M. A. K. Halliday and William S. Greaves. *Intonation in the Grammar of English*. London, UK/Oakville CT: Equinox 2008, xiii+224, with CD (ISBN 978-1-904768-15-9)

Reviewed by Paul Tench (Cardiff University)

I have always appreciated the way that Halliday integrated intonation with the rest of language — into the phonology, grammar and discourse structure of a language, unlike Kingdon (1958) and O'Connor & Arnold (1961/1973) who treated it in almost total isolation from the rest of language; for Pike (1945, 1967), intonation was part of the total phonology of the language, but only incidentally related to grammar and discourse; Crystal progressed from a merely affective motivation in intonation (Crystal 1969) to a more balanced position with grammar (Crystal 1975); the early generativists regarded intonation as a mere appendage to syntax and not as an independent set of systems providing information structure or attitudinal expression; etc. Halliday had seen intonation as realizing all these functions and was largely responsible for setting tonality, tonicity and tone as the three, now conventional, pillars of the edifice — the division of spoken discourse into prosodic segments of intonation, the identification of the nucleus (tonic) in each segment, and the classification of significant pitch movement at each nucleus/tonic, respectively. However, the standard treatments (Halliday 1967; 1970) were long out of print, and the summary of intonation 'beside the clause' in Halliday (1994) was scattered in the new edition of Halliday & Matthiessen (2004). At long last, a new presentation of his description of English intonation has appeared.

This new work is aimed at both students who are novices in the study of English (cf Halliday 1970), and to scholars who are *au fait* with trends and approaches in phonology and linguistics in general (cf Halliday 1967).

Chapter 1 is an essay on the place of sound in human experience and its biological and social evolution into language. Language is 'stratified' into meanings, (lexicogrammatical) forms, phonological patterns "which enable the communication of those forms", and phonetic substance. The concern of the book is "to show the place that one particular kind of patterning, the intonation system in the phonology, has within the whole indivisible language system" (p. 5). The reader is immediately invited to participate in a practical task to sharpen their thinking about sound: we are to analyze our reactions to 9 different sounds according to a 6 item questionnaire. We are assured that our view of sound will change as we engage with the book, and so will what we hear!

Functions of Language 17:2 (2010), **255–265**. DOI 10.1075/fol.17.2.05ten
ISSN 0929–998X / E-ISSN 1569–9765

The student is led to consider different ways in which sound can be investigated: from the point of view of physicists, biologists, engineers, philosophers and those specialists who engage with sound in language (e.g. sociolinguists, sociologists, psychologists, clinicians, therapists and audiologists). The linguist investigates the sound of language as a resource for the construction of meaning.

The scholar, and the student perhaps, are then invited to consider different approaches to English intonation: de Pijper and 't Hart's studies with 6 "ensembles" of pitch variations that constitute the intonation system of English; a nicely concise presentation of ToBI ('tone and break indices'); very brief introductions to metrical and autosegmental approaches; and an attempt at an elucidation of Optimality Theory, which seems actually to elude the authors as it does many others!

Then come the defining characteristics of systemic functional linguistics. Sound is a resource for the construction of meaning. Language is able to create meaning via the lexicogrammar, with semogenic potential of new combinations of sound and meaning. Language construes human experience; language enacts human relationships; and language engenders human discourse. Language is a network of systems, each containing sets of options. The sound systems constitute the phonology of a language. Language is both resource and realization. And so the setting of a description of English intonation is laid out.

But first we proceed to a seminar on sound representation in Chapter 2. Here the student learns how sound is represented on paper and how two- and three-dimensional graphs are interpreted. Wave forms, periodic and non-periodic sound, frequency and pitch, intensity and loudness, and spectrograms — all eventually leading to the analysis of pitch in intonation. The seminar is accompanied on CD by small segments of recorded speech, which are helpful, but not essential.

