Notes on Richard VanNess Simmons: *Chinese Dialect Classification*

William G. Boltz (Seattle)

It would be possible to epitomize in a single, straightforward sentence what Professor Simmons has done in this book: he has shown (in Chapter 1), definitively (in Chapters 2 through 7), that the dialect of Harngjou belongs properly to the Mandarin dialect group of North China and not to the Wu group of the mid-south as has traditionally been thought. While the basic conclusion of Chapter 1 is in itself of prime importance to current understanding of the pattern and distribution of the Chinese dialects, it is only a small part of what Professor Simmons has achieved in the present study. His major contribution lies in the “definitive” part; by that I mean the part in which Professor Simmons shows systematically why he can conclude as he does about Harngjou. He takes his revised classification of the Harngjou dialect as his starting point for a thorough scrutiny of what it means for a dialect to be identified as Wu. In pursuing this question the reclassification of Harngjou is merely a welcome by-product of Professor Simmons’ real achievement, which is to have come to grips with the problem that bedevils every effort to classify languages and dialects according to their cognate relations: how to distinguish inherited features from areal features, the tangle of which confounds the delineation of a neat taxonomy intended to reflect cognate affiliations. In addition to giving a revised picture of where the Harngjou dialect fits into the scheme of Chinese dialect groupings, Professor Simmons has adumbrated through the details of this one example, carefully scrutinized *vis-à-vis* an analysis and characterisation of the Wu dialect group overall, a methodological approach to sorting out the bits and pieces of that tangle.

In Chapter 2 Professor Simmons surveys past efforts to characterise Wu dialects as a group, and in Chapter 3, inspired by and in part modelled on Y. R. Chao’s 1928 sketch of Common Wu, he establishes a scheme of what he calls Common Northern Wu, by which he means the Tayhwu dialects. His focus is here because these are the Wu dialects of the area where Mandarin and Wu are in close contact. Professor Simmons then lays out in Chapter 3 his own set of criteria for identifying a Northern Wu (and *inter alia*, a Wu) dialect. He chooses the criteria deliberately to reflect an archetype-like model, largely but not exclusively phonological, representative of the structure of Northern Wu dialects. In this way he substantially reduces the chances for misconstruing accidental areal features as inherited features. This accomplished, in Chapters 4 and 5 he analyses two additional dialects, what he calls “Old” Jintarn and Danyang, both of which appear atypical from the perspective of traditional Wu dia-

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1 This is a review article of Richard VanNess Simmons. *Chinese Dialect Classification. A comparative approach to Harngjou, Old Jintarn, and Common Northern Wu*. Amsterdam / Philadelphia: John Benjamins, 1999. (Amsterdam Studies in the Theory and History of Linguistic Science; Series IV – Current Issues in Linguistic Theory, Volume 188.) I am grateful to Wolfgang Behr for his comments, questions, and detailed references in connection with a draft of this review.

2 His conclusion about the dialect of Harngjou is in fact the substance of Professor Simmons’ 1992 University of Washington Ph.D. dissertation, done under the guidance of Professor Jerry Norman.

3 Chao’s classic study is *Studies in the Modern Wu Dialects*. Peking: Tsing Hua College Research Institute, Monograph no. 4, 1928 (趙元任, 現代吳語的研究. 清華學校研究院,叢書第四種).
lect typology, but which he is able to show on the basis of the criteria set out in Chapter 3 are in fact properly classified as Wu. The purpose here is to provide a kind of independent comparative check on the objective validity of the set of criteria that he has established and that allowed him to identify Harngjou as a Mandarin rather than a Wu dialect in the first place. In the last two chapters Professor Simmons re-examines his conclusion about Harngjou against the elaborate, richly detailed, framework that he has been able to erect to identify a (Northern) Wu dialect. And, as we would expect, he finds his original decision to classify Harngjou as a Mandarin dialect confirmed.

