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A journey through Austronesian and Papuan linguistic and cultural space Papers in honour of Andrew Pawley

edited by John Bowden, Nikolaus P. Himmelmann and Malcolm Ross with the editorial assistance of Edgar Suter



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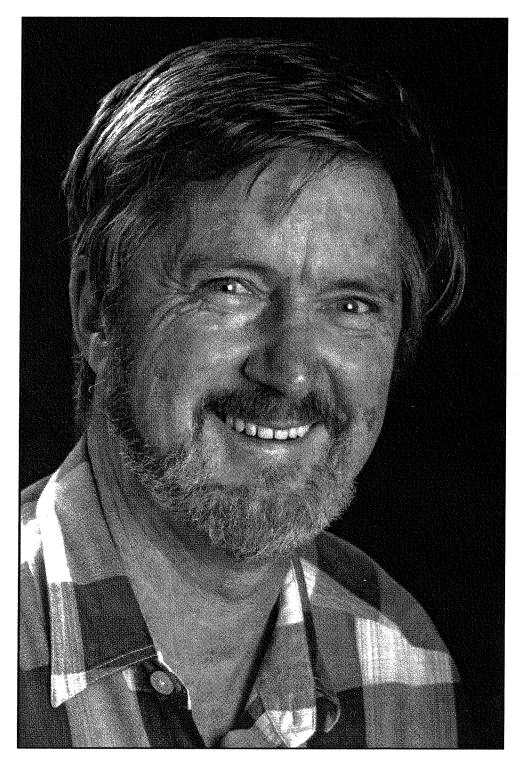
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Andrew Pawley

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Taking up the 'Pawley challenge': speech formulae and linguistic theory

NIKOLAUS P. HIMMELMANN

0 Introduction¹

As briefly explained in the preface, the contributions to this festschrift had to be severely limited in a number of ways in order to keep it within manageable bounds. In line with these limitations, all chapters are primarily concerned with Austronesian or Papuan languages and cultures. But this book would be seriously incomplete as a celebration of Andrew Pawley's achievements in linguistics in particular, if it did not contain an explicit, though minimal acknowledgement of his contribution to contemporary linguistic theory.

The core of his contribution consists in the following challenge: structural linguistics, broadly conceived,² is incapable of handling two interrelated core components of linguistic competence, that is native-like selection (idiomaticity) and native-like fluency. This failure is most obvious in its inability to deal with the formulaic nature of all kinds of linguistic interactions, which are replete with speech formulae of various levels of abstractness (collocations, idioms, patterns for recounting events, etc.). Structural linguistics has failed to develop an adequate descriptive practice for speech formulae and lacks a convincing theoretical account of their structural properties and central role in human language. Such an account, among other things, would have to be psychologically realistic in the sense of being based on a 'profound understanding of how human minds actually organize information' (Pawley 1993:105) as exemplified by the one-clause-at-a-time hypothesis proposed by Pawley and Syder (2000).

In the 1970s, when first articulating the challenge, speech formulae in fact tended to be considered marginal phenomena not at all relevant to linguistic theorising. At the beginning, then, part of the challenge consisted in getting their central role in human language acknowledged within mainstream linguistics. In this regard, there have been

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That is, including not only classical structuralism, especially in its American descriptive guise, but all varieties of generative grammar and its post-generative successors and opponents. Note, however, that most European linguistic structuralisms and their offspring have differed here in at least one important regard which we will turn to in §3.

major changes in the last two decades, so that currently their importance for linguistic theory is no longer in doubt (cf. Pawley 2001b, 2007).

The deeper reason for the failure of structuralist linguistics to successfully deal with speech formulae, Pawley argues, is to be found in its reductionist conception of language. This conception of language, variously called grammarians' language or the (parsimonious) grammar-lexicon model by Pawley, is based on the idea that the linguistically relevant aspect of language is that of a self-contained system of atomic units and combinatorial rules for these units and that the task of linguists consists in capturing this system in as economical and elegant terms as possible. What is ignored here almost completely is the fact that linguistic expressions on all levels of complexity — ranging from simple words to complex sentences — are social institutions, and that in order to arrive at a reasonably coherent and comprehensive view of how languages work, descriptive practice as well as linguistic theories have to incorporate methodologies, theoretical components, and representations for social constraints on linguistic units and knowledge.

