which are necessary to convey more precise notions than can be obtained from general description. The foreign alliances of the insular languages are next considered. I commence by examining the general characteristics of the languages of the basin of the Indian Ocean,—the Lau-Chinese, Burmese, Tibetan, Himalayan, Arabic, Indian and African. Before adopting any conclusions respecting the connection between the Africa-Semitic and Oceanic languages I considered it necessary to examine the former as fully as the data within my reach allowed. The results are too extensive to form a portion of the present paper, but they will be given separately.

In the meantime I have indicated very briefly the character of the African families. The relations of the Oceanic languages to the different continental alliances are examined and a view is given of the affinities between the formatives, definitives, pronouns, directives and numerals of the former and those of the latter. The bearing of the results on the ethnology of the Indo-Pacific islands are adverted to in this last chapter. That no room may be left for doubt as to those continental families with which the insular languages are most closely connected, I have added brief general comparisons with the Fino-Japanese, and American alliances.

I have already remarked on the great deficiencies in our knowledge of the Indo-Pacific languages.—Journ. Ind. Arch. vol. iv. p. 445. The list at the end of this
fully developed in the middle languages of the region, those of Eastern Indonesia, in most of which the proportion of consonantal finals is small, and in some of which the vocalic tendency is so great that all final consonants are rejected. This phonology has largely influenced the languages of Melanesia and Micronesia, and it has degenerated in Polynesia into an extreme softness and weakness. Polynesian has not only, like some of the E. Indonesians, lost the power of pronouncing final consonants, but even that of maintaining the distinction between surds and sonants, and the phonetic elements are reduced to a smaller number than in any other known language. In N. E. and W. Indonesia the vocalic phonology is accompanied by a greater love for consonants and a tendency to nasal terminals. In the ruder dialects it becomes harsh, without entirely losing the vocalic tendency; strong nasal and guttural sounds abound; and the pronunciation, instead of being pure and distinct, is smothered and intonated. The pronunciation of some of the more cultivated languages of the West is open and agreeable, retaining however a considerable degree of intonation; that of many of the East Indonesian tongues is highly rhythmical and harmonious; while the Australian is extremely hurried and abrupt.

The Melanesian languages in general partake of the prevalent insular phonology. The western New Guinea, the Australian, Tasmanian and New Caledonian are in general highly vocalic, the Tasmanian and some of the Australian being purely vocalic in their finals. But some languages in the Melanesian region, particularly those of N. Australia and Torres Strait, have preserved a highly consonantal phonology, possessing some compounds which are unknown in Indonesia. In Micronesia the prevalent phonology is intermediate between this high degree of consonantalism and that of N. Indonesian. The latter has peculiarities which connect it with Micronesian phonology, and some of these are found in a few of the languages of Borneo.

The insular intonations have not the complexity and variety which distinguish those of the Chinese and Ultraindian phonologies. In general each language has a prevailing tone which is consequently of no phonetic value. There are, however, some paper of all the authorities from which I have derived any data, presents, I believe, a tolerably accurate view of the contributions that have hitherto been made to this branch of the ethnography of the region.

In the ethnographic notices of the different tribes, the characteristics and affinities of each language will be separately considered.

I ought to add that in the use of certain terms, and in the general mode of treating the subject, I assume that the reader has perused my previous papers on insular ethnology, or at least three of them,—entitled "A System of Classification and orthography for comparative vocabularies," Journ. Ind. Arch. vol. ii. "Preliminary remarks on the generation, growth, structure and analysis of languages." Ib. vol. 111 p. 697, and "the ethnology of the Indian Archipelago, embracing enquiries into the Continental relations of the Indo-Pacific Islanders." Ib. vol. iv p. 392.—J. R. L.
exceptions. The substitution of the abrupt tone for A is common in the West, and the same tone forms a principal characteristic of Polynesian phonology.

It results from the vocalic tendency of the Oceanic languages, that the powerfully articulated and complex consonantal sounds of archaic times, still preserved to a considerable extent in N. and N. E. Asia, in the uncultivated Tibetan dialects, in S. India and S. Africa, in Rakhoing and some of the ruder languages of N.W. Ultraindia, and, in a less degree, by the ruder tribes along the more southerly portions of the W. mountain chain into the Malay Peninsula, have become softened by ejecting, abrading or vocalising the consonants. In the middle of the Oceanic region however there are remnants of a highly consonantal phonology with Tamulian and Hottentot traits. Although this archaic phonology appears to be now chiefly confined to N. Australia, it probably prevailed in Melanesia before the vocalic influence of the E. Indonesian began to operate in that region. In N. E. Indonesia and Micronesia also some allied consonantal phonologies are preserved, and this, combined with other reasons, leads to the inference that the oldest Oceanic phonologies were highly consonantal.

The variations in the phonetic character of languages which have so much in common are perhaps best illustrated by the terminals. Those of Polynesian, it has been already remarked, are purely vocalic. In E. Indonesian this is the case with the languages of Gorontalo in Celebes, Ende in the S. Chain, Sapurua and Halmahera in the Moluccas; the others have a small proportion of consonantal endings, e.g. in Celebes, Kaili about 5 per cent, Buol about 7, Parigi and Tojo 10, Mandhar, Mangkasar and Bugis 25, Buton 5; in the S. Chain Tenimber 16, Letti 10, Savo 3, Sumba 14, Bima 5; the others exceed the highest Celebesian ratio, Kissi 40, Timor 38, W. Timor 34, Belo 40, Roti 37, Solor 36. The Ceramese gives 16 for one dialect and 28 for another. A few W. Indonesian languages have the E. Indonesian phonology in a much larger measure than the others. This is the case with some of the languages of the islands to the W. of Sumatra. That of

* It must be borne in mind that languages easily pass from consonantal to vocalic terminals. Hence we sometimes find that allied languages, spoken by adjacent tribes, differ in the terminals. Many instances of this are afforded in those parts of Ainsela in which the vocalic system meets the consonantal or penetrates into it. Thus in Australia we find some dialects with numerous and varied consonantal finals, others with nasal and liquid finals, and others purely vocalic. Some languages are neither decidedly consonantal nor decidedly vocalic. This must be the case where the existing phonology differs from the original one. The Vietic seems to be an instance of a language primitively consonantal having become vocalic from interpenetration with Polynesian, but still retaining a consonantal tendency, the final vowel being frequently indistinct and hardly perceptible.

The ratios are drawn from 300 words in the W. and N. E. Indonesian languages and 100 in most of the others. These numbers are too small, but they are sufficient to show the tendencies of the different languages. More exact phonetic results will be given when we come to glossarial comparisons.
Nias has only about 9 per cent of consonants and that of Tilanjang (Engano) about 5. The Daya' tribe who occupy the river Sandol in the S. W. of Borneo have 31 per cent of final consonants, and it is remarkable that amongst these d and g occur, thus presenting a combination of N. E. and E. Indonesian phonology.

In W. Indonesian the final vowels and consonants are in general in about equal proportions, e.g. the consonants are in Malay about 65 per cent; Batta 57, Aehin, Lampong, Javan, Sundan, Bali 50 per cent, Komring, Bawean, Ngaju about 40. In the N. R. X Indonesian the proportions are nearly the same as in W. Indonesian or about 50 per cent. But some dialects of the Formosan appear to be more consonantal than any other Indonesian language, having as much as 70.

The W. Micronesian languages are in general as consonantal as the N. Y. Indonesian. Tobi has about 50, and Pelew 65 per cent; the Marian and the Caroline are probably similar to the latter. The E. Micronesian present in Mille (Radak) a language still more consonantal, for it has 70 per cent of final consonants, a ratio only found elsewhere in Formosa and Torres Strait. The Tarawan, near Polynesian, has only 13 per cent. The Melanesian languages vary from a consonantality greater than that of W. and N. Y. Indonesia, to a vocalicism as great as that of the most vocalic of the E. Indonesian dialects. New Caledonian has about 20 per cent of terminal consonants of a W. Indonesian character. The Tasmanian and S. Australian languages in the S. and the Limba Apiu in the N. W. are purely vocalic. The western, eastern, middle and a few of the northern languages of Australia are vocalic, but most have a proportion of consonantal terminals nearly the same as the W. Indonesian. In the E. and S. W. languages the vocalic tendency is very decided, for although the proportion of terminal consonants is large in several of the dialects, the consonants are few and all of the most vocalic kind,—the nasals n and ŋ and the liquids l and r, e.g. Wiradurai 63 (n 23, ŋ 20, l 14, r 6) Kamilarrai 30 (n 16, ŋ 17, l 6). The western languages are more consonantal. The S. W. Australian has the same variety of terminals as the W. Indonesian with the exception of s, the nasals and liquids predominating. This trait, with the possession of j as a substitute for s, both being wanting in E. Australia, connects the S. W. with the N. W. Australian dialects, and leads to the inference that the intermediate western languages will be found to have similar characteristics. The northern languages present remarkable contrasts, but the prevailing character is a much higher consonantal development, and a greater proportion of terminal consonants, than the more southern languages possess. In the N. W. dialects the consonantal terminals vary from 65 to 50 per cent, while one at least is purely vocalic. The N. E. languages, have the eastern phonology as far N. at least as Endeavour River. The dialects of the Torres Strait islands are
highly consonantal, having about 70 per cent of final consonants. They are distinguished from all the Australian languages by their possession of sibilants. The N. W. languages however are phonetically allied to them. The western New Guinea languages are in general E. Indonesian in their phonology. Utanaian has 4 per cent, Lobo 14 per cent and Waigiu 9 per cent of final consonants. These languages are chiefly insular. That of Point Dory is highly consonantal, having about 65 per cent of final consonants, and it may be inferred that this represents the archaic phonology of New Guinea better than the dialects that have become vocalised at the line of contact with E. Indonesian.

The most common consonantal finals are the nasals $n$ and $ng$; $t$ ranks next; then $s$ and $r$; the others are comparatively rare. $ng$ and $n$ are in nearly equal proportions in most of the W. Indonesian languages, and both united form from 20 to 30 per cent or about one-half of all the consonantal finals. In the more consonantal of the E. Indonesian there is about 20 per cent of nasals, but it is remarkable that while the Mangkaas and Bugis affect the more sonant and musical $ng$, the Eastern and Southern languages use the surd $n$ almost to the exclusion of $ng$. In the vocalic Australian languages the nasals are in larger proportion than in W. Indonesian, some having upwards of 40 per cent. In the Torres Strait dialects they are almost wanting. The Micronesian vary, Tobi having only 5 per cent and Mille 28 of which $n$ forms 23. The final $ng$ of W. Indonesia becomes $kn$ in several of the Bornean dialects, and is sometimes replaced by $g$ in the N. E. Indonesian. In Kayan $kn$ is also initial. $K$ is a frequent terminal in several of the W. and N. E. Indonesian such as Batta, Malay, Pontiana, Tagalo, in some of the E. Indonesian, such as Roti, Timor, Belo, Kissa, and in the more consonantal Melanesian and Micronesian languages.—S. W. and N. E. Australian, Torres Strait, Tobi, Pelew, Mille. $T$ is also common in most of these languages, and the majority of the W. Indonesian, unlike the E. Indonesian, affect it in preference to $k$. $D$ does not occur in Indonesian save in some rare instances in Malay, Sandol and N. E. Indonesian. It forms 2 to 8 per cent in Torres Strait, N.E. and S.W. Australian and 1 per cent in Mille. In W. Indonesian $q$ occurs very rarely and in a few languages. In N. E. Indonesian it is more common, reaching in Formosan to 14 per cent. In E. Indonesia and Australia it does not occur. In the Torres Strait dialects it is as common as in most of the N. E. Indonesian. In the Micronesian languages, which have so much phonetic affinity both to the N. E. Indonesian and Torres Strait, it appears to be rare. The liquids $r$ and $l$ are not common finals in W. Indonesian, but in Malay, Javan and a few others, and in the N. E. Indonesian, they form about 8 per cent. In W. Indonesian $r$ predominates and in N. E. Indonesian and Micronesian $l$. In most of the E. Indonesian these liquids are rare, but in some, such as Ceramese and Kissa, $r$
forms about 8 per cent, which is the highest W. Indonesian ratio. In the Australian languages r and t are the most common terminals next to the nasals, and indeed are the only other consonantal ones in some of the E. Australian. L predominates in the latter and in N. W. Australian, and r in S. W. Australian, as it does in the Torres Strait dialects also,—e.g. Wiradurai 14, r 6; Kamilari 16; S.W. Australian r 19, t 1; Cape York r 11, t 5; Murray I. r 15, t 2. The sibilant s forms about 6 per cent in W. Indonesia, but in some languages it is only from 2 to 4, which is also the N. E. Indonesian ratio. Several of the E. Indonesian have the same per centage as the majority of the W. Indonesian, and Roti has as high as 22. In others it is rare or wanting. In the Torres Strait dialects s is more frequent than in W. Indonesia or 7 to 11 per cent. Two W. Micronesian languages, Tobi and Pelew, give 3 and 7 per cent. Of the labials, m is the most common terminal. It forms 2 to 4 per cent in W. and N. E. Indonesia, 1 to 2 in E. Indonesia, 1 in S. W. Australian. In Torres Strait and Micronesian it is much more common,—Murray I. with Erub and Maier 10, Tobi 15, Pelew 7, Mille 6. The labials b and p are from 3d. to 2 per cent in W. Indonesia, b being generally 3d. In some of the E. Indonesian they are in about the same proportions, but in most, labial finals are wanting. F and v, take the place of p, b in some. In the Torres Strait dialects b, p form about 12 per cent, in Micronesia 6 to 9. In Tobi b, p, v, and f occur. Pelew has a terminal sound written th which appears to be a peculiar pronunciation of r. It thus appears that the large proportion of labial terminals is a peculiar bond between the Torres Strait and Micronesian languages. The compound terminal dj, tj is also common to these groups and to N. W. and S. W. Australian.

The only simple sounds that are wanting in the majority of the languages are the labials f, v, and the sonant sibilant x. F and v are found in some of the E. and N. E. Indonesian, N. Borneon, in Polynesian, and in some of the Micronesian languages, and x occurs as a pure sound in Formosan, Tobi, Banabe and Rarotongan, and enters into the compounds of some the Torres Strait dialects. The distinction between dental and palatal is fully established in some of the W. Indonesian languages, but it has only a local prevalence. In other respects the W. Indonesian phonology is well developed. The N. E. Indonesian wants the strong r, and often substitutes g for it. The E. Indonesian, on the contrary, has a decided tendency to r in many of its languages. In several the aspirate is wanting, but others affect it in preference to the sibilant. G and ch, are also absent in some. Polynesian, as I have before remarked, confounds the surds and sonants.

Australian and New Caledonian are distinguished by the want of s, which is possessed by other Melanesian alliances. The allied b, appears to be absent in Australian although found in N. Caledonian. S appears to be wanting in Mille (th is probably
substituted for it) and Tarawan. The latter is a remarkable combination of Polynesian and Micronesian phonologies, the former predominating. With a great deficiency or want of distinctness in its elements and a proneness to vocalise its finals, it possesses consonantal combinations and is very guttural. Most of the Melanesian languages and that of Mille affect the vibratory \( r \) and, as we shall see, frequently combine it with other consonants. Some of the N. W. Australian dialects have a cluck like that of the Hottentot.

The junctions of consonants are chiefly of the labial \( m \) with other labials, and of the liquids \( l, r, n \), and the sibilant, with other consonants. The former are rare in W. Indonesia, but common in some of the E. Indonesian languages, Formosan, Viti &c. The liquid combinations are found in the greatest number and variety in Melanesia and Micronesia. In W. and N. E. Indonesia they occur in most languages, but are rare in E. Indonesia. In Micronesia \( nt, nr, mr \) Tarawa; \( rt, dr, rn, rh, rht, dj, th \), Mille; \( dr, rt, dj \) Pelew; in Melanesia \( nr, ndr, nd, mb \) Viti; \( br, ts, &c \). Malicollo; \( kn, nk, nt, nd \), New Caledonia; \( rt, rh, lk, lt, dl \); \( nr, ndr, rp, tp, &c \). Australian; \( rh, rt, rs, rb, pr, lk, hl, nt, sm, dm, mh, ph, zh, dz, rz, &c \). Torres Strait; \( mp, np, nt, pr, kr, rb, mbr, st, nts \) Waigiu.

Combinations of more than two vowels, and reduplications of the same vowel, are very rare in all save the most emasculated languages. They are common in Polynesian and occur frequently in some of the southern languages of E. Indonesia. In W. and N. E. Indonesia \( au, ao, ai, ia, iu; io, oo, eu, ua, oi \), are found.

The permutations of sounds are numerous in the different languages, and allied sounds often replace each other in the same language. There is much dialectic variation in vowels, and taking the phonology as a whole, little ethnic weight can be given to them. \( A, o, e \) and \( u \) are constantly interchanged. I alone has considerable individuality, so that we might almost say there are essentially two vowels, a broad and a slender. The consonantal changes are seldom purely organic. They are more often organic and acoustic or purely acoustic. The organic depend on a slight change in the articulation, or in the articulative energy, in the muscular action and the strength of the breathing, by which a sonant becomes a surd of the same class, or a surd or a sonant of one organic class is substituted for a surd or a sonant of another, e.g. \( k \) for \( t \). The acoustic changes are dependent on the kind of harmony which characterises each language, and to the laws of which every exotic word is subjected before it is incorporated. It may have a surd or a sonant, a broad and open or a liquid, tendency, a love of the most simple sounds, or a predilection for some of the many kinds of compound ones, such as guttural, aspirate, sibilant, liquid &c. It may delight in the harmony of resemblance or in the harmony of contrast, and may exhibit the first in the
repetition of the same or the reflection of an allied sound. The following are the most common interchanges of the elements of sound in the insular languages. $k, g, h; t, t'; k, s, h; g, r; g, y; ch, y, h, s, j; j, d, j; n, s, t; t, d, r, l, n; n, n'; l, m, n, ng; j, v, p, b, w, m; ng, kn, g.$ The aspirate and liquids $h, r, n, l,$ are easily substituted for most other consonants.

The following examples will shew the glossarial effect of the variable phonology. The form first given is the nearest to that which each word had when introduced into Indonesia from Madagascar, India &c.


**Structural Phonology.** The Asianesian languages have some structural characteristics in common, but they also present great contrasts. In all, words and particles are compounded and united
by the accent, dissyllables prevail, reduplication of words and syllables is common, euphonic augments, elisions and permutations frequently accompany the junction of formative particles with words. On the other hand the contrasts are striking. While the Polynesian has little fluidity and its phonetic processes are few and seldom exercised, the Indonesian languages that approach nearest to it in vocalic tendency, are distinguished for their phonetic vitality and power. This is particularly the case with most of those of E. Indonesia, which are highly agglomerative, although within narrow limits, compared with the Australian, which has a power in this respect coequal apparently with that of suspending the breathing. The N. E. and the W. Indonesian have somewhat more phonetic power than the Polynesian, but are greatly inferior to the E. Indonesian. On the other hand, the combinations of formative prefixes are carried to an extraordinary extent in N. E. Indonesian, while the E. Indonesian formatives are few and simple.

Euphony is a distinguishing quality of the phonetic structure of the Oceanic languages, and that it is an archaic and fundamental one is proved by the extent to which it prevails in the formation of roots. It is true that comparative analysis can resolve a large number of words into still more rudimental monosyllabic elements, and that many monosyllables exist, but the structural basis of the insular phonology, as a distinct development, is harmonic, vocalic and disyllabic. The fundamental law of disyllabic harmony has made biconsonantal roots of one syllable disyllabic by the prefixing, infixing or postfixing of vowels, and under its operation monoconsonantal roots have added a vowel before or after the consonant, according to its position, or have been reduplicated. The love of euphonic echo shown in these reduplications, which are very numerous, appears also in the purely vocalic augments, and in the accomodations which take place when different roots are united. To the same law may be attributed the great use that is made of reduplication of entire words or of single syllables as a structural process. By this means plurality, intensity, repetition, and reciprocity are very generally expressed.* In the junction of

* All the vocabularies of the Oceanic languages that I have examined, show that in their primary era, reduplication was largely used, both in a purely phonetic mode to give effect to that almost universal euphonic principle from which the disyllabic character of these languages has arisen, and also ideologically to express indefinite multiplication of substantives in number and quantity, of qualities in degree, and of verbs in repetition, combination or intensity of action.

a. As an expression of plurality of number. In the Malay, and in the Javan &c. occasionally, a substantive becomes plural by reduplication, or rather, since substantives are in themselves indefinite as to number and perhaps in general indefinitely plural rather than singular, the reduplication is a more specific and distinct expression of plurality. In most of the Polynesian languages, as in the Vitlan and Javan, the substantive may be pluralised by the repetition of a syllable (the first apparently) of the adjective, or of the entire adjective,—Sam. law uatele, large tree, law uatele large trees; Har. maki sick, maki maki sick persons. Jav. homah gede large house, homah gede gede large houses.

b. As an expression of intensity in qualities.
particles with words, the changes are always euphonic. Thus the prefix *men*, in the W. and N. E. Indonesian languages, becomes *mem*, *meng*, *me* according to the initial of the word, and when the initial is a surd it is elided. Other illustrations may be seen in the various forms of the Polynesian passive particles, the S. E. Australian directives, &c.

**Sec. 2. Ideology.**

All the Asianesian languages are crude, and all have formative particles, prefixual and postfixual. The general character of the ideology is similar to that of the Fino-Japanese, Archaic Indian and African, that is to all those languages which have phonetic combination without decided flexion. The differences are great and are chiefly connected with the different degrees of phonetic power and activity which have been traced in the preceding section. There are others resulting from the collocation of words, from number and variety of relational particles, the mode of using and the capacity of combining them &c.

The more important of the characters common to all the groups may be briefly stated as follows,—crudeness, most words being capable of a substantival, adjectival, verbal, or adverbial use; prefixual and postfixual formative; active, neuter, passive, qualitative, substantival, personative &c.; absence of flexion to distinguish number, gender, person, time, mood, &c.; general want of formative particles to distinguish number, gender, and time; and the want of union between the pronoun and verb. The principal exceptions are the flexional indication of time in the N. Indonesian, and the union of the pronoun and verb in several of the E. Indonesian.

**Pol.** the superlative degree is formed by reduplication of the qualitative.

**Vit.** lo, also by reduplication of the adverb *leu* *sara* *sara* very very great.

**Jum.** the superlative degree in adjectives may be thus expressed, duwer duwerre the highest. Adverbs are also doubled *genti genti* by turns.

**c. as an expression of intensity of action.**

**Pol.** Tong. *tece*, to tremble; *tece tece* to tremble much. N. Z. *kai*, to eat; *kakai* to eat much. *Kar. kati*, to bite, *kati kati* to bite much. *Hau. lave* to take; *lave lave* to handle.

**d. as an expression (1) of repetition, frequency, continuance or permanence (2) plurality, combination, or (3) reciprocity of action in itself, and in relation to the subject or object.**

**Pol.** N. Z. *ina*, to drink, *ina* to drink frequently. *Kar. kiti* to bite *kati kati* to bite often; *Tah. amaha* to split, *amakahama* to split repeatedly, *Hau. ile* to jump, *ile* to jump, often, *ile ile* to jump repeatedly (as a man his wife) *Nuk. *pelp* to strike, *pepahi* to strike hard and often. *Sam. *jefa* to fear, *jefa jefa* they were afraid; *moa* to sleep, *monoe* to sleep together; *tufa* to divide, *tufa tufa* to share out; *ta* to speak, *tala* to talk; *Tong. wfo* to dwell, *kau* *nono* to dwell together; *Hau. tae* to come, *tae a ta* in *rau* and they two arrived, to descend down, to descend together. *Teo. tato* to sleep, *taote* to sleep together.

**Jaw.** *bambele* *bedil* continuing to shoot; *bali* to return, *balabali* always returning; *hangapunduruhdunurah* constantly to replace.

**Vit.** *vara* to kill, *vese* *arasu* they are killing one another.

**Examples of other applications.**

**Vit.** Komb to climb, *kamb* *kamba* a ladder.


**Vit.** *loa* dirt, *loa* *loa* dirty, black; *sombe* down *sombe* *sombe* steep.
languages. Other flexional traits occur, but they are not numerous. Glossorially there is a large agreement in definitive and formative particles, in pronouns and numerals, and many words of every class may be traced in all parts of the region. The permutations caused by the varying phonologies tend to disguise the extent of the agreement.

Definitives are much used in Polynesian, in which the definite article occurs more frequently than in any other language in the world. It is found also in N. Indonesian. Definitives for personal names and pronouns occur in both these groups, and they are partially used in E. and W. Indonesian for personal names. The common definitives are not used in the latter groups as the article, but largely as demonstratives. In some of the E. Indonesian and Australian languages they are preserved as prefixed syllables to substantives. Segregative or generic particles are numerous in W. Indonesian, much less so in Polynesian, and rare or wanting in the other groups.

The distinctions between rational and irrational, animate and inanimate, male and female, are little indicated by particles. The chief instances are the distinct definitive articles for common and proper nouns in Polynesian and N. Indonesian, the definitives for proper names in Australian, the masculine and feminine and the human definitives in some of the E. Indonesian languages, the masculine and feminine forms of the third personal pronoun in Tarawan and E. Australian, the gentilic feminine postfix in one at least of the Australian languages. In some languages there are distinct words for male and female when applied to human beings, and some of the E. Indonesian further distinguish in the several words between different classes of animals, and in the case of females whether they are mothers or not. Some of the substantival formatives are personative and some abstract.

The plural number may be indicated in most of the languages by reduplication of the word or a syllable. In Polynesian and Javan the adjective is reduplicated. A plural definite occurs in N. Zealand and appears to have been at one time a common possession of Polynesian. A plural postfix occurs in some of the Trawan and Australian pronouns. The companionative plural definite is a flexion of the singular in some of the N. Indonesian languages. The companionative is a peculiar plural found in Polynesian and N. E. Indonesian. In the possessive of Polynesian the prefix of the plural a, o is simpler than that of the singular ta (the definitive article.)

The pronominal system in almost every language presents various forms. The Australian, Polynesian and N. Indonesian are complex. The Australian has 6 forms, separate, agentive prefixual, objective postfixual, oblique, dual and transition. Full, separate and contracted postfixual forms are common. A dual form occurs in Polynesian and N. Indonesian as well as in Australian.
Inclusive and exclusive forms of the plural of the first person are found in nearly all the groups. The pronouns unite with nouns in the postfixed contracted forms in all the groups; in some of the E. Indonesian the postfixes are quasi flexional, the full forms being also preplaced. In Polynesian the agentive pronouns unite with the time particles to a certain extent, and also with the agentive particles. In Vitian the pronouns are preceded by particles. In some members of the E. Indonesian alone is there an incorporation of the pronoun and verb.

