

Firth's early phonological views and prosodic analysis: a reply to Coleman (2004)

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In a previous issue of this journal, John Coleman (2004) reviewed the written-up version of a poster I presented at the 15th International Congress of Phonetic Sciences, Barcelona (Battaner-Moro 2003, henceforth BM). The aim of the poster was to discuss the evolution of Firthian prosodic analysis. In his review, Coleman derives from it 'an ignorance or a neglect of Firth's publications prior to 1948' on my part (p. 211). He focusses his criticisms on the following three statements:

- (1) 'Firth never did prosodic analysis.'
- (2) 'There is a complete absence of programmatic work in Firth's works.'
- (3) 'Prosodic analysis was developed by the members of the London School and not at all by John Firth.'

I am grateful to John Coleman for his time and interest in discussing my poster, which was one outcome of research carried out for my Ph.D. thesis (Battaner-Moro 2002), at, among other places, the School of Oriental and African Studies, the London School of Economics, and the University of York, which houses the Firthian Phonology Archive (<http://www.york.ac.uk/depts/lang/fpa/>). I believe some of Coleman's criticisms are based on a misunderstanding of my position – which admittedly was presented in highly condensed form in BM (but see Battaner-Moro 2002, 2005) – and would like to take this opportunity to clarify the above statements (see also Battaner-Moro 2005).

By stating that 'Firth never did prosodic analysis' and that 'prosodic analysis was developed by the members of the London School and not at all by John Firth', I wanted to focus on the fact that after Firth introduced the term 'prosody' in the article 'Sounds and prosodies' (Firth 1948) – and therefore after the notions '(Firthian) prosodic analysis' and 'analysis along prosodic lines' came into being – he himself did not employ the technique that he had sketched and briefly exemplified in 'Sounds and prosodies' in phonological analysis. What I wanted to make clear by stating that 'there is a complete absence of programmatic work in Firth's works' is that Firth's published work does not contain a comprehensive outline, or 'program', of prosodic analysis. In order to see prosodic analysis applied to well-defined collections of language material and to formulate a set of principles underlying the technique of prosodic analysis, we must look to the work of Firth's co-workers, in particular W. S. Allen, J. Carnochan, E. J. A. Henderson, F. R. Palmer, R. K. Sprigg and N. Waterson. These observations are, as far as I can see, uncontroversial in commentary on Firthian phonology (e.g. Palmer 1970, Anderson 1985, Ogden & Kelly 2003), but they deserve to be emphasised because

much commentary on prosodic analysis, including that which appeared when Carnochan, Henderson, Palmer, Sprigg, Waterson and others were still active in developing the technique (e.g. Langendoen 1968, Sommerstein 1977, Sampson 1980, Goldsmith 1992), refers primarily to Firth's work, thus under-representing important aspects of the technique, for example, the notion of exponency, on which more below.

As I made clear in BM, my own research had approached the evolution of prosodic analysis from a theoretical and a novel, institutional perspective. The latter leads to a reappraisal of the relative contributions of Firth and his co-workers to the development of prosodic analysis independently of their published work, and strengthens the case for considering the development of prosodic analysis as carried out more by Firth's co-workers than by Firth himself. For example, a consideration of teaching duties at the School of Oriental and African Languages (SOAS) in the period between 1945 and 1956, when Firth retired, reveals that Whitley, Henderson and Carnochan were responsible for the phonetics and phonology teaching, while Firth concentrated on teaching general linguistics. This is not to deny or ignore the fact that many of the main features of prosodic analysis originate in Firth's own work, including work prior to 'Sounds and prosodies' (1948).