The central role of speech formulae in natural language is the paradigm example of such social constraints: while the grammatical rules of a language — as conceived of in structuralist theory — may provide for numerous ways of expressing a given idea or state of affairs, there is usually only a single conventional (= native-like, fluent, idiomatic) way to express it. Hence, to repeat one of Pawley's most often used examples, while there may be many grammatical ways of telling the time in (standard) English (e.g. three quarters before one, twelve and fifteen minutes, eleven plus two hours minus forty five minutes) there is only one native-like way for doing so, using the established formula X minutes/a quarter past/to HOUR (hence a quarter past twelve in this example).

In all his writings on the topic, Pawley emphasises the fact that other conceptualisations of language, which recognise the importance of speech formulae and hence address the issue of languages as social institutions, are not only possible but actually attested. Such alternative approaches — labelled humanists' language, subject matter-model or vernacular view of language by him — can be found in disciplines and professions such as (traditional/commercial) lexicography, anthropology (ritual speech, performance routines), sociology (conversation analysis), language teaching, and ordinary language philosophy. Consequently, the challenge is to further develop structuralist theory and practice so that it becomes compatible with, and incorporates insights and practices from, the subject mattermodels of language developed in these disciplines.

While Pawley was one of the first linguists in the 1970s to point out the limitations of the parsimonious grammar-lexicon model and to emphasise the need for an appropriate place for speech formulae in linguistic theory, other linguists have raised similar concerns, in particular in the late 1970s and 1980s. As a consequence, linguistics now looks quite different compared to the 1960s when Chomsky's Aspects Model was the most advanced and articulated instantiation of the parsimonious grammar-lexicon model and the major target for critics of all persuasions. Thus, the question arises whether and to what extent structural linguistics has taken up the 'Pawley challenge'. This epilogue attempts a very brief and highly tentative first assessment.

One way in which the Pawley challenge differs from similar critiques of the structuralist program pertains to the fact that one of its two major motivations³ was a deep lack of satisfaction with structuralist descriptive practice regarding little-known languages, resulting from his own work on Kalam (Pawley 1993 [first presented in 1980]). Although theory and practice are never fully and neatly separable, it will be useful to single out the question of whether and to what extent descriptive practice regarding little-known languages has changed since Pawley first presented his challenge in 1980. Section 1 will be concerned with this question, while the more comprehensive question regarding changes in the basic conceptualisation of language as the object of linguistic study is taken up in §2 and §3. Section 2 deals with current usage-based approaches, and §3 with the distinction between system and norm, which has been used in quite a number of European structuralist frameworks.

1 Language documentation avant la lettre

The question of whether descriptive practice regarding little-known languages has changed significantly since the 1960s when Pawley did his main descriptive work on Kalam has a straight yes/no answer. That answer is 'no' in that to date no real progress has been made in developing a descriptive practice which allocates a central role to speech formulae and is capable of representing and giving an analytic account of the knowledge underlying native-like selection and fluency.⁴

But the answer is 'yes' in that traditional descriptive practice has been expanded by a new subfield called documentary linguistics which dissociates the agenda for collecting and processing linguistic data from a narrowly structuralist view of language in terms of the grammar-lexicon model. This view is replaced by a view where — in line with the Pawley challenge — the observable linguistic behaviour and native speakers' metalinguistic knowledge are the major concern. Unsurprisingly, Pawley's writings have been a major source of inspiration in arguing for and developing documentary linguistics (cf. for example, Himmelmann 1996:327–329, 1998:164, fn.6).

Note that, strictly speaking, documentary linguistics does not solve the speech formula problem, because it does not provide an analytic-representational format for them. Nevertheless, because they take into account both grammarians' and humanists' views of language, data collections compiled according to the documentary agenda will, ideally, contain many and variegated specimens of formulaic speech and hence furnish the empirical basis for an in-depth study of the structure and use of speech formulae in the documented community.

Pawley's contribution to documentary linguistics, however, is not restricted to providing a crucial argument for its theoretical foundations. He has also been influential with regard to many aspects of the documentary agenda through his exemplary fieldwork practices, developed in collaboration with his teacher and colleague Ralph Bulmer. Of major import here are the following points where his and Bulmer's practices often diverge significantly from those of their contemporaries:

The other major motivation was the joint work with Syder on the syntax and discourse structure of conversational speech as reported in Pawley and Syder (1983a, 1983b, 2000).