Then in Chapter 3 we are introduced to the phonological perspective. Phonology is the study of how sound is organized as a set of systems in a given language; prosody is that aspect of phonology that deals with feet and tone units which provide the patterns of rhythm and intonation. The tone unit — *nota bene* no longer called the tone 'group', no doubt a concession to prevailing conventions — is characterized by pitch contours of various kinds and has a structure of Tonic and (optional) Pretonic. The familiar TONE system is presented, simple and compound tones (1, 2, 3, 4, 5, 13, 53), with familiar graphics and labels, except that Tone 3 is now labelled 'level rising' rather than 'low rising'. The 'logical' meanings of tones are demonstrated in the familiar way by reference to co-ordination and subordination, but the meanings of the marked sequences are not specified (p. 47–48). Likewise the 'interpersonal' meanings, but strangely the fall for *wh*-questions is not explained. The attempt to explain why 'key' is a *grammatical* system (p. 51–52) is difficult to follow, and students might just as well ignore it. TONICITY then follows with notes on salience and focus, and a bit more information on the

information unit. It was not clear at the beginning of this chapter when rank scales were defined what exactly the relationship was between the (lexicogrammatical) information unit and the clause; now (p. 55) we are told that whereas they are not identical, they are co-extensive in unmarked cases. Explanations of Given and New information then follow, with an attempt to explain the awkward case of ambiguity of information that precedes the tonic: "The phonological system does not determine this" (p. 57). But a partial explanation actually follows on p. 58 through a difference of pitch:

A: What did you do today?
B: // $1_{\wedge}$ I /bought a /new com*/**pu**ter // (with a "jump up in pitch on the word *bought*")

A: What did you purchase?
B: // $1_{\wedge}$ I /bought a /new com*/**pu**ter //

I maintain that in the first case, B would use a 'neutral' mid level pretonic, indicating 'broad' focus, but in the second case, B would use a low level pretonic on *bought* to indicate its givenness. The recordings do not help here, as they are identical for B's two responses; however, the recording at 6.3 illustrates it satisfactorily and so does the discussion around 7.4l (p. 173). Also a mysterious asterisk has joined the transcription which is nowhere explained! Finally, TONALITY is introduced with that familiar lack of congruity of borders with information units, which most other scholars find strange; see the discussion in Tench (1990: 155–166). Marked tonality is rather oddly illustrated by an example of a researcher talking to a bonobo ape; she is, of course, quite entitled to do so, but it left me wondering …!

Then the reader is introduced in Chapter 4 to the principles and apparatus of systemic-functional linguistics: paradigmatic systems, strata ('levels of analysis'), metafunctions, types of structure and, eventually, their significance in a specifically systemic representation of phonology. All this explains the 'shape' of a systemic-functional approach to intonation. The 'content:expression' duality of the linguistic sign is developed for intonation with expressions like: "the falling tone realizes a complex feature consisting of declarative realizing 'statement'" (p. 64). This is most helpful as a way of trying to dispel the confusion of labels that exists in other treatments of intonation, especially in language textbooks, that do not distinguish between, say, 'interrogative' and 'question'; it avoids the misleading claims, for example, that rising tones always (or don't always) indicate interrogatives/questions, etc. TONE is shown (p. 73) to realize meanings of the interpersonal and logical metafunctions, and TONICITY those of the textual. What about the experiential metafunction? Doesn't intonation play a role there? Apparently not. It must not, of course, be confused with the lexical tone systems of 'tone languages' (p. 74). Yet

it could be argued that TONALITY, because it corresponds to information units which themselves carry the representation of the experiential in the structuring of the clause, does in fact do so. The chapter also carries a brief note on intonation in infants' language development; the authors often relate the evolution of language in humans as parallel to the development of language in infants.

Why is it that intonation has always featured so strongly in the systemic-functional approach to language (even though phonology at word level has not)? Because intonation's primary role in infant language has always been recognized; because intonation is a meaning-making system; because there is an iconic dimension to it in contrast to the 'standard' notion that phonology is purely arbitrary; because it realizes interpersonal meanings, which systemicists have always highlighted; because intonation systems display proportionalities very clearly; because intonation features are relatively stable; and because intonation allows for powerful generalizations which are available for a wide range of applications (p. 79).