Formatives* are found in all the languages; substantival occur everywhere and attributival very generally, but in some of the E. Indonesian the substantive and attributive are to a certain extent confounded. The more minute distinctions are not thus universal, although some are nearly so. The passive is a very general formative, and it is much used. It occurs in all the groups, but to a small extent only in the E. Indonesian. It is closely allied to the transitive, the same particle being passive in some Polynesian dialects and transitive in others. In some of the Indonesian languages it is used both transitively and passively. Causatives occur in all the groups, but partially only in the E. Indonesian. Transitives and intransitives prevail in the

* The idea involved in every principal word may be determined from its primary concreteness into several limited meanings. That is the attention may be fixed on one or other aspect or portion of the whole, to the exclusion or subordination of others. Thus take a person (or other subject) striking an object. The mind grasps the whole phenomenon concretely, as all language must have originally done. But the attention may be fixed on any part or aspect, which has the effect of subordinating every thing else for the moment. If the attention be chiefly directed to the action, or the subject be considered as subordinate to the action, the word under this view assumes a pure action—form, he strikes it. This is the verb. If the action be subordinated to the subject, or viewed as an attribute of it, the participial form is produced; he is striking (active) it is struck (passive); and if the attention be fixed on the action itself as the principal part of the phenomenon, the general or abstract substantival form emerges,—the striking (active) the being struck (passive). It is evident that it is difficult to fix the attention principally on the action without making it substantive, and that it depends upon the mode in which, by the form of expression, the act is related to the subject, whether it assume a purely substantival, a qualitative or a participial character. If the attention be fixed entirely on the subject, we have a personal substantive, the striker (active), if on the object, the person-struck (passive). If other elements of the phenomenon be considered, we may fix our attention on the place, and thus locative substantives be produced. All this is exhibited with much simplicity in the insular languages, and from the particles which express the different relations remaining free, a high amount of power and applicability is given to them.

But besides the expression of the different forms yielded by the analysis of a phenomenon of action, the same particles are applied to indicate ideas either closely connected with those contained in the primary concrete, or having an analogy to it either real or fanciful. The particles are far more frequently used to express specific objects thus related to the primary word, than as abstract action—names. As the number of substantival particles is very limited, and no variations take place to distinguish between the most direct connection and the remotest association, and to mark the various kinds of analogy and relation that are expressed by them, it is generally impossible to know a priori what the effect of any given particle will be on a particular word. The kind of change may be indicated, the specific meaning cannot be anticipated. With the particles that confer and modify the attributival forms (verbs and adjectives) it is in general otherwise.
N. and W. Indonesian, the latter including qualitves. Reciprocal
forms are used in these groups and in Polynesian. The Polynesian
has an agentive particle, and Australian has agentive forms of
the pronouns. Intensives occur in Polynesian and E. Indonesian,
and the transitives have an intensive force in N. and W.
Indonesian. Desiderative, distributive, habituative, multiplicative,
complicative, and associative forms occur in Polynesian and N.
Indonesian; and potential in Tongan and N. Indonesian. A great
variety of other forms are produced in N. Indonesian by com-
ponding the particles. Some of the Polynesian distinguish be-
tween the action and the result of the action. The active agent,
the passive object or recipient, the instrument, the place are
indicated, but not regularly and consistently, in N. E. and W.
Indonesian and in some languages of E. Indonesia. The Australian
distinguishes the actor, the habitual actor, the act abstractly or
generally and particular acts, the place of the act, and the object
or patient. The direction of the action in relation to the speaker
is indicated by particles in Polynesian, N. E. Indonesian and E.
Indonesian. Traces of this are also found in W. Indonesian.

tine is indicated by prefixes in Polynesian, flexional changes
in the attributival particles in N. Indonesian, and postfixal
compounds in Australian. In the latter, time is minutely indicated.
The present and future are confounded in most of the Polynesian
and in one of the N. E. Indonesian dialects, and the same particle
is used for present and past in most of the latter, the present
however, being distinguished by a reduplication of its first syllable.
In Polynesian the time particles are largely united to the agentive
pronoun or agentive particle.

In structure there are some extensive agreements and some
striking differences. The Australian stand apart as postpositional.
The Polynesian and Indonesian are in most respects prepositional,
the directives being preplaced; the qualitative and possessive follow
the substantive, the modal or adverb the verb, and the object is
placed after the subject and action. The subject is generally
preplaced, but in Polynesian it is possessive or preceded by the
action. In Australian the object precedes the action. When
the agent is a pronoun, it generally precedes the action in Polynes-
ian and follows it in N. Indonesian. In W. and E. Indonesian
it usually precedes, but may follow it.

I postpone any remarks on the lexical character of the Oceanic
languages until we enter upon glossarial comparisons. Like all
other crude languages,—the American, Turanian, African &c.—
they are rich in concrete, and exceedingly defective in abstract, words.
Honorable words are used in Polynesian and Indonesian, and in
the former, words are substituted for those that enter into the
name of the king &c.

Sec. 3. Recapitulation.

Viewing the region as a whole, we observe that it presents
certain distinct systems or tendencies in its phonology, which in
some places maintain their separate characters and in others
operate together with different degrees of power. The most
important is highly vocalic, harmonic and assimilative. It
permeates the whole region; but it chiefly prevails in E. Indonesia
and Polynesia. Its tendency to emasculation is checked in
Indonesia by the influence of more consonantal languages.
Isolated in Polynesia, it has degenerated. It operates largely
on the phonology of S. and E. Australia, Tasmania and New
Caledonia, and probably on all the Papuanesian languages between
Australia and Polynesia. It pervades the western portion of New
Guinea and the western islands between New Guinea and
Australia, but is abruptly and completely stopped by a totally
opposite phonology in Torres Strait. It does not prevail along
the northern and western coasts of Australia, although the vocalic
languages of the S. islands of E. Indonesia are near them. It
does not prevail in Micronesia. It appears therefore to sweep
from the line where E. Indonesia rests on the southern Indian
Ocean, over Celebes and the Moluccas, and thence eastward and
southward round New Guinea to Polynesia, E. Papuanesia and
Australia. Whether it pervades New Guinea is unknown. But
the main line of connection is evidently through New Guinea or
along its northern coast, and not through N. Australia and Torres
Strait. It predominates in the western and eastern extremities of
Asianesia, in Nias and Easter island, and it deeply influences
the phonology of W. and N. E. Indonesia.

The other systems are consonantal. One is distinguished by
the prevalence of nasal finals, and the almost total absence of the
final sonants d and g. It has taken possession of W. Indonesia,
and affected several of the vocalic languages of E. Indonesia, such
as the Bugis. Another system is closely allied to the preceding,
but is distinguished from it by having less repugnance to the final
sonants d and g, and less predilection for final nasals, by possessing
f, v and the sonant z, and by its shewing less of the vocalic in-
fluence. This system is found pure in Formosa and Tobi only, but
it has evidently at one period spread over N. Asianesia including
at least N. Indonesia and Micronesia. In the Philippines the In-
donesian influence has considerably modified it, and in Micronesia
it has been blended to some extent with the consonantal Melanesian
phonology. Like the latter it has a proneness to final m (Tobi,
Pelew, Mille) and affects consonantal combinations not known in
Indonesia. The consonantal Melanesian is represented by the
Torres Strait dialects, and by the less primitive N. Australian lan-
guages, which have been somewhat influenced by the transmitted
vocalic tendencies of southern Australia and by those of the ad-
joenct E. Indonesian region.

In the progress of vocalism we remark that the liquid terminals
n, n, l, r are retained longest, that there is a tendency to surds in
preference to sonants, and that the more aspirated labials, or rather
dento-labials, $f, v$ are substituted to a great extent for the non-aspir-
ated or pure labials $b$ and $p$.

The primitive Melanesian phonology, of which strong traces are
preserved in Australia, is associated with a peculiar postpositional
and inverse ideology, which has not been discovered in any other
part of the insular region, although it has a great range on the con-
tinents. The more essential traits of Indonesian ideology are common
to the vocalic Eastern and the consonantal Western and Northern
languages. The last have a very complex system of prefixes and
postfixes, but important remnants of the same formatives are found
in the other groups and particularly in the Western. The Eastern
have fewer formatives, but they present in the union of the pronoun
and verb, a peculiar and highly flexional trait, and besides having
strong affinities of their own to Polynesian, they retain some
characteristics in common with N. E. Indonesian and Polynesian
which are wanting in W. Indonesian. There are other traits
again common to N. E. Indonesian and Polynesian, and the
latter has many peculiarities. As a whole, the ideology of the
region is more complex and remarkable than that of any
of the continents. Languages almost as crude as the Siamese,
are connected with others that exhibit traits of the highest
development, and yet retain much of the common crudeness.
The more crude are clearly not tending to a further develop-
ment that will bring them nearer the latter. On the contrary
the ideology, like the phonology, appears to have degenerat-
ed. In its more archaic condition it was evidently possessed
of powers and forms which are now only preserved in a state of
fixity or decay in some languages, while in others they have been
nearly lost. On the other hand, the consonantal languages have
no inherent vocalicism capable of explaining the transition of a
phonology like that of the Torres Strait dialects, into one like that
of the adjacent dialect of Endeavour River in Australia or of
Utana in New Guinea, nor do the complex ideologies exhibit
tendencies capable of explaining the transition of a language like
Tagalan into one like Malay. There are several strongly contrasted
and independent developments in the region, which have not
sprung from a common source, but have greatly influenced each
other. There are mixtures, assimilations, and less extensive changes
cased by tendencies received from contact, but if we confine our
observation to the Asiatic islands, the extraordinary combination
of connections and contrasts is inexplicable.

We can understand how wandering tribes so extremely low
in civilisation as the Australians, might be gradually displaced by
superior races, until they and their languages disappeared from the
genial islands of the eastern Ocean, and obtained shelter only in
the dreary and boundless wilds of the southern continent. We can
understand how, through the influence of vocalic Papuanesian or
Indo-Polynesian, their consonantal phonology might become vocalic, but we cannot detect in Australian any native tendencies capable of transmuting it into Papuanesian, Polynesian, or any form of Indonesian. So also we can understand how the higher ideologies, represented by numerous traits in N. E. and E. Indonesian and in Polynesian, might be gradually impaired by a continued influx of more powerful and civilised people with comparatively crude and simple ideologies. In this way only can we reconcile the striking affinities of all the non-Australian languages with their not less striking differences. There has been a succession of predominating systems of language. The Australian type has been followed by others, which we may term the Papuan, having a different but equally high, and in some respects a higher, development, and strongly distinguished from it by their vocalic and prepositional character. These have been succeeded by a very crude type, which has greatly influenced the Papuan and been influenced by it, and which has the more readily amalgamated with it from having a similar prepositional and direct collocation. In W. Indonesia this type predominates. It has deeply penetrated the E. Indonesian and Polynesian, but in N. E. Indonesia, Micronesia, and probably in some parts of Papuanesia, the older Papuan ideology is still the more powerful element. By the blending, under very variable circumstances, of these systems, and of the mixed systems thus induced, it appears possible to give a satisfactory explanation of the structure and composition of every known language of the eastern ocean. How these systems arose in the insular region must remain a mystery, unless it can be discovered by an examination of the languages of the adjacent continents.

CLASSIFICATION OF THE INDO-PACIFIC LANGUAGES.

While all the languages of the Oceanic region are intimately connected with each other, they admit of being provisionally divided into seven groups, several of which possess decided traits.

These are, 1st, the Polynesian, 2nd, the Micronesian, 3rd, the Papuanesian, 4th, Australian, 5th, the Eastern Indonesian, 6th, the Western Indonesian, and 7th, the North Eastern Indonesian. Although the linguistic limits do not coincide with the geographical, I have given to the groups the names of the regions in which they chiefly prevail, because while we remain ignorant of the languages of many tribes, we cannot obtain correct ethnic names.

The Polynesian group is characterised by its vocalic and emasculated phonology, its great crudeness, the number of its separate particles, its great use of the definite article, the paucity of its formatives, and its habit of placing the subject after the action.
The Micronesian can only be discriminated at present by its phonology, which, as we have seen, connects it both with N. E. Indonesian and Melanesian. The characters of the different classes of Papuanesian are too imperfectly known to be described. The Torres Strait dialects form a strongly marked class, for they have the most archaic and consonantal phonology in Asiansia. The other known languages are highly vocalic. The language of Tanna has been stated to be inflectional, and it is probable that there are others between Indonesia and Polynesia that resemble it. The Australian is distinguished by its agglomerative power, and its postpositional particles; the E. Indonesian by its vocalic and cohesive phonology, its paucity of formatives, and its union of the pronoun and verb; the N. E. Indonesian by the extent and variety of its formative combinations; and the W. Indonesian by its possession of most of the formatives of the N. E. Indonesian without the power of compounding them. The classification of the languages in the larger groups belongs to the glossarial part of our enquiries.

It is obvious from the remarks in the 1st chapter that it will always be difficult to classify the Asiansian languages. The phonetic, ideologic and glossarial characters of the same language have often separate affinities. Languages that agree in most of their phonetic traits, sometimes differ in everything else. Some that have a considerable glossarial connection are divided by their phonologies and ideologies, and many that are almost identical in the latter have comparatively little that is common in their vocabularies. Neither ethnic nor geographic divisions can help us to an exact classification of the languages. On the whole however we find that the geographic are the best. It appears that when one system of languages has taken possession of a region, it rather tends to absorb foreign elements, and to become gradually modified by actual additions and substitutions and by the working of new tendencies received from without, than to be displaced. Hence even when some portions of such a region have long been subject to foreign influences, while others have retained a comparative isolation, the linguistic connection is still maintained. The relations of the foreign to the native tribes are sometimes such as to lead to the extinction of the languages of the latter, but this does not appear to have happened on a great scale in the later eras of Asiansian history, and in all eras linguistic changes must have taken place very slowly, so that at any given time there must have been a certain geographical distribution of languages as at present. Bearing in mind that each group has complex connections with the languages of other parts of the Oceanic region, that in the larger groups some languages have peculiar connections with those of other groups, and that where two groups meet assimilations take place, we may provisionally assume the seven principal groups which we have indicated. The chief uncertainty is caused by the Microne
sian and Papuanesian languages. They are evidently connected, but the extent and nature of the connection can only be conjectured. The former are also more closely connected with N. E. Indonesian, and the latter with E. Indonesian, and probably to a certain extent with Australian. The languages of Tasmania, New Caledonia and Tanna (New Hebrides) appear to be connected. The two former are highly vocalic, and New Caledonia in its phonology and glossary is E. Indonesian, W. New Guinea and Polynesian and not Australian, Torres Strait or Micronesian. The Papuas of Torres Strait again have very consonantal dialects, which are phonetically allied to the N. Australian and the Micronesian. Glossarily they are very archaic, and well distinguished from other Oceanic languages, although they have some affinities to New Guinea, Vití, E. Indonesian &c. They appear to have very few with the adjacent Australian dialects. Before proceeding to give a more full account of the characteristics of the different groups, I shall mention the known languages, and advert to the probable number of undescibed languages, comprised in them.

The **Polynesian** includes the dialects spoken in Polynesia, that is, those of the Samoan, Tongan, New Zealand, Tahitian (Society), Raratongan, Mangarevan (Gambier), Paumotuan (Low Arch.), Waihu (Easter), Nukuhivan (Marquesas), and Hawaiian (Sandwich) islands; those of the detached islands of the Fakaofo group, Vaitupu and Rotuma; the Vití (Fiji) group; and some of the eastern islands of Micronesia, as Tarawa. To the same division belong the languages of the Polynesian tribes of Tikopia and the negro tribe of Vanikoro in Melanesia. The languages of the Solomon Isds., the Louisiade, New Britain and New Guinea, and the numerous islets fringing Papuanesia on the north, from Vanikoro to the western extremity of New Guinea, are unknown, with the exception of some lists of western New Guinean words, but it is probable that dialects will be found along the northern skirts at least of this band, closely allied to Polynesian on the one side and E. Indonesian on the other. Indeed I anticipate that the Papuanesian languages as a whole will prove to belong to the E. Indonesian system.

The **Papuanesian** group comprises the language of the negroes of Tanna and probably that of Malicollo, those of all the other islands of New Hebrides, those of New Caledonia (said by Cooke to resemble that of Tanna) and some others spoken in the western groups of Papuanesia. From the number of islands in this region, the barbarism of the tribes and their low maritime skill and enterprise, a large number of distinct dialects must exist, although it is probable that most of them have been greatly influenced by Polynesian and E. Indonesian. It is impossible to indicate any line of division between the Papuanesian languages and the E. Indonesian and Polynesian.

The **Australian** group comprises all the known languages of
Australia and the languages of Tasmania, which appear to connect the Australian with the E. Papuasian. The undescribed languages of Australia probably belong to the same group. The languages in my vocabulary are for Tasmania, Bathurst, Wellington (Wiradurei), Mudgee, Peel River, Muruya, Liverpool, Sydney, L. Maquarie (Kamilarai), Moreton Bay, S. Australia, S. W. Australia, and in the N. W. * those of the tribes of Jalakura (Mt. Norris bay and E. coast of Cobourg Peninsula), Bijina Lumbo (S. coast of Cobourg P.), Trusan (Croker's I. and N. E. of Cobourg P.), Limba Apiu (N. W. part of Cobourg P.) and Limba Karadji (Port Essington), and in the N. E. the dialect of Endeavour River.

The E. Indonesian group comprises the languages of the chain of islands extending from Aru to Sumbawa, the western languages of New Guinea, those of the Papuan islands between New Guinea and the Moluccas, the indigenous Moluccan languages, and those of Celebes and the adjacent islands. To the same group the languages of Pulo Nias and Tilanjang, and perhaps of some other islands off the west coast of Sumatra, may be referred. In this large insular region there are numerous languages and dialects undescribed. In phonology all the known languages agree so much amongst themselves, and differ so decidedly from the N. and W. Indonesian groups, that there is no room for doubt that all the undescribed languages belong to the same alliance. Whether the principal ideologic trait, the union of the pronoun and verb, will be found to prevail extensively, may be doubted. It is connected with the adhesiveness of the phonology, and in dialects where that is lessened by the influence of the W. and N. Indonesian languages, it is probably wanting. The languages and dialects of this group for which I have data are those of Wokam (Aru), Kai Dulan, Kissa (2 dialects), Letti, E. Timor, Belo, Timor, T. Kupang, Roti, Savo, Solor, Ende, Deret mountains in Ende, Manggarai, Tambora, Bina, Sambawa, in the Aru-Sumbawan chain; Buton, Tumia, Kalidupa, Wanchi, Benerati, Sangir, Manado, Buol, Goron Talo, Parigi, Tojo, Tidori, Kaili, Mandhar, Mangkasar, Wugi (Bugis) in and near Celebes; Ceram and Saparua in the Moluccas; Waigiu, Koyway or Utanata, Lobo, Mairassi of Lobo, and Onin, in and near the west peninsula of New Guinea; Tilanjang and Nias in the chain W. of Sumatra. The number of undescribed languages in all parts of this region must be great.

The W. Indonesian languages comprise those of Lombok, Bali, Java, Borneo, the Malay Peninsula and Sumatra. I have data for the languages and dialects of Sasa' (Lombok); Bali; for Javan, Sundan, Maduran, and Bawean in and near Java; for Paser, Banjer, Kapuas, Murung, Bajo, Ngaju (Kahayan),

* I am indebted for the important N. W. vocabularies to the kindness of my friend Mr. Earl.
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Sandol, Kandayan, Landa, Pontiana', Sambas, Malo, Tatan, Kayan, Sarawak, Seribas, Millanau, Meri, Totong, and Brune in Borneo; Lampong, Komreng, Palembang, Siraw, Rijang, Malaya, Batu* (2 dialects), Pagai, and Achin in Sumatra; and Binua of Johore, Besisi, Minturi, S.Sakai, Jakun, Udai, N. Sakai, and Simang (2 dialects) in the Malay Peninsula.

The N. E. Indonesian embraces the Philippine and Formosan languages. It probably includes some of the W. Micronesian languages, and on the south the division between it and the W. Indonesian is not ascertained. The language of Tobi has strong N. E. Indonesian traits. The indigenous languages of the N. of Borneo and the islands between Borneo and the Philippines probably belong to it. I possess data for Solo, Balingini, Magindanau, Ilanu, Palawan, Bisayan (Panay, Zebu) Bikol, Tagala, Ilok, Pampangas, Batan, and Formosan. In this region there must be many undescribed dialects.

The Micronesian languages are only known from short vocabularies of Tobi, Pelew, Carolinian, Mille, and Radak. The Marian and Caroline languages have been described as closely related to the Philippine. Lutke gives a list of Ualan words which I have not seen.

In describing each group I shall notice those languages in which its characteristics are less decided. Here it is only necessary to remark that the evidence of mutual influence which is strongly impressed on the languages of the region as a whole, is exhibited by each group, and by every one of its members. There is not a single known language that has not complex affinities. The causes of this have been already pointed out.†

CHAP. III.

Sec. Ist. COMPARATIVE CHARACTERISTICS OF EACH GROUP.‡

I. POLYNESIAN.§

The Polynesian agreeing in much with the Indonesian languages, differs from most of them in its greater simplicity, crudeness, incapacity of phonetic union of its particles, its highly vocalic The abrupt tone found in the Chinese and Ultraindian languages, and which is especially frequent in Kasia, also characterizes

* The Batu has traits which connect it with Nias and the S. E. Indonesian languages.
‡ I have made this section as brief as possible. To prevent the mind of the reader being filled with details, to the obstruction of the general comparative impression which it is my object to convey, I have thrown many facts relating to the principal languages into a Supplement. Those who desire fuller information are referred to it.
§ In the following remarks on Polynesian and in some other parts of this enquiry, I have availed myself of a paper which was intended to be read at the last meeting of the British Association, but which arrived in Edinburgh too late.
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character, its abundance of monosyllables, its greater number of separate particles, its abundant use of them, and in its collocation. Polynesian, and prevents it vocalicism possessing the harmonic fluent character of the E. Indonesian vocalic languages. In the latter group, save in Letti and a few other languages, a consonant is always interposed between vowels. The Polynesian frequently attenuates the consonant into the abrupt tone or catching of the breath. The same contrast between the open, sonant and harmonic character of the E. Indonesian and the surd and clipping tendency of the Polynesian, is seen in the whole phonetic field of the latter. The tendency we have noted is in such excess that the surds and onants have ceased to be phonetically distinct, and the predilection or the surds is so great that the missionaries have decided on rejecting sonant symbols altogether, so that $g$, $h$, $d$, and $t$ are not used in books. $L$ and $r$ again are used indiscriminately, and in Hawaii at least a sound which partakes of both is sometimes substituted. Weak vowels appear to occur frequently, and the broad, full, sonant vowels of Indonesia are seldom heard.† Even the Aru-Sambawan phonology, with its decided approach to the Polynesian, preserves most of the sonants as distinct phonetic elements, allows liquids and consonants to meet, and does not carry the meeting of vowels to such an excess.

The Polynesian agrees with the Indonesian languages generally in vocalic character, possession of the moveable accent and its position in the penultimate, disyllabic tendency, use of particles which do not become flexions but are sometimes phonetically connected with the principal words, rarity but not absence of flexions;‡ the use of definitive and segregative particles and words, the expressions of sex by distinct sexual words, of number by reduplication, by separate numerical or quantitative words or by pronouns, the use of reduplication to express intensity and frequency as well as plurality, in the number and variety of the pronouns, the exclusive and inclusive plural of the 1st personal

* $b$ is preserved in the Tongan which has a more Indonesian character than the other dialects.

† I speak here chiefly from the impression which I derived from hearing Hawaiian spoken. It was at once distinguishable from Indonesian by its surd, clipping character, the number of vocalic meetings with a catch of the breath between them, the constant recurrence of univocal words, the general paucity of long vowels and the want of that dwelling on the full toned $e$, $i$, $u$, $o$, which constitutes one of the chief beauties of the Indonesian phonology. It struck me as being phonetically the poorest and most degenerated and attenuated language I had heard in Singapore.

‡ These, like all the other characteristics, have nothing peculiar in them taken singly. Such terms are found in many languages. Their use in Indonesia and Polynesia may perhaps be primarily referable to Tibet or Mid-Asia, in which the Polynesian custom of temporarily dissuading words that enter into the king's name also prevails. Remnants of this and many other Mid and North Asian characteristics are preserved in China. On the recent occasion of the succession of the present emperor, the character $chā$ which enters into his name was ordered to be written in a mutilated form whenever it requires to be used for common purposes. This custom began 249 B.C., but it was probably an imitation of that of dissuading words, the antiquity of which is vouched by finding it in Asia, Polynesia and America.
pronoun, the contracted postfixual forms of the pronouns, in the use of particles for the indication of time, mode, &c., in the use of ceremonial and honorific words* &c. &c.

Glossarily there is much and close affinity, particularly in the most generic, primary and relational words,—articles, formatives, pronouns, directives, &c. A number of these are mentioned in the 2nd sec. of this chap. and in the glossarial division of this paper.

With particular Indonesian languages Polynesian agrees in many remarkable traits. Like Javan it pluralises the substantive by a partial or entire reduplication of the qualitative. Like S. and N. E. Indonesian it indicates the direction of an action with reference to the speaker, an idiom of which traces are still to be found in the W. Indonesian family.† The ancient Indonesian habit, now wearing out in Malay and Javan although preserved in Philippine, of using a definite article, is in full force in Polynesia. In the distinction made between the definitive article for proper names and that for common names, some of the Polynesian dialects agree with the Philippine. Thus the Tongan always, and the New Zealand and Rarotongan occasionally, use a in the first case; while the Philippine languages use st. This distinction is observed in Arabic and in those members of the Indo-European family which use a definite article, for they confine it to common nouns. The other Polynesian dialects use the same articles before proper names and pronouns.

Some tendencies found in Indonesia receive peculiar directions in Polynesia. The idea of personality and particularly that of the speaker, I, has a great sway and produces nice distinctions in Polynesian ideology, as in that of all crude national minds and languages. It gives rise to some remarkable and interesting idioms that are not common in Indonesia. Such is the double possessive, in which we detect a new and flexional expression of the distinction between transitive and intransitive which reigns in Asianesian philology. That which is mine attributively, or to possess merely, is indicated by the vowel o while that which is mine objectively or instrumentally, to act on or with, takes the stronger vowel a.† The same distinctions enters into na, no; ma, mo. As further illustrations of the same supremacy of the I, we may notice the dual and plural idioms, common to Indonesia and Polynesia, which distinguish those who are really or ideologically subordinates of the speaker from those who are not. Mana, we—two i. e. I and my associate, not you, tua, we—I and you.

* e. g. marōma moon, mārama light; tanāta man, tānaa men Rarotongan.

† It is found in the Chinese lai (Asianesian mai) incoming and kāhi out-going e. g. mai pot lai, mai pot kāhi, I buy not sell not.

‡ I think this is the correct explanation. Mr Hale says the o is “general and indefinite” and that “the proper meaning of a seems to be in the sense of belonging to.”
LANGUAGE.

Matou, we (not you); tatou, we (with you). Aku berdua (Mal.) I [with mine] two, I twain (e.g. husband and wife).* The two plurals are the same in Malay with a euphonic transposition of vowels—
kita we (not you) kami we (with you). This idiom is not confined to the first personal pronouns in Polynesian and Philippine. Any personal name may be attributively pluralised by adding the companionitive plural particle e.g. Hongi ma (Pol.) here Hongi is clothed with plurality by having other persons with him. Sa Pedro (Philippine, Zebu) Peter and his family, companions, &c. Other Philippine dialects have a, na, &c.

The expression of the time and place of action is in some respects peculiar. Nearness in time and place are in many crude ideologies the same, for the speaker is the centre of being and action. The past is, and always will be, inaccessible. It agrees with the idea of distance. The present is with me, subject to my desires and my will. It agrees with the idea of nearness in place. The past is dead, gone, remote. The present and future, are living, come or coming, and near. Hence the present and the future tenses are both indicated in Polynesian by the definite article, which is an assertion of existence. The past is indicated by the same particle that expresses distance in place both in Polynesia and Indonesia, na, ra, &c. The remote verbal locative is the same. E mea atu nei ahu kia koutou. The speech outgoing here [of] I to the you; I say unto you. Te tuatua nei au, the speaking here [of] I; I say. Te tuatua ra au—the speaking there [of] I; I was saying.