N.B. this is not to say that no significant changes have happened in descriptive grammar writing since the 1960s. On the contrary, during the 1970s and 1980s the typological-descriptive framework for writing grammars of little-known languages has emerged and, in many respects, constitutes a significant advance over older descriptive practice (see the contributions in Ameka et al. 2006 for a recent assessment). However, these changes do not, or only very indirectly, address the Pawley challenge.

- interdisciplinarity: Pawley has done all his fieldwork in interdisciplinary partnerships and repeatedly emphasised the need for interdisciplinary cooperation in working on and with little-known speech communities (e.g. Pawley 2001a).
- long-term commitment: Pawley has stayed in contact with the speakers and communities he has worked with over many decades, keeps them abreast of his work and helps out as much as possible in their regularly recurring economic and health crises.
- native speaker involvement: Pawley has trained and encouraged native speakers to become active partners in shaping and carrying out the research agendas concerning their communities. Among other things, this has meant that native speakers have been co-authors of many articles and books (e.g. Majnep and Bulmer 1977, 1990; Pawley and Sayaba 1971, 1982, 2003; Pawley, Gi, Kias and Majnep 2000; Majnep and Pawley 2001), that they have stayed and worked with Pawley for extended periods of time in New Zealand and Australia, and that they have accompanied him to international conferences and meetings.

In short, Pawley is a documentary linguist avant la lettre who has implemented the documentary agenda since his very first fieldwork with the exception that the massive amount of primary data he has compiled to date have not yet been publicly archived in such a way that they can be of use to future generations. However, he has spent a significant part of his professional life in preparing two voluminous dictionaries for his two major field languages, Kalam (Pawley and Bulmer 2003) and Waya Fijian (Pawley and Sayaba 2003), which contain substantial amounts of this data in an edited format.

2 Changes in (mainstream) linguistic theory

Has linguistic theory, and more specifically, grammatical theory responded to the Pawley challenge? At first, the answer would appear to be an unequivocal yes, because there are quite a few more recent theoretical frameworks and approaches which address many of Pawley's concerns (usually without explicitly referring to his work). These approaches have been referred to as usage-based and would include — in addition to much so-called functionalist work — Construction Grammar in all of its different guises. Among the concerns addressed in this work are the following ones:

- Many usage-based approaches, in particular Construction Grammar, place speech formulae at the centre of the theory and claim that all other lexically and grammatically relevant features of natural languages can be captured with the apparatus designed to give a full account of speech formulae.
- For most usage-based approaches, economy and parsimony in representation and conceptual apparatus are not a major concern. That is, they are happy to allow multiple, at least partially overlapping representations for the same unit. This is particularly obvious in Exemplar Theory (Pierrehumbert 2001, Bybee 2006) which assumes that speakers store all tokens of all the linguistic units they hear or produce, at least for some time (tokens not reactivated and reinforced by similar tokens decay over time).
- Most usage-based approaches attempt to be psychologically realistic by incorporating insights from psychology into how the human mind works.

 Usage-based approaches allow for gradience and differences in productivity and frequency on all levels of linguistic structure.

Despite this impressive (and far from comprehensive) list of changes — their proponents would say 'improvements' — in linguistic theory over the last three decades, however, it is debatable whether these changes suffice to meet the Pawley challenge. Here are a few points indicating that they, in fact, fall short of the still more radical changes called for by this challenge.⁵

To begin with, the key concepts of native-like selection and fluency do not play any role in usage-based approaches, neither explicitly nor implicitly. That is, usage-based approaches do not even remotely approach the type of comprehensive model of idiomatic competence that Pawley is envisioning. More importantly, it is not clear whether they are actually striving for such a model. While usage-based approaches differ significantly in the articulation of their theoretical goals and underpinnings and in their deviation from, or revision of, the structuralist agenda, they all tend to stick to some of its, apparently deeply entrenched, methods and ideas.

Thus, for example, usage-based theories and models do not concern themselves with questions of comprehensiveness regarding data coverage. Instead, they continue the Chomskyan 'tradition' of basing far-reaching claims on the analysis of a comparatively minute set of phenomena. Obviously, comprehensive accounts of how a natural language works are no small achievement and require the work of many people for many decades. Hence the point here is not that Construction Grammar or Exemplar Theory to date have not yet produced anything remotely approaching a comprehensive framework for analysing natural languages. The point is whether CG or ET are at all capable of and interested in producing something coming close to such a comprehensive framework.