This is followed very commendably with a tutorial on analyzing the intonation, and interpreting its meaning, in two short segments of a conversation. A holistic analysis is attempted: mood choices, lexical key (annoyingly, there is no reference back to the earlier presentation for the reader to check on what that means, and even more annoyingly, there is no index at the end of the book to look it up), and tone choices. Surprisingly, tonicity choices are not discussed even though there is a simple example of marked tonicity in

//2 **ev**er / smoked //

and tonality is not dealt with either, even though there are plenty of examples of congruence of information/tone units and clauses.

It is not an easy tutorial for a newcomer to follow all by themselves. The first segment is straightforward enough, although the rise elements in the spectrograms of the two fall-rises (Figures A.I.1d and e) do not match the icon of Figure A.I.1c, and the recording of the final utterance is so indistinct that the reader has to take the authors' analysis on trust.

The second segment is certainly more challenging. There is a long discussion of *um*, which a newcomer may well find difficult to follow, even though it is clearly intended to enlighten them on principles of systemic-functional description and practice. There also seems to be a discrepancy between transcription (where *um* is included within a single tone unit with *what about smoking*) and discussion (which treats *um* as a separate unit). It is a good idea to present the alternatives to what the speaker chooses from the tone system, but it becomes rather complicated with the elliptical wording that they have chosen.

I agree that "These little fragments illustrate how much meaning is embodied in the prosodic patterns of ordinary speech" (p. 94), but as a teacher I think I

would have used two more clearly articulated fragments for an initiation. I also think the presentation could have been executed more helpfully; for instance, each utterance could have been presented, with description, discussion, transcription and displays together, with a single 'play' icon (not two) on a single side of a page, progressively through the dialogue.

We now proceed to Part II "Intonation and Meaning", for a closer look at the way the intonation systems operate in English to express different kinds of meaning. Chapter 5 introduces us to meanings in the textual, interpersonal and ideational metafunctions. The 'textual' meanings in the "flow of discourse" involve TONALITY and TONICITY and are presented in the conventional way familiar to all who have adopted Halliday's description and transcription, except that *neutral* tonality and tonicity are now referred to as 'unmarked'. The boundaries of tone units (remember, not tone *groups* now!) still look clumsy and odd to most other phonologists as they do not coincide neatly with lexicogrammatical units: witness the transcription of part of the illustrative dialogue 5.1.1e (p. 100):

> // yes ˄ I // joined / ˄/ ˄ I was // in what they / called the / local terri/torials ˄ like a ci//vilian / army be//fore the /war ˄ I was apprenticed engi/neer at a // big truck and / bus factory ˄ called // Leyland / Motors //

Yet, listening to the recording, it seems to me most natural to distribute the boundaries on the basis of phonetic criteria as follows:

> // yes // ˄ I joined … // ˄ ˄ I was in what they called the local territorials // ˄ like a civilian army // before the war // ˄ I was apprenticed engineer // at a big truck and bus factory // ˄ called Leyland Motors //

The phonetic basis of such boundaries now coincides neatly with lexicogrammatical boundaries and seems more appropriate. (NB My transcription includes a tone unit *I joined* that the speaker clearly abandoned; there is no tonic, and he re-starts his message with *I was in* …) This would no doubt have been reflected in Crystal's and Brazil's transcription too, and that of many others.

Given and new information and focus are explained in terms of TONICITY in the conventional way, but it is rather awkward in the context of a turn which specifically alludes to information already shared, *you were telling me that you were in the army.* (There is also a mysterious reference to a *Section 2.5 below* on p. 103, which I could not find!)

Interpersonal meanings are realized in the TONE system; they are presented much as in Halliday (1967; 1970), but there are a couple of new combinations of tone and mood. Here is the list:

Statements:

(a) declarative + Tone 1: unmarked
(b) declarative + Tone 4: "seems, or seemed, certain, but isn't" (reservation)
(c) declarative + Tone 5: "seems, or seemed, uncertain, but isn't"
(d) declarative + Tone 2: query; challenge; response to a question asked or implied
(e) declarative + Tone 3: "uncommitted"
(f) declarative + Tone 13: option (a) with an appended "secondary focus"
(g) declarative + Tone 53: option (c) with an appended "secondary focus"
(h) "statements realized by other than declarative clauses"

Type (e) is described differently from Halliday (1967; 1970: "acceding to request … reassurance") and more widely and seems to take account of Brazil's 'oblique' tone. Quite what type (h) means is not clear, especially in the light of its re-appearance later.