However, there are several reasons for treating Firth's early work on phonology separately from later work by his co-workers applying the technique of prosodic analysis – and in fact from 'Sounds and prosodies'. First of all, statements of the type Coleman makes on 'early expression[s]' of or 'formulation[s] of' theoretical concepts stated explicitly later on, or on 'more or less synonymous' concepts from different theoretical contexts, are necessarily based on interpretation with hindsight, and are, therefore, in Coleman's own terms, attempts to rewrite history. My own three statements are not based on interpretation with hindsight; my approach takes seriously Hymes & Fought's (1966: 904) statement that '[a] cardinal tenet in historiography is that one understand an approach in its own terms, understand its answers in terms of the questions it itself asked, and understand the question in terms of the times' (see also Malkiel 1969 and Koerner 1978, among others). In this particular case, I insist that Firth should not be said to have been 'doing prosodic analysis' before 'Sounds and prosodies' – however interesting and important his work from this era is for our understanding of the development of Firth's phonological views.

It is important to see Firth's phonological work from the 1930s in a historical context. Coleman asserts that 'the two main characteristics of Firthian phonology that distinguish it most sharply from phonemic phonology are (a) the polysystemic approach, and (b) the importance placed on prosodies as the principal elements of phonological representations' (p. 211). From a modern point of view, this is certainly accurate. However, it should be noted that the main feature with which Firth himself distinguished his work from contemporary phonology in his early papers was his interpretation of 'function', in particular his distinction between the 'minor' and 'major' function – the former associated with phonetic distinctions; the latter with grammatical distinctions (Firth 1935a, b). Coleman's citation from Firth (1935a/1957a: 20), on page 212, illustrates Firth's concept of 'minor function': Firth is setting up 'phonetic substitution-counters' (e.g. Firth 1935a: 24) in a type of analysis that shows marked similarities to phonemic analysis with its practice of formulating minimal pairs or sets (see Anderson 1985: 183). While much of Firth's early phonological work dealt specifically with minor function (in particular Firth 1935b), Firth later explicitly abandoned the distributionalist approach employed there (Firth 1957c/Palmer 1968: 187, note 53). The distinction between minor and major function features neither in 'Sounds and prosodies' nor in the work of Firth's co-workers: in particular, the phonological categories 'prosody' and 'phonematic unit' cut across the distinction. In this important respect, then, Firth's early work on phonology is distinct from his own thinking after 'Sounds and prosodies' and from work by his co-workers in prosodic analysis.

When we consider the two features of prosodic analysis that Coleman refers to – which have been taken up by modern phoneticians and phonologists, for example, Hawkins & Smith (2001) for polysystematicity and Kohler (1999) for prosodies – in a historical

context, two observations are in order. First, during the 1930s, the treatment of features that may be considered non-segmental was of great interest to many phonologists, e.g. Trubetzkoy's (1939/1969) 'Grenzsignale', Harris's (1944) 'simultaneous components', and the extensive discussions on juncture, intonation and accent in this period (see Anderson 1985 for discussion). In other words, Firth's concept of prosodic features partly grew out of his thoughts on prominent phonetic and phonological issues of the time.

Secondly, several of Firth's writings on these features (Firth 1933, 1936a, b, 1938, 1942, and Firth & Rogers 1937) are concerned specifically with the Romanisation of Eastern languages – an area of research in which Firth published little after 'Sounds and prosodies'. Notably, Firth & Rogers (1937), the importance of which for our understanding of the evolution of prosodic analysis is generally acknowledged (see Palmer 1970), ends with a 'sample telegram' applying the proposed method of transcription. This work is therefore driven partly by practical considerations, such as economy of representation and ease of reading. Such considerations do not underlie the work by Firth's co-workers, who were thus free to develop a variety of notational devices absent from Firth's work, and adopt an *ad hoc* approach to the statement of phonological categories which is not present in Firth's early papers. This led to debates in the prosodic analysis literature on, for example, economy and redundancy in phonological statement (Allen 1954, 1957; Palmer 1956), notation in phonological representation (Henderson 1951, Palmer 1955, Sprigg 1957) and the status of zero categories (Henderson 1949, Allen 1957, Sprigg 1957) – matters on which little, if any, direction is found in Firth's own work. Again, then, there is reason to consider Firth's early work on phonology distinct from work by his co-workers in prosodic analysis.