Usage-based approaches also follow the highly problematic Chomskyan strategy of leaving the precise boundaries of its object of study undefined. Of course, Chomskyan theory targets U(niversal) G(rammar), understood as the genetically inherited code which defines the universal structural core of human language. In this sense, the object of study is clearly defined. But exactly which structural features attested in natural languages manifest or realise this structural core is unclear. More importantly, it is not at all clear that the theory is, at least in principle, capable of providing an unequivocal delimitation of the relevant structural phenomena. Even though usage-based approaches generally do away with the distinction between theoretically 'interesting' core structures and 'uninteresting' peripheral phenomena — which is constitutive of the Chomskyan approach — they still have a similar problem in that they also have to indicate in some way what they consider to be 'the limits of language' and thereby delimit the object their theories and models are targeted at.

And, looking at the types of data actually investigated in these approaches, we may note that indeed, there is only *one* new data type that has been added to the empirical agenda, that is the type of speech formula represented by partially variable phrase- and clause-sized patterns such as What's X doing Y (Kay and Fillmore 1999). Otherwise, however, usagebased approaches largely concern themselves with the same phenomena as have been on the structuralist agenda for most of the 20th century. Thus, to date, they really have not yet started the vast expansion of the empirical agenda for linguistics implied in the Pawley challenge.

In Pawley (2008:§5), he himself points out a few problems and desiderata which will not be repeated here.

Nevertheless, there is no doubt that in some regards usage-based approaches diverge significantly from major tenets of the structuralist agenda, the most important one perhaps being the relaxation, if not total abolition, of the principles of economy and parsimony in representation and conceptual apparatus mentioned above. But this move is also not without its problems because, as a consequence, usage-based approaches tend to neglect, or even explicitly deny, the relevance of structural generalisations, that is genuinely linguistic, as opposed to more broadly functional or cognitive principles or laws of language. Specifically, they tend to neglect the grammar part of the grammar-lexicon model, that is the rules for productively forming new expressions, and greatly expand the list part of this model.⁶

But even if a large part of everyday linguistic behaviour is automatised and consists in replicating more or less fixed expressions of various degrees of complexity, there is also ample evidence that speakers can analyse these expressions and create new ones. Consequently, the Pawley challenge calls for theories and models which account for the fact that native speakers know, and are capable of doing, two things.

- (a) they know and use large numbers of at least partially prefabricated linguistic expressions of various sizes, where 'knowing' importantly includes not only meaning and form of the expression but also its social 'value' (when is it appropriate to use the expression, thereby achieving which interactional goal?).
- (b) they are able to take linguistic expressions of any size apart and create new ones from their parts in such a way that the meaning and intention conveyed by the new expression is understood by their interlocutors.

Hence, a comprehensive and realistic model of language has to contain components for both holistic *and* analytic ('generative') processing of linguistic expressions, as argued by, for example, Wray (2002) for 'the lexicon' and Jacobs (2008) for 'constructions'. Wray (and many others thinking along these lines) remains silent with regard to what exactly the analytic component is supposed to look like and hence how the two components interact. But this is what I take the Pawley challenge to be in its most precise and ambitious reading: to develop the structuralist model of language in such a way that it can be synthesised with concepts and practices from subject matter approaches, thus accounting for linguistic competence both in its highly creative-analytic as well as in its thoroughly entrenched and socially constrained aspects.⁷ A core issue for this enterprise is the question of whether the machinery developed as part of the grammar-lexicon model to account for productive linguistic abilities and knowledge needs a basic and radical overhaul for such a synthesis to become possible, or whether some minor modifications will do.

3 The view from Europe: system versus norm

In concluding these observations on the uptake of the Pawley challenge, it may be useful to note that the basic problem underlying the challenge has been tackled in European linguistics for quite some time, although not really successfully, but in a way that differs in an interesting way from Pawley's approach to it. The key for providing a place for idiomatic competence in a comprehensive theory of language in the European tradition is the distinction between system and norm, which has been intensely debated in European linguistics for much of the 20th century. The language system is conceived of as an abstract system of oppositions and rules which define what a possible linguistic expression in a given language is. The less abstract level of norm pertains to which of these merely possible expressions are actually in common use. Importantly, this notion of norm (or usage) is a descriptive one. It does not pertain to what some authority considers 'good usage' — this would be a prescriptive norm. Instead, it pertains to what is conventional in a given speech community and hence characteristic of the normal linguistic behaviour of its members.