Questions:

(a) polar interrogative + Tone 2: unmarked;
(b) non-polar interrogative + Tone 1: unmarked
(c) polar interrogative + Tone 1: "demand for an answer"
(d) polar interrogative + Tone 5: demand as *yes but …*
(e) non-polar interrogative + Tone 2: "milder" (*may I ask?*)
(f) non-polar interrogative + Tone 2, with marked tonicity: 'echo question'
(g) non-polar interrogative + Tone 5, with marked tonicity: (c) + (e)
(h) questions realized by other than interrogative clauses, as Statement types (d) and (a), but the latter is ambiguous (p. 118).

Interrogatives with Tone 5 are new, as is the ambiguous Question as Statement type (a).

Offers:

(a) all primary mood types + Tone 3: unmarked
(b) all primary mood types + Tone 13: major tonic on subject (the person offering)

This is an innovation over Halliday (1967; 1970).

Commands:

(a) imperative + Tone 1: unmarked;
(b) imperative + Tone 3: "greater tentativeness"
(c) imperative + Tone 13: major tonic on the verbal operator
(d) imperative + Tone 4: "a compromising command" (*well at least …*)
(e) imperative + Tone 5: insistent
(f) imperative + Tone 2: same as Statement type (d)

(g) *let's* (suggestions) + Tone 1, 3, or 13
(h) commands realized other than by imperative clauses + Tones as Statement and Question types (a)

Again, commands with Tone 5 are new, and so is the inclusion of (g) 'suggestions'.

Exclamations:
Declaratives typically with Tone 5; polar interrogatives (typically in the negative) with Tone 1.

Calls, greetings (including valedictions) and alarms:
Eileen gets called in exactly the same way as she was in Halliday (1970)! Greetings with Tone 3 and valedictions with Tone 1 are added. Alarms are not illustrated, other than shouting at Eileen perhaps!

Reponses:
Responses take on the range of tones associated with the mood selected.

There then follow two discussions on TONE as a system within grammar rather than the semantic category, and TONE in the modality system. However, it is perfectly feasible to argue otherwise as I have done in showing that Tone 1 represents the dominance of speakers (they know or have power, and therefore tell) and Tone 2 their deference (they don't know or don't have power, and therefore defer to the superior knowledge and power of their interlocutor). Furthermore, Tone 4 could be seen as representing an implication of an additional, yet unspoken, message, consistently whatever the modality.

Finally, ideational meanings are presented; not experiential meaning as in (lexicogrammatical) tone in tone languages, but logical, i.e. the types of relationship between clauses. The explanation is very similar to Halliday (1970). Again, it seems to me that an equally acceptable formulation of the relationship between TONE and the 'logic' of clause sequences is simply in terms of the semantic categories of major, incomplete and implicated information. It has always seemed odd to me to claim that successive, but unco-ordinated, main clauses are two 'happenings' that are not connected, as in (p. 130):

> It's stopped raining. I'm going out.

Clearly, they are not linked grammatically, but semantically, they are; and it is the tone choices that tell you the speaker's perception of the relative importance of the two happenings. We are told to note "the differences in meaning among the three forms: 3+1, 4+1, 1+1" (p. 132), but we are left to assume that the differences in meaning are consistent whatever the clause taxis is.

Where one clause elaborates the information of a preceding one (a non-defining relative clause, or apposition), then tone concord marks this relationship, which is neatly explained (p. 133) and embraces the tonality of *too* too (p. 135). On projection, I think it is easier to maintain that the reported clause is the complement of the reporting verb and the sequence constitutes just one clause as one information unit; the regular accompaniment of a single tone unit suggests this too.