Amongst the peculiarities of the Polynesian we may remark the excess to which it has become emasculated. As we have seen, it has not only lost the distinction between surds and sonants, and the power of enunciating consonantal terminals, but its phonology has become still further impaired by the frequent elision of consonants even when they are vocalised. The excess to which the abrash of consonants is carried, frequently gives the language the aspect of a return from the disyllabic to the monosyllabic form. Thus, to take an illustration selected by Mr Hale for a different purpose, haka Tong. burning, 'aas Sam. aa Mangarevan, 'a Hawaiian; 'ese, keke, other, is in New Zea. ke, Tah. e.

The Polynesian collocation, although in most respects Indonesian, has one striking peculiarity in the position of the nominative, which

* The Malay attributival particle ber elucidates the idiom. I become clothed with duality and plurality when I have with me a person belonging, or subordinate, to me. The idea of association and subordination is at the bottom of all these idioms. Ma is the general Polynesian connective and is hence used for many kinds of connection, like the Tibeban and Philippine particles hereafter noticed. It is conjunctive, instrumental, locative, collective & because connection is involved in each of these relations. In different phrases it is translated with, by, and, in, at. Ma carries the same radical meaning into the Philippine plural particle mags, which is a combination of ma and the purely plural nga still used in Polynesia. It appears also in the Malay banius; many.
generally follows instead of preceding the action,—e. g. e moe ana te tamaiti, is sleeping the child. The Indonesian collocation is generally, but not invariably, the reverse.*

The main ideologic peculiarity of the Polynesian, as compared with the Indonesian, is that, though equally crude, it is more discriminative and indicative, and indeed carries this to an excess of pleonasm found in few other languages, but to which approximations occur in Australian, Kaskan, some African languages and in the ground-work or archaic form of the Indo-European and Semitic languages, the flexion of which is frequently a disguised pleonasm. The pleonastic discriminativeness of Polynesian is chiefly seen in the use of separate particles of different kinds, which occur far more abundantly in Polynesian speech than in that of any other insular race. Thus the Malay generally leaves the indication of the agent and object, the time and direction of the act &c., to be suggested by the sense or context. The Polynesian, with a minute discrimination, particularises each. A sentence will shew the effect of this in speech. * Ko-e hotua ho Tangaloa mo enne foha tokaua nowa nofo gi Bolotu,—the [agentive] god, the Tangaloa with his son they two did they dwell at Boloto. The particles in italics might be omitted in most of the W. Indonesian tongues. In some of the E. they would be partially retained.

The use of the agentive particle in addition to the definitive is a striking peculiarity. Each is used separately in some Indonesian as in many other languages.† The formative distinction between an action and its result, is another peculiarity arising from its greater discrimination.

In some respects Polynesian has a closer resemblance to Malay than to Eastern Indonesian. It is greatly distinguished from the latter by its comparatively crude phonology. In its low degree or absence of fluency and adhesiveness, it is nearer the Malay, while it possesses many traits of E. and N. E. Indonesian ideology which are not found in Malay, as well as some very striking ones which are peculiar to it. It exhibits no trace of the complex formative agglomerations of N. E. Indonesian, and in speech a far larger proportion of words are used without prefixes or affixes, than in most Indonesian languages. It contains a considerable archaic element which is now nearly obliterated in the prevalent Indonesian types, but which can be partially recognized in them. Its insular affinities are mainly with the eastern and southern

* In Polynesian, as in Indonesian, the possessive is placed after the object possessed, and recollecting the very archaic character of the former it appears possible to explain this collocation by considering all verbs as pure substantives. The above idiom would then be correctly translated,—The sleep is [of] the child. So e kitea ana okau i te tangata, the seeing is [of] the man i. e. I see the man. So the passive,—e kitea ana te tangata e au the seeing is [of] the man by me.

† In Chinese, in which words are as crude as this translation assumes the Polynesian to be, the idea of possession runs through the whole ideology, just as the allied participial idiom pervades the Tartarian.
E. Indonesian. Its Indonesian words have chiefly the eastern form, and its vocalic and contracted phonology is the emasculation of some of the E. Indonesian phonologies carried to excess. It possesses many E. Indonesian words that are not found in W. and N. Indonesia. But it differs from E. Indonesian in too many traits to admit of our considering it simply as a dialect of that group modified by separation and long isolation. Its affinities of all kinds prove it to be essentially an Indonesian language, and as it is neither a simple derivative of modern E. or N. E. Indonesian nor a simple mixture of both, and it appears to differ from the adjacent Melanesian, we must regard it as a representative of one ancient condition of language in E. Indonesia, possessing traits some of a N. E. Indonesian and others of a different kind, which have subsequently been lost or greatly modified in the mother islands by the continued influence of the present prevailing E. Indonesian type and that of the adjacent W. Indonesian. Its location may have been near the junction of the E. Indonesian and N. E. Indonesian, or it may have acquired its N. E. Indonesian traits from mixture with a language of that type in its progress to the eastward. The present language of Tobi appears to show that the N. E. Indonesian had at one time a greater extension to the southward than it now has, and in the Micronesian languages we can trace its influence far to the east. It must also be observed that N. E. Indonesian has left abundant traces in W. Indonesia and even in E. Indonesia, of its having prevailed at one time over a large portion of Indonesia, and the traits preserved in Polynesian may therefore be simply an evidence of its having been derived from E. Indonesia at an ancient period, when the N. E. element was still comparatively strong in that region.*

The extent to which the same formatives prevail in Asiaesia will be best seen in Sec. 2. Here it may be noted that Polynesian agrees with Australian in having an agentive particle ko, and a dual formed in the same way; with E. Indonesian in the passives in na, tna; with E. and N. Indonesian in the particles of direction, and in the attributival ma; with N. E. Indonesian in the dual, the companionative, and the use of the def. article for common names; with N. and some of the languages of E. and W. Ind. in the def. art. for proper names; with W. and N. E. Indonesian in the causatives ha, kan. Amongst the peculiarities of Polynesian are the causative use of ta; the assertive use of hu, ha, hua; the desiderative fia, via; the possessive use of ta, to, a, o, &c.; but the latter appear to be the same with the possessives of Tobi and Formosan. It has, of course, the particles common to all the

* In speaking of the Polynesian language I do so without reference to the Polynesian race. It is a question for ethnology whether that race did not find a Papuan language established in Polynesia as in E. Indonesia, and to what extent they modified it.
groups, the most important being the substantival *ka* (in the Marquesan post-fix); the passive *I*; and the substantival—*an*.

The Polynesian dialects differ to a certain extent amongst themselves. To enter fully on this would be to anticipate our enquiries into Polynesian ethnography, and I shall therefore only notice some of those that have been pointed out by Mr Hale. K is ejected in Sam. Tah. and Haw., L frequently in Tongan. H is S in Sam. and Fak.; F is W or H in New Zeal., Haw. and Pau.; R. is L. in Fak. Sam. Tong. and Haw.

Mr Hale has shown that the more eastern dialects have been derived from the western and have lost or changed some of the forms of the latter. This is particularly observable in the plural of the possessive and demonstrative pronouns, and the passive, desiderative and reciprocal forms.

The New Zealand dialect appears to be the most primitive and entire. It differs as widely as the Tahitian from the Samoan, and has therefore existed for a long period as a separate dialect.

The great mass of Nukuhivan or Marquesan is Tahitian, but it has also Tongan traits (Hale 127.) The Hawaiian has the strongest affinities to the Nukuhivan (Hale 135.) The Raratongan like the Hawaiian is most closely related to the Tahitian, but in some respects it differs from it and resembles the Samoan. Mangarevan is similar to Raratongan but has some slight Tahitian traits that are wanting in Raratongan. The language of the Astral group is Raratongan and Tahitian.

The Tongan and Samoan dialects have received modifications from western languages subsequent to the Polynesian language into the eastern islands. The Samoan group is considered by Mr Hale as the first location of the Polynesian, whence it spread S. to New Zealand and W. to Tahiti. The Tongan is Polynesian with many Vitián traits not found in other Polynesian dialects. The passive particles of Polynesian are transitive in Tongan and Viti. The Polynesian definitive *te* is obsolete in Tongan, the Vitián *a* being used in its place. Tongan like Vitián substitutes *chē* for the Polynesian *ti*, and in many words which have *thā* and *s* in Vitián the Tongan has *h*, while the consonant is wanting in the corresponding Polynesian words. Mr Hale does not derive the Tongan from the Samoan or vice versa, but assigns to both a common western source.

The languages in and near Polynesia which have decidedly foreign elements mixed with Polynesian are of much ethnic interest. These are the Paumotuan or Tarawan, the Vitián, the Rotuman, the Polyneian dialects spoken in some of the eastern Melanesian islands, as in Vanikoro, Tikopia, Immeri, A. d. Espirito Santo &c.

Paumotuan differs in its numerals and much of its vocabulary from the other dialects (Hale 245), but it has a considerable
resemblance to Tahitian. Mr Hale considers it to be a primitive tongue partially corrupted and destroyed by an infusion of Tahitian. The structure, so far as it is known, is Tahitian, just as in Vitian the structure is mainly Polynesian. I find some of the non-Polynesian words to be peculiar; but the majority are recognizable as Indonesian and Indian words, and I believe it will prove to be the original Tahitian of Faumotu modified by the vocabulary of Micronesian emigrants.

The language of Rotuma, although essentially Polynesian, is, like Vitian, somewhat less removed from Indonesian. It has some traits in common with Vitian, but it is distinguished from both it and Polynesian by a fluent and cohesive phonology that approximates to E. Indonesian. As in many of the languages of that region, related words are connected by elision, transposition and change of sounds. Consonants may meet, but its general character is vocalic. Another peculiarity is the postfixing of the definite and possessive uthan thata, father-of man-that, which is an Indonesian collocation (Javanese.) The future particle la corresponds with the Vitian, Tarawan and Indonesian na. The vocabulary is described by Mr Hale as “a mixture of Polynesian words, with those of some other language, unlike any which has been elsewhere found.” “Some words shew traces of communication with the Vitiens.”

VITI. This language is vocalic like Polynesian, but as its consonants are nearly complete and it has a few compounds, the phonology is stronger and richer. It has a tendency to nasalise dentals and labials and even gutturals. The Polynesian p generally becomes mb; t frequently nd; k, ng; r or l, ndr or nr. It has fewer monosyllabics and a greater tendency to compounds. Ideologically it is closely allied to Polynesian, and although it has some western characteristics, it is much more akin to it than to any Indonesian language. It has a definite article. Most of the definite and formative particles are the same, although their application varies. The definite for common nouns is the def. for proper names in Tongan and Maorian, and that for proper names is the agentive in Pol. The causative, desiderative, and reciprocal are Pol. The transitives are the Pol. passives. Nouns are made adverbial by the causative pref. as in Pol. The collocation is Pol. not Indonesian. The possessive is Indonesian not Pol. So is the future na, but it is also the past in Pol. The passive participle ta—is a causative in Pol. It corresponds with the Malay ter.

Mr Hale has remarked that some traits in which the Tongan differs from the other Polynesian dialects are common to it and Vitian. Such, as we have seen, are the passive use of the transitive prefixes, the def. article a, the change of t before i into ch in the Lakemba dialect of Viti, the replacing of the Vitian th or s
by A in many words which want it in the other Polynesian dialects.

Glossarily it differs to a large extent from Polynesian. It possesses many Indonesian words which are wanting in it. It has also some Torres Strait words, and as its Indonesian affinities are not only with the E. and N. E. languages, but to a smaller extent with the W., it is impossible to analyse its elements ethnically without a knowledge of the intermediate Papuanesian vocabularies. It has probably received a succession of glossarial contributions from Micronesian and Papuanesian, and it has some W. Indonesian words of a comparatively modern aspect which, in all likelihood, have been transmitted through Papuanesian.

Tarawan appears to be Polynesian with peculiar E. Indonesian traits, and considerably modified by mixture with Melanesian and Micronesian. Like Polynesian it is vocalic and it merges the surds and sonants. But it has compound consonants, the finals are sometimes consonantal, the pronunciation is guttural and indistinct, ny is common, f, v and s are wanting, nor is the latter replaced by h or j. The ideology is Polynesian in all essentials, but it has some peculiarities. The 3rd personal pronoun has masc. and fem. forms, and the latter has, in the singular, postfixes which indicate whether the person is present or absent. The 1st person adds na in the plural which is a Melanesian (Viti, Australian, Torres Strait) and E. Indonesian particle. The 1st person is Melanesian. The 2nd is the Viti and Indonesian ku with the A changed into ng according to a common Vitian permutation; in the plural it is euphonically prefixed to kama, a common form of the first person plural. The pronouns have two verbal forms,—one preplaced and agentive, and the other postfixed and objective. This is a trait similar to the Australian transition forms. The future particle is the Vitian na.*

II. Micronesian.

No grammatical notices of any proper Micronesian language have been published. We have seen that the known phonologies have a consonantal character allied to N. E. Indonesian, on the one side, and the most consonantal Melanesian, on the other. The vocabularies, we shall find, are archaic, and have not only Indonesian words but many Continental ones which are absent in other known Oceanic languages. The Marian and Caroline languages are said to be closely related to Philippine, and in Tobi 1 have noticed the Formosan possessive. In Mille a sexual flexion is observable in the first syllable of the word for child,—lodruk boy, ldruk girl. It is probably the personative definitive preserved also in Bugis, Lietti &c.

III. Papuanesian.

Little information has yet been obtained respecting the languages of the black races who inhabit that portion of Oceania extending

* See E. Indoneisan for further remarks on Tarawan.
from the eastern extremity of the Indian Archipelago to the centre of the western boundary of Polynesia.

I can only add to what I have said in the preceding chapter, a quotation from Dr Prichard which contains all that is yet known respecting the character of the eastern Melanesian languages. "I have seen a grammar of the language of Tanna in manuscript written by the Revd T. Heath, a missionary who resided on that island. It is much to be regretted that this work has not been published. From this grammar it appears that the language of Tanna is entirely distinct in character from the Polynesian. It abounds with inflections, and has four numbers viz: singular, dual, trinal, there being a particular form in the verb when three persons are spoken of, which is distinct from the plural." Researches vol. v. p. 238. This trinal is probably the common exclusive plural. Connecting the flexionism, or adhesive phonology as it will most likely prove to be, of this eastern member of the Melanesian group, with the tendency to a similar phonology in Rotuman, there is the strongest reason to expect that the Melanesian languages nearer Australia will also prove to have a similar character. It is probable that the peculiar E. Indonesian traits found in Tarawan, Rotuman and Viti, while they distinguish them from the more remote Polynesian on the one side, connect them with the nearer Papuanesian on the other. Should further information establish this, it will then appear that the E. Indonesian system sweeps in a great curve, coincident with the vocalic band, round N. and E. Australia. Since in islands so distant as Ende and Tarawa it possesses decided Australian connections, it may be anticipated that the Papuanesian languages from New Guinea to New Hebrides also retain Australian traits. The New Caledonian was said by Cook to resemble the language of Tanna, with a mixture of Polynesian. It is evidently much more vocalic than Tannan, but it possesses consonantal terminals and combinations. Its vocabulary has few peculiarities, most of the words being common to it with Polynesian, Tarawan, Viti, W. New Guinea, E. Indonesian, Tasmanian and Australian. The words common to it with Viti and Tarawa are probably Melanesian. The words common to it with the southern shores of W. New Guinea and N. W. Australia indicate a line of connection through Torres St. or the southern coast of New Guinea, although the main vocalic stream has evidently been round the N. coast of New Guinea.

IV. AUSTRALIAN.

Phonetically the Australian languages are fluent, cohesive, euphonic, vocalic and sonorous. The enunciation is extremely rapid and agglutinative, with elision and permutation of sounds. The Australian languages are characterised by very great agglomerative power, by the postfixual position of words or particles of direction, time, mood, and other relations, by the extent to which they may
be compounded, and by the position of the object before the action. These characters distinguish it from all the other divisions of the Asianesian languages. In phonetic plasticity it is equalled by the E. Indonesian languages, and the power which the Philippine possesses of compounding its prefixual formative, makes some approach to the Australian agglomeration of particles. It derives an appearance of inflexion from the postfixual position of its directives, which being euphonically varied, according to the terminal sound of the word, resemble the declensions of flexional languages.

It possesses several postfixual formative particles, such as the substantival or personative, locative, instrumental, abstract, and habitual.

Segregatives have not been observed, but some of the directives have distinct forms for proper names. The patronymic postfix has a feminine terminal *een*. Some decided flexional traits are observable, such as the change of vowel in the particles of time, a present, i, e, past; in the substantival postfix, ta for a particular act, to the act in general. The pronouns do not pleonastically unite with the words of action, nor are they reflected by them, but they have prefixual agentive and postfixual objective forms, and transition forms. They have also forms which unite with directives. All this renders the Australian pronominal system more complex than any other in Asianesia.

Its great phonetic power, and the extent to which this operates on the whole language, cause it to approximate in many respects to the E. Indonesian languages, and place it at a distance from the Polynesian and even from the W. Indonesian. But the postfixual system and long agglomerations stamp it with a very peculiar character. The N. E. Indonesian aggregates, long as they are, yield to the Australian, which has words such as *bumabumalalimambilingidaivagiri*.

The S. E. Australian languages want most of the formatives and other particles of Polynesian and Melanesia, but, as we have seen, they have the agentive to, ko of Polynesian and a dual formed in the same manner. The active substantial to, ta is also the Polynesian and Indonesian definitive. *Kan* active personative, and *hana* instrumental, is the causative and transitive particle of Polynesian and Indonesia. The time particles of Kamilarai and Wiraduerei resemble Polynesian *ana*, an &c. present (comp. Mangarevan &c.) i past. The vocalic time flexion is also N. E. Indonesian, a present and future, i, e past, (Pampangan.)

The vocabularies are highly archaic, the affinities being in general directly Continental. The insular affinities are chiefly with the southern languages of E. Indonesia which are continued into New Guinea, and this probably indicates the main line by which the Australian languages were received. The Torres Strait language has little connection with the most northerly of the known
dialects of E. Australia, that of Endeavour River, the principal affinities of which are with the other E. Australian dialects, with E. Indonesia and Micronesia. It has a few Torres Strait and N. W. Australian words, and several of an archaic Continental character. On the whole, its vocabulary appears to have more insular affinities than the other Australian languages.

The Australian languages, with many characteristics in common with the other insular languages and with similar crude languages in more distant regions, possess a primary form which is radically distinct from the prevailing types in Indonesia and Polynesia. At the same time they have some archaic connections with these, although far too slight to give the remotest countenance to the supposition that both have sprung from a common insular parent. They have more modern connections, which are attributable to the influence of Indo-Polynesian and Papuanese languages exerted chiefly on the Eastern coast and, through Tasmania, on the southern coast, and thence transmitted, in different degrees, into the interior and partially to the west. The western languages have received a remarkably slight impression from the adjacent S. Indonesian, and the superiour vocalism of S. W. compared with N. W. Australian appears to have been derived from the S. Australian dialects.

**Torres Strait Islands**

The languages of Torres Strait are probably connected ideologically with the adjacent ones of Australia on the one side and those of eastern New Guinea, Louisiade &c., on the other. They have phonetic connections with the N. W. Australian and with Micronesia. In the meantime we can only recognize them as Melanesian with a strongly marked and archaic phonology. They have glossarial connections with Indonesia (chiefly S. E.) New Guinea, Viti and some, less marked, with Australian, but the majority of their words appear to be archaic and Continental. The W. portion of New Guinea appears to belong to the E. Indonesian group.

**V. East Indonesian.**

All these languages are highly vocalic, flexible and euphonic, and the powerful action of this phonology produces a considerable appearance of inflection. The most interesting of the known S. languages in this respect is the Lieti, in which the euphonic feeling produces many curious elisions, permutations, inversions, transpositions, combinations, incorporations and inlookings of words. In its love of consonantal elisions, its capricious shortening of words, and its frequent vocalic syllabification, it exhibits a decided tendency to a Polynesian phonology. It preserves some consonantal junctions and terminals, but these are liquids. Many of the other southern languages, so far as they are known, have similar characteristics, but in some there is a much larger degree.
of a W. Indonesian consonantalism. E. Timor has more cohesiveness and echo than the other dialects, resembling in this respect the Lieti.

The languages of the islands to the south of Celebes have a similar phonology. In Buton the aversion to consonants is even greater than in many of the southern languages. The Celebesian languages are all vocalic, some being purely so, while others retain some degree of western consonantalism. They have much of the fluent and agglutinative phonology of the S. languages, and they have made it subservient to a regular rhythmical cadence, which in languages with a less happy combination of the liquid with the sonorous, would be monotonous. The constant unions of servile with principal words, and of the latter with each other, are invariably euphonic, sounds being elided and interjected to produce this effect. The more Eastern or Moluccan languages, the parents probably of the Polynesian, appear to be more allied to the southern than to the Celebesian. Phonetically the E. Indonesian as a whole are distinguished from the W. Indonesian by their far greater softness, vocalism, fluency and cohesiveness, and from Polynesian by their cohesiveness, harmony and strength, the vocalic emasculation not being carried so far. In vocalicism they are intermediate between Polynesian and W. Indonesian, never reaching the great emasculation of the former or the consonantalism of the latter, although they nearly pass into both.

Most of the ideologic peculiarities of the S. E. Indonesian languages are the result of their phonetic flexion and cohesion. Relational words and particles are united to the principal words by adhesion, infixing &c. with euphonic elisions and adaptations. The pronouns are pleonastically united to the verb, and in some of the S. languages to the noun when possessive. This characteristic is not possessed by any other language in Asiasia save the Tarawans. There are comparatively few formatives, and they are not compounded. This greatly distinguishes these languages from the Philippine on the north and the Australian on the south-east, while it allies them to the Polynesian, and, in a less degree, to the W. Indonesian.

The Lieti indicates the direction of action like the Polynesian and Philippine. As in Polynesian the plural by reduplication of the substantive is wanting, E. Indonesian has the substantival ha—of N. and W. Indonesia, but it gives it also an attributival force. It has also the substantival (often personative) pa of these groups. The Celebesian languages have the transitive i of N. and W. Indonesia. The use of ma as a substantival pref. is a peculiarity of some of the Celebesian languages, but in Kaili na is substituted and this links it with the Batta. Phonetically, ideologically and glossarily the language of Nias belongs to the alliance of E. Indonesia. So does Tilanjangi and probably some of the other W. insular languages of Sumatra.
The E. Indonesian languages are peculiarly interesting from two of their leading affinities, that with Australian and that with Polynesian. Both are most marked in the south or Aru-Sambawan band of islands. The Australian words are probably vestiges of Australian vocabularies that prevailed in this band to a later period than in other portions of Indonesia. The ideologic affinities are comparatively few. They are partly attributable to the same cause, and partly to the original type of the E. Indonesian languages having been much more highly developed than that of the W. Indonesian, and therefore approximating more to the Australian and similar developments. The Polynesian affinities are very strong and decided. We have already noticed the phonetic and glossarial, which are numerous and conclusive as to the portion of Indonesia from which Polynesia derived the most important elements of its language. It is remarkable that the Vitian, Rotuman and Tarawan, but particularly the latter, possess E. Indonesian traits which appear to have been lost by Polynesian. Tarawan, although it has been changed by intermixture with Micronesian, preserves more of the distinctive Aru-Sambawan characteristics than any other languages of the extreme east, and it is remarkable that it has some Australian features which are not found in E. Indonesia. This however appears to be a natural consequence of its Aru-Sambawan affinities belonging to an ancient period, when we may suppose the Australian element in the latter was stronger than it is at present. Our knowledge both of the Tarawan and of the Aru-Sambawan is very limited, and further research in this direction will probably lead to results of great interest for Asianesian ethnology. The Tarawan pronominal system is not fully described, but it has remarkable affinities to Aru-Sambawan and Australian.

(To be continued.)
ETHNOLOGY OF THE INDO-PACIFIC ISLANDS.
By J. R. LOGAN.
LANGUAGE.
Chap. III.
Sec. 1st. COMPARATIVE CHARACTERISTICS OF EACH GROUP.
VI. WEST INDONESIAN.

Our preceding remarks have anticipated all the leading characteristics of the W. Indonesian languages as a whole. Their chief peculiarity consists more in what they want than in what they possess, for they have few traits that are not found in the more eastern languages, while the latter have many striking features, both in structure and ideology, that are unknown in the West. All the formatives that distinguish the W. Indonesian from still cruder systems appear to have been derived from a language the structure of which is best preserved in N. Indonesian. Of all the Oceanic groups it has the least pretension to represent an original and distinct system of development. It has every appearance of being the result of the blending of a formative system like that of N. Indonesian and a phonology like that of E. Indonesian, with a predominating and comparatively consonantal one, the crude ideology of which could only be impressed with the simplest forms of N. Indonesian. It is probable that languages in which the latter element was much stronger once existed in W. Indonesia, for the Javan in some respects approximates more to the Philippine ideology than the Sumatran languages, while the latter are less remote from it than the proper Peninsular. But it is not conceivable that the simpler Peninsular and Sumatran languages, or even the Malay, ever thoroughly possessed the elaborate Philippine system of composite formatives with its time flexions. The Malay may have been preceded in Sumatra by languages more Philippine in their ideologies and may have derived much from them, but it belongs fundamentally to a far lower development.

The W. Indonesian languages are much more consonantal than the Polynesian or E. Indonesian, and although some are more vocalic than others, none exhibit any tendency to the purely vocalic syllabification or the elision of the consonant between two vowels, which frequently occur in the former and in some members of the latter.* As in Polynesian and the least cohesive languages of E. Indonesia, words, when joined in sentences, maintain their phonetic integrity and independence, and are not subjected to contractions and permutations. Almost the only structural changes that take

* In these remarks we leave out of view the E. Indonesian languages of some of the islands west of Sumatra. The vocalic and contractive tendencies observable in them slightly affect many W. Indonesian languages, and some more than others.
place are those that attend the prefixing or postfixing of the inseparable particles, which sometimes displace or change the initials of the word, and almost invariably cause the accent to shift forward, in obedience to the law which places it on the penultimate.

The phonetic elements are nearly the same in all the W. Indonesian dialects, but there is considerable diversity in the force and tone of enunciation and in the vowels that are most affected. With the exception of the cultivated Malay the W. Indonesian languages possess, in different degrees, a strongly articulated and aspirate phonology, the majority being also guttural and nasal. The Javan retains much of this, and the Bawian, Maduran and many of the languages of Borneo closely resemble it. The inland languages of the Malay Peninsula, and the ruder Malay both in the Peninsula and Sumatra, all approximate to the same character. It is evident from this that the primitive phonology of the present W. Indonesian languages greatly differed from that of the E. Indonesian. It has in many localities and dialects been much softened, chiefly through the influence of the more ancient Indonesian phonology, now preserved in its purity in the East only. The tendency of the cultivated Malay to soft and smooth sounds has been progressive, for in modern times we can trace the rejection or softening of the strong initial aspirate and the final k, while other final consonants, such as s, are also sometimes rejected or transmuted into vowels.*

The stronger phonologies are chiefly distinguished from the weaker by nasal, aspirate and guttural sounds, and combinations of consonants and vowels. To these the Simang and Javan add strongly palatal or cerebral forms of the dentals t, d, and lighter palatals occur in some of the other languages.

The vocalic finals are frequently o, e, and compounds, ai, oi, ui, ae, oe, eu &c. The softer phonology transmutes the latter into pure vowels, and replaces o and e by a. The initials are aspirated and nasalised in some of the ruder languages, and the more refined show evidences of having, in earlier stages, possessed a similar tendency. Initial ny is rare in the Peninsula and Sumatran, but frequent in the Javan and Borneon groups.