The Pawley challenge and this system/norm distinction differ in many ways due to a fundamental difference in perspective and motivation. The former is empirically motivated and results from work with naturalistic (specifically conversational) data and fieldwork experiences. The European distinction is rooted in the notorious ambiguities of Saussure's distinction between *langue* and *parole* and was developed as a purely theoretical (philosophical) argument (cf. Coseriu 1952/75) with no concern at all for descriptive practice.⁹

A very conspicuous difference between the two approaches is the fact that Coseriu's prime examples for the distinction are phonological ones (Coseriu 1952/75:64–68): 10 phonemes are abstract system units, while (allo-)phones — as conceived of in structuralist accounts — indicate the normal realisations of a given phoneme. Thus, for example, the phoneme /o/ in a 5-vowel system /i e a o u/ in principle allows a number of more open or more closed realisations. But in a given speech community, there will only be a single normal realisation for this phoneme — or a small number of positionally determined

As noted in Pawley (2008), the expansion of the lexicon in usage-based approaches tends to be done with the conceptual tools and machinery of the grammar-lexicon model, hence not taking on board the concepts and practices characteristic of subject matter models and thus not paying due attention to the social constraints on the listed expressions and patterns.

This view can also be found among some proponents of usage-based approaches, for example, Pierrehumbert who writes (2001:139): 'The real challenge arises from the fact that the classical view does provide important insights about the mental representation of phonology. Although a word may have idiosyncratic phonetic properties, it is perceived as made up of units of sound structure which are also shared with other words. [...] Thus, the correct model must describe the interaction of word-specific phonetic detail with more general principles of phonological structure.'

See Coseriu (1952/1975) for the perhaps clearest and most convincing exposition of this distinction. This essay also includes a detailed review of related distinctions proposed in the first part of the 20th century in work by Jespersen, Hjelmslev, Brøndal, Bally, Sechehaye, Martinet, Gardiner, Trubetzkoy, Bühler, Porzig and several others.

This does not mean that the theoretical argument has not had any practical consequences. The fact that phraseology has been a major concern in various schools of European linguistics is, at least in part, motivated by this argument.

Coseriu also provides examples pertaining to other levels of linguistic structure. For inflectional morphology, the difference is illustrated with examples where the system allows two options only one of which is commonly used (e.g. the plural of Rumanian chibrit 'match' is either chibrite or chibrituri, but the later is the more normal/widely used one (1952/75:69); compare also English formulas versus formulae). Interestingly, he also includes the example of overgeneralisations found in children's speech. Thus, for instance, oxes (instead of oxen) is said be a systematically possible but not normally realised plural of English ox. For derivational morphology, Coseriu refers to the well-known distinction between a merely systematically possible and a commonly used and hence traditional formation (compare actor/actress versus doctor/?*doctress). For the syntactic level, he gives two types of examples (1952/75:76): on the one hand, speech formulae and on the other hand, 'normal/unmarked' order in 'free' word order languages such as Latin. A major problem arises with regard to the lexical level (1952/75:77–80) because here it is difficult to make a distinction between lexemes as system units as opposed to lexemes as normative units.

variants — which define native-like speech behaviour. Similarly, in most languages there is no contrast between alveolar and uvular trills as realisations of an /r/-phoneme and hence both are possible realisations, but usually only one is the normal or traditional one.

With regard to phonology, then, it would appear that structuralist linguistics has — right from its beginnings — provided a framework for both system and norm, both the general structure underlying productivity and the specifics characterising idiomatic competence. This is further corroborated by the fact that it has been possible — unproblematically! — to link the basic concepts of this framework with social variables and hence to account for social constraints on the linguistic system (cf. variationist sociolinguistics, especially of the Labovian style). If this is indeed the case, the Pawley challenge does not arise for phonology. And it may be a seemingly circumstantial, but perhaps nevertheless productive new response to the Pawley challenge to further explore the question of why this is so and what, possibly, can be learned from phonology in order to meet the challenge on other levels, in particular derivational morphology and syntax (speech formulae).