Now follows a detailed demonstration in Chapter 6. A 'microtext' is taken and examined turn by turn and tone unit by tone unit, with full commentary and explanations of what was chosen by the speakers from the systems that were available to them; alternatives not chosen are commented on as a way of explaining what the system of choices is. An excellent task, but it is not an easy one for a newcomer to the description, as most of the choices on display are marked. You are thrown into the deep end, with a danger of sinking. It is full of instances of marked tonality, marked tonicity and marked tone, with an awkward sequence in the conversation itself; the commentary has therefore to range far and wide. See for yourself!

A: //4 ˄ we / reached / Howard / **Tur**ney // 3 a.k / **a** // 5 ˄ his / **Roy**al / Highness // 5 ˄ Prince / **Laz**arus / Long // 1 ˄ in / Tulsa Okla/**ho**ma // // 2 Prince / **Laz**arus //
B: // 1 yes this / Lazarus is / **fine** // 1 how / **are** you //
A: // 3 ˄ I'm / very / **fine** // how are / **you** //
B: // 1 very / **good** //
A: // 2 how are you coming a/long with your / plans for U/**to**pia //
B: // 3 it's / coming a/long / **nice**ly //
// ˄ the / only / ˄ er … // 4 ˄ we have a little / **hold**up that er // 5 happened as a re/sult of the er / **hur**ricane //

The build up of acoustic displays is pedagogically fine at first; what we could have done with is a set of simple wave diagrams to accompany each tone unit, especially towards the end of the microtext where the alleged Tones 4 and 5 seemed to me to be both Tone 1. The tonality of B's first tone unit seems to be inconsistently represented; above as indeed one unit, but also as two, with *Yes* as a separate tonic (see p. 154 and 156), which sounds right to me. The tonality of A's final, long, turn also sounds to me suspiciously like two units, with a slowing of pace on *along*. The old term 'neutral tonality' makes its reappearance (p. 142). The term 'status' is suddenly introduced for the first time, and in exactly the same way as I introduced it (Tench 1990: 219), and their explanation of the Tone 4 used at the very beginning looks very similar to my notion of 'highlighted theme' (Tench 1996: 83). ('*Very long*' is not a lexical item! (p158).)

Chapter 7 introduces the secondary tones, the variations that are 'directly' related to the 7 primary tones and those that are 'indirectly', through the Pretonic. The variations for Tone 1 are identical to Halliday (1967; 1970):

1+ (high falling) strong key
neutral
(low falling) mild key
−1 ('bouncing movement') insistent
…1 listing

The listing pretonic is "clearly related to a sequence of tone 3 tone units" (p. 172), so clearly that others maintain that that is, in fact, what it is (e.g. Tench 1990); the recording at 7.4h reinforces this impression strongly as distinct pausing surrounds each item in the list. A listing within Tone 2 is also included, but the items do seem to have 'level rising' Tone 3s in my view.

The variations for Tone 2 are also identical to Halliday (1967; 1970):

2 ('sharp fall-rise') specified enquiry
−2 ('low pitch') involved

Watt (1994: 34–36) has shown the sharp fall-rise to be no more sharp than a Tone 4, and the meaning of Tone 4 could be appropriate, implying in the case of questions the additional, unspoken, message "This is what I am focusing on". The illustrative case, 7.5a, does not sound like a Tone 2 at all, and certainly not like the constructed example 7.5d. HRT (high rising *terminal* — not *tone*) is acknowledged (p. 176), and treated simply as -2; but this fails to take account of the raising of the baseline, which can be clearly heard in the cited recordings; see Tench (2003) for a fuller exposition of this phenomenon. There is an odd instance of Tone -2 with no pretonic (p. 177; and twice again on p. 182).

Tone 3 is acknowledged as "phonologically a level tone" (p. 178), not the 'low rising' in earlier versions, which is its most common phonetic realization. However, it is also acknowledged as overlapping with Tone 2 (high rising); that is why others feel such a description is confusing and prefer to phonologically distinguish a rise with its range of variations from the level tone.