Of course it is possible, with hindsight, to interpret early concepts in Firth's work in terms of later ones. One concept that Coleman does not mention, for example, is exponency. The term 'exponent' and its derivatives feature prominently in work in prosodic analysis (Sprigg 1955, Palmer 1956, Waterson 1956, Henderson 1966), and the concept of exponency as a declarative relation between the levels of phonetic and phonological representation has continued to be of interest to modern phonologists, in particular in the area of Declarative Phonology (Ogden 1995, Carter 2003). While Firth & Rogers' (1937) outline of the phonetic correlates of their transcription terms shows SIMILARITIES to the phonetic descriptions of early work in prosodic analysis (Henderson 1949, 1951; Carnochan 1951) and to the exponency statements of later work (starting with Sprigg 1955), Firth himself did not explicitly discuss exponency until 1957 (Firth 1957b, c) – and then only in very general terms. Indeed, as pointed out by Ogden (1995: 44):

Much of what it is of value in the theory of phonetic exponency is remarkable by its absence from Firth's writings... The vast majority of commentators on the Firthian tradition have failed in this regard, concentrating almost exclusively on Firth's own work. This emphasis on Firth (who can be seen primarily as a theorist) at the expense of the practitioners has led to the disastrous result that the theory of phonetic exponency has not received its due attention.

To sum up, contrary to Coleman's impression, I do not wish to 'rewrite history' and deny the founding role of Firth in the evolution of Firthian prosodic analysis. However, for the reasons outlined above, I maintain that Firth's early 'prosodic approach' should not be equated with the 'prosodic analysis' practised – and practically developed – by his co-workers. In particular, the suggestion that in his published work Firth DID PROSODIC ANALYSIS, implicit in Coleman's discussion and much existing commentary, encourages a rather limited understanding of prosodic analysis, which I believe should be avoided. Prosodic analysis is still relevant to phoneticians and phonologists today. I have already referred to Declarative Phonology, which takes explicit cues from prosodic analysis (see in particular Broe's 1991 unification-based formalisation of Allen 1957). I have also referred to Hawkins & Smith (2001), who advocate a polysystemic approach to speech processing (see also Hawkins 2003), and Local (2003: 336) points towards prosodic analysis in developing 'a robust

phonetic and phonological infrastructure for those approaches to speech perception that seek to make use of the rich phonetic detail available in the speech signal'. To see the complexity and elegance of polysystemic phonological statements which make no distinction between rules and representations, we must look first and foremost to the work of the prosodic analysts, rather than to Firth. In addition, prosodic analysis has been successfully applied in the fields of clinical phonetics and child phonology (Waterson 1987, Kelly & Local 1989, Wells 1994). Wells' (1994) case study of junction in developmental disorder illustrates my main point: while Wells acknowledges Firth's inspiration and suggestions with regard to phonological statement, he takes his METHOD from Sprigg (1957) – a key work in prosodic analysis.