The method for distinguishing inherited features of a dialect from areal features that Professor Simmons has delineated in this study by his example of Harngjou vis-à-vis the Wu dialects has a significant bearing on the general study of comparative linguistics and language history. The great achievement of nineteenth century comparative philology (what we would now call comparative and historical linguistics) was to have conceived a scientifically-inspired genetic model of language relation. That model was devised as a direct consequence of the realisation that the well-known languages of Europe, classical and modern alike, could be matched systematically in their phonological, grammatical, and lexical features with the languages of the Persian and Indian east to an extent greater than could be attributed to chance alone. This realisation took the form of a hypothesis that all of these languages ultimately were descended from a common origin, and this led in turn to the proposal of what has come to be called the Indo-European language family. That family is depicted conventionally by a tree-branching diagram, called typically a Stammbaum model, which purports to show how a given language was devolved from the splitting of its immediate predecessor into two (or more) parts. English and Frisian, for example, are said to be devolved from the splitting of a putative language called Anglo-Frisian, which for its part arose out of a split of a still earlier West Germanic source into two, the second part of that split being Proto-German.

The theory underlying this model of language relations, and of the Indo-European languages in particular, is called Stammbaumtheorie, and as far as it goes, it provides a useful conceptual scheme for understanding cognate language relations. The concept of a genetic or cognate relation between the languages of Europe on the one hand and those of Persia and India on the other, and the implications that this recognition had for an understanding of language evolution, constitutes one of the major intellectual achievements of the nineteenth century. It is likely even to have played a role in Darwin’s thinking about species relations and Marx’s about social evolution. Conversely, Darwin’s theory of evolution was directly influential in the formulation of the Stammbaum model, first proposed explicitly in 1863 by August Schleicher as a way to characterise these relations.


5 The four names that are usually identified with the first stage of the emerging recognition of an Indo-European family of languages in the first half of the nineteenth century are Friedrich von Schlegel, Franz Bopp, Rasmus Rask, and Jacob Grimm. See Peter A. M. Seuren, Western Linguistics: an historical introduction, Oxford: Blackwell, 1998, pp. 81-84 et passim. That Darwin influenced the development of historical linguistics in the second half of the nineteenth century is well known. The suggestion that the early period of historical linguistics influenced Darwin is made in David Lightfoot, The Development of Language: Acquisition, Change, and Evolution, Oxford: Blackwell, 1999, pp. 35, 41–42, but is not documented there.

6 Schleicher was a great admirer of Darwin and titled his principal work in this regard Die Darwinische Theorie und die Sprachwissenschaft. See Seuren, op. cit., pp. 84–85. He was also a believer in the reality of a reconstructed proto-
Stammbaumtheorie implied that all distinctions between related languages were the result of “vertical” diachronic splits and conversely that all common features were the result of shared origin. The model seemed to assume that languages developed in isolation, untouched by influences from any adjacent languages. It included no provision for “lateral” influences of one language on another “horizontally” across branches, so to speak. The failure of the Stammbaum model to capture any sense of how languages evolve under the influence of adjacent languages, irrespective of shared origins, and its inadequacy in reflecting the fact of variation within an area in which a particular language was spoken led Johannes Schmidt to propose in 1872 a competing model, called Wellentheorie, intended to suggest that non-inherited, areal features spread like “waves” across a linguistic community.7

By the end of the nineteenth century, in reaction especially to the insistence of the so-called Junggrammatiker (called variously in English ‘Young Grammarians’ or ‘neo-grammarians’) on the absolute regularity of sound change laws, it was becoming still more apparent that the Stammbaum model could give only a partial approximation to language history.8 Among the linguists who recognized the short-coming of the Stammbaum model as reflected in the proposals of the Junggrammatiker, Hugo Schuchardt was the one who expressed the problem most effectively and ardently. He pointed out that the language splitting characterised by the Stammbaum model, a feature crucial to the arguments of the Junggrammatiker, went hand-in-hand with language mixing and that the influence of one dialect on another was just as much a part of language evolution as were the features that over time came to distinguish one dialect from another through splitting off from a parent language.9 Schuchardt’s misgivings about Stammbaumtheorie were similar to Schmidt’s a decade earlier, except that for Schmidt the radical claims of the Junggrammatiker were yet to come. Each of these two models, Stammbaumtheorie and Wellentheorie, reflects a part of the way languages evolve; neither gives the whole picture, and thus they never became complementary in anything but a theoretical way. The problem remained of knowing which of the two models pertained to what specific features or to which developments of a given language.