References

- Ameka, Felix, Alan Dench and Nicholas Evans, eds, 2006, *Catching language:* the standing challenge of grammar writing. Berlin: Mouton de Gruyter.
- Bybee, Joan L., 2006, From usage to grammar: the mind's response to repetition. Language 82:711–733.
- Bybee, Joan L. and Paul Hopper, eds, 2001, Frequency and the emergence of linguistic structure. Amsterdam: Benjamins.
- Coseriu, Eugenio, 1952/75, System, Norm und Rede. In *Sprachtheorie und Allgemeine Sprachwissenschaft*, 11–101. München: Fink. [Originally published as *Sistema, norma y habla*, Montevideo 1952.]
- Himmelmann, Nikolaus P., 1996, Zum Aufbau von Sprachbeschreibungen. *Linguistische Berichte* 164:315–333.
- —— 1998, Documentary and Descriptive Linguistics. *Linguistics* 36:161–195.
- Jacobs, Joachim, 2008, Wozu Konstruktionen? Linguistische Berichte 213:3-44.
- Kay, Paul and Charles J. Fillmore, 1999, Grammatical constructions and linguistic generalizations: the *What's X doing Y?* construction. *Language* 75:1–33.
- Majnep, Ian S. and Ralph Bulmer, 1977, *Birds of my Kalam country*. Auckland: Oxford and Auckland University Press.
- Majnep, Ian S. and Andrew K. Pawley, 2001, On the value of ecological knowledge to the Kalam of New Guinea: an insider's view. In Luisa Maffi, ed. *On biocultural diversity: linking language, knowledge and the environment*, 343–357. Washington, DC: Smithsonian Institute.
- Pawley, Andrew K., 1993, A language which defies description by ordinary means. In William Foley, ed. *The role of theory in language description*, 87–129. Berlin: Mouton de Gruyter.

- —— 2001a, Some problems of describing linguistic and ecological knowledge. In Luisa Maffi, ed. *On biocultural diversity: linking language, knowledge and the environment*, 228–247. Washington, DC: Smithsonian Institute.
- —— 2001b, Phraseology, linguistics and the dictionary. *International Journal of Lexicography* 14(2):122–134.
- 2007, Developments in the study of formulaic language since 1970: a personal view. In Paul Skandera, ed. *Phraseology and culture in English*, 3–34. Berlin: Mouton de Gruyter.
- —— 2008, Grammarians' languages versus humanists' languages and the place of speech act formulas in models of linguistic competence. Draft for Symposium on Formulaic Language, University of Wisconsin at Milwaukee, 17–20 April 2007.
- Pawley, Andrew K. and Timoci Sayaba, 1971, Fijian dialect divisions: Eastern and Western Fijian. *Journal of the Polynesian Society* 80:405–436.
- —— 1982, A sketch grammar of the Nabukelevu language of Kadavu. Te Reo 25:35–93.
- —— 2003, Words of Waya: a dictionary of the Wayan dialect of the Western Fijian language. Printout in circulation, 1250pp. To be published by Pacific Linguistics.
- Pawley, Andrew K. and Ralph Bulmer, 2003, *A dictionary of Kalam with ethnographic notes*. Printout, 750pp. Department of Linguistics, Research School of Pacific and Asian Studies, The Australian National University.
- Pawley, Andrew K., Simon P. Gi, John Kias and Ian S. Majnep, 2000, Hunger acts on me: the grammar and semantics of bodily and mental processes in Kalam. In Videa P. de Guzman and Byron W. Bender, eds *Grammatical analysis in morphology, syntax, and semantics: studies in honor of Stanley Starosta*, 153–185. Honolulu: University Hawaii Press.
- Pawley, Andrew K. and Frances Syder, 1983a, Two puzzles for linguistic theory: nativelike selection and nativelike fluency. In Jack C. Richards and Richard W. Schmidt, eds *Language and communication*, 191–227. London: Longman.
- —— 2000, The one clause at a time hypothesis. In Heidi Riggenbach, ed. *Perspectives on Fluency*, 167–191. Ann Arbor: University of Michigan Press.
- Pierrehumbert, Janet B., 2001, Exemplar dynamics: word frequency, lenition and contrast. In Joan Bybee and Paul J. Hopper, eds *Frequency effects and the emergence of linguistic structure*, 137–157. Amsterdam: John Benjamins.
- Wray, Alison, 2002, Formulaic language and the lexicon. Cambridge: Cambridge University Press.