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References

- ALLEN, W. S. (1954). Retroflexion in Sanskrit: prosodic technique and its relevance to comparative statement. *Bulletin of the School of Oriental and African Studies* **16**, 556–565.
- ALLEN, W. S. (1957). Aspiration in the Harauti Nominal. *Studies in Linguistic Analysis* (Special volume of the Philological Society). London: Basil Blackwell.
- ANDERSON, S. R. (1985). *Phonology in the Twentieth Century*. Chicago, IL: The University of Chicago Press.
- BATTANER-MORO, E. (2002). John R. Firth y la Escuela de Londres: principios teóricos del funcionalismo británico. Ph.D. thesis, Universidad de Salamanca.
- BATTANER-MORO, E. (2003). The Department of Phonetics and Linguistics at SOAS: The institutional life of Firthian prosodic analysis versus its official history. In Solé, M. J., Recasens, D. & Romero, J. (eds.), *Proceedings of the 15th International Congress of Phonetic Sciences* (vol. 3), 2681–2684.
- BATTANER-MORO, E. (2005). J. R. Firth and the London School: a historical and theoretical approach to Firthian prosodic phonology. In Kelly, J. & Plug, L. (eds.), *Seventy Years of Firthian Phonology: Prospect and Retrospect* (York Papers in Linguistics Series 2), 221–258. York: Department of Language and Linguistic Science, University of York.
- BROE, M. (1991). A unification-based approach to prosodic analysis. In Bird, S. (ed.), *Declarative Perspectives on Phonology* (Edinburgh Working Papers in Cognitive Science, vol. 7), 27–44.
- CARNOCHAN, J. (1951). A study of quantity in Hausa. *Bulletin of the School of Oriental and African Studies* **13**, 1032–1044. [Reprinted in Palmer (1970: 91–103).]
- CARTER, P. (2003). Extrinsic phonetic interpretation: spectral variation in English liquids. In Local, J. & R. Ogden & R. Temple (eds.) *Phonetic Interpretation: Papers in Laboratory Phonology VI*, 237–252. Cambridge: Cambridge University Press.
- COLEMAN, J. (2004). The development of J. R. Firth's phonological views in the 1930s. *Journal of the International Phonetic Association* **34.2**, 211–213.
- FIRTH, J. R. (1933). Notes on the transcription of Burmese. *Bulletin of the School of Oriental Studies* **7**, 137–140.
- FIRTH, J. R. (1935a). The technique of semantics. *Transactions of the Philological Society*, 36–72. [Reprinted in Firth (1957a: 7–33).]
- FIRTH, J. R. (1935b). The use and distribution of certain English sounds: phonetics from a functional point of view. *English Studies* **17**, 2–12. [Reprinted in Firth (1957a: 34–46).]
- FIRTH, J. R. (1936a). Phonological features of some Indian languages. In Jones, D. & Fry, D. B. (eds.), *Proceedings of the Second International Congress of Phonetic Sciences, Held at University College, London*, 176–182. [Reprinted in Firth (1957a: 47–53).]