The labial aspirates j, v, are wanting in all save Nicobari, the E. Indonesian languages of the W. Sumatra islands, and one or two Borneon languages. As the languages in which these sounds occur have other peculiar affinities to E. Indonesian and

* The change of s into i (as in tikut for tikus) is an interesting illustration of the affinities between particular consonants and vowels. So initial s is sometimes changed into i by the transitive prefix, e.g. surat, menurut. The vocal chamber is of the same shape and volume for both sounds, the vowel being changed into the consonant by the approximation of the tongue to the palate. In fact it is i with the maximum of aspiration produced by nearly closing the linguo-palatal valve. Some Chinese, whose tongues are not sufficiently flexible or practised in foreign sounds, cannot leave the slight opening required, but produce actual contact of the organs, thereby closing the valve and changing the aspirate s into the explosive t [e.g. tikut for tikus, bagat for bagus.]
Polynesian, we cannot consider their presence in them as a proof that they were a general characteristic of the primary W. Indonesian phonologies.

The sonant sibilant $z$ only occurs in Silong in which it is obviously an Ultra-indian trait while in Malay it is an exotic sound preserved in a few words of Arabic derivation. Consonantal combinations are chiefly with the liquids $l$, $r$, and $s$, but the stronger phonologies possess several others, some being abrupt or produced by forcibly joining sounds which are phonetically uncombinable, as $mn$, $lm$, $th$, $gn$, $kn$, $dn$, $hb$. Compounds of this kind occur in Silongi, Nicobari, in Javan and Kawi, and in several of the Borneon languages.

The guttural tendency of the older W. Indonesian phonology shows itself in the frequent occurrence of terminal $k$ and in its substitution for $t$, in aspirate and guttural forms of $r$ as $h$, $rh$, (Malay of Kidah and Pera, $rh$, gh Lampang,) in combinations of the gutturals with other sounds as $hn$, $hm$, $gm$, $gn$, &c, in the gutturalising of nasals, as in the change of final $ny$ into $gn$ and of initial and final $n$ into $kn$.

The aspirate tendency leads to the frequent aspirating of initial vowels in the ruder dialects of all the groups, Peninsular, Sumatran, Javan and Borneon, in the aspiration of terminals in all the languages rude and polished, in the strong and abrupt aspiration of consonants in a few languages possessed of the most vigorous and primitive phonologies ($nk$ Sil. $kn$, $ph$, $phr$, gh Nicobar, $hm$, $hp$ $nhl$ &c., Simang, $hn$ Kawi, Jav.,) in the change of $r$ and $h$ into the aspirate. In the more liquid languages the sibilant is the most frequent form of the aspirate, $s$ being very common; $ch$ and $j$ also occur, but $sh$ is very rare.

Euphonic adaptations occur in most of the Western languages, but they are far less frequent than in the E. Indonesian and Australian. They partake more of the character of the N. Indonesian, and many are indeed the same as in it.

Ideologically the W. Indonesian languages are crude, like those of all the other Oceanic groups. They possess substantival, attributival, transitive and passive prefixes and postfixes, which are much used in the cultivated languages especially in writings. But in the ruder languages and in the colloquial style of the cultivated, they are far more sparingly introduced, and the simpler Peninsular languages are almost destitute of them.

The aformative tendency is much more decided than the formative in the W. Indonesian ideology. In a few languages only, culture preserves the system in a condition of comparative completeness, but even in these it has obviously degenerated, while in the great mass of the languages the formatives are not only little used, but are losing their phonetic integrity and dwindling away into mere initials, which have already in some cases lost their formative force and become concreted. Whether this tendency
has been occasioned by an internal principle of decay, or by the intrusion of a crude foreign ideology, it is manifest that it predominares in W. Indonesia at present.

In the following remarks I speak chiefly with reference to the better preserved systems. Some of the forms, substantival as well as verbal, require both a prefix and postfix, and two prefixes are occasionally combined in verbal and adverbial forms. The transitive postfixes are also used intensively, and hence causatively, imperatively, &c. A reciprocal form is given by reduplication, and an adverbial by attributival, substantival and independent particles, generally accompanied by reduplication. By different substantival particles, either used singly or together, the abstract action, the place, the actor or the instrument, and the patient or thing acted on, may be signified. None of the languages have flexion, or even particles prefixed or affixed, to indicate sex, number, case, degree or time, for all which separate words are employed. The pronouns are simple, but they possess some postfixual contracted forms, and the first person plural has exclusive and inclusive forms. Neither a generic definite nor an agentive article is known, but the demonstrative is much used and generally postplaced. Segregative or generic words are numerous in some of the languages, particularly the Malay. The collocation is simple and direct, like that of the other Indonesian groups. The agent precedes the action; the action the object; the adverb (generally) the verb or adjective; the substantive its qualitative or possessive; the directive the noun. Most of the inseparable particles are prefixual as in the other Oceanic groups, but some are postfixual.

It will appear from the above that numerous interesting ideologic traits found in the more eastern languages, are wanting in W. Indonesian. The definitive article, the dual, the plural definitive, the agentive, the direction particles, the double possessive, the quasi flexional particles of time &c. of Polynesian are absent. It wants the strong definitive tendency of that language and the use of some particles which are now only recognizable as dead elements in compounds, while in Polynesian they preserve an independent significance. To the original deficiency of particles, and their incorporation with words, may, in a considerable measure, be attributed the greater rarity of monosyllables. Next to the comparative paucity of separate definitive and other particles, the principal distinction of W. Indonesian consists in the greater number and more constant use of formative prefixes and postfixes, frequently double and sometimes more complex. This however is closely connected with the deficiency previously adverted to, and

* The passive and abstract postfix -en forms abstract plurals and collectives.
+ The comparative prefix ter- is used as a superlative in Malay and for the past passive. The postfixual expletive -oak has also a completive sense and like ter- is sometimes used intensively and also to indicate the past tense.
Polynesian, as we have seen, possesses several formatives of a similar kind, such as intensive, passive and substantival prefixes and participial and causative prefixes.

When we compare W. with E. Indonesian we still remark the comparative crudeness and poverty of the former. It not only wants the distinctive phonology, with the quasi flexion of E. Indonesian, but also some striking Polynesian and N. Indonesian traits preserved by some members of that group, such as the indication of the direction of action. At the same time the essential ideologic habits of the two groups are so closely assimilated that, in general, a sentence can be translated from an eastern into a western language of the Archipelago without displacing or omitting a single word. This ideomatic accordance is most marked in those E. Indonesian languages that have been most subjected to western influence, such as Bugis, but all have been deeply penetrated by the languages of the civilised Malays and Javans, and have cast off many of those peculiarities which they probably possessed, in common with Polynesian, before the trading stations and colonies of Java began to be spread over the eastern portion of the Archipelago. Of the facility with which the more complex of two kindred languages parts with many of its forms, when the more simple acquires a predominating influence from the relative position of the people who speak it, numerous illustrations may be found in the history of European languages.

While the want of phonetic flexion places the W. below the E. Indonesian languages, the former are in one respect richer. The number and combinations of the formatives in the principal languages are greater, and this forms a bond of alliance with the N. Indonesian group, although the complex combinations of the latter are totally opposed to the genius of the western languages. But the W. and N. groups will be more advantageously compared when we have described the latter.

Ideologically the simplest of all the W. Indonesian languages are those of the northern extremity, where the group meets the monosyllabic one of Ultraindia. Here the Simang dialects represent W. Indonesian in its purest and crudest form, divested of the phonetic and ideologic traits which it has acquired in its insular progress. Most of the Peninsular and Sumatran languages shew but a slight advance, using formatives sparingly. In the cultivated Malay, formatives are far more frequent, and in Javan they are still more numerous and complex. The Borneon languages are not sufficiently known to enable us to determine their position with accuracy. My present information leads to the conclusion that they are essentially Peninsular and Sumatran in their ideologies, but with Javan, Philippine and E. Indonesian traits not possessed by the Sumatra-Peninsular languages.

As the ideologic basis of all the W. Indonesian languages is the same, and they only differ in the extent to which they have
borrowed from a common system of formatives, found in greater fullness and vitality in Malay and Javan than in the others, I shall mention the principal prefixes and postfixes of the group viewed as a whole before proceeding to ascertain those of individual languages.

_ka_- substantival, also in Javan, Sund. (_ka, _ha_) Maduran (_he, _he_) and Ngaju (_ta_) passive; in Tilanjangí, Maduran _ka-, _ta-, attributival. In Andamaní _ko-, _go- is active.

—_an_ subs. generally passive or quasi passive and hence abstract, sometimes collective or pluralisive.

_pa-, _pan-, _pang-, _pam-, subs. generally personative, agentive or instrumental. In Battan, Niasi, Sundan (_pa, pe, pi_) Javan, Maduran (_pa, pe_) Bali (_pa, pe_) Ngaju and Kayan it is active; in Tilanjangí instrumental; in Niasi, Ngaju causative; in Kayan transitive, adverbial.

_pi- _ib. but generally passive. In Sundan participial.

_par- (also _pra- _Jav) _pa-, subs., generally quasi passive or intransitive, abstract, locative (sometimes used instead of _bar- _in Mal.)

_pun_, personative, intensive, occurs separately and as a prefix in Jav. and as a postfix in Malay.

_si_ def. personative, still used separately with proper names, and as a personative of qualitatives.

_1_ (a contraction of _si_?) definitive (concrete).

_wa- _personative, Tilanjangí.

_tu-, _tan- occurring separately as the relative-def. of Ngaju and in the relative of Sundan _eta_, and preserved as a concrete pref. in local, botanical and tribal names. In Tilanjangí it is attributival and identical with _ha-._

_so-, _sang-, _sam- _preserved as the numeral _one_ and the indefinite article and used as a def. and attributival prefix in Malay, Maduran, &c.

_in- _apparently subst. in Nicobari (the numeral _one_ like _sa_.)

_so, _sa- _is still applied as a def. formative in Malay, to give qualitatives a def. or assertive, i.e. quasi adverbial, form when used with words of action, in the same manner as the common def. _an_ is used to give an adverbial application. It may be recognised in the _s_ of _sini_ here, _situ_ there, where it restores to the primary and absolute elements _ni, tu_, in the compounds _ini_ (the thing &c here) _sttu_ (the thing &c there) the adverbial meaning of which the def. _i_ had deprived them. In like manner it converts _mana_ where, into _sana_ yonder. In Javan it is used as a postfix.

_bar-, _mar- _attributival (qualitive, intransitive).

* None of these forms are peculiar save the Malay _bar-_ to which the Javan _mer-, _mer- is probably related although it appears to have acquired a transitive application. But this peculiarity is apparent only. That _bar_ is the common attributival _ma-, with the liquid _r_ euphonically added, cannot be doubted when we find a Sumatra-Polynesian formative, the passive particle, _ta- _(Nias, Lampong, etc.) converted by the same augment into the Malayan _tar_. So _pa, _par.
Ngaju, Binua, Battan, Acehian, use the vocalic forms ba, ma, mi &c. The common or full Malay form bar—occurs also in several of the languages which give a preference to the vocalic form as in Binua dialects, Battan, Javan, Bali, Sussaki and Sambawan. In these languages it often assumes the form of mar— I have not the r form in any Bornean languages.

Ma— qualitative, Nias, Batta (also subs.), Lampongi (also ba— be—, m—), Javan (sometimes a—), Maduran (sometimes also a, ha, e, he, ba, be, pa), Bali ma— qualitative Nias, subst. Timlanjangi.

Na—, ia— a— qualitative, Nias; na— ib. and subs. Battan, Acehan; nang—, nam— la—, ha—, a— Sundan. In some languages it occurs in the forms lam—, ram— but very rarely.

Di— (dhi, Jav; di—, ti— Landak) passive (present) radically denoting action in progress or being; the same element occurs in jadi Mal. to become. The preposition di appears to be the same passive particle, the two applications resting on a similar ideologic basis with the locative and temporal uses of our word present. The speaker transports him self ideally to the place and time of the being or action of which he speaks and so they become present to him. The preposition di denotes presence of the thing or act in relation to a substantive. The prefix di— is the same particle limited to action or being in relation to time. So that the variation is not in the particle itself but in the subject to which it is applied.*

Di— is used actively in Binua, and sometimes in Malay.

I— occurs as a contraction of di— in some languages.

Ta— ta—, tar— passive (past) radically denoting action finished or completed, and hence in Malay used with qualitatives to denote fullness or perfection of the attribute. In Lampongi the vocalic form only is used.

—I—, —in—, passive, Jav.

—Um— participial, sometimes purely active, Jav. ( traces of um are found in Mal.)

Man— mang— mam—, ma— by contraction m—, ng—, n—) transitive. The contracted forms occur in nearly all the languages.

* The active ada like the passive jadi appears to have its prepositional counterpart in pada, the p or pa of which is evidently a definitive prefix. In ada (the past form of ada) the active root takes another prefix. As the transitive-causative particle (kan, akan &c) has also its verbal and substantival applications, it is evident that the notion and expression of relations of time were derived by the proto-Malay-Polynesian from those of place. The latter in their turn appear to rest partly on pronouns and partly on definitives, which are the ultimate foundation and source of all these particles, including pronouns themselves. I shall advert to this subject in another place.

These variations are euphonics like those of ta, sa, ha, ha'ko and depend on a general phonetic law of the Malay-Polynesian languages, of which illustrations may be found in most vocabularies. Thus in Malay the first syllable of a word sometimes adds m when the initial of the second syllable is a labial, and n when it is a dental. This is to obtain a fuller and more rythmic or less short and abrupt phonetic movement. Thus we have lapis, lampia; gabala gombala; kutum, kun—tum; so in other dialects sapulo sampulo; duapulo duampulo; sabua, sambua, duabua, dambua &c.
in Javan much more frequently than in Malay, and in many languages in preference to the full forms, as in Lampong, Landaki &c. As they occur in Kawi they must be ancient.

Han-, hang- ham-, ka- active transitive, Jav. The aspirate is omitted or softened in the modern pronunciation of Javan, but retained in other languages as the Maduran, Bali, Ngaju of Borneo, Landaki (eng-, an-). It is probably derived from man-. The Andaman active prefix ing-, in- may be the same particle. In Ngaju ham- appears to be sometimes used as an attributive.

—I, transitive, causative.

—Kan—hen, —aken —ake transitive causative, the same element is found in aken and ka, transitive prepositions. The formatives of higher power have an intensive effect. Thus —kan renders intransitives emphatic, imperative &c.

—Lak, completive, intensitiive or emphatic but often merely euphonic.

—Kah, —tah, interrogative.

Some of the formatives take the place of others in several languages, and in some cases the same languages give different applications to one formative. Thus, as we have seen, the substantival particles are also used actively. Ka— is a passive prefix in Javan. The passives are sometimes used as actives. The qualitative man— and even the passive substantival an are used transitively in Sundan, and the latter occasionally in Bali. T— occurs in several languages with an active force and in some it is even causative. Ha— a— &c. is used as a simple attributive or qualitative in Sundan, Maduran &c.

Some of the formatives are used both separately and with others. Thus in Malay, words with an can prefix ha—, ban—, par—; —i and —kan are used with man— and occasionally with bar—; —kan may take di—. Double postfixes do not occur, unless when the possessive pronoun —sia is added to an. Double prefixes are sometimes used as baka, bapar, sabar.

I will now add some remarks on the different W. Indonesian groups in geographical order, beginning with the Peninsula; and as the languages of the islands facing the Peninsula from Pegu to Sumatra are Indonesian and not Ultraindian, I shall notice them also.

The language of the Silong of the Mergui Archipelago is mainly disyllabic, but with a strong monosyllabic tendency. Its phonology, like that of the Simang, is a compound of earlier W. Indonesia and Ultraindian. It possesses several non-Indonesian combinations of consonants, such as nh, mn, pn, dx, hn, km, gm, lm, pl, kb, ty, th. Some of these however are found in the more consonantal of the W. Indonesian dialects, particularly in some Malayan and Bornean ones. Like these too it affects long and compound vowels u, ai, ae &c. Its finals are W. Indonesian and with a higher proportion of consonants or about 70 per cent, which
is the same as in the most primitive and consonantal of the N. Indonesian, Micronesian and Melanesian languages (Formosan, Mille Torres St.) 100 words give the following terminals cons. 69, i.e. t 16, k 12; n 18, ny 12, m 6, r 2, ia 11; vowels, 31 i.e. a 8, i 2, ai 8, ui 1, oi 1, u 3, oe 2, ao 6. The most frequent consonantal terminal is the abrupt nasal, and the most frequent vocalic one, i. From the few examples of sentences which I possess its structure appears to be similar to that of the Simang.

The Andaman language is more purely Indonesian. It is disyllabic. Lieut. Colebrooke's vocabulary of 115 words containing only two monosyllables and the terminals, with few exceptions, being vowels, amongst which i and ie are very common. The consonantal terminals are ny 2, n 1, l 1, p 2, being about 5 per cent. Consonants combine (st, sm, nk) and meet (rh, ry, nk, lb, ngt, ny) but the syllables have generally vocalic finals. As we possess no information respecting the structure, and no sentences are given, we can only draw a few meagre conclusions from an examination of the vocabulary. Many of the words are evidently compound. Thus cochengohee, blood, contains two words, the second again occurring in meengohee to drink, where the first element, meen, is a prevalent Indonesian word. Most of the verbs have a common prefix which appears to be euphonically variable, as in komohba to sleep, kotoheba to take up, gohabela to run, gongtohebe to sit down, ingelbohee to eat, ingotahaya to beat, ingotahoe to cough, onkessmai to laugh, ingesgenecha to pinch, inhakayohe to scratch, ingadoho to wash, inkahoaongy to spit. This prefix has a close resemblance to the W. Indonesian verbal prefixes in, ing, ang, ka &c. If it is not a formative it is probable a pronoun.

The Nicobar dialects have a phonology allied to that of the Silong and Simang. It is disyllabic with a considerable proportion of monosyllables; it is consonantal, aspirate, guttural, and nasal; and it has compound, chiefly aspirated, consonants (e.g. km, gn, gnh, ki, th, ph, pher, dr, tr,) and vowels (ot, at, st). Mr Barbe's list of 49 Nancowry words gives the following terminals—cons. 26 or about 55 per cent, the nasals being nearly one half, n 11, ny 1; t 4, k 2; l 1, s 1; m 3, p 1. Vowels 23 or about 47 per cent, the simple and compound ones being in about equal proportions, a 10, (a 7, ah 3;) i 7, (ai 1, a 2, oi 3, ei 1; o 3 o 2, o 1;) e 3 (é 1, ae 1;) a and i thus predominating. In a longer M. S. vocabulary of the Car-Nicobar dialect, which I owe to my friend Mr Windsor Earl, the same terminals occur, with the addition of gh, gn, and ph. The phonetic elements of Nicobari are complete, with the exception of x. It possesses w, f, and v as well as b, p. I have no data for the ideology. In occurs so frequently as the first syllable in substantives that there can be little doubt it is the numeral one (king, softened into in in inflaa 4, inhatta 9) used as an indefinite or definite (Pol.) article (inkonhay man, idam wife, inkoi hair, inkanau chin, Nancowry; khyus vest, intul gun, insouy fly C. Nico. (in which the numeral is varied to eng.)
ETHNOLOGY OF THE INDO-PACIFIC ISLANDS.

The most northern of the old Indonesian languages of the Malaya Peninsula are those of the Simang tribes of Kidah and Pera. They are mainly disyllabic like other Asianesian ones, but they have more monosyllables, and a disyllabic tendency may still be detected in the contraction of some Malay words. It may be remarked that the Malay of Kidah exhibits a similar tendency, as well as other marks of proximity to the monosyllabic region. The phonology of the Simang has some strong peculiarities. The voice is low and soft compared with that of the Binua and Malay tribes. The pronunciation is palatal. D, t are generally palatals. There is a considerable degree of intonation, and the rising tone is a phonetic element as in the word te (husband), where the vowel is at once abrupt and ascending. It has consonantal combinations which are not known in Asianesian languages, such as hm, hp, nhl, as well as several of those which are common to the Malay and most of the W. Indonesian languages. It wants the guttural r of the adjacent Malay of Pera. In common with the Binua and several other of these languages it has a tendency to long and compound vowels at, au, oi, oa, ue, ui &c. E occurs frequently as in some Binua and other W. Indonesian languages. In other respects its phonology is similar to that of the Binua. Ideologically it has the same basis as the other W. Indonesian languages, but it wants most of the structural particles which they have superadded, such as the prefixes and postfixes which only occur as integral parts of words derived from the Malay. It makes a very sparing use of directives and conjunctives, and its structure is almost purely positional like that of the monosyllabic languages. From the total absence of culture, a long speech or narrative is only a string of short and simple affirmations, the connection being indicated by frequent repetitions.

The ruder Binua dialects of the Peninsula when compared with Malay present the same aspect as the uncultivated Sumatran. From the sparseness and rudeness of the people who speak them, they have been more completely subjected to Malayan influence than the comparatively civilised and powerful Battan and Achin races, and the consequence is that the indigenous Peninsular vocabularies are rapidly disappearing. The language of most of the Binua tribes is now a rude Malay with a few vestiges of the ancient glossaries. Some however still preserve a considerable proportion of Peninsular words. The phonetic elements and combinations are the same as the Malay, but the pronunciation retains much more of the primitive W. Indonesian character. The languages of the Binua or Sakat of Pera appears, from the few examples given by Colonel Low, to resemble in its phonetic character the ruder dialects of the Biarmin group, which is the next to the southward. This character is intermediate between that of the Simang on the one side and that of the rude Sumatran, Javan and Borncon on the other. Its chief ingredient is a less
soft and pure, or a stronger, broader, more nasal, guttural and aspirate pronunciation than that of the polished Malay. Its affects weak, long and double vowels, occurring very frequently in place of the Malay an a and å. The initial aspirate h, and final guttural, k, are generally preserved where the Malay has lost or softened them. The Pera' dialects appear to be still more consonantal and monosyllabic than those of the Barmun group, as might have been anticipated from their proximity to the Simang. They are very dental and the Ultraiindian nasal u occurs frequently as a medial and final. The use of this u has extended to the Malay of Pera' and it is also found in some of the insular dialects of Malay to the south of the Peninsula. The Barmun pronunciation is nasal, slow and drawling, but not harsh and guttural. E occurs frequently in place of a (as emek for anak kelet for jabat, aps for apa, bapei for bape, bawie for bawa, the expletive le for la.) The Malay of the river Muar preserves the Binua e in many words. The Besisi dialect, which is less Malayised than the others, has some combinations not found in the Minta, such as gn. The Johor Binua is more guttural, aspirate and harsh, remarkably broad and slow, and with a strong tendency to e.

The Malay of the southern Binua tribes is in general the ruder Sumatran and not the polished Peninsular, which may in some degree be owing to the modern influx of Sumatran highlanders into the interior of that portion of the Peninsula.

But the more striking and ancient Sumatran affinities, the phonetic and formative, are with non-Malayan languages. The older coast Malay of the Peninsula has the same formatives and the same aversion to compound vowels as the Sumatran, while it substitutes final a for o. The more recent inland Malay is pure Sumatran, the o and other peculiarities being retained. The Barmun dialects, on the other hand, have the e and the double vowels of the older Sumatran and Sundan languages, while the formatives have generally the original or vocalic forms of these languages where the Malay has added r. In the Binua dialects we find ma- ba-, be- used for bar-, and the prefix di- occurring frequently as an active sign, man being very little used. --Kan is often used causatively or transitively with di-. The relative has the Sumatran forms nam, nang, men and not the Peninsular iang.

The rude maritime nomades who frequent the coasts and islands of the Peninsula, and amongst whom several distinct tribes are distinguishable by their physical characters, retain very scanty traces of their original vocabularies, the language of all being mainly Malay, variously pronounced, but in general in a very harsh, guttural, nasal and uncouth manner, so as to be often unintelligible to persons who are not accustomed to these dialects although familiar with the Malacca Malay. A nasal a or u is

* Low.
common in several and it takes the place of the final a, o and e of other Malay dialects.

The influence of the ancient Peninsular languages on the Malay has not been great. A few Peninsular words are found in most of the dialects, and some phonetic corruptions have been produced in a few.

The prevalent Sumatran phonology is somewhat softer than that of the other portions of W. Indonesian, but all the languages have some of the primary western characteristics; they become more decided in the ruder dialects, and it is evident that W. Indonesian phonology when introduced into this island had essentially the same character as in the Peninsula, Java and Borneo. Most of the languages have final o where the more refined Peninsular Malay has a? In several dialects e occurs frequently, and in the Serawi it and a nasal u take the place of o as finals. A guttural or aspirated r, probably analogous to that of Kedah or Perak, is found in most of the dialects, even the Battan, Mantawai, and Lampang languages, otherwise comparatively soft, possessing it. In Battan it is very rare. Compound vocalic finals occur in all the languages and dialects save the Menangkabau Malay, but in Battan they are infrequent. In chap. I. (ante p 214) the ratio of final consonants to vowels finals is given as 65: 55 for Malay and 67: 43 for Battan, while in the other W. Indonesian languages the consonants and vowels are nearly equal. The higher consonantalism of Malay and Battan is caused by their affecting final aspirates, s and hard h, more than the other languages. Malay has 13 (s 5½ h 2½) and Battan 9½ (s 7, h 2½) while the other adjacent W. Indonesian languages have only 4 to 6.

The uncultivated languages of Sumatra like those of the Peninsula use the formatives much less frequently than the Malay, but they have all been deeply influenced by that language, while they have also derived much from a common source, for it must be borne in mind that both of these causes have operated in producing the great amount of affinity which now prevails.

All the phonologies have much in common, the Malay itself departing less from the primitive W. Indonesian character than it has done as a Peninsular language. The most northern Sumatran language, that of the Orang Ache, has some peculiarities. The Battan dialects are tinged with the eastern character of the adjacent Nias. The dialects to the south of the Malay are closely allied in phonology to the Sundan, S. Peninsular and W. Borneon.

Before proceeding to the proper Sumatran languages I will notice those of the western chain of islands.

The Marawi language, which is spoken by the natives of the Banik and Si Malu islands, is said by Marsden to have much radical affinity to the Batta and Nias and less to the Pagai. From his list of 24 words and the numerals it appears to be vocalic with a small proportion of consonantal terminals.
The sounds of the language of Pulo Nias and P. Batu are in general pure and clear, but like most E. Indonesian phonologies, it is softly aspirate. $V, f$ and $w$ occur frequently, and $ch$ and $j$ are common, $ck$ sometimes representing $t$ and $h$ of Battan and Malay, (e. g. $chunu$, Bat. $tunji$ Mal. $tunu$; Buchi, B. $baht$; chuka, M. $tuka$; fitchu, Bat. $pitu$; Bachu, B. M. $batu$.) The aspirate tendency occasionally leads to a preference of $h$ to $k$, as in one of these examples. Although the pure $a$, $i$ and $u$ are preferred, broad $o$ and $e$ are also used and the two latter occur as finals. It has a softly guttural $eu$. $R$ replaces $d$ in some of the words common to it and Battan. The strong vocalicism is accompanied by elisions similar to those of E. Indonesian but less common (e. g. $ipi$, B. $nipi$, M. $nipis$; uri B. $urat$; ama B. $amang$, M. $abang$; puda, B. $pudang$; bakha, B. $bakhas$). In some respects Niasi may be considered as a link between W. and E. Indonesian, for although its vocalic phonology and its glossary are decidedly eastern, it wants some of the peculiar characters both of the typical E. Indonesian and Polynesian. It is rhythmic, adhesive and euphonically flexible like the Celebesian languages, and although phonetically it approximates more to some of the southern languages, it wants the union of the pronoun and verb. In collocation it is purely Sumatran or W. Indonesian, but the E. Indonesian languages in general have this collocation also, although some possess slight peculiarities, such as the constant placing of numerals and numeric adjectives after the substantive. $Ma$-, $ma$-, $ba$- are used both attributively and intransitively. $Pa$-, $fa$-, $fan$- is active as in Sumban; $ha$-, $la$, attributive as in Timori, Rotian and some other eastern dialects. $A$- probably a contraction of $ma$ or $na$, is also used frequently as a qualitative prefix. $I$- appears to be also an active prefix, but it is probably a contraction of $di$-. $Ta$- as in Vitian, is the formative of the passive participle, corresponding with the Malay $tar$-. The basis of Niasi, as preserved in the general character of the phonology, in the formatives, and in much of the vocabulary, is E. Indonesian, but it has been much influenced by the W. Indonesian of Sumatra.