In general the Stammbaumtheorie has predominated over the Wellentheorie as the preferred conceptual model of language relation because it is more intrinsically a part of the taxonomic and evolutionary thinking that characterised the nineteenth century intellectual world than the Wellentheorie is and because it came about in conjunction with the establishment of the notion of the Indo-European language family. By the end of the twentieth century the short-comings of the Stammbaumtheorie expressed by Schmidt and Schuchardt a century earlier came once again to be regarded as significant, and it is now widely conceded that the tree-branching model in general can be as misrepresentative of true language history as it might be representative. Beyond this, linguists have now begun to suspect that this short-coming of the Stammbaum model might constitute a more serious conceptual flaw for the study of non-Indo-European languages than for the Indo-European. In other words, it might turn out that the Indo-European language family is

8 The Junggrammatiker were a group of linguists committed to a tenet of scientific rigor in the study of language relations. From about 1875 to the end of the century they operated with an uncompromising belief in the absolute regularity of sound changes. The origin of the movement was centered in Leipzig, and the principal figures were Karl Brugmann, Berthold Delbrück, August Leskien, and Hermann Osthoff. See Seuren, op. cit., pp. 89–94.
9 See Seuren, op. cit., pp. 95–98.
atypical in being more amenable to a useful Stammbaum portrayal, its acknowledged imprecision notwithstanding, and less misrepresented by that kind of picture than other language families are.\textsuperscript{10} The problem that so absorbed Hugo Schuchardt of how to sort out these aspects of a given language's history, as they are implied by one or the other of the two models, remains something still to be contended with, even if acknowledged in theory but seldom faced in fact. Professor Simmons has now, for one of the major intersections of Chinese dialect groups, not only faced the problem, but also laid out an example of how it can be dealt with successfully.

In a classic paper in the field of Chinese dialectology the late Y. R. Chao said that the three-way distinction among voiceless aspirated, voiceless unaspirated, and voiced obstruents (the last-mentioned are often phonetically unaspirated with “breathy” voiced murmur), corresponding historically to the same three-way distinction in the Chiehyunn 切韻 rime dictionary of A.D. 601, was “probably the only condition ... both necessary and sufficient for classification as a Wu dialect.”\textsuperscript{11} The Harrngjou dialect has such a three-way contrast and has therefore traditionally been classified as a Wu dialect. But Professor Simmons points out that, in contrast to this strongly Wu-type feature in its inventory of initials, Harrngjou has numerous other characteristics that would instead suggest an affiliation with the northern dialects, conventionally called Mandarin, rather than with Wu. He mentions, for example, that Harrngjou has the distinctive set of personal pronouns woo, nii, and ta, as well as several other common lexical items, all of which are known typically only in northern dialects. (p. 1.) Thus, within the space of less than two pages Professor Simmons has not only identified the problem that serves as his starting point, but has stated his proposed solution. He says:

“... taking into account the clearly dominant Mandarin elements ... we must conclude that the Harrngjou dialect is more appropriately classified as a conservative Mandarin dialect [than as a Wu dialect – WGB addendum]. It is the descendant of the language engendered in the city by the multitude of Northern immigrants who inundated Harrngjou in the Southern Song, which has subsequently acquired certain areal features as it developed in an Wu environment.” (p. 2)

The chief areal feature that he is referring to is, of course, the set of voiced obstruents distinct from both aspirated and unaspirated voiceless counterparts.

In his presentation of “The Mandarin nature of Harrngjou phonology” (pp. 2–15) Professor Simmons shows first that the Harrngjou voiced obstruents can be analysed as voiceless consonants plus voiced murmur (which he sometimes calls jwo [濁]-murmur.) He then shows that the voiced murmur doubles as a mark of the lower (i.e., yang 陽) register tones. Thus, when the upper and lower register tones are distinguished phonemically from each other, the voiced murmur of the initials ceases to be phonemic and can be treated as an automatically co-occurring feature of tone. He can then conclude this section by saying:

“... it is safe to say that the Wu-like jwo-murmur has developed as a phonetic feature in Harrngjou’s

\textsuperscript{10} In a paper given in August, 1986, in Hamburg, at the XXXII International Congress for Asian and North African Studies, Michael C. Shapiro suggested that this atypical amenability to Stammbaum representation may be especially characteristic of the Germanic languages, and this may in turn have had something to do with the way the field of Indo-European historical linguistics developed in the nineteenth century. In this connection he drew attention to the fact that the Romance languages and the Indo-Iranian languages both, for example, evolved under the weight of a formidable classical language influence, Latin and Sanskrit respectively, and this may account in part for these language families being less representable by a Stammbaum model.