The 'low' variations for Tones 4 and 5 are identical to Halliday (1967; 1970). They are explained in much the same manner, but not so well illustrated: 'low' Tone 4 means 'contrastive', but none of the examples are actually contrastive; in two cases the authors have to admit that the instance is borderline between Tones 4 and 4.

Altogether there are 19 options in the TONE system of English (p. 183), which can all be listened to in the ten minutes of audio recording of spontaneous, unrehearsed, Australian and British conversations that are provided, following along

with detailed transcriptions. A detailed commentary accompanies two 'micro-texts' extracted from those conversations in Part III, together with an analysis guide which lists the semantic and clausal systems along with the 26 intonational systems of options that are involved in the generation and processing of discourse. (It eventually dawned on me what *IGBE* in the intonational system tables stood for: Halliday 1967!)

What is new is the attempt to explain the linguistic use of raw sound 'from scratch', CD technology, recordings of Canadian and Australian as well as British voices, detailed commentaries of spontaneous speech, some minor re-labelling, some new patterns with Tone 5, the analysis guide which sets intonation in the totality of systems that operate in discourse, and the reduction of the number of intonational systems from 40 (Halliday 1967) to 26. What we get is a comprehensive exposition of English intonation up to the level of the clause complex, with much practical help. What we don't get is all the pedagogical material for training students as in Halliday (1970) — the practical help that *is* offered does not have enough of a teacher's feel about it; and we don't get the perspective of intonational systems above the clause complex that Pike was renowned for, and then Brazil (1975; 1997) and Couper-Kuhlen (1986), and which I have reported (Tench 1990).

Annoyingly, we don't get a topical index, which is a basic requirement. Maybe its next edition, which will undoubtedly and deservedly appear, will include one and it will clear up these *Errata*:

P. 36: a small error *in* settings
P. 58: 'ranking' clause
P. 59: TRANSIT*I*VITY
P. 73: Figure 4.6: tex*t*ual metafunction
P. 75: distinction between, say, *bad* and *bud*
P. 102: continue to use these three terms
: because *it* doesn't fit
P. 103: Section 2.5 below (There is no *Section 2.5 below*!)
P. 152: Howard *Turney*
P. 177: Sound 7.5i: the ^ symbols should surely be lowered.
P. 183 (last line): Section *7.7*

References

Brazil, David. 1975. *Discourse intonation.* Birmingham: English Language Research.
Brazil, David. 1997. *The communicative value of intonation in English.* Cambridge: Cambridge University Press.
Couper-Kuhlen, Elizabeth. 1986. *An introduction to English prosody.* London: Edward Arnold.

Crystal, David. 1969. *Prosodic systems and intonation in English.* Cambridge: Cambridge University Press.
Crystal, David. 1975. *The English tone of voice.* London: Edward Arnold.
Halliday, M. A. K. 1967. *Intonation and grammar in British English.* The Hague: Mouton.
Halliday, M. A. K. 1970. *A course in spoken English: Intonation.* London: Oxford University Press.
Halliday, M. A. K. 1994. *An introduction to Functional Grammar.* 2nd edn. London: Arnold.
Halliday, M. A. K. & Christian M. I. M. Matthiessen. 2004. *An introduction to Functional Grammar.* 3rd edn. London: Arnold
Kingdon, Roger. 1958. *The groundwork of English intonation.* London: Longman.
O'Connor, Joseph D. & Gordon F. Arnold. 1961/1973. *Intonation of colloquial English.* London: Longman.
Pike, Kenneth L. 1945. *The intonation of American English.* Ann Arbor, MI: University of Michigan Press.
Pike, Kenneth L. 1967. *Language in relation to a unified theory of the structure of human behavior.* 2nd edn. The Hague: Mouton.
Tench, Paul. 1990. *The roles of intonation in English discourse.* Frankfurt am Main: Peter Lang.
Tench, Paul. 2003. Processes of semogenesis in English Intonation. *Functions of Language*, 10(2). 209–234.
Watt, David L. E. 1994. *The phonology and semology of intonation in English.* Bloomington, IN: Indiana University Linguistics Club Publications.