The Mantanowi race who inhabit the Perai and Pagai groups probably speak more than one dialect, but we possess only a short vocabulary by Mr Crisp of that of the Pagais, which is said to be spoken in the other group also. Its phonology is considerably more Battan than that of Nias, as it appears to have about 27 per cent of consonantal finals (70 words give $ny$ 4, $n$ 2, $r$ 1, $k$ 4, $t$ 3, $b$ 2, $p$ 3) and although it possesses the Niasi $r$ it does not displace $b$, which, on the contrary is the most common labial. The phonology is purer than the ruder Malay, and is apparently free from the Sumatran aspirates. But as $r$ and $g$ are permutable in $lorau$, $logau$, blood, and there are a few compound vocalic finals, $ut$, $at$, $au$, $uo$, it is probable that a larger vocabulary would
shew a greater phonetic affinity with Battan. As in Battan and Nias the d of Malay is replaced by a liquid* (lilah korone, M. dara.) Final consonants are sometimes wanting in words which have them in Sumatran languages. The few words that agree with Niasi and Battan exhibit considerable modification, e.g. M. mareb, N. mar; M. matau N. machua; M. senanaliap N. sialapi; M. utay N. hukau; M. root, Bat, raut; M. omange B. Mal. panas. Some are in Battan where the Niasi is Malayan e.g. lila. Its proper phonetic position appears to be intermediate between Niasi and Battan. Of its ideologic characteristics it can only be gathered that qualifiers take the prefix ma—like those of Niasi. Of the two verbs given, one manibu to speak, has probably the same prefix but it may be man.

The language of Tilanjang or Engano is equally vocalic with the Niasi and more pure. It agrees more with some Indonesian than with any Sumatran languages. Mu— is substantival, ka—ta— qualitative or attributival, pa—instrumental and rea—personative.

From the highly vocalic character of the Nias and Tilanjang languages, it may be inferred that the more consonantal phonology of the Mantawai has been induced by Sumatran influences, and that the original languages of all the western islands were purely E. Indonesian. The circumstance of the Mantawai language being more closely connected with the comparatively remote Battan than with the adjacent Malay, indicates a great retrogression of the former race to the northward, and an occupation of their southern lands by the latter, a fact probable in itself on other grounds, and important as offering some clue to guide us in our search for the seat of the Malays, before they had risen above the level of the other numerous petty tribes by which Sumatra must have been peopled in the barbarous ages of its history.

Proceeding to the languages of Sumatra, we begin with that spoken by a peculiar people who occupy the territory which receives its name from its principal port Ache, called by Europeans Achin. The Achean language is distinguished from all others in Asianesia by having the accent on the terminal instead of the penultimate syllable. In other respects its phonology has the prevailing Sumatran character. The influence of Malay has been great, but the native portion of the vocabulary shews that originally it must have differs from Battan and Malay in some decided traits. Many of the native words are consonantal monosyllables, and it preserves compound vocalic terminals oii, io, ui, we. Like the other Sumatran languages it prefers o and e to the purer vowels. Its native affinities are thus with the ruder Peninsular and Sumatran languages and not with the Battan and Malay, while the number of abrupt monosyllables strongly allies it to the Simang. This affinity between the most northern languages on

* L and r appear to be interchangeable, Mahala hard and mokara, rough, (Malay kros) must be the same word.
the opposite sides of the Malacca sea, or those nearest to the
monosyllabic region, has an interesting ethnic bearing, and gives
additional import to its accentuation,—anomalous as an Asianesian
trait but natural in a language in which the Ultradean element
is strong. Although there is much that is peculiar in the vocabu-
larv, it is in composition so largely intermixed with Malay idioms
and phrases as to appear like a dialect of Malay. It sometimes
however uses the na-- of Battan, and like it substitutes ma, mi--
for the Malay bar.

The principal languages of Sumatra or those that are spoken
by the largest populations and over the widest extent of territory,
are the Battan dialects and the Malayu. Both are distinguished
from the other languages of Sumatra by a purer and more refined
phonology and a higher culture. The influences that have produced
this result are two-fold. The earliest and most important was
the greater persistence of a phonology and vocabulary of an
E. Indonesian character in the middle regions of Sumatra, and
particularly in the northern or Battu portion than in the northern
and the greater part of the southern. From whatever causes this
happened it is certain that the E. Indonesian languages still
preserved in the western chain of islands, have left stronger traces
of their former presence in the Battu and Malayu lands than in
most other parts of Sumatra. The second refining influence was
that of Indian literature or Indonesian literature of Indian origin,
aided probably by a gradual accomodation of the Malayan phono-
logy to the articulative habits of the Kalinga or Telugu traders and
settlers, who appear at one period to have formed a large and im-
portant element in the mixed population of the chief Indonesian
ports. But when we compare Battan and Malayu with those
languages and dialects of the Archipelago which have been most
Indianised, such as the Javan, we perceive at once that their
greater smoothness and purity, when compared with that of all the
other W. Indonesian languages, is chiefly attributable to the earlier
or native vocalic influence.

In the Battan dialects the W. Indonesian element predominates,
and they have the closest affinity with Malay. But although
essentially similar to Malayu in their phonology, structure and
formatives, they are more vocalic and have many eastern words that
are not found in Malay, while their direct affinities with Niasi,
phonetic, formative and glossarial, are so considerable as to show
that the basis of Battan was similar to that of Niasi, or that the
latter language spread into Sumatra and modified the W. Indone-
sian character of Battan. Which conclusion is the more probable
will be shewn further on. The only peculiar native traits are a
considerable tendency to aspirates; the possession of the sibilo-
aspiret sound sh which I have noticed in the dialect of Ulu Pane; a
frequent preference of k to h as in Niasi (e. g. horobau horbav Mal.
horbav; hutu Mal. kutu; lahi M. laki; ohan M. ikan); m or w
to b, p; and an occasional one of h to t; d to j; k or g to r; k, d, or j; to t. Compound consonants and vowels are very rare. Final ue is found in some words. The Battan like the Javan has ma,-- mar-- in place of the Malay bar-- in accordance with its general preference of m to b. It has the eastern na-- and ma-- as substantive prefixes and occasionally uses po as an active and causative prefix; ma-- is also used attributively. The active prefix is generally a contracted form of man--. I have found traces of the transitive ham-- but it appears to be obsolete or concreted.

The Malayan language, in its more ancient form, partook, in a considerable measure, of the general character of the W. Indonesian of Sumatra, as is evident from the phonology of its ruder dialects.

The initial aspirate and final k were common, and the enunciation was somewhat slow, broad and guttural. In a word, with the purer phonology of E. Indonesian it combined the consonantal, aspirate, and guttural tendencies of the other languages of the Malacca basin. Traces of this earlier character are still found in the centre of Malayan civilization—Menangkabau, where the language received its greatest culture, and attained the form which, with some phonetic improvements and a few glossarial changes, it has preserved in its dissemination throughout the Archipelago. The Menangkabau dialect retains final o and gives r an aspirate guttural sound. The initial aspirate is still retained in some words that have lost it in the polished Peninsular dialects, and e keeps its place in a few words which have replaced it by a in the latter. In the other dialects the earlier phonology has been less refined. It is remarkable that the E. Indonesian tendency to cut off final and initial consonants shows itself in the curtailment of some Menangkabau words that remain intact in the Malacca Malay (e. g. agi: for bhagi, tenge for enge; angha, anghat; lune, lucus; sayu, sayap). As such elisions are common in Rejangi, Mantawai, and Nias, it might be thought that the examples we have cited are inconsistent with the derivation of the polished Peninsular from the Sumatran Malay, but the fact is that the same tendency is found in the latter language also and operates on different words at different places. The strong and consonantal phonology appears to have predominated for a time in W. Indonesia, but the soft and vocalic, never completely overpowered, slowly undermined it and has gone on increasing in influence until the present time. With the above slight qualifications, it may be pronounced that the Malayu of Menangkabau is distinguished from all the other Sumatran languages by its higher culture, purer phonology, wider prevalence and greater influence on other languages. It uses formatives more frequently and regularly. Its main phonetic peculiarity is the rejection of all the harsher traits of W. Indonesian phonology while preserving its consonantalism. It has transmuted the compound into final vowels, discarded final e for o and ē, rejected all the harsher consonantal compounds, in general replaced the more by the less aspirated consonants, and all but
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Treed itself from aspirate initial and guttural finals. In the Peninsula it has received a still higher culture, and by clearing itself from nearly all the strongly aspirated sounds retained in Menang-kabau, substituting the liquid a, u for o; i or a for e, r for rk or gh and dismissing the remnants of aspirate initials and guttural finals, it has acquired a completely open and pure phonology, at once smooth, masculine and harmonic. In its most modern or improved form it presents a somewhat similar phonetic contrast to the harsher dialects that Latin does to Dutch and German. Its strength is shewn in its preservation of a large proportion of final consonants and in the absence of the tendency to vocalise or attenuate consonants which destroys the natural beauty of so many E. Indonesian phonologies. Its refinement is shewn in its preference of a clear, smooth and easy articulation with non-aspirate, pure and open sounds, to the laboured and obstructed articulation and aspirated, guttural, nasal, cerebral and hollow sounds, which characterise not only the ruder phonologies of the Peninsula and Sumatra but also, to a large extent, Javan. The formatives of Malayu are the subst. kan-, -an; pam-, ping-; pam-, pa-; attributive bir bar, bal-ba; transitive ma, mang-, man-; mam- m- and -i; transitive and causative -kan; passive (sometimes active) di-; pass. part tér-; adv. so-; jang-; sam-, so-; ta, tam; kamp-; -um- are preserved glossarily in a few words, but they are not now used as formatives.

The other Malay dialects are less improved in their phonologies. The Kortinchi dialect has a few non-Malayan words, and some phonetic peculiarities, such as the substitution of k for r, and e for a (e. g. lukus, M. lurus: diteluk, M. dilauvr).

The Rejang is somewhat vocalic, frequently gliding or vocalising consonants (e. g. luus, M. lurus; biko, M. bengko; pukua, M. puhul; lam, M. dalam.) Its phonology has been closely assimilated to Malay, but compound finals, oi, oe, ei, occur.

The next people to the south, the Pasumahs, speak a dialect, the Sirawii, in which the final e replaces o and a. A nasal u (like the eu in due) is a common final, as in the Malay of the Johore Archipelago.

In the dialect of Palembang a few Javanese words very slightly affect the phonetic character of the vocabulary. Final o prevails.* In different parts of Palembang some rude communities are found of a people so much resembling the Rejang in character, as to suggest the latter having preceded the present Malayu-Javan race in Palembang. This is probable on other grounds, for the invariable result of settlements by the civilised races on navigable rivers or coasts is to confine the native tribes to the interior.

The Komring language like the Rejang and Serawi has final

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* Marson attributes this to "the political influence of the Javanese" overlooking the fact that the proper Sumatran Malay itself prefers final o to a. We have seen that this preference is not confined to Malay.
me, ec, ek, and it is distinguished from them by the greater prevalence of the initial aspirate.

The Lampung dialects prefer the pure vowels of E. Indonesiam and Malay, a, i, u to the Sumatran e and o, although the latter occur, while compound vowels are frequent. It also possesses the nasal vowels, and the aspirate or guttural r, which in many words replaces the pure r of allied languages. Like the Rembang, Nias and most of the vocalic languages, it often contracts and softens words of foreign origin. Its prefixes have the vocalic forms: Ba-, ma-, m-, ba- attributive; nga, ny (chiefly) transitive; wi-present passive (also used actively); ta-past passive. The causative has the Besisi and Sundan form -ken. The substantive are the common ka-an, pa-, pe-, kce. Besides a and o it has the intermediate o of the Javan alphabet.

The Sumatran languages as a group present some interesting features when compared with those of the Peninsula. In the latter we observe only two native systems, a consonantal, aformative and partially monosyllabic one in a comparatively pure state, and a mixed system produced by the blending of this with a vocalic one, more decidedly dissyllabic and possessed of formative. None of the native languages is predominant, diffusive or even stable. Ail, on the contrary, are broken and scattered, and are either rapidly passing away or maintain a precarious existence by retiring from contact with the Malay, the position of which in the Peninsula, where it environs all the other languages and spreads up the rivers amongst them, strikingly contrasts with that which it holds in Sumatra, where it covers a large and compact region of its own, beyond which its influence is slight compared with that of the Peninsular Malay on the Binua dialects which it invests.

In Sumatra we find at least three well marked languages each occupying its own area, and a fourth still preserving its peculiar character and location although much affected by foreign influence. In addition the western islands contain at least three other distinct and stable languages. Sumatra thus combines a greater expansion of individual languages with a greater number. The variety is also greater, for in addition to languages which closely resemble the Binua and approximate to the Simang, it presents a new system, or rather reveals in its purity that system which in the Peninsula is only recognisable as an element blending with the consonantal.

While the Sumatran group is thus at once more varied and more stable, it exhibits the phenomenon of having only one diffusive language, the Malay. The character of some of the southern dialects within the Malay area would alone suffice to establish its progressive tendency, while the presence of a more or less considerable element of modern Malay in all the other languages proves that they are at present stationary and recipient. The fact of the purely Malayan area being nearly equal to that of all the other
Sumatran languages collectively, shews that its dominant and aggressive character was acquired in its native seat, and that it had conquered a wide space for itself at the expence of earlier Sumatran dialects, before it overflowed and spread to other regions. At present the proper Sumatran Malay appears to be stationary, like the Battan and Achean. Its expansive energy and power has been paralysed, and it must now be extremely difficult to ascertain where its Sumatran centre was, and in what directions it chiefly advanced. But from its great relative extension, the petty populations who use the southern dialects, its manifest interpenetration of the more important Battan and its continuity on the east and west from the Indian Ocean to the Malacca strait, it is evident that in the era of its predominance it expanded on all sides. If it was not poured in at several points from a foreign source but grew up in Sumatra, it is probable that its location, at the beginning of this era, was much to the south of the present Battan land, and that a large portion of Sumatra was occupied by languages akin to the Battan in their earlier or non-Malayan form.

That this form was vocalic and E. Indonesian cannot be doubted, when we find strong traces of the same element in the language to the south of the Malay, and in the western chain of islands a purely E. Indonesian form, which through Nias identifies itself with the primary Battan. We are thus led to the conclusion that the consonantal phonologies of Achean and Malay, and of the allied languages which may have been incorporated in these or diffused in the Battan and Lampongi, are of later origin in Sumatra than the vocalic; and the position of the Achean and Malay in relation to the Battan and the other languages having an E. Indonesian basis, leads to the further inference that the consonantal system was introduced from without. Our examination of the Peninsula languages leaves no doubt that this system was an extension of that which previously prevailed on the opposite side of the Malacca basin, and there also came in contact with vocalic languages which it absorbed.

The fact that the long sequestered and very ancient and peculiar language of the Andamans, is vocalic, dissyllabic and formative, now acquires a new character. The adjacent languages belong either to the monosyllabic and consonantal system, to an allied dissyllabic one, or to the mixed system of the Malay type. The Andaman phonology therefore connects itself with the Nias and earlier Sumatran system, and indicates the prevalence of that system in a continuous band, from the Strait of Sunda to the gulf of Martaban. Thus in that portion of Asiasia which faces Africa, Ceylon and S. India and runs northward towards Bengal, joining and slightly overlapping the Ultraindian region, we can still distinguish two parallel phonetic bands, which are of characters so distinct and even opposite, that they must necessarily
have been of distinct, and one at least of foreign origin. In phonology Andamani is fundamentally opposed to Silongi, Nicobari and Semangi; Nias to Acehian; and Tilanjangi to the rude Malayan dialects which appear to have prevailed and are partially preserved in the adjacent portion of Sumatra. The fact that in most languages of the region the influence of both phonologies may be traced does not weaken the force of these contrasts, because the very circumstances of parallelism and proximity throughout an ethnic region so long and narrow, necessarily lead to interpenetration.

It is remarkable that the existing vocalic languages have been less influenced by the consonantal, than the latter by the former, if we except the Mantawai. The vocalic element is found in all the Sumatran and Peninsular languages, strong in Battan and Lampangi, less so in the Malay dialects, and comparatively weak in the Acehian and Semangi. In the Andamani, Nias and Tilanjangi the consonantal element is very slight, and this can only be explained by the consonantal stream having been mainly a continental one, flowing down the coasts of the Malay Peninsula and into the Malacca sea, and not along the outer islands and west coast of Sumatra. The consequence has been that these islands appear to have long been left in possession of their native phonology while the consonantal phonology was spreading over the Peninsula and Sumatra. These views render it in the highest degree probable that the vocalic system occupied this insular and Peninsular area and even extended up the Peninsula into the proper Ultraiindian region, before the consonantal one began its advance along it.

The consonantal element, it will appear hereafter, has been derived from the southern progress of the Ultraiindian system, and the character of the W. Indonesian languages proves that they were formed by the engraftment of this system on a vocalic, dissyllabic and formative one. The preceding remarks leave no doubt that the latter was the same that is now represented by Andamani, Nias, Tilanjangi and E. Indonesian.

The preceding considerations tend to the following view of the later era of the linguistic history of the Malacca basin. At the dawn of our present ethnic light, vocalic languages occupied it, and the fragments of a Negro population preserved in the Andamans and the Malay Peninsula, the fact that the language of the most sequestered of these remnants is vocalic, the evident priority of the spiral haired Negro race and the vocalic system to the lank haired brown race and the consonantal system, and the immediate derivation of both the latter from the adjacent region of Ultraiindia,* leave no room for doubt that the vocalic system

* Whether Negro tribes and dialects did not in a still more ancient era, occupy Ultraiindia and India before any of the present non-Negro races moved into these regions, is a further question awaiting investigation.
was the native one of the Negroes of the Malesca basin. It is
needless to pause here to point out the abundant confirmation
which this view receives from following the two races and systems
of language into the more eastern parts of Asianesia. The
advance of the lank haired race into the Peninsula necessarily
led to the formation of numerous dialects in which the proportion
of the vocalic and consonantal elements must have gradually
changed, until the latter from being the less became the greater.
Each dialect caused by the rise of new settlements and tribes at the
expense of old ones, must have had a less vocalic basis than those
that preceded it. The Peninsular dialects were thus gradually
revolutionised by the continued influx of Ultraindian, those in direct
contact with Ultraindian necessarily undergoing the earliest and
greatest metamorphosis. It is hence not surprising that while
an isolated Negro language like the Andamani should be little
affected, others adjacent to the Ultraindian tribes, like the Simang,
should be all but converted into Ultraindian.

The extension of the same view to the Sumatran languages
clears up their chief anomalies and obscurities. The Johor
Archipelago, which connects the southern extremity of the
Peninsula with Sumatra, must have been the great highway by
which the earlier Ultraindian tribes of the Peninsula passed in a
constant stream into the basins of the Indragiri, Jumi and Pae-
lembang, first gaining a predominant or exclusive footing there,
and then spreading into the interior. Here the same process
would be repeated, with this difference that the intruding phonology
was already a mixed one. Successive dialects would be formed in
Sumatra, the vocalic element long predominating. The Battan,
deprived of its Malay ingredients, is an example of one of the later
stages of the slow metamorphic process. The constant intercourse
between the Johor islands and the S. E. Sumatran basins produced a
complete assimilation of the phonology of the latter to that of the
former. This phonology carried inland and northward by the
Malay tribes, as they gradually advanced into the land of the
Battas, communicated much of its own consonantalism to the
dialects of the latter, and received from them in return a more
vocalic character than it possessed in the northern river basins and
islands. The circumstance of the southern Malay dialects having
continued to be more consonantal than the northern, and the Battan
affinities of the Mantawai, strongly corroborate the opinion that
the main direction of Malayan progress in Sumatra was from south
to north. The Achean language, separated from the Malay by the
wide area of the Batta dialects, and in phonology far more
closely connected with the Simang than with them or the adjacent
W. Sumatran insular languages, indicates a distinct and direct
maritime migration from the Peninsula or Ultraindia.

Reserving the prosecution of the general enquiry into the con-
nection between the Ultraindian and Asianesian languages till we
have adverted to the other elements that enter into it, I will, before passing on to the Javan group, make a few remarks on a question that has been much discussed by writers on Malayan ethnology,—the origin of the polished dialects used by the more civilised Malayan communities of the Peninsula and of most parts of the Archipelago, or what we may term the Malay, distinguishing the other dialects by the names of the places where they are spoken.

It is difficult to ascertain how much of the superior refinement of Malay compared with most other W. Indonesian languages is due to the culture of Menangkabau and how much to that of Palembang or Malacca. Whatever improvement it received in the Peninsula is undoubtedly due to its culture in Malacca, when that country was the seat of the greatest commercial nation, and at the same time the most polished and literary, that the Malayan race has produced. We know too little of the earlier commercial settlements of the Malays on the eastern rivers of Sumatra and the islands opposite them, to judge whether they were favourable to the improvement of the language, but as the proper or non-Malacca Malay of this region, from Banka to Singapore and Johor, retains more of the earlier harshness than that of Menangkabau itself, it is not probable that the Malay even of the kingdoms of Bentan and Singapura made any close approach to the refinement which the language attained in Malacca, although it must be borne in mind that a general rudeness in the dialects beyond Menangkabau is not inconsistent with the existence of a more polished mode of speech in populous maritime towns such as Palembang and Singapura where the intercourse with Indian navigators and residents must have been great.

The circumstance to which we have adverted of the proper southern Malay of the Peninsula being more primitive than that of Menangkabau, admits of two explanations. It is evidently a continuation of the ruder Sumatran Malay represented by the dialects prevailing in the upper Palembang basins, and its connection with the Menangkabau Malay thus goes back to a period when the latter was at a much greater distance than it now is from that of Malacca. Either therefore the latter was derived from Menangkabau long after the more primitive Sumatran Malay had spread over the Johor Archipelago into the Peninsula, or this primitive Malay of the Peninsula was the immediate stock of the refined Malacca dialect, while that of Menangkabau received its culture from Malacca. The ethnic flux and reflux between the southern part of the Peninsula and the middle and southern regions of Sumatra must have been uninterrupted from the present day to the remote period when the land on either side of the Strait was first inhabited. Long anterior to the expansion of the Malay beyond its cradle, wherever that was, the languages of the opposite coasts and the islands connecting them, must have had strong affinities. The spread of the Malay language over the wide space
it now occupies in Sumatra must have been the work of many ages, and if in its ruder state it embraced within its limits these coasts and islands, it is not probable that in later times, when the sway of Menangkabau extended over the greater part of Sumatra, its language would neither be cultivated nor carried in its improved state to the seats of foreign commerce on the Malacca Strait. That both happened can hardly be doubted, even if we discard Malayan history and tradition. There is no reason however to question the modern derivation of the Malacca Malays from Singapore and Bentan as related in the Malayan Annals, and although the basin of the Kuantan or Indragiri, from its directly connecting the Johor Archipelago with Menangkabau, is the country from which we might have expected traders or adventurers to emigrate to Linga or Bentan, there are not wanting strong probabilities and facts to corroborate the native history when it asserts that it was not from the river of Menangkabau itself, but from its most southern dependency, Palembang, that the Malacca Malays were derived. The Palembang river is much more accessible to vessels than any of the northern ones, and it is probable, both from this cause and from its proximity to the great trading port of western Java, Kalubar, that it early became the chief place of resort, on this side of Sumatra, for Indian and other foreign traders. If it was the principal port of the kingdom of Menangkabau, or of the east coast it would be natural to ascribe to its chiefs the planting of a maritime colony on an island more in the general track of Indonesian and Indo-Chinese commerce.

The annals of several ancient Malay states, including Menangkabau itself, point to Palembang as the original land of the Malays. They afford various indications of a close connection between it and Java, and mention Javan invasions and settlements long anterior to the modern conquest of Palembang by Majapahit. From their concurrent tenor it appears that the royal dynasties of Menangkabau, Malacca and other states traced their descent from Palembang. It may be inferred that it was in Palembang that the Malay race and language received their earliest and deepest impressions from Hindu and Javan influences, and that the Indian monarchical form of government was first engrafted on the native Sumatran institutions, which are of a mixed patriarchal and oligarchical form. It is even probable that Palembang was closely connected with the southern extremity of the Peninsula long before the foundation of the modern colony of Singapura. The remnant of the ancient vocabulary of Johor, small as it is, contains some words only found elsewhere in Upper Palembang and others of Sundan and Javan affinity which may also have been immediately obtained through Palembang. For Marsden's notion of the descent of Menangkabau highlanders to the Johor islands by the Indragiri or any other route, and their sudden metamorphosis into a maritime community at Bentan and Singapura, there is no foundation
whatever. The people who established a maritime and commercial town on Singapore so late as the twelfth century must have been an offset from an older port.

It appears most consistent with our present knowledge to believe that the purerst of the Malacca Malay was a dialect of the cultivated Menangkabau Malay spoken at Palembang when the colonists of Fentan and Singapura left it.* While it is clear that the transplanted dialect derived every thing which it now possesses save a few words, some phonetic refinement, and a more artificial and laboured literary style, from Sumatra, it is also probable that the influence of the Malacca dialect on the Malay of all the maritime districts of the ancient kingdom of Menakabau has not been unfelt around lake Sinkara itself, and that the present Menangkabau Malay is considerably more polished than it was in the 11th and 12th centuries. When or how the modern Malay of Menangkabau was imported into lower Palembang, where it probably displaced ruder and more ancient dialects akin to those of which vestiges remain in Upper Palembang we know not, although it is probable all the populous Malayan dependencies, such as Priaman, Indrapura and Sangiaku on the west coast, and Siak, Indragiri, Jambi and Palembang on the east. Of the earlier history of the Malay nothing is known. We are ignorant in what part of middle Sumatra or of the Peninsula the Malayan tribe was first located, and of the ethnic history of the Malacca basin during the long era between the first civilisation of that tribe and the foundation of the Singapura of the 12th century,—the migrations and conquests that took place, the towns that flourished and decayed, the foreign trade and maritime enterprise,—no authentic record exists, and our knowledge of it must be limited to those broad inferences to which we may be conducted by a careful comparison of languages and other ethnic data, followed by a critical examination of the native histories and traditions when our ethnology is sufficiently advanced to enable us to break up and clear away the matrix in which the few remains of fact have been imbedded and preserved. The Malacca sea, the strait of Singapore, and the eastern navigable rivers of the Menangkabau empire must have been frequented by Hindu and other foreigners for more than a thousand years before the Malay Singapura arose, and when we consider that the Malay language was already that of Johor, that settlements of Hinduised Malays existed in the northern parts of the Peninsula, and that the Malay language and civilisation of the 12th century were the same as at present, we cannot avoid the conclusion that the Malay annals relate only one of the latest migrations of that people, and that their silence as to the dominion and history of Menangkabau arose partly from their having already

* If any conclusion may be drawn from Marco Polo's orthography, the Malacca Malay of the 13th century had not yet replaced the strong naso-guttural terminals by pure vowels. He writes Malayu Malaiwar.