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lower register ... tones through the influence of surrounding dialects and by virtue of Harngjou's isolation [from its historical source - WGB addendum] among those dialects. In other words, it is an areal feature that has evolved more recently in Harngjou and thus postdates the older, intrinsic, Mandarin traits of the dialect.” (pp. 6–7)

The second section of Chapter 1 is called “The Mandarin nature of Hangjou [sic, read: the Harngjou] lexicon” (pp. 15–25). This subtitle is a little misleading in that the bulk of the data examined are systematic phonological distinctions among cognate words rather than genuine lexical distinctions, such as the personal pronouns (already mentioned once and re-introduced here), for example. Nevertheless, the import is unaffected; Professor Simmons here only adds more supporting evidence to his already persuasively argued case classifying the Harngjou dialect as Mandarin.

All of this regarding Harngjou is really just Professor Simmons’ starting point for the central focus of the study, which is to define on empirical grounds what is a Wu dialect. He begins by phrasing it this way:

“... the task remains to prove definitively that Harngjou is not Wu. For the question persists: While Harngjou is Mandarin, can it be somewhat Wu-like at the same time? Or can Wu-affiliation, even weak affiliation, invalidate even a markedly Mandarin character?” (p. 28)

By most measures the task that Professor Simmons says here still remains, does not seem to me to remain. He has, I think, already shown persuasively in Chapter 1 that, as he phrases it, “Harngjou is Mandarin.” What he means by insisting that this question remains, apparently, is that there is still a counterpart responsibility to show what a Wu dialect is independently of an ad hoc “opportunistic” contrast with Harngjou, and then to show that Harngjou when matched against that definition is not Wu. The second question he asks also is, in my view, already answered: Yes, of course, it can be “somewhat Wu-like at the same time.” These “somewhat Wu-like” features are precisely the areal features that it has acquired from adjacent (or sub-strate) languages, the tripartite distinction among the initial obstruents being prime among them, of course. If, by this question, Professor Simmons has in mind something like “can the Harngjou dialect be in some genetic sense both Mandarin and Wu?” the answer has to be ‘no’. It is a widely accepted premise that languages have historically only one parent. In Stammbaum terms, this means that a tree diagram allows only for splits, never for convergences.12 The last-mentioned question is at least implicitly answered in Chapter 1 also. Professor Simmons in sketching what he called the “Mandarin nature” of Harngjou phonology and the Harngjou lexicon has inter alia implied that the apparent Wu affiliation does not invalidate a deeper Mandarin character. I stress the word ‘deeper’ here because it suggests one way of seeing what lies at the heart of Professor Simmons’ analysis, viz., looking at the Mandarin character of the Harngjou dialect as a deep (or fundamental, or original) stratum, and the Wu features collectively as representative of another stratum (or other strata) distinct from the fundamental one. In his Introduction he phrases it this way:

“Accurate synchronic classification will facilitate further investigation of the direction and origin of change over time, the nature and shape of successive waves of change, and whether the changes belong, for example, to a Northern superstratum or a Southern substratum.” (p. xiv)


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Whether an identifiable stratum is recognized as sub- or super- is a matter of perspective. If we are talking about Harngjou as a fundamentally Mandarin dialect, then relative to that original dialectal identity areal features that come to be reflected as influences in that dialect are subsequent developments and therefore may be called evidence of a superstratum (or perhaps of superstrata.) But if we think instead of the Harngjou dialect as formed through the introduction of a not-yet-Harngjou Mandarin dialect into the Harngjou area, where it incorporated over time features of the dialect that was already spoken indigenously there before the Mandarin speakers moved in, then it makes sense to say that the Wu features reflect a substratum. Both ways of looking at the situation end up reflecting the same conclusion about the circumstantial and historical relation between what is inherited and what is the result of areal influence. The second, i.e., considering the Wu features as a substratum influence, is the usual way such phenomena are described. But the very fact that the same objective phenomenon can also be described by calling the Wu influences elements of a superstratum because they are later than ("postdate" in Professor Simmons’ word, see the passage cited above from pp. 6–7) the Mandarin foundation shows, I think, that this picture of language consisting of strata is, like the tree-branching model, just another heuristic convenience, and should not be thought of as in some literal way reflecting genuine language history or structure.