- FIRTH, J. R. (1936b). Alphabets and phonology in India and Burma. *Bulletin of the School of Oriental Studies* 8, 517–546. [Reprinted in Firth (1957a: 54–75).]
- FIRTH, J. R. (1938). A practical script for India. *Indian Listener* 3, 356–357.
- FIRTH, J. R. (1942). Alphabets for Indian languages. In Jones, D. (ed.) *The Problem of a National Script for India*, 12–17. Hertford.
- FIRTH, J. R. (1948). Sounds and prosodies. *Transactions of the Philological Society*, 127–152. [Reprinted in Firth (1957a: 120–138).]
- FIRTH, J. R. (1957a). *Papers in Linguistics 1934–1951*. London: Oxford University Press.
- FIRTH, J. R. (1957b). Introduction. *Papers in Linguistics 1934–1951*, x–xii. London: Oxford University Press.
- FIRTH, J. R. (1957c). A synopsis of linguistic theory, 1930–1955. *Studies in Linguistic Analysis* (Special issue of the Philological Society; 3rd edn.), 1–32. Oxford: Basil Blackwell. [Reprinted in Palmer (1968: 168–205).]
- FIRTH, J. R. & ROGERS, B. B. (1937). The structure of the Chinese monosyllable in a Hunanese dialect. *Bulletin of the School of Oriental Studies* 8, 1055–1074. [Reprinted in Firth (1957a: 76–91).]
- GOLDSMITH, J. (1992). A note on the genealogy of research traditions in modern phonology. *Journal of Linguistics* 28, 149–163.
- HARRIS, Z. S. (1944). Simultaneous components in phonology. *Language* 20, 181–205.
- HAWKINS, S. (2003). Roles and representations of systematic fine phonetic detail in speech understanding. *Journal of Phonetics* 31, 373–405.
- HAWKINS, S. & SMITH, R. (2001). Polysp: a polysystemic, phonetically-rich approach to speech understanding. *Italian Journal of Linguistics – Rivista di Linguistica* 13, 99–188.
- HENDERSON, E. J. A. (1949). Prosodies in Siamese. *Asia Major* 1, 189–215. [Reprinted in Palmer (1970: 27–53).]
- HENDERSON, E. J. A. (1951). The phonology of loanwords in some South-East Asian languages. *Transactions of the Philological Society*, 131–58. [Reprinted in Palmer (1970: 54–81).]
- HENDERSON, E. J. A. (1966). Towards a prosodic statement of Vietnamese syllable structure. In Bazell, C. E., Catford, J. C., Halliday, M. A. K. & Robins, R. H. (eds.), *In memory of J. R. Firth*, 163–197. London: ongan.
- HYMES, D. & FOUGHT, J. (1966). American structuralism. In Sebeok, T. (ed.), *The Historiography of Linguistics, vol. 2* (Current Trends in Linguistics 13), 903–1170. The Hague: Mouton.
- KELLY, J. & LOCAL, J. (1989). *Doing Phonology*. Manchester: Manchester University Press.
- KOHLER, K. J. (1999). Articulatory prosodies in German reduced speech. *International Congress of Phonetic Sciences 14*, San Francisco, 89–92.
- Koerner, E. F. K. (ed.) (1978). *Toward a Historiography of Linguistics: Selected Essays* (Studies in the History of Linguistics). Amsterdam & Philadelphia: John Benjamins.
- LANGENDOEN, T. F. (1968) *The London School of Linguistics: A Study of the Linguistic Views of B. Malinowski and J. R. Firth*. Cambridge, MA: MIT Press.
- LOCAL, J. (2003). Variable domains and variable relevance: interpreting phonetic exponents. *Journal of Phonetics* 31, 321–339.
- MALKIEL, Y. (1969). History and histories of linguistics. *Romance Philology* 22, 530–566.
- OGDEN, R. (1995). An exploration of phonetic exponency in Firthian prosodic analysis: form and substance in Finnish phonology. Ph.D. thesis, University of York.
- OGDEN, R. & KELLY, J. (2003). Carnochan, Scott & Whitley's prosodic analysis of French regular verbs. *Transactions of the Philological Society* 101, 57–80.
- PALMER, F. R. (1955). The 'broken plurals' of Tigrinya. *Bulletin of the School of Oriental and African Studies* 17, 548–566. [Reprinted in Palmer (1970: 133–151).]
- PALMER, F. R. (1956). 'Openness' in Tigre: a problem in prosodic statement. *Bulletin of the School of Oriental and African Studies* 18, 561–577. [Reprinted in Palmer (1970: 133–151).]
- PALMER, F. R. (ed.) (1968). *Selected papers of John R. Firth*. London: Longmans.
- PALMER, F. R. (ed.) (1970). *Prosodic Analysis*. London: Longmans.
- SAMPSON, G. (1980). *Schools of Linguistics*. London: Hutchinson.
- SOMMERSTEIN, A. (1977). *Modern Phonology*. Baltimore, MD: University Park Press.

- SPRIGG, R. K. (1955). The tonal system of Tibetan (Lhasa dialect) and the nominal phrase. *Bulletin of the School of Oriental and African Studies* **17**, 134–153. [Reprinted in Palmer (1970: 112–132).]
- SPRIGG, R. K. (1957). Junction in spoken Burmese. *Studies in Linguistic Analysis* (Special volume of the Philological Society), 104–138. London: Basil Blackwell.
- TRUBETZKOY, N. S. (1939/1969). *Principles of Phonology*. Berkeley, CA: University of California Press.
- WATERSON, N. (1956). Some aspects of the phonology of the nominal forms of the Turkish word. *Bulletin of the School of Oriental and African Studies* **18**, 578–591. [Reprinted in Palmer (1970: 174–187).]
- WATERSON, N. (1987). *Prosodic Phonology: The Theory and its Application to Language Acquisition and Speech Processing*. Newcastle upon Tyne: Grevatt & Grevatt.
- WELLS, W. (1994). Junction in developmental speech disorder: a case study. *Clinical Linguistics & Phonetics* **8**, 1–25.