A [lines omitted]
become dim and partly from a desire to exalt the Malacca dynasty by assigning to it an independent and fabulous origin. At the time when the emigrants from Bentan settled on Singapore, it is probable that the power of Menangkabau was on the wane, and it is certain that when the works which furnished the materials for the Malay annals were composed, its fame was eclipsed by that of Malacca and the northern Sumatran ports. Whether the Malays first became a great maritime people at Palembang, Bentan, Singapura or Malacca, and about the time assigned or in an earlier century, it is certain that this maritime civilisation, the loss of some of the Menangkabau institutions and the slight changes in the language, must have had their origin in one port, and that the dialect and customs of this port were those of trading communities in the most remote parts of the Indian Archipelago when European vessels first entered it in the beginning of the 16th century.

With reference to the Javan element in the language and civilisation of the Johor basin, I may advert to a curious fact which came to my knowledge when exploring Johor a few years ago. The Malays of Johor, at least of the southern basins, when employed in gathering camphor use a fictitious vocabulary constructed in a similar manner to the deferential dialect of Javan, by substituting for the common Malayan words others in the same language descriptive of some characteristic of the object, and by borrowing from the remnants of the Binua vocabularies. As this language is also deferential, being used to propitiate the spirit of the camphor tree, it appears to indicate the former prevalence of a high dialect in Johor, derived in all probability from Java, for there are other traces of the ancient residence of Javars at the southern extremity of the Peninsula and along the east coast. Indeed the histories of the Malayan dynasties themselves afford strong evidence that at one period the Javans extended their sway over the islands and coasts of the sea of Johor, and the suggestion may be thrown out that the numerous Hindu geographical names found on the western side of this sea, including Singapura itself, are indications of Javan trading settlements that flourished for centuries before the Malays rose into note as a civilised maritime people and displaced the Javans in this quarter. Should further research establish this, the successive ethnic revolutions in this region during its recent era will be, 1st the growth of one or more populous and powerful communities in the fertile plains of the Sumatran highlands and the extension of that which ultimately predominated, the Malayan, over a large portion of Sumatra and the islands, coasts and rivers of the Malay sea; 2nd the advance into this region of Javan maritime people civilised by Hindu culture, the establishment of Javan maritime settlements from which Hindu culture spread up the rivers amongst the native communities of the

* A small vocabulary of this dialect will be found in my account of the Binua of Johor (Jour. Ind. Archp. vol. I. p. 263.)
interior;* 3rd the recovery of the native race from their political or ethnic subjection to the Javans, followed by the overthrow of the Javan governments and the retirement of Javans from the region; 4th the spread of the now cultured Malays into the maritime seats vacated by the Javans and their gradual rise into the predominating maritime race of the Archipelago,—the Javan for a time, as strong governments were formed in Java, seeking to regain a footing in the Johor sea but only partially and transiently succeeding, their conquest of Singapura leading to no permanent dominion, and their settlements on the Sumatran coast soon relapsing to Malayan rule with the exception of those nearest Sunda. These conquests of the expiring Javan power are quite distinct from the ancient colonisations and conquests in the era of Javan supremacy,—or that of Hinduism, the Kawi and a flourishing Indian trade. The 4th of the above eras extends back from the 16th century, when European domination commenced, probably to the 10th or even earlier. The 2nd and 3rd probably extended over a large portion of the preceding ten centuries, for the Sumatran trade with its gold, camphor and other valuable productions, would necessarily draw the Javans to its coasts as soon as they became a commercial people, just as the spices and other produce of the east attracted them to Celebes and the Moluccas. The demands of the Indian trade which centered in Java, if it was not long confined to it, must have greatly stimulated the maritime enterprise of the Javans, and made its two ports the emporia of the whole Archipelago.

The phonology of the Javan group closely resembles that of the ruder Sumatra-Peninsular and is chiefly distinguished from it by being more hollow, palatal, aspirate and distinct and less nasal, guttural and smothered, while equally slow and broad. Sundan, however, amongst other striking affinities with the southern Sumatra-Peninsular Malay has a decided nasal vowel. As Javan has given its high and priestly dialects to the other peoples of the group and has greatly influenced their common languages, I will notice it first, although Sundan is closer, both in character and geographical position, to the S. Sumatran languages.

Javan, as we remarked above, has a much broader, more forcible, aspirate and primitive phonology than Malay. Its syllables do not flow into each other with that uniform smoothness which characterises Malay. Each is uttered with force and abruptness, the voice as it were grasping the initial and throwing itself on the terminal sound of each syllable, instead of euphonically blending

* On historical and ethnic probabilities, I here provisionally adopt Mr Crawford's view of the relation between Sanskrit elements in Malay and Javan, but without excluding the direct influence of Hindus. It is probable that the Hindu culture of middle and south Sumatra came first through Java, but improbable that it continued to be received exclusively by this indirect course. It appears to be clear from ancient Arabic and European accounts that Sumatran ports were early frequented by Indian vessels.
them with those that follow by a light and rapid touch as in the purer Malay articulation. Malay consonants that meet are generally euphonically combined, and when uncombiable or inharmonious consonants meet, the phonetic genius of the language changes one or both or has recourse to elision or attenuation to produce euphony. In Javan not only is the initial of one syllable frequently uncombiable with the final of the preceding one, the surd and sonant of the same sound being even thus brought in contact, but similar junctions take place in the same syllable. Consonants that terminate a syllable are frequently repeated at the commencement of the succeeding one, producing an abrupt and inharmonious effect. The Javans vary the character of the vowels more than the Malays from their greater articulative power and energy or command over the form of the vocal chamber and over the breathing. Hollow cerebral sounds are often heard which never occur in Malay. Like most of the Sumatran languages Javan affects o where the Malacca Malay has a. Frequently also Javan has o for u, e for i, d, t, for k; w for b; ng for m of Malay. It is far more aspirate in its general phonology and frequently has k for h, j and r of Malay. Ideologically the two languages have the closest resemblance. They have nearly the same number and kinds of inseparable formative particles and use them in the same way, although Javan possesses some which Malay wants. Most of the principal formatives are identical. Javan is richer in formatives than Malay and it exhibits more freedom and power in their application. They hang somewhat loosely on the latter, are more often dispensed with, and have therefore a more artificial character. In Javan they appear as a more essential and integral element of the language. In this respect, and in their greater number, Javan is at a less distance from the N. Indones'ian. The attributive ma-- of that group, of E. Indonesian and Polynesian is preserved in Javan but is wanting in Malay, which as we have seen, has substituted the peculiar ber--. The possession of the infixed participial (sometimes purely active) -um-- and passive --in--, of N. Indonesian distinguishes Javan not only from the Sumatran but from the E. Indonesian languages. The position of the possessive particle before the possessor and the pluralising of substantives by reduplication of a connected adjective, are N. Indonesian and Polynesian traits which the Sumatran languages do not share with it. The Javan imperative and subjunctive postfixes are absent in Malay. Although it possesses the transitive man-- as well as its common prefix is an-- which is probably a contraction of man--, as the attributive ma-- is sometimes by a similar elision converted into a--. It uses kha-- as well as dhi--, dhipun-- passively. The causative ahe, aken corresponds with the Malay kan. Of the imperatives -a, ho--; -ea, -hen; -ono, -hono, -henno, -no; -to, the second appears to be also the same as the Malay kan which is sometimes used in the same way. The impera-
tive use of the expletive -to is analogous to the similar use which Malay makes of its expletive -lah, the latter however generally softening the mandate. Kawi has the same collocation and formatives as Javan, but it is more consonantal in the initials of its syllables and more vocalic in its finals. As it treats the sibilant and liquids as vowels, combinations of these with the other consonants are exceedingly common e.g. sk, st, sd, sn, sm, sr, gr, kr, dr, tr, br, mr, nr, ngr, pr, jr, nr, ktr. Uncombinable consonants are also sometimes brought together in the same syllable e.g. tk, hn, tr, nd. The abundance of these combinations, the vibratory sound of the language from the constant recurrence of r by itself and combined with other consonants, the absence of compound vowels and the predominance of a, distinguish it from the more prevalent Javan phonologies. At the same time it must be remarked that the Javan participates to a certain extent in the peculiar consonantalism of the Kawi and that i is a frequent sound in both. From this account of the Kawi it appears that most of the peculiarities of the Javan, or those phonetic traits which distinguish it from the general W. Indonesian phonology on the one side and from E. Indoneisan on the other, may be referred to the influence of Kawi.

The Kawi itself preserves some evidence that, at the era of its formation, the Javan language was less removed from the adjacent languages than it afterwards became through the continued development and influence of Kawi, and a disposition to a factitious and pedantic culture. But it must be remarked that if the Kawi introduced some Indian phonetic traits, it has been instrumental in preserving the ancient native phonology of the Javan from the emasculating and refining influences of the Malay and E. Indonesian, and hence it is that Javan continues to present us with a much larger amount of the characteristics of the earlier W. Indonesian phonologies than Malay or even the majority of the ruder W. Indonesian languages, although, under modern Malay influence probably, it has thrown off some of the harsher peculiarities of that phonology which are still found in the adjacent languages of the same island. It is quite consistent with this, and indeed a necessary concomitant, that it also preserves in greater purity and integrity some of the earlier E. Indonesian traits, which it acquired prior to the arrest, by Indo-Javan literature and culture, of that ideologic transformation which, if not thus interrupted, would have gradually assimilated it to the cruder W. Indonesian languages.

The other western languages of the Javan group,—Sundan, Maduran, (with its dialect Bawian) and Bali, have phonologies in most respects similar to Javan, but preserving still more of the primitive W. Indonesian character. Those of Sassak and Sambawan are softer than Javan. All possess initial ng and h, the latter

* The Javan of the inhabitants of the Teng'ger mountains is much more guttural than that of the polished Javans.
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occurring most frequently in Maduran. It is remarkable that final o common to the Javan and Sumatran languages, is in general replaced by a in Sundan, Maduran and Bali, a circumstance which is possibly connected with the great influence of the modern Malay on these languages.

Sundan has some peculiarities which separate it from the other languages of the group and ally it to some of the W. Borneo and S. Peninsular dialects. The most striking is the extensive use of the peculiar nasal u which, in imitation of the French orthography, has been written eu as in hileu (for utal or kulat) beusi (best) geuleung (gelang). The same vowel occurs as frequently in the Seraw of S. Sumatra and in one of the dialects of the river Landa in W. Borneo, as in aseump (for asum) duweu (duwa), batewuwuk (batanak) eumeu (umu or uma) angheuweump (hirim). It is also preserved in the Malay of the Johor Archipelago which also, in its ruder dialects, makes a frequent use of initial h and a broad and full final k as in Sundan. Formatively Sundan is more simple than the Javan or even the Malayan, and approximates to the ruder Peninsular, Sumatran and Borneo languages. It possesses the subst, ha— --an or en and pa, pang, pam, with and without --an. (generally pers. loc. or instr.); simply attributive or qualitative and intransitive nga-, ha-- a-, nang--, nan--, ma--; la--; ti is sometimes used intransitively; participial pi --en; passive di-- (sometimes with --en), and ka-- ha--; trans. m-, ma- man-- with or without --an. Pa-- is sometimes used actively. It thus differs from Sundan not only in the more sparing and less regular use of formatives but in the want of the passive --in--; participial --um--; the transitive an-- and --aken (unless the transitive postfix --an is a contraction of --kan and the intransitive a-- fe be the Jav. an-- a--f); and the imperative and subjunctive particles. Like the Javan it sometimes denotes the plural by a reduplication of the first syllable of a connected qualitative. From all the known W. Indoneian languages it is distinguished by the use of the definitive e-ta before the substantive or as an article, a N. Indonesien and Polynesian trait of great interest.

Maduran and Bawian have the substantive ha--, pa--, pang &c, --an ; attributive ha--, ah --, a--, he--, e-- (ha-- in Sumenap tar-, rare) ma--, ba--, be-- pa--, sang-- ; passive he--, hi-- [Jav. ha-- Sund. ha--]; transitive nga--, ng--, n--, e--.

Javan and Malayan have deeply influenced the western languages of the trans-Javan chain. The phonology of the high or deferential Bali like its glossary and ideology is nearly the same as that of the deferential language of Java. It has a for the Javan o and with most of the other trans-Javan languages it possesses v. The common or native tongue has a closer affinity with the Sundan and Malay than with the Javan, and the remark may be extended to the other W. Indonesian languages of the trans-

* Freidtch.

†-ker, however, is retained in Sundan as a causative.
Javan chain,—the Sassaki and Sambawan. The following formative
euses in written composition have been ascertained from an
examination of large vocabularies of Balian and of the *Usana Bali*
and other Balian compositions that have been published by Mr
Freidrich. Subst. *ha-, pa-, pang, -an, -ing &c attrib. intrans. *ma-
ng-, ng-, ng- pe- pa-, (sometimes with -an ; -an, -in) he-,
ha-, hang-, haman—trans. *ma- mem- mang- n-, ha-, han-,
hen-, ham-, -an, -in is sometimes used transitively.

Sassaki and Sambawan are softer than the Javan languages,
owing to the greater influence of Malayen and Mangkasari, and
probably to the ancient E. Indonesian phonology of the trans-
Javan islands never having been displaced by the Javan. Sassaki
has subs. *peng- pen, attributive b-, ber- tran. *me-, ng- and
probably some others. The Balian-Javea or high language is that
of Bali, which is originally from Java, as the name implies.
Sambawan agrees more with the Sassaki and other western
languages than with the other tongues of Sambawa which belong
to the E. Indonesian group. It possesses subs. *ha- pa, pan,
pe- pen &c, intrans. ber he- ba- mer-, trans. *m-, *ng- n and possi-
bly some others.

The principal distinction of the Javan group is its possession of
a sacred or poetical and a deferential dialect, and the Hindu origin
of the former.* The history of the formation of the Kawi and the
infusion of Sanskrit words into Javan, Malay, Ngaju, Wugj &c is
a subject too wide and complex to be entered on here, nor does it
properly belong to the present enquiry. We have remarked
that Javan preserves more formatives than Malay, and Malay
more than the ruder languages. This must be attributed to the
culture which they received at a remote period in consequence of
large and civilised communities having arisen earlier amongst the
Javan and Malay than amongst other races. It is probable that the
acquisition of the art of writing, and the formation of Kawi and a
native literature, fixed the formatives of Javan in the state in which
they were when these events took place.† In the other W. Indonesian

* Remnants of deferential or of sacred words are found in most of the languages
of the Archipelago, as in the Malay, of Sumatra and the Peninsula, the Ngaju of
Borneo, and the Wugj of Celebes. Their antiquity in Asinæias is vouched for by
Polynesian. Wherever Hindism was established it has left traces of a sacred or
sacerdotal language.

† The art of writing was acquired in Sumatra, Java, Sambawa and the Phil-
ippines at a much earlier period. the distance between it and the formation of the
Kawi being marked by the simplicity of the continental characteristics which formed
the basis of the Indonesian alphabets compared with the elaborate architecture of
the later Indian letters in which the Sanskrit was conveyed to the Java. The
possession of rude races of an alphabet without a sacred literature can have little
effect in obstructing the progress of an ideologic change in the language. the earlist
alphabet of the Archipelago was probably derived by the leading maritime tribe
from continental traders and used for trading purposes which led to its being
carried in the course of time to the more powerful and civilised of the tribes who
took a part in the insular commerce or, like the Butans, fed it by the productions
of their land. It is possible however, that their introduction and wide dissemina-
tion were connected with the spread of a religion that did not maintain a permanent
footing.
languages they probably continued to decay under the formative tendency, and the fixation of the Malayan by a sacred literature was not in all likelihood effected until a considerable period subsequent to that of the Javan. The preservation of the system even in the deteriorated condition in which we now find it in most of the uncultivated languages of W. Indonesia, appears to be owing to the influence which the Javan and Malayan languages have exerted on them for many ages.

The Borneon languages have phonologies similar to the stronger Peninsular and Sassau-Sundan with some still stronger or more primitive traits. The aspiration is very strong and broad and the initial aspirate is common. They have been much influenced by Javan and Malayan and many of the coast dialects are greatly assimilated in phonology and glossology to the latter. The less refined affect e like the Peninsular and Sassau-Sundan languages, one at least, the Landaki, has the eu of Sundan, most delight in compound vowels, ui, oi, ei &c., and many have compound consonants more harsh than those of any Indonesian language save Simang. Amongst these compounds are final gn, kn, tn, pm, in the S. W. and W. languages. Initial kn occurs in Lundu, Kayan, and sn, sn in Sinding. The less Malayised are strongly nasal and aspirate. The guttural tendency is also in general strong, final g, gn &c being frequent in some dialects. The strong aspiration does not appear to produce the more aspirated labials save in the dialects of Meri (j, v) and Santan (v) and in the Kayan language (v) but the number of words for most of the known Borneon languages is too small to enable us to draw any general conclusion. In one of the few inland dialects for which I have any data, that of Sandol in the Pembuang basin on the western part of the S. coast, the guttural character is very decided, final ng becomes g which occurs much more frequently than in the Javan group and indeed is as common as in N. Indonesian reaching 6 per cent. In one of the less softened Western dialects that of Landak, it is 4 per cent. In Sandol final n becomes d. The more easterly of the southern languages have thrown off most of the compound consonantal finals, and differ little in their phonologies from Maduran and Bali, save in being still more broad and aspirate. In Ngaju or Kahayan final pm, gh and kn occur, e and compound vowels are common. Its pronunciation is almost identical with that of the ruder Binua dialects of Johor in the Malay Peninsula, being exceedingly broad, aspirate and slow, the strong aspiration retarding the flow of sound. R is remarkably strong, and gives a peculiar character to the language. Final k is retained and sounded full, and forcibly. The Landaki has final kn for ny, tn for n, pm for m, and eu very commonly for u and sometimes for o. In some words initial j takes the place of n, ny, m of n &c. Kn, pm, and the compound vowels wi, oi, ei occur in some of the numerous dialects along the

* This compound vowel occurs in Ngaju but rarely compared with Landaki.
particularly the Malay. If the Malayan race only began to spread itself b-yond Sumatra 7 or 8 centuries ago, the rapidity with which its idiom and much of its vocabulary have been inter-fused amongst the languages not only of the W. Indonesian but of the eastern tribes, is extraordinary, even if we allow for the influence of more ancient assimilations in the Polynesian era before the Malays themselves had received any Indian culture. The facility with which in modern times the simpler tribes of the Archipelago approximate to the linguistic habits of a dominant and kindred race with whom they have constant intercourse, throws much light on the process by which in archaic eras the languages of all Indonesia and Polynesia acquired so many characteristics in common, while retaining decided evidences of distinct origin. Some of the Borneo languages appear to be very illustrative. They have a basis, now chiefly glossarial, of N. Indonesian affinities. Javan traits appear to have supervened, and now these are disappearing and giving place to a purely Malay form. Changes so great and so rapid are only possible in languages that have not departed from, or have been reduced to, a condition of crudeness and simplicity, and are spoken by tribes more imitative than tenacious. European ethnologists must bear in mind not only the great simplicity, docility and impressiveness of the Malayu-Polynesian tribes, but also the mode in which the seas and rivers of this insular region and the habits of the adventur-ous Malays enable them to act on these tribes. The influence of the Malay language has extended to the remotest parts of Eastern Indonesia, and some of the languages of the Trans-Javan chain exhibit phenomena similar to the Malayunised Borneo dialects although much less marked.

No sweeping assertion can be made as to the precise influence of Malay or any other diffusive languages on the formatives of the remaining languages. How much has been retained from the first era of the blending of the affirmative and formative systems, and how much has been successively lost and regained in subsequent eras, are questions that must be discussed separately for each language and group, with such light as a comparison of all our data affords, when we enter on ethnographic details.

When we consider the assimilative power which the Malay exercis at the present day amongst the languages of tribes remote from the great mass of the Malayan nation, we can the more easily appreciate the manner of its operation in Sumatra when the nation was acquiring its predominance in numbers and power. Prior to the civilisation of this race the great middle region of Sumatra must have contained numerous separate tribes, speaking distinct languages, all of which have been obliterated or absorbed by the Malay, for I am not aware that the remnants of these tribes that still exist have preserved any pre-Malayan languages. We have inferred from the character of those Sumatran lang-
great and obvious practical use, and the simplicity of their broader and more fundamental principles. Deprive the Malayu-Polynesian languages of their prefixes and affixes, and they are thrown back to the level of the rude dialects of the aformative family in which the symbols for generic distinctions and relations, and the rich and exhaustless nomenclature for specific objects and actions furnished by the formatives, are replaced by cumbersome and not unfrequently ambiguous circumlocutions, aided by a constant recourse to repetitions and variations of the phrase and to synonyms and analogues. Hence we can easily understand that languages which possess formatives should cling to them while their vocables are gradually displaced, and that aformative languages should readily adopt them, when brought into close contact with formative languages. But the genius of the aformative system cannot readily embrace a complex formative system abounding in minute distinctions, and where it continues to predominate in the mixed system or gains fresh power from languages in which it has its native seat, its tendency must always be to throw off ideologic refinements and retain only the more simple and generic of the formatives and of their uses. Even these may be ultimately lost by a strong infusion of the aformative element or a decay of the formative, and both causes must operate in tongues which happen, in the course of ethnic revolutions, to be withdrawn from an active intercommunication with members of the formative family, and placed under the exclusive or predominant influence of aformative languages. It is very obvious both when we cast the eye over the map of W. Indonesian languages as a whole, and when we seek the spirit of each language in the common speech of the nation rather than in the factitious and pedantic compositions of scholars, that the aformative element is the prevailing one in W. Indonesia, and since we inferred from the Javan and Malay formative systems that it has been gradually gaining instead of losing ground, it becomes important and interesting to enquire how the numerous rude and illiterate languages have preserved the formatives in so considerable a degree and with so much glossorial uniformity. This I think is explained by the fact that in all eras since the amalgamation of the two systems was brought about by maritime intercourse, there has been a succession of predominating maritime races who have spread as navigators and settlers over large portions of the Archipelago or over the whole of it, as is the case at the present day when European dominion considerably obstructs the ethnic effects. Long after the growth of the W. Indonesian system there were powerful E. Indonesian maritime races, whose modern influence on some of the W. Indonesian languages is still very perceptible. But the prevalence and general uniformity of the formatives throughout Western Indonesia at the present era is mainly attributable to the influence of the languages of the most civilised and enterprising western races,
ETHEOLOGY OF THE INDO-PACIFIC ISLANDS.

By J. R. LOGAN.

LANGUAGES

Chap. III.

Sec. 1st. COMPARATIVE CHARACTERISTICS OF EACH GROUP.

VII. NORTH INDONESIAN.

The N. Indonesian are the most interesting of all the insular languages. They have a complex and highly intellectual ideology, which is carried out with so considerable a degree of consistency and so deeply penetrates all the dialects, that in relation to the other Asiatic groups it is evidently original. When we observe that the formatives found in the W. Indonesian languages,—which sometimes appear as if they were foreign trappings, little adapted to a crude ideology and which in reality are more often discarded than worn,—constitute an integral and essential portion of the complex N. Indonesian system, and have undoubtedly not been borrowed by it from other existing Indonesian languages, the important enquiry suggests itself whether the latter may not have derived these particles from the former. The interest of this group increases when we further find that it has not only the closest relations to the W. Indonesian, but possesses also many striking Polynesian traits of which there is hardly a trace in W. Indonesia. It possesses nearly all the formatives of the other groups, it has some which are peculiar to itself, and it enjoys a wonderful and unparalleled range of relational expression through its power of combining them. Its definitive, demonstrative, possessive, directive, pronominal, and formative systems abound in flexional or quasi-flexional traits which with the complex formative prefixes, impress a very marked and distinctive character on its speech. An ideology so elaborate and peculiar cannot be properly understood without numerous illustrations, and we must therefore be satisfied with a few general comparative remarks in this place, but the reader will find in the Supplement the means of acquiring a more accurate knowledge of the genius of these remarkable languages, which appear to have hitherto escaped the attention of English philologists.

N. Indonesian is less harmonic and in its syllabic finals and junctions, though not in the combinations, more consonantal than W. Indonesian. It differs phonetically from that group chiefly in shewing less of the influence of the vocalic E. Indonesian, in having a tendency to final 
, and in its liquids not possessing a definite character but passing into each other and even into guttural and vocalic sounds. The two traits are connected.
and $d$ not only take the place of each other in some words, but both are not infrequently pronounced like a soft $r$, and in some dialects $l$, $y$ and $r$ are, to a great extent, commutable. It wants the strong vibratory $r$ which is so marked a characteristic of a large group of languages in the middle of Indonesia, including many of Borneo, Celebes, Java and the trans-Javan chain. Occasionally it softens it into the other liquids $y$, $l$, or, like some of the W. Indonesian languages, replaces it by $gh$, but in finals it generally passes into the pure guttural $g$ (e. g. brat Mal., hurat Sund., mabigat Tagalo, bayat Pamp.; bibir M., bibig Tag.; ratus M. gatus Tag.; tidor M. tolog Tag.) It wants $j$, $f$, $w$, $v$ and $z$, but as $z$, $f$ and $v$ are found in Formosan and $w$ in some of the Philippine and Bisayan dialects, it is probable that the present prevailing phonology is a refinement on an older and more aspirate one, possessed of all these sounds. A further remnant of this highly aspirate phonology is the use of $ch$ for $d$ and other consonants in some of the Negrito dialects of Luzon and in Formosan,—a Nias trait. No occurs frequently as an initial, as in Javan and its allies. It does not distinguish the dental from the palatal $t$, $d$, and it wants the sounds which have been borrowed by some of the W. Indonesian languages from the Arabic. Its vowels are limited to the simple sounds, $a$, $e$, $i$, $o$ and $u$, but $e$ and $i$, $o$ and $u$ are so permutable, that there cannot be said to be more than three decided vowels. The diphthongs $ai$ and $ao$ occur frequently.

In N. Indonesian phonology three main ingredients appear to be distinguishable. The first is of an archaic character with some affinities to the earlier Melanesian, the second is E. Indonesian, and the third is W. Indonesian. In later ages the two last have varied in their respective influences, but W. Indonesian has predominated in the most recent era. In the sequestered Formosan dialects both the E. and W. Indonesian ingredients are preserved in a ruder or more primitive form than they now possess in most other Indonesian languages, and it is through this ancient form that the phonology of W. and N. Indonesia is connected with that of Tobi and the allied eastern languages. It is worthy of attention that the highly aspirate character of one development at least of E. Indonesian phonology, is well preserved in distant and comparatively sequestered languages in all the great regions of Asiasia including Nias in W. and Formosa in N. Indonesia.

Structurally N. Indonesian has much power of euphonic adaptation in the junction of formatives with principal words and with each other, and in the union of definitives, directives, possessives, pronouns, &c. The monosyllabic coalescence of these particles produces numerous instances of pure flexion, for one of the elements is frequently represented by a single vowel or consonant. Many of these composite monosyllables may be found in the languages of other groups, but the N. Indonesian alone.
enables us to decompose them, by presenting clusters of particles in which the same mode of formation prevails. This is one of the many evidences of the originality of the Philippine ideology, and of the great influence it has at one time exerted on the other Malayu-Polynesian languages. Some particles are infixed, but the phonetic fluency and cohesiveness of the language is very weak compared with the E. Indonesian and it rather resembles the W. Indonesian, but with numerous traces of having been imbued in its nascent condition, with greater freedom. Other flexional traits occur in the formation of the companionative, the different forms of the pronouns, &c., which are sometimes produced by a simple change of the final vowel, and above all in the indication of tense by a variation in the initial of the active formatives.