Professor Simmons deserves great credit for approaching the question of what is sometimes called “dialect mixture” in a rigorous and substantive way. He has demonstrated that the way to distinguish inherited features from areal features, and thus to classify a dialect’s cognate affiliation correctly, is to show a match between the dialect in question and a set of criteria that represents an abstracted underlying model of the dialect group’s phonological structure, supplemented by lexical or grammatical items where pertinent. The job of establishing the set of criteria, chiefly phonological, is carried out in Chapter 3. This is where Professor Simmons argues at length for each criterion that he establishes. Taken together his arguments serve to show that the set overall is well-motivated and non-arbitrary. The key phrase here is "... motivated and non-arbitrary." The fact of the systematic nature of the comparison and that identifying features are motivated within the scope of the whole set of criteria and not simply impressionistic or arbitrary contrasts or coincidences that happen to be noticed ad hoc are what make Professor Simmons’ demonstration a bench mark for studies in Chinese dialect classification.

After establishing the features of Common Northern Wu item by item, i.e., initials, tones, and finals, Professor Simmons proceeds to scrutinize what he calls “Common Distinctions”. (pp. 59–68.) What he means by ‘distinctions’ is distinctions between his Common Northern Wu and Mandarin. In setting out this part of the demonstration Professor Simmons uses Jerry Norman’s Common Chinese as a referential framework. For example, section 4.1 is called “Vocalism before Common Chinese coda *-ng.” Here he says:

“The Common Wu systems reflect the pattern of Wu vocalism discovered by Jerry Norman (1999) and described by Yu Zhiqiang (1996 [sic]:99–109) in which Common Chinese finals *ing and *i*ang are merged, while Common Chinese *ang is distinct, contrasting with the Mandarin pattern in which Common Chinese *ang and *eng are merged.”

From the data that Professor Simmons gives to illustrate this distinction, it appears that the part about *ing and *i*ang merging in Wu is irrelevant, because they appear to have merged in Mandarin, too. Common Chinese *ing is represented by Sujou (Wu) pin¹ and Changli (Mandarin) ping¹ ‘ice’ and *i*ang is represented by Sujou buŋ⁶ and Changli ping⁶ ‘sick’. The only
pertinent point is that *ang and *eng merge in Mandarin, not in Wu. Professor Simmons illustrates nine more points like this before he turns his attention to a discussion of the characteristics of Common Wu overall and sets out his list of diagnostic criteria.

Apart from a few passing references to superstratum and substratum possibilities, as in the passage from the Introduction cited above, Professor Simmons does not much discuss the diachronic implications of his study. He comments at the beginning of Chapter 3 on the relation between Common Northern Wu and Y. R. Chao’s Common Wu, thus:

“For the purposes of our present task of dialect classification, Chao’s Common Wu and Common Northern Wu represent only common phonological categories. From a diachronic perspective, it is possible that there is a time-depth operating in the relationship between Common Northern Wu and Chao’s Common Wu. Common Northern Wu may represent phonological developments that are historically subsequent to Chao’s Common Wu. But neither should be considered to be a single real language of the present or the past…” (p. 51.)

The caveat expressed in the last line is, to be sure, an appropriate reminder about the nature of reconstructed languages, and Professor Simmons need not worry that anyone will try to write a fable of sheep and horses in Common Wu. The preceding reference to a “time-depth operating” is more than a little vague. Presumably Professor Simmons means by this what he says somewhat more clearly in the next sentence, to wit, that Chao’s Common Wu may reflect the phonological structure of an earlier stage of Wu than his own Common Northern Wu. While this is true, it does not follow that recognizing it or discussing it would lead inevitably to the presumption that these common systems represent real languages, as Professor Simmons seems to think it would.

The apparent downplaying of the diachronic implications of Professor Simmons’ study overall may reflect his eagerness to insist that his Common Northern Wu is established on the basis of modern data exclusively and does not depend on Chiehyunn categories. See, for example, section 3 of Chapter 2, called “The problems with Chiehyunn based classification” (pp. 40–49) where Professor Simmons says:

“Using a common system in classification is a more rigorous … method than the traditional Chinese approach of determining affiliation primarily with reference to the Chiehyunn system. Chiehyunn/rime table modes of analysis lead to several problems, … (p. 40.)

He then lists four problems he finds with the Chiehyunn as a reference point for dialect classification. The first two amount to the fact that the Chiehyunn categories do not match the categories arrived at by an independent analysis of the dialect data themselves; categories in the common systems established for dialects are “torn asunder” in the Chiehyunn or, conversely, categories apparent from the Chiehyunn do not exist in the common dialect systems. The second two problems amount to the fact that the Chiehyunn has too much detail, but at the same time does not include “a great many words” in use throughout the dialects.

Both of these are legitimate and valid observations, one might even say “complaints,” that could be made about the Chiehyunn. And in avoiding reliance on Chiehyunn categories Professor Simmons has erected his study on sound methodological ground. The implication of this, which ought to be transparent in Chinese dialect studies in general but is often either overlooked or simply ignored, is that there is no a priori reason to assume any kind of direct evolutionary line from the dialect(s) represented by the Chiehyunn to the modern Wu dialects or to any other group of modern dialects. If there is a direct line of descent it must be shown; it
cannot be assumed. In this study Professor Simmons through his methodological rigor has shown in fact that such a line does not obtain for the Wu dialects.

Professor Simmons repeatedly refers to dialects in the Tayhwu area that show both Mandarin and Wu features, – precisely the kind of dialects that he has devised a rigorous and non-arbitrary procedure for classifying, – as ‘transitional’. (See, e.g., the index, p. 316, where there is even an entry for ‘transitional dialects’.) Unless he intends to imply that a dialect can really shift from being Mandarin to being Wu, or vice versa, the word ‘transitional’ is ill-advised and potentially misleading. Taken literally, it implies that there are dialects in the Tayhwu area that are undergoing shifts from having been once Mandarin or Wu to becoming Wu or Mandarin respectively. But dialects do not change their cognate affiliation, in fact dialects (and languages) do not exist except in individual speakers. Speakers may change the dialect they speak, and conceivably by introducing a sufficiently large number of features from an adjacent dialect, they may end up speaking a different dialect, and that new dialect may even be called by the same name as the former one spoken in the same locale by the same speakers. But it is all the same a misconception to think that the dialect has changed. Rather, one dialect has been supplanted by another one, whether called by the same name or not. In the hypothetical case this would have happened gradually and bit by bit instead of in the historically attested way where a new dialect or language moves in and takes over all at once (relatively speaking), as for example, French vis-à-vis the original Celtic language of Gaul. But no one would say that the original Celtic language of Gaul changed to a Romance language. And we should not allow the implication that one Chinese dialect can change into another one either. By definition such things do not happen.

What Professor Simmons means when he says ‘transitional’, of course, is ‘mixed’. He uses this term (the same term used by Schuchardt, vide supra) in pointing out that his set of criteria can be re-designed to create a taxonomic “key” that will... characterize mixed affiliation. It can gauge the nature and degree of Mandarin or Wu influence and similarity in dialects individually otherwise classified as Wu or Mandarin (respectively) by tabulating all the features matched in each dialect type.” (p. 80.)

The key, he says, will also suggest that a dialect is neither Mandarin nor Wu in its original identity when it shows weak or no features of both of those groups.

Among his other contributions in this study, Professor Simmons has introduced a thorough description, including a glossary, of what he calls the “Old Jintarn” dialect. Presumably because this material is from his own fieldwork and not available elsewhere, he gives a “Syllabary of Old Jintarn” in the form of rime-table charts (Appendix 2, pp. 191–194), an “Old Jintarn Lexicon” (Appendix 3, pp. 195–264), and an “English to Old Jintarn Glossary” (Appendix 4, pp. 265–309). This last will be particularly welcomed by anyone who has had to flip pages repeatedly in a dialect glossary or lexicon trying to find an example known or remembered only by its English gloss. In conclusion one can only compliment Professor Simmons for the magnitude of his achievement in this work, moving the study of Chinese dialect classification one giant step ahead and setting a precise and sophisticated methodological standard that will inevitably command the attention of all scholars and students interested in the study of Chinese dialects now and for some time to come.

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13 Among the late nineteenth-century Indo-Europeanists the fact that grammars, and languages themselves, do not exist as independent entities but only within individual speakers was made most forcefully by Hermann Paul. See the discussion in David Lightfoot, op. cit., pp. 77–79 et passim. See also Seuren, op. cit., pp. 93–94.