N. Indonesian agrees with all the other Oceanic, and we may add, the majority of the Continental, families, in thecrudeness of its glossarial elements, which become substantival, attributival, transitive, personative, &c., by position and the aid of servile particles. The word itself remains crude. The phonetic expression of relation lies wholly in the particles, separate, prefixed, infixed, or postfixed, aided frequently by reduplication of a portion of the word. The terms of European philology, when applied to this language, must, therefore, receive a logical and not a purely grammatical meaning. The Philippine verb, for example, corresponds logically or ideologically with the English verb, because it serves the same essential purpose in speech, but grammatically it is not a pure word of action or assertion. It is a crude, a substantive, a qualitative or even a mere particle, clothed with particles which denote being, relations of action, transition, &c.

Even if we considered the compound as a unity, it would not rise to the character of a true verb. The more the crude or the substantival notion accompanies us in exploring the labyrinth of Philippine ideology, the more correct are our conclusions likely to prove. In almost all cases the verb will be found to be in reality a substantive or qualitative, and its formatives directives similar in their nature to those used with pure substantives and indeed frequently identical with them phonetically. The same remarks will apply, with hardly any modifications, to all the other Malayu-Polynesian languages. In most however there are purely assertive words, affirmative and negative.

It is obvious from the above remarks that the ideology of N. Indonesian resolves itself into an examination of its relational words of particles, such as definitives, directives, pronouns, and

* The compound particles having acquired the character of concretes like inflected words in the Indo-European languages, pleonasm are produced as in that family. An or si tavo, the man, nin [= ni an] tavo, of-the man, ninesi [= ni an si, tavo] of-the-man. Less disguised pleonasm occur, as but Pedro or on, of Peter's slave, i.e. Peter's slave.
formatives. In this class of words it combines the most lavish profusion in some directions with great poverty in others. It possesses distinct definitives for persons (including pronouns) and for apppellatives, and it uses them as in Polynesian. The former has a companionative form which is a flexion of the singular. In the cruder state of the language the definitives must have occurred separately more frequently than they do now, when they are phonetically combined with directives, pronouns, adverbs, &c. These particles are thus complex definitives. The directives are few and highly generic, the same particle being at once possessive, ad-transitive, ex-transitive, locative and instrumental. But there are also exclusively possessive particles. Most of the definitive, locative and directive elements are also pronominal and formative elements. The pronominal system is more elaborate and complex than any other in Indonesia, but it closely resembles the Polynesian and Vitian. The principal elements are the same, and so is the general plan, but the Polynesian is more simple and consistent in its mode of forming the dual and two plurals. The N. Indonesian appears to have lost some of its original simplicity from dialectic changes. It also combines the definitives and directives with the pronouns, and in some cases has a supersaturation of elements, which again are compounded, so that the actual number of distinct forms is much greater than in Polynesian, although the latter has a refinement of its own in a double possessive, and the dual is not well distinguished in most of the Philippine dialects from the plural exclusive.

N. Indonesian is distinguished less by the great number and variety of its formative particles, than by the complex manner in which they are compounded and the minute discrimination with which they are applied. It has not only definitive or substantival, personative, instrumental, attributive, transitive and intransitive, active and passive, causative, reflective and temporal particles or flexions, but by compounding and repeating the formatives in various combinations, single names are given to a multitude of those modifications of action and relations of substances, which most languages express paraphrastically when they express them at all. In this manner it expresses combined, assistive, simultaneous, alternate, intermittent, intensive, augmentative, remittent, imitative, simultaneous, spontaneous, intentional, involuntary, convertitive, frequentative, habituative, and continuative action; potentiality, causation, perfection, privation, action for another, incitement, solicitation, permission, command, possession, being, equality, similarity, &c; season, time, place, the point of commencing or concluding an action, the point to which action is directed &c. &c. Only two times are radically distinguished—the future and the past. The present, which is always passing, is considered as an intensified past and so expressed. The imperative is the same as the future.

It is by its multiplex combinations of formatives that N. Indo-
nesian stands apart from all the other languages of Asianesia. In W. Indonesian the combinations are, in general, limited to a single prefix and postfix, which often intensify the form. Such are the transitive prefix with the causative or transitive postfix, the intransitive prefix with the causative postfix, one of the substantival prefixes with the substantival postfix. Double prefixes, such as the intransitive and substantival, rarely occur, and the highest measure of combination is such a double prefix accompanied by a postfix. But the N. Indonesian by heaping and repeating its formative, indicates active or passive, transitive or intransitive, single or associated, simple or complex, intentional or involuntary action, power, causation, permission, mandation, solicitation, privation &c. in the same word that expresses the actor or the other substantive and the time of the action. No other Asianesian language possesses words like makapagpapagigintapay, ipinagmamapasintahin, all save the portions in italics being agglomerations of formative.*

These extraordinary combinations arise from the extent to which N. Indonesian has carried the generic discrimination or classification of action, and as this distinguishes it from all the other Asianesian languages, and is the most conclusive proof of the originality of its ideology, a more particular account of the system is necessary.

The number of simple and composite prefixes and the complex ideas which they express, render them, at first sight, difficult to be understood. The chief source of the difficulty consists in many of the ideas being not only different from those which in our own language have been raised to generic power, but of so little comparative importance in our ideology that we have not even named them. We have neither inflexions, affixes, nor single words to represent them; and some are so little recognized by us that even when defined we cannot readily familiarize our minds with them. When we analyse them, however, and ascertain the force of each elementary particle, the complexity disappears.

While it is in general laborious rather than difficult to ascertain the more essential and generic powers of the different particles, approximately at least, we soon find that in the application of each there is little adherence to one abstract idea. Each appears to have originally possessed a determinate meaning, or to have represented a certain class of ideas, but to have been gradually extended not so much to a higher and more abstract sense, as to successive classes of ideas or relations having some natural analogy to the primary class. This process has even gone on to a limited extent since dialects were produced, for in some of these there are peculiar uses of particles. Sometimes their powers have become

* We have seen however that in Australian compounds of a different kind are still longer.
restricted instead of being enlarged. The new applications are occasionally so different from the general character of the old ones, that we can only conjecture upon what principle of association they have been founded. When the different powers of a formative are thus loosely connected, ambiguity is a necessary consequence. It sometimes happens that these peculiar uses do not proceed from the recognition of a new class of relations, but consist in applying the particle to a class found in the ideology common to all the dialects but which is represented by a different particle in the others. The matter for wonder is that when an ideologic system so complex is diffused over dialects spoken by tribes so rude, such misapplications are not more numerous.

The N. Indonesian pronominal system, as may be seen on reference to the Supplement, is founded on a different basis from that of European languages, or at least one that has not yet been recognised in the latter. The classification of action, on which the system of formatives rests, has likewise so much that is peculiar, that the ordinary distinctions of transitive, intransitive or neuter, and passive, are not sufficient to enable us to describe it. A more important and essential classification is based on the presence or absence of power, and a recognition of degrees in the intensity and complexity of action; and the object has more influence in determining the character of the action than the agent. The most generic division of actions depends upon the object being determinate or indeterminate, a distinction which also regulates the use of some of the directives. When the object is determinate the form of speech is passive or possessive i.e. the object is nominative and the agent possessive. When the object is indeterminate the form of speech is active, i.e. the agent is nominative and the object directive. The formatives differ in the two forms of speech, and, as most objects are determinate, the passive is far more used than the active.

Of the other divisions of action that are recognized in N. Indonesian ideology the most important refer 1st to presence or absence of an object and the relation between the agent and the object; 2nd to differences in the power exerted or in the complexity of the action; 3rd to the relation between the action and the mind of the agent; 4th to relations of time; 5th to relations of place. Of these the first are of the greatest importance and involve most of the others. In the first class the following kinds of action may be distinguished by differences in the formatives. When there is no object to receive or excite the act, it is purely intransitive, and action thus considered as a mere attribute of the agent stands on the same footing as qualitives. The sleeping or walking, the size, colour and character of a man, have the same formatives. Simple transitive action, in which the act is single and may be considered as taking its origin spontaneously in the agent, without being incited or intensified by the object, is the
2nd degree. In the 3rd the agent is considered as subordinate to the object, as in *solicitation* where it is really so, or in *eating* where it is so because it exerts a power over the agent and causes or intensifies the act. The discrimination of this class of transitives is one of the most remarkable traits in N. Indonesian ideology. It belongs to the archaic basis of the language and is too refined and complex to be found in the cruder Indonesian tongues. In most of the applications of the formatives appropriated to this class there is an external active or potential object so that it is *quasi* reciprocal as well as transitive. We may designate it complex transitive or objecto-transitive in contradistinction to the simpler kinds of transitive or agento-transitive action in which the object has no relation to the agent save as object or recipient of the act. In the complex transitive the object first acts on the agent and is the primary incentive or cause of the action, as in *buying* in which the article purchased raises the desire to acquire it and induces the purchase, in *teaching* where the agency of the learner is as essential as that of the instructor, in *giving* which implies an act of acceptance by the receiver, in *imitating, simulating, permuting*, where the object of the act leads to it. In some uses of complex transitive particles as in denoting the acts of *spilling, scattering, putting in a place, sowing or planting, &c.*, the object does not first act on the agent but the action is still complex, the object becoming detached from the agent and assuming an active power in producing a secondary or consequential effect. The water is first spilt and then strikes the ground, the article is first carried or moved and then deposited &c.

In the 4th degree the two parties are each agent and object as in all kinds of reciprocal and *quasi* reciprocal action. Reflective action is considered as *quasi* reciprocal. This class of transitives may be designated *agento-objective*.

The 2nd class of distinctions relates to the degree of power exerted. The differences in intensity or energy embrace simple action, potentiality, causation, conversion, perfection or completeness in the action &c. Complex action being considered as the result of increased power stands on the same footing with it. It may consist in plurality or multiplicity in the agent, in the object or in both. It comprises various kinds of associative action, some of which are reciprocal. When the plurality is in the object, there is, in some cases, a distinction between action affecting numerous objects collectively and that affecting each separately. When the agent acts for another it is considered as complex and the action is distinguished by particles belonging to the complex class.

The 3rd class of relations are those between the action and the mind of the actor. To this belong the formatives denoting voluntary and involuntary action, that which leads to unintentional results, expectation, inclination, addiction, &c.
The 4th class of relations, or those to time, embrace actions continuative, frequentative, intermittent, alternative, gradual, &c. With these may be associated the distinction between the beginning, the middle or progress, and the completion of an action.

The relations to place embrace the formative expression of the direction of action towards a place, or towards the speaker; of the point where it begins or ends; of transfer to a place; of exposure to the influence of an external object.

Similar distinctions pervade both the determinate or passive and the indeterminate or active forms. In the former there are three distinct formatives, the application of which depends on the intensity of the action, the degree of complexity of the whole phenomenon comprised in the proposition, or the particular relation that is to be indicated. Hence there are 3 degrees or classes. 1st where the mere place or object of the action is indicated; 2nd where the relation between the action and object is simple; 3rd where the relation between the action and object is complex, from the intensity or complexity of the action or the exercise by the object of a powerful, provocative influence on the agent. The formative of the first is the definitive for the subordinate class of appellatives, that for the second the definitive for the class of proper names in which superior dignity and power resides, and that for the third is compounded of the first and second. The first is purely objective and generally local or quasi local; the second is highly agentive, that is the agent is either principally regarded or the act is energetic or compound; the third is objecto-agentive, the object generally exerting a power over the agent.

The N. Indonesian association of actions is somewhat analogous to that of substances found in Chinese, Ultraindian, W. Indonesian and Polynesian, and it may be considered to approach still more closely to a scientific classification. The root expresses the individual nature of the action, and the different particles indicate with much minute discrimination its generic character and relations.

It must be borne in mind that the preceding remarks are merely explanatory of the kinds of generic discrimination on which the system of formatives is based. There is no rigid classification of action, with each class and subordinate division distinguished by its appropriate particle or combination of particles. Still the actual applications of the formatives have a general correspondence with the logical basis although the system abounds in marks of a rude and capricious workmanship. Some of the particles are applied to so many kinds of relations that although the nature of the root in general fixes the meaning of the compound there is much room for ambiguity. While the number of composite formatives is very great they are all built up of a few elementary particles. Every syllable is a particle and most of the monosyl-
labic particles are themselves composite. Their analysis however belongs to the history of the language. In its present state all the monosyllables and even many compounds of two or more syllables, may be considered as distinct particles. If the national mind had retained a sense of the distinctive powers of the various elements the system would have been comparatively regular and scientific. It is the loss of this sense that has caused simple and compound particles to branch off into numerous uses inconsistent with the primitive powers of the elements and in many cases not reconcilable with each other. In their existing uses some of the most important particles closely approximate and even coincide. It is obvious that such a system can only be understood by examining the various applications of each particle in all the dialects. In the supplement I have given, in a list of the most important formatives, the results of an examination of this kind directed to a Formosan, a Bisayan (Zebuan) and four Luzonian languages (Pampangan, Tagalan, Ilokano and Bicolan.) From a cursory examination of the Cagayan (Luzon) and Panay (Bisayan) they appear to agree in all essential's with the above dialects, and as these do so with each other, and the most northern and southern present only minor differences, it is probable that the dialects for which I am yet without materials, the Zambales, Pangasinan, Batanes and Chamorro, present nothing that can materially affect the conclusions I have drawn.*

We must refer to the Supplement for a view of the N. Indonesian formatives and their combinations. It will afford some idea of the elaborateness of the system when we state that 18 of the Tagalan formatives (simple and compound) take about 400 combinations. The different dialects furnish about 50 principal monosyllabic and dissyllabic formatives, chiefly compound, but there is a large number of important compounds of several syllables, and the total number of combinations used must be very great. The principal of the definitives and simpler formatives are the following. We merely give what appear to be their more generic powers. Their actual uses, and the variations of these in the different dialects, will be seen in the Supplement.

Si def. for proper names (W. Indon.—In Pol. it occurs in the numeral one,—tasi, tasi and the indef. article se, he is probably derived from it.)

Iiti, ti, te def. for appellatives. Ta def. for proper names in Formosan. (Te, ta def. Pol. Itu, eta, ta, rel. def. W. Ind.)

Ang, an, appellative def. (Pol.) As is also used as a substantive post. with a passive or privative force. As such it forms many kinds of words expressive of passivity, deprivation, inferiority, diminution, &c. When used in relation to action it

* Some remarks on the dialectic differences will be found in the Supplement. The most important peculiarities occur in Formosan and the Luzon language nearest and most resembling it,—the Pampangan.
indicates the place or object. It is also collective, as it sometimes
is in W. Ind. In W. Indon. -an is used to form substantives as
in Phil. In the vocalic Pol. na, nga is also a substantive
postfix and a passive element.

I is a passive transitive prefix, factive, causative, &c. It
occurs as the personal or agentive def. in Pampangan, the other
dialects having si. Si or hi must therefore be considered as the
full primary form. In Pol. I is the transitive directive. In the
dative it may be ki [the transitive ko+i?] corresponding with the
Bikolan transitive ki [ka+i]. I also occurs as a def. in W. I.

In, (un, on, an, en) is the complex transitive particle of the
passive. (Jav. Pol.)

Ka- has received numerous applications, generally, as in W.
Indon., in conjunction with -an which appears to remove or qualify
its radically transitive force. Thus it forms abstract, collective,
companionative, equative, and locative substantives, and in
combination with other prefixual particles has various powers,
chiefly intensive. Bansay, beautiful, kabansayan beauty; arak
wine, kaarak, a co-drinker of wine; kabuti equal in beauty; talo
three, katalo the third; katalo-an the third part. Ka occurs with
its substantival, abstract, and ordinal powers in W. and E.
Indonesian and as a transitive particle or element in W. and E.
Ind. and Pol. In Pol. it occurs as a subst. postf. in Marquesan,
and as an agentive and transitive preposition (ko). The assertive
particle -ka (Maori, Paum.) is also evidently the same. In the
other dialects it is hua in which it is probably combined with
another element. This may be compared with the change from
kan to kating, kti in the transitive of some of the N. Indon.
dialects. In N. Indon. ka alone is not an assertive particle but
it enters largely into the compound active formatives.

Pa- is an active substantival pref. sometimes personative but
more frequently instrumental. In Itokan it is passive, in Formosan
transitive and causative. (W. E. Ind. Pol.)

Na in all its applications has as its basis the idea of remoteness
from the speaker. Locatively it means there; personally it is the
third personal pronoun; actively it imports time past,—its infixual
form being -in-. It is found with its personal, locative and
temporal powers in Pol. As a particle of action (but without the
distinctive element of time) it is found in E. Indon. Na- is a
def. prefix to the numeral 10 in some of the Pol. and N. Indon.
dialects.

Ma is attributival and radically intransitive. It is also substanc-
tival. In its active uses it has an element of time being indicative
of the future and imperative in most of the dialects. -Um- -m-, is
the infixual form of ma.

Mi (ma+i) is an active and generally transitive pref.
Ga, g &c is an active and transitive element.
Kni (ka+i) is transitive.
K\'fin, K\'pg, Kan, kag are particles compounded of ka, i, an, g. Man, nan (euphonically nang, mam, ma &c) active, intensive.

The more important compound particles are naka, naga, napa, and naksi. Naka denotes the highest degree of energy in a simple action. It is hence perfective, potential, causative &c.

Naga is applied generally to complex action. It is active, factive, augmentative, reciprocal, frequentative, continuative, alternative, correlative, companionative &c. Napa generally applies to lower degrees of complex transitive action than naga. In some dialects it is used where there is an intermediate agent, as in permission, mandation &c.

The prefixual letter of these and the other compounds having the active prefix na, becomes n in the imperative and future and p in the instrumental form,—thus nan, man, pan; naka, maka, paka. The transitive g being postfixed, intensified and more decidedly transitive combinations are obtained, nakag, napag, nak\'ig &c. Many other simple or disyllabic combinations occur such as pagka, kapag, naga, naga, nonki, n.nay, mina, mpia, &c; most of these, although in reality compounds, have acquired specific powers, but the combinations above three syllables are in general merely mechanical agglomerations, that is, each of the constituent particles, be it of 1, 2 or 3 syllables, retains the same power which it possesses when used separately. But this must be qualified by the remark that the initial or last added particle is the determinative one, that a particle is frequently reduplicated to express mere intensity, plurality &c., that na when it is repeated is often changed into pa to give euphony to the compound, and that some of the particles so closely approximate in their powers to each other, that in combinations they have often a simply intensive effect or are merely euphonic.

All the words formed by these prefixed and suffixed particles remain crude. They become substantival or attributival from the context. Preceded by the definitives they are substantives; followed by other names they are attributive. Ex. Tag. tolog (root) sleep; natolog, the act viewed as a whole, as completed, and hence past; natotolog, the act extended or continued up to the present by the intensive form; matolog the act viewed as about to take place, imperative; matotolog the extension or intensifying of this, the future; ang natolog he whose sleep is completed; ang natotolog he who continues to sleep; ang matotolog he who will sleep. Ang vino maoy nagapahotololog kanimo, the wine causes-sleep. This is the active form. The passive is gipakatotologan. In the first form naka or paka being by itself causative, the factive naga simply emphasises the expression if indeed its office is not merely to gratify the sesquipedalian predilections of the Luzonian ear. The reduplication in the root tolog sleep makes the action frequentative. In the passive form the prefix gi is the passive of the present in the intransitive form. Sulat a letter, to write; smulat, sumulat, imperative; sungmulat, perfect; sungmusulat,
present; magusulat, intensive. Isug, bravery; maisug brave; nagapakamaisug, to simulate bravery. Aso dog; manguo, to hunt. Rahay good; nangamaromarahay, he who feigns himself good. The N. Indonesian collocation is that which is common to all the Indonesian languages and to a large extent to the Polynesian, which we have described under the head of W. Indonesian. The agent when a pronoun follows the action.*

N. Indonesian compared with the other Malayu-Polynesian languages.

On comparing N. Indonesian with the other groups, the conviction is forced upon us that they have derived much of their ideologies from it or from a mother system which is best represented by it. Its elaborate and in many respects complex development of relational particles,—definitives, demonstratives, directives, pronouns, formatives, &c,—is complete and in general self-consistent, and the dialectical disintegration and corruption is not so great as to prevent our recognizing one primary ideologic system which has borrowed nothing essential from the systems now prevailing elsewhere in Asiaesia, whatever it may have derived from older languages.

The varied applications of the formatives in N. Indonesian reveal the working of an intellect possessed of great vitality, and creative activity. In the formatives of the allied Asianesian languages there is hardly a trace of this high mental vitality. They offer no independent manifestation of a creative power adequate to the production of a system of formatives, while in N. Indonesian these very particles are not only found in company with others of a kindred nature, but are induced with refined applications and distinctions and formed into multiplex combinations, having on the whole a wonderful degree of consistency, attesting the originality and unity of the system and compelling us to refer the intellectual tendencies which created it to the single tribe, wherever placed, which first spoke the proto-Philippine language.

While the ideology of N. Indonesian abounds in the strongest evidences of originality in reference to the other Asianesian languages, the number of traits found in all the other Malayu-Polynesian groups that are identical with N. N. Indonesian ones, and the absence in all these groups of any approach to the fullness and complexity of the N. Indonesian ideology, lead to the inference that they were at one period as deeply influenced by it as we have seen several of the languages of rude Peninsular

* I ought to mention that the above very imperfect generalisation of N. Indonesian ideology has been written before reading Humboldt’s views in his Kawi-Sprache, which I only at present know from Dr Frichard’s brief account of them in his Researches. Before concluding the present paper or revising the section on the Malagasy, I hope to be enabled to possess myself of the contents of the Kawi-Sprache.
and Bornean tribes to be by the Malay. This influence must have preceded the civilisation of the Javanese and Malays and the consequent spread of their languages. What its nature and extent were on the different groups will appear from the following comparative remarks. Let us first advert to the Polynesian which has long been withdrawn from direct Indonesian contact.

The Polynesian is essentially a distinct language from N. Indonesian, and cannot be considered as a descendant from it. It has many characteristics in common with all the Indonesian languages, which alone would prove it to have existed in Indonesia for a sufficiently prolonged period to assimilate it to this extent to the prevailing ideology of that region. But it does not exhibit a trace of that fundamental complexity and elaborateness which distinguishes N. Indonesian, its phonology is essentially different, and its vocabulary adds a mass of peculiarities to these proofs that it is a separate language. The N. Indonesian features must therefore have been derived from contact with a N. Indonesian ideology. The connection must have been of an intimate kind to induce the engraftment of the N. Indonesian pronouns and pronominal system, and several of its formatives, on Polynesian. We cannot determine with any approach to accuracy what its accessions were, because we have no means of ascertaining the exact condition of Polynesian or its germ before it came in contact with N. Indonesian. It may have had primitive affinities with that language in some of its pronouns and particles, for affinities of that kind are found in languages very remote from each other both in place and character. But the number and kind of resemblances are such as to shew that at least a large portion of them must have arisen from actual contact.

Nearly the same remarks apply to the Indonesian groups. They have all assimilated in their general habits and collocation, but each group at least retains sufficient peculiarities to establish its primary independence. The E. Indonesian has well-marked characteristics of its own in phonology, structure and vocabularies, which prove that its languages are not derivatives from N. Indonesian. The striking affinities with the latter must therefore have been produced by contact with it. The W. Indonesian languages have a similar crude basis, and have not even the quasi-flexional traits of E. Indonesian. They have therefore still less claim to be considered as descendants of the highly developed N. Indonesian. But some of them have more largely grafted its formatives than the Eastern languages, and the phonologies of the two groups have greatly assimilated, so that an appearance of primitive affiliation has been acquired.

In speaking of the influence of N. Indonesian on the other insular languages I do not mean to convey the impression that the tribes who inhabit the Philippines were the agents who exerted this influence, or that the language or languages spoken by the
tribes who did were identical with any of the Philippine dialects. That the ideology was essentially the same cannot be doubted, but it may have possessed traits which have been lost in these dialects, and it is reasonable to believe that the latter have acquired something from the languages which their prototype so much enriched. It is even consistent with linguistic history to believe that amongst these languages there may be preserved some traits acquired from the primary N. Indonesian which have been lost in the Philippines.

Nothing connected with this subject is more remarkable than the contrast which the different groups, and even the various languages of the same group, present in the amount and nature of their N. Indonesian accessions. In Polynesian we find the definite article, the possessive, the dual, a close adherence to the essentials of the entire pronominal system, the particles of direction, &c. but the assimilation in these striking traits is accompanied by a very limited adoption of the formatives. In the W. Indonesian languages the formatives are more largely adopted, but the other characteristics are wanting. E. Indonesian again possesses fewer of these characteristics than Polynesian and more than W. Indonesian, while its share of the formatives is less than that of the latter group. These contrasts have probably been chiefly occasioned by two causes, difference in the closeness and duration of contact and difference in the tendencies of the assimilated languages. To these may be added the probable loss of some of the acquired traits. Some of the W. Indonesian languages appear to have possessed the definite article. That for proper names is preserved in Javan and Malay, but is becoming obsolete in the latter. The demonstratives in many W. Indonesian languages are identical with the definitives of N. Indonesian and Polynesian and in Sundan the definitive is preplaced as in these groups. It is probable therefore that some at least of the W. Indonesian languages used the definite article at one period, and that the prevailing ideology of W. Indonesia was too crude to endure the refinement, or received a backward tendency which induced a gradual return to its primitive simplicity. Traces also exist of the particles of direction, and not only the elements but some of the ideologic characteristics of the pronouns have been preserved, such as the exclusive and inclusive plurals (hâmi, kîta as in N. Indonesian), the possessive of the 2d person in mu and its reappearance as an element of the nominative plural, the faint vestige of the possessive in the plural use of the singular for the indication of associated persons. The Malay pronoun of the 2nd person angha, kau, presents a curious relict of the era of N. Indonesian ideology. The prefix an is in full accordance with Philippine and Polynesian ideology, but in these languages an, a is the definitive for appellatives and not for pronouns. This is a trait similar to the dialectic misapplications or divergencies which occur
in Philippine itself, and it could only have arisen in a language which had acquired the habit of using the definitives prefixually. Aang has no meaning or independent existence in Malay. But the possessive and relative definitive of Philippine produced by prefixing the possessive particle n to this article, is preserved in Malay as a relative,—nang. It is also preserved in the objective particle akan and transitive-causative han which N. Indonesian resolves into a combination of ka (a directive found in Malay) and the def. article. The locatives, demonstratives and other particles afford similar instances, tending to prove a greater approximation in ancient times to the character of the Polynesian engraftments. This renders the explanation of the superior wealth of W. Indonesian in Philippine formatives more simple, for it may be attributed to a prolonged continuance of N. Indonesian influence. Why the formatives should have been better preserved than other traits is less easy to understand. It probably arose from their great practical utility in preventing ambiguity and circumlocution, the extent to which names formed by their aid enter into the vocabularies, the ready means they afford of naming new objects, operations &c., and the manner in which they are euphonically joined to roots.

It will appear from the preceding remarks that the relations of the N. Indonesian group to the other Malay-Polynesian languages have a paramount ethnologic importance. I will therefore, at the risk of some repetition, compare its ideology with that of the other groups in a more detailed manner than I have adopted in the very brief and imperfect notes on these groups which form the preceding part of this chapter.

**N. Indonesian compared with Polynesian.**

Phonetically Polynesian differs widely from N. Indonesian, which is more consonantal than the other Indonesian languages. The only marked trait in which they agree is the convertibility of l, d and r. In the archaic phonologies of both z appears to have been an element, as it is preserved in Formosan and Rarotongan. V is also found in both. The vowel sounds are more numerous in Polynesian, and it possesses f as a distinct element from p. But it wants b, d, g, h, as well distinguished elements, while N. Indonesian possesses them. In structural phonology N. Indonesian is more advanced and agglutinative, but there are many traits common to the two languages, such as the frequent coalescence of two particles into a composite monosyllabic particle.

We have already noticed the principal ideologic characteristics, common to N. Indonesian and Polynesian. Such are the definitive articles for proper names* and appellatives,—the

* In Pol. the personal pronouns are also preceded by the definitive. In Phil. they appear to have been so in the more archaic form, for the first syllable in
pronominial dual, companionative, exclusive and inclusive plurals; the indication of the direction of action in relation to the speaker; the distinction between an act directed to several objects collectively and to each separately; the position of the particle of possession before the possessor and after the subject of possession; the power of reversing this collocation by placing the possessor first; the expression of frequency, multitude, intensity, &c., by a reduplication of the word or of its first syllable; the common plurals by a preplaced demonstrative and by reduplication of a connected qualitative; the substantival, attributival, active, passive, causative and potential formatives; a close similarity in numerous idioms, such as the formation of the ordinal from the cardinal numbers by definitive, substantival and transitive prefixes, of the numbers between 10 and 20 by conjunctives (tekau ma tahiti 11, i.e. 10 and 1, Pol., pangolo kagaro ob. Bikoli, napulo ug usa Zebedian), of the tens by formatives (hokoru, 20 Pol., karuha-ma 20 Zebedian); the use of definitives and formatives with the cardinals, as in the above examples of sang, na used as prefixes, (ka is used when numbering in N. Ind. e.g. tolo katavo 3 men, in Pol. it is prefixed to the numeral, toka or tokotolu nga matapo, 3 blind men); the expression of present and future time by the same particle of action (in this agreeing with the more archaic N. Indonesian dialects, Formosan, Pamangan); the use of e for the present and i for the past in some dialects, the indication of the past by the remote definitive and locative na; the use of the definitive for the present (Ilok. id); a similar causative prefix; the use of the passive transitive elements ti, in the reciprocal forms; the frequent use of the passive form of speech; the use of the same particle as a passive and substantival postfix; the several of the pronouns is a definitive. That a, or an, ang was at one time a definitive for pronouns in Indonesia appears by the Malayan pronoun of the second person kau, angkau.

† In this case the possessive particle is postfixed and phonetically united to the possessor in N. Indonesian, but in Polynesian it is made to coalesce with the definitive article which precedes the subject possessed; in other words the subject of possession is removed to the end of the phrase while its definitive retains its place at the beginning. Thus te kupu a te tangata (N. Z.), the speech of the man; te te tangata kupu, the of-the-man speech. We have seen that a similar coalescence takes place in the possessives of the pronouns, tabu, toku, my (N. Z.) for te a ku, te o ku, the of-me.

† Tu, ko Pol. woaka Maori, ika Zeb.

* The imperative and future ma is not Pol. but me is sometimes used in the imperative in Maorian and the prep. ma is the future form of na.

† Pa is also potential in Tongan. In Maori sobaka sometimes implies "the becoming, or the being like to, or the fitting or exhibiting the root to which it is prefixed" (Maunsell p. 150.) The Philippine naga and nabu (paka) are applied in a similar manner. It is also used to denote reciprocity, inception and gradual declension.

† The Pol. prefixes fi and postfixes faki, ani, &c.; fi does not occur as a postfix in N. Indonesian, but it is used passively.

§ In Pol. the passive is sometimes distinguished from the substantive by the omission of the nasal, e.g. patu, patua, patunga.
incrementive and intensive use of the reduplicated form a$a and c. The Polynesian, from its use of the article, exhibits the crudeness of the Malayu-Polynesian words as strikingly as the Philippine. These words of action are made substantive by preplacing the article.†

The N. Indonesian characteristics not possessed by Polynesian are numerous. The latter has merely a few detached fragments of the complex formative system of N. Indonesian. It wants the remarkable divisions of action on which that system is based; some of the simple and nearly all the numerous compound formatives and the power of combining them; some of the plural companionsative and pronominal elements; the initial time flexions; the numerous quasi-flexional combinations of definitives, directives, formatives &c.; the formation of the companionsative particle from the definitive; the personal definitive s (a which corresponds with the Philippine appellative def. an, being used as in Formosan). Amongst the simple formatives the most striking deficiency is in the personative and instrumental prefix pa, so common throughout Indonesia. It occurs however with its causative and transitive powers va, vaka, paka, rehaka, &c.

On the other hand Polynesian has some remarkable traits not found in N. Indonesian, such as the plural formed by elision of the initial consonant of the singular in the compound article tetahi S. etahi P. and demonstratives taua, aua; tena, ena &c.; the distinctly definitive plural nga (Maori), the Philippine mangga, being adverbial and not definitive; the more frequent use of locative particles to indicate the degree of proximity of the place of action to the speaker; the double possessive; the simple and regular system of forming the pronominal dual and plurals by post fixing the numerals two and three; the generic or segregative words; the agentive particle as distinguished from the definitive; the use of both these particles together, and, in some dialects, of both the proper and appellative definitives before names of person; the indication of time by the definite article (used assertively as in many other ideologies) and the locative of distance (which is also la; the desiderative particles. Some of the assertive and tend an element in the 3rd personal pronoun and the demonstratives). Some of the Polynesian formative traits are also peculiar. Such is the distinct expression of an action and its result; the causative and dorl particles of Polynesian are peculiar, e.g. the article e

* In the B. Polynesian dialects nga, na retains its most passive sense, generally denoting the result of an action, while a nga, ana denotes the action itself. In Hawaiian ana appears to have had an incrementive force as e.g. bana a place where many things stand (from te to stand.)

† Tanat un te tu atu net, here (am) I the (person) standing towards (you.)

‡ N. Indo-esian preserves traces of having possessed a similar power of using two articles, and for an analogous purpose. Thus, in Bikol, mni, of-the, if the object has not been mentioned before, but mna, of-the-the, if it has. The si is a more determinative particle than an, and is in most dialects appropriated to proper names and pronouns; in other words an is generic, si individual.
present, future, contingent; the frequent use of ka as an assertive of the present and future; the use of ana as a post fix with a prefixed to denote the present*; the use of kua (ku-) the def. a?) as a past assertive, but it may be related to the past gi of Phil. (passive); of kia generally a passive prefix &c. The position of the agent after the action appears at first to be a very remarkable peculiarity, but if the explanation I have offered of it (ante, vol. i. p. 235) be correct, as I believe it to be, it is identical with the common N. Indonesian passive or possessive form of speech in which the agent follows the verb. The same idiom is much used in W. Indonesian. The action word is to be considered as substantival or participial and as referred possessively to the agent.

The more important of the N. Indonesian particles found in Polynesian are the definitive for proper names and pronouns (Tongan and N. Zealand) and that for appellatives (Iloko) altered in accordance with the curt and vocalic phonology of Polynesian; the subst. and attrib. ma--; the pronominal elements; the demonstratives; the possessives in n and a; the dative (and objective) particle in a; the Maorian plural particles (of which

* But ana here appears to me to be merely the passive ana, so that the form of expression is participial, e kite ana aian i te tangata, the seeing (of) me to the man; so in Malay halatena aku, my seeing.

† In Polynesian it has the form ki in the dative and i in the objective and ablative (ex-transitive, instrumental). If the k and i are the same particle, its range of application is nearly as great as the N. Indonesian ka. It is probable however that i is a distinct particle corresponding with the N. Indonesian definitive i (Pamp. Ilok.) which again appears to be a contraction of the more common ai. Ki would thus be a compound of the kind so frequent amongst the N. Indonesian and Polynesian particles, k, or ka--i or ki. Ko, equivalent to the N. and W. Indonesian ka, occurs in N. Zealand, and it is also found in all the Polynesian dialects as the locative there, which brings us probably to the proximate root of the directive, and explains why it embraces dative, ad-directed, ex-transitive and instrumental or causative, and has also become an action-formative expressive of transition and causation. All these relations are based on the common one of a space or distance separating the source from the terminus of motion or action, the ko, there. The different ideas proper to its several applications have been gradually imported into the particle in the progress of language from a primary or crude state analogous to the Chinese to that in which it now exists, and definitives have entered into combination with it. In Malayu we can recognize it in the particles ka, to (locative); akam (combined with definitives), to (objective); kan causative and transitive post fix. In N. Indonesian it is found unchanged in ka, kamila, kar, &c. Zebun, anda, andegiti, arduaka &c. Ilokon &c. &c.; it combines with the definitives in the directives kan, akam, akaming, kiai (the nearest to the Polynesian ki); and it is used as a substantival and verbal formative with many applications. We may proceed a step further in the dim region of primitive ideology and identify as there, with the 2nd personal pronoun, ya you. In the supplement some remarks will be found tending to show that the 2nd and 3rd personal pronouns are primitively based on notions of relative distance from the 1st, so that you corresponds with there, and he with yonder in relation to ma.

There can be no doubt of this in the case of the 3rd personal pronoun, which is many of its forms, N. Indonesian and Polynesian, has a locative element, and the locative origin of the 2nd person is confirmed by observing that in N. Indonesian the directives &c. as well as the pronoun have the vowel a while in Polynesian both have o. The element ka in the plural inclusive of the first, and the plural of the same person (kami; amm or kau) in the demonstratives kar, kau, &c. appears to be the same particle. The rationale of its appearance in the first person inclusive
traces exist in other dialects); the particles of direction in relation to the speaker; the combinations of particles such as the directives and possessives with the definite article, of the latter with locative particles, (to form demonstratives,) with pronouns (in Polynesian with the agentic particles); the incorporation of conjunctive, possessive, companionative or plural particles with pronouns, the causative prefix (paka, maka); the passives i (ina, nga, fia &c), na, ana, nga, anga; the qualitative ma (na) sometimes used to form adjectival substantives as in N. Indonesian.

The affinities between the Polynesian and N. Indonesian suggest several questions. Is Polynesian the archaic and ground form of N. Indonesian, is it N. Indonesian in a state of declension and impoverishment, or is it a separate language that has been deeply influenced by N. Indonesian? If the last is the case, are its N. Indonesian traits entirely referable to the present condition of that language, or do they point to a more archaic one, and what was the character of Polynesian itself prior to its assimilation to N. Indonesian?

Polynesian is more monosyllabic, less agglutinative and less complex than N. Indonesian, but because it is thus more crude and archaic, even in traits common to the two languages, it does not necessarily follow that it exhibits N. Indonesian in an immature or nascent form. If the Polynesian was an independent tongue, with a comparatively crude character, at the time it came under the influence of N. Indonesian, its acquisitions from that language would be affected by its own ideology; and if the process of assimilation was interrupted at a stage considerably prior to complete conversion, the N. Indonesian element would be more likely to receive the colour of the native one than to prevail over it. The comparative simplicity therefore of the Polynesian will not establish the hypothesis of its being the parent of N. Indonesian, or a representative of a condition through which that language passed, unless it is supported by other facts. But the general character of the language gives no countenance to this hypothesis. It is hardly possible to conceive that a phonology like N. Indonesian has sprung from one like Polynesian. This objection cannot be met by the violent supposition that while N. Indonesian has changed in so many other respects, it has preserved the archaic phonology while Polynesian has lost it, because this only substitutes one improbability for another, and is moreover irreconcilable probably consists in the person or persons nearest me (by locative or by social connection) as distinguished from those not so connected although present, being the objects singled out by the pronoun and indicated as attached to me the speaker by the conjunctive mi. Ta, which is radically identical with ka, is found in N. Indonesian as a definitive, the remote locative and a plural and possessive element in pronouns.

* All these combinations are archaic and dead. Polynesian no longer possessing a plastic power over its vocabulary like E. Indonesian. N. Indonesian has also lost much of the agglutinative power which it appears to have at one time possessed.
with the fact that the words and forms common to the two languages have in general a similar phonology. The common definitives, pronouns, formatives, numerals &c. are nearly all similar. The archaic phonology of these at least was vocalic and therefore Polynesian more than N. Indonesian. Glossariically the two languages are to a very great extent separate, and the phonetic contrast between the purely N. Indonesian and the purely Polynesian or Malayu-Polynesian words is decided. Indeed as respects phonology Polynesian associates itself with E. Indonesian and even with W. Indonesian far more closely than with N. Indonesian. There only therefore remains the ideology which so far from counterbalancing the phonetic and glossarial objections to the hypothesis, would alone suffice to prove that Polynesian is neither the parent nor the child of the N. Indonesian. The latter is one of the most elaborate, refined and complex languages of the formative class, while the former is essentially one of the most simple. The former is so homogeneous that all its most marked tendencies must be referred back to its inchoate or normal condition. The language has grown as one consistent whole under the operation of these primitive tendencies and they are consequently manifested not in isolated traits but in numerous phenomena that rise up in all directions as we pursue our researches. Now in Polynesian we do not detect the leading ideas and tendencies which form the physiological character of N. Indonesian. We only observe isolated traits identical with N. Indonesian, and which we cannot refer to any fundamental law prevailing in Polynesian ideology. If these had been of native growth the identity would hardly have been so complete and so uniform, and the generic ideas in which they originated would have been represented in many other kindred traits.

Take for instance the remarkable companionative form found in Polynesian as well as Philippine. That it is original in the latter and derivative in the former, is proved by the idea on which it is based recurring in other forms, simple and compound, in Philippine but not in Polynesian. Some of these forms are so strongly marked that if they had originated in any other Asianerian language, it could not have entirely lost them. The associative notion on which they all rest pervades Philippine ideology, while it cannot be recognized as a fundamental and generative idea in the other insular tongues. Thus in Philippine the substantival prefix *ka* is extended from a simple transitive to an associative meaning. With the passive subj. poss. *an* it forms such words as *kakabohan* a plantation from *kaboy* a tree. By itself it receives a peculiar and curious application of the associative idea. While the companionative formatives of Philippine, Polynesian, &c., denote a person and his companion or companions, *ka* denotes the companion alone. Thus from *taro* play, comes *kalaro* a playmate. The compound formatives, *naga*,
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Nagaha, nakvis, nasig, nagahi, nakhri and others have various associative powers, some being very striking. Thus nagahi (Zebuan), or nagvsi (Tag.) may be used to express association in the agent and singleness in the object, nagvisisulat sile, all write to one.

To the question whether the N. Indonesian traits of Polynesian are entirely referable to the present condition of that language,—in other words whether Polynesian affords any evidence of N. Indonesian having changed since the former was cut off from connection with it, it may be answered that Polynesian has carried away so little of the complex ideology of N. Indonesian that it cannot present a just criterion of the state of that language at the era of separation. But as the forms and offices of most of the Polynesian particles are similar to what are still found in N. Indonesian, the evidence, as far as it goes, is against the supposition of that language having suffered much change. It is probable that the agglutination of the definitives with the pronouns and directives was then less advanced.

The question as to the character of Polynesian prior to its contact with N. Indonesian is one of the ultimate ones of Asianesian ethnology, and we must reserve any attempt to answer it till we have compared the other Indonesian languages with the N. Indonesian.

E. Indonesian compared with N. Indonesian.

The Indonesian languages differ so considerably amongst themselves that a full comparison of them with N. Indonesian would require a separate notice of each, and for this there is not room here. We have seen that the phonetic characteristics of E. Indonesian ally many of its languages with Polynesian and others partly with Polynesian and partly with W. Indonesian, while they distinguish it greatly from N. Indonesian. Structurally many of the languages are more agglutinative than N. Indonesian but the compositions are different. The agglutinative power of N. Indonesian is chiefly exhibited in certain kinds of union between some classes of its particles, while the roots or substantive words themselves are rarely affected by the prefixed or infixed particles, the changes in the initials being confined to a few invariable kinds. The typical E. Indonesian has not the N. Indonesian composite particles, but it possesses in full activity and far greater energy the agglutinative power which produced these. In it alone of all the Malayu-Polynesian types can we recognize phonetic finency and adhesiveness as an essential and living principle. In the other classes of language we find some fixed euphonic habits rather than a plastic euphonic power. N. Indonesian has more habits of this kind than W. Indonesian and is therefore nearer E. Indonesian, but there is no evidence or probability of its ever having possessed the phonology of the latter, much less of its having originated it.
We should rather be compelled to refer the euphonic habits of N. Indonesian and Polynesian to an E. Indonesian influence if they could not be otherwise explained. E. Indonesian has fewer N. Indonesian traits than Polynesian. It wants the definite articles, the companionative particles, the pronominal dual, the time signs and idioms, the causative *paka* (*laka, waka*) common to Polynesian and N. Indonesian, but with them it possesses the particles of direction.

Most of the E. Indonesian languages are very deficient in formatives. In this respect also Polynesian is somewhat nearer N. Indonesian. The N. Indonesian *ka* is more closely represented in E. Indonesian than in Polynesian. It is used prefixually, with a substantive and also as an attributive meaning. *Pa, ma, na* and *i* are found in E. Indonesia (ante Vol. v. p. 249). The prefixual *ma* of Lietti appears to be the N. Indonesian *pa* (Pol. *ma, fa*), used with one of the complex-transitive powers of N. Indonesian. *Am* appears to be intransitive like *ma*—of N. Indon. The passive and transitive *i* does not occur as a pure action particle in Lietti, but in the formation of substantives from words of action it exerts a passive or quiescent power in the infix *nia, ni, n, i*, and in the passive personative pref. *ri*. The active personative *mah* is the N. Indonesian *maka* which is a substantive as well as an attributive pref. and with a causative force. The possessives *na, ni, ene* are closely allied to the N. Indon. In the other southern languages *ma, na* occur. *Pa* is active in Sumba as in Formosan. The passive *na* of E. Timor is the passive *an* of N. Indon. *na, nga* of Polynesian. Bugis has subst. *a—ang* corresponding to N. Indon. *ka—an*. It has also *pa* personative pref., *la* personal def. (Tongan), *ma* attributive and subst. as in N. Indon. and Pol., *i* transitive and causative, and *ni* a particle of the past. All the deficiencies of Polynesian as compared with N. Indonesian are shared with E. Indonesian, and it also wants most of the non-Philippine ideologic features of Polynesian which have been mentioned above. Several of the formatives in E. Indonesian languages have every appearance of being exotic and of having been borrowed, indirectly or directly, from a N. Indonesian system. They are very little used in most of the languages and their powers and office vary, but they always retain some portion of the N. Indonesian meaning. They are always restricted to some simple and single office, and the refined and peculiar ideologic distinctions which they represent in N. Indonesian are lost. It cannot be conceived that the *maka* (with its flexions *maka* and *paka*) of N. Indonesian which is an essential portion of a complex system and is composed of two particles, both of which are much used as elements in other formative combinations, can have been derived from the restricted *mak* of Lietti, or that if the latter had

* But see the remark on *mak* (infra.) It is found in N. Celebesian languages.
been a genuine daughter of N. Indonesian it would have discarded all the more important and generic functions of *maka* and retained no trace of the influence the particle at one time had on its whole ideology. While Lietti has adopted the verbal form and given it a limited personative sense, Polynesian has taken the personative or instrumental form and given it a generic active sense. Each in a different way is a partial representative of the N. Indonesian particle, and each contains an error of a kind that constantly occurs when particles are borrowed from a foreign language by a people who do not fully understand its ideology.

While E. Indonesian has few of the flexional traits common to N. Indonesian and Polynesian, it has many quasi-flexional features of its own induced by its agglutinative power, and some of the languages are distinguished by one of the highest flexional traits, the pleonastic union of the pronoun and verb.

It thus appears that E. Indonesian has no phonetic or ideologic resemblance to N. Indonesian save in the common Malayu-Polynesian characteristics and in a few formatives applied to some simple and partial uses. It appears also that Polynesian, notwithstanding its close phonetic and glossarial affinity to E. Indonesian, has more N. Indonesian features than that group. The reasons for not considering Polynesian as directly related in the ascending or descending line to N. Indonesian apply more strongly to E. Indonesian. By its phonetic peculiarities which ally it to a class of phonologies totally different from the comparatively crude W. and N. Indonesian and Polynesian, by its vocabularies, by the absence of a formative ideology like N. Indonesian, and by the want of most of the ideologic traits common to that language and Polynesian as well as of those that are peculiar to the latter, E. Indonesian, in its more typical languages at least, vindicates its right to rank as an independent development. Its present basis is a phonology having well marked native peculiarities but intimately allied to the Polynesian, and an ideology closely akin to the simpler W. Indonesian but with slight vestiges of a N. Indonesian influence. There is no evidence that the southern E. Indonesian languages ever approximated very nearly to N. Indonesian, or had the prolonged and intimate association with it which Polynesian must have enjoyed. The obvious explanation of this is that Polynesian or its Indonesian prototype was spoken by tribes locally intermediate between N. Indonesian and the present E. Indonesian tribes and which were deeply influenced by both. If the ethnic limits of the two Indonesian peoples have not greatly altered since the emigration of the Polynesian stock, linguistic probabilities would point to some portion of the northern Moluccas as the spot from which they went forth.* But it would be premature to refer the origin of the Philippine affinities of Polynesian to this locality. Facts to

* See the remarks on this subject, ante Vol. V. p. 295.
which attention has already been drawn in this paper prove that
the philology of Eastern Asia...is complex. Several distinct
affinities with western groups have been indicated. In Viti we
find W. Indonesian, in Rotuman and Tarawan, Australian and
E. Indonesian, and in the Micronesian islands, N. Indonesian,
characteristics which are absent in Polynesian. These indicate
a succession of movements from the west to the east, and it
is possible that the strong Philippine element of Polynesian may
have been derived from N. Indonesia through Micronesia, and
the E. Indonesian element through distinct migrations from
the Moluccas.

W. Indonesian Compared with N. Indonesian.

The phonology of N. Indonesian, as we have seen, is complex.
It has affinities with W. Indonesian, with Micronesian and Melane-
sian, and with E. Indonesian. Those with W. Indonesian are more
marked than those with E. Indonesian and they are modern or
recent as well as archaic. The latter are so decided as to prove that
the strongest element in the phonology of N. Indonesia belongs to
that comparatively harsh and consonantal system which appears
at one period to have prevailed over W. Indonesia, and which
is still impressed, in different degrees, on languages in all the
W. Indonesian islands. Our remarks on the phonologies of Java
and Borneo leave little room for doubt that this system extended
continuously over W. and N. Indonesia and Micronesia, and
that it has held its ground against the harmonic and vocalic systems
more tenaciously in Java, Borneo, N. Indonesia and Micronesia
than in the Malay Peninsula and Sumatra. Many of the
characteristics of the older W. Indonesian phonology are found
in N. Indonesian, such as the finals o (Philippine), e (Formosan)
and g, the initial ng, and the abrupt meeting of incombiable or
inharmonic sounds such as gh. Abruptly consonantal and guttural
words are more abundant in N. Indonesian than in the harshest
W. Indonesian dialects.* The harsher and more consonantal
traits are best preserved in Formosan, in which we find the N.
Indonesian phonology in its rudest form. Notwithstanding its
consonantalism N. Indonesian has a tendency to contract its
phonetic elements by commuting several which are kept distinct
in most W. Indonesian languages. It is probable that the
phonologies of N. E. Borneo will be found to melt into the N.
Indonesian. Many peculiar forms of Indonesian words are common
to Bornean and N. Indonesian dialects, and the names of places
on the eastern face of northern Borneo and the adjacent islands

* B. g. taylabohok, tagduc, tagkus, sakok, saloosog, saligbet, kahaplog, lagoklog, bogoklog, ngitugit.
† Balambangan, Guhusen, Kahanman, Latoen, Bankowam, Marantang, Maratahuan, Paiten, Kalangan, Lionan, Kaidengon, Sandakan, Kint-batangan, &c. The postfix is found in the geographical nomenclature of all parts of Indonesia, but it is nowhere so common as in N. Indonesia and Borneo.
are N. Indonesian, the locative postfix -an being as common as in Luzon. Ideologically W. Indonesian is much more crude, and the remarks that have been made respecting the comparative poverty of E. Indonesian and Polynesian in formatives apply to W. Indonesian also. While it is essentially as crude and simple in its ideologic system as N. Indonesian is developed and elaborate, its formatives are still more unequivocally N. Indonesian than those of Polynesian and E. Indonesian. They are phonetically identical, and their uses, although devoid of most of the refined distinctions and of the wonderful expressiveness of the Philippine particles, agree with those of the latter more strikingly than with those of the eastern groups. We have already mentioned the more important of these formatives and remarked the closer approximation of Javanese to N. Indonesian. The Javan an—active and transitive, if not a contraction of man—may be the N. Indonesian na—, a slight phonetic change like that of the Lietti am— for the N. Indonesian ma—. Ka— and -an have only their most generic N. Indonesian applications, -an is substantial, passive and frequently locative or instrumental. In Javan it has also some of the privative applications of N. Indonesian, as in forming diminutives, and in general it denotes a more limited and specific object either agreeing in kind with the root or having some alliance to it. It also pluralises numerals and temporal substantives, hatusan hundreds, tahunan years, being a restricted application of the collective power of the Phil. -an. The other uses of the particle in Phil., all attributable to a native development of the essential idea of privation, abstraction, or generalisation, are not found in W. Indonesian, and this, with the fact of all the specific W. Indonesian uses being Philippine, proves that they were derived from that language or its prototype. Similar remarks apply to to ka in Jav. and Mal. With -an it has some of the peculiar Phil. uses. Thus in Javan it forms locatives. Most of the more refined applications of ka and ka—an, such as the companionative, equalitative, correlative, simulative &c. &c., are wanting in the W. Indonesian languages. So servile have they been that they have not imbibed any sense of the more essential powers of these particles or originated any new applications of them.

The Javan qualitative ma—corresponds with the N. Indon. and the Malay ber—, the same particle disguised by the final r, a terminal which Malayan phonology affects. In dialects of Malay it occurs in the forms mer, me, ma, ba. The W. Ind. pa has also the N. Indon. power but with less varied applications. In Jav. pa is active personative with -an locative and instrumental. In Mal. pe, pen &c. is also active personative and instrumental. Men transitive as in N. Ind. becomes personative by changing m into p. In Jav. the participial and passive infixes um and in are N. Ind. So is the Jav. and Malay transitive postf. -i.

The Jav. def. -he, e is Pol. but the Sundan etta corresponds closely with the Ilokön idi. The directive and possessive king is
Phil. in which it is seen to be a native compound of the def. and possessive particles, the latter not existing in Jav. The same particle occurs as a relative in the pure Phil. form *sing*, and another relative *kang* is also Phil. The time flexions of N. Indonesian and Polynesian are not found in W. Indonesian.

On the whole it appears that the W. Indonesian languages want most of the marks of development and refinement which the other and more eastern Malayu-Polynesian languages exhibit. If they have acquired more of the N. Indonesian particles than the E. Indonesian tongues, their formative systems have a similar fragmentary and simple character compared with N. Indonesian, and they possess no undoubtedly native traits of an advanced ideology as the E. Indonesian does. Their chief peculiarity consists in this absence of higher traits, and if we deprive them of their N. Indonesian formatives they present an entirely crude ideologic basis, with some traits which must be considered as peculiar when compared with N. Indonesian, such as the large use of generic or segregative particles and of the postpositional demonstrative, the position of the pronoun or other agent before the verb &c. The transitive directive *kan* of N. Indonesian, which is also an element in causative prefixes in that group and in Polynesian, has become a transitive and causative postfix in many W. Indonesian languages.

Our concluding remarks on the position of N. Indonesian will be found in a subsequent section.
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