Talking Intonation

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You can't manage without intonation. Just as you can't manage without grammar, without words, without pronunciation or without the various aspects of discourse, you can't manage to talk without intonation, whether you are speaking your mother tongue or doing your best in another language. Intonation should perhaps best be regarded as part of pronunciation defined broadly, *pronunciation* embracing the spoken form of words (word phonology), phrases (rhythm), clauses and sentences and every aspect of discourse (intonation). Intonation is the use of pitch in discourse; it is usually distinguished from the use of pitch to differentiate words as in so called 'tone languages' like Chinese. Intonation is a universal feature of language; every language has it, even the tone languages. But just as every language has its own set of vowels and consonants and syllable types and rhythmic structures, so each language has its own intonational characteristics. Intonation is an integral part of the total pronunciation system of language. Thus it is a legitimate part of the study of a language's phonology and should be an essential part of the pronunciation programme of a language being taught/learnt.

This presentation of intonation owes much to many scholars, but principally to Halliday and Pike. To Halliday (1961, 1967, 1970), for three main reasons. Firstly, he presented intonation as belonging to a scheme of phonology, with 'ranks' of phonemes, syllables, rhythm groups and tone groups in a hierarchical arrangement of structure and function: phonemes functioned in different ways in syllables, which functioned in rhythm groups, which functioned in tone groups; and conversely, syllables had a structure of phonemes, rhythm groups of syllables, and tone groups of rhythm groups. Intonation was not isolated from the rest of phonology. Secondly, intonation was related to grammar, by accompanying clauses and other, lower, grammatical units and by differentiating the meaning of identical strings of words. Thirdly, intonation was related to semantics in the form of information structure; this, I believe, was his major contribution, and his trio of systems which express information structure – tonality, tonicity and tone – are now more or less universally acknowledged as valid, even though they appear under different terms.

And to Pike (1945, 1967), for three reasons also. He had not only developed a phonological hierarchy in which intonation figured, but secondly, he extended that hierarchy beyond the level of 'sentence' to include 'breath groups' (paragraphing) and larger textual units including whole discourses and partners in conversation. Thirdly, his contribution included the fine detail of pitch levels and movements, what we might call the 'phonetics of intonation'.

O'Connor & Arnold (1961, 1973) was by far the most widely used course in intonation in TEFL in its time, but intonation was presented primarily as attitudinal expressions in clause types, but otherwise largely divorced from the rest of language. Pike, also, had highlighted this attitudinal function as did Crystal (1967) who also provided the fine detail of the phonetics of British (RP) intonation.

Ladd (1980) contributed the important distinction between broad and narrow focus, complementing and clarifying Halliday's 'tonicity' system. Brazil (1978, 1997) had much in common with Halliday, but is most well known as developing a tone system that distinguished between communicating either new information ('proclaiming') or shared

knowledge ('referring'). However, for me, his most valuable contribution was not that, but the notion of 'key' and 'pitch sequences'. These notions added significantly to Halliday's presentation. Barbara Bradford's article in this issue provides a fuller picture of Brazil's description.

In my own work, I developed in the 1980s the distinctions between six separate functions of intonation in English discourse but did not publish until 1990 (Tench 1990) and was gratified to find similar, but not entirely overlapping, distinctions in Brown, Currie & Kenworthy (1980), Couper-Kuhlen (1986) and Crystal (1997).

I must confess that I do not feel any particular debt to the generative phonology tradition, as it seemed fixated on syntactic structures treated as tokens in isolation, or in contrast, but entirely removed from discourse. ToBI was a notable enhancement of it, but nevertheless lacked the capacity to embrace the breadth and depth of Halliday's, Pike's, Crystal's, Brazil's and Couper-Kuhlen's comprehensive presentations of intonation.

Functions and Forms

Intonation performs six different functions in English discourse; five of these are common to all languages. I will present each of these functions and gradually introduce the forms involved in tonality, tonicity and tone. A full summary appears in the detachable centre fold, the poster entitled **Intonation Information**.

Communicative function

Imagine a quiz; and imagine people's intonation as they respond to the questions. What would you answer to the question *Which country has the largest population in the world?* ? If you know, and feel sure of your knowledge, you are likely to say

- \Chi̱na (with a falling tone)

If you are not sure, you will probably feel the need to ask, or at least to guess, and say

- /Chi̱na (with a rising tone)

The fall indicates the speaker's knowledge and is thus typical of statements. The rise indicates the speaker's lack of knowledge, and their need to ask someone who they believe does have the knowledge; it is thus typical of yes/no questions. Here is another pair of possible answers:

- it's \Chi̱na | \i̱snt it (fall on tag)
- it's \Chi̱na | /i̱snt it (rise on tag)

(NB We now begin to ease away from written punctuation, to focus on (spoken) intonation.)

The falling tag indicates: "I know, and I expect you to confirm".
The rising tag indicates: "I think I know – but I'm not sure – and so I'm asking you to confirm".

The fall is part of the (spoken) statement, as in 'full' sentences:

- the country with the largest population is \Chi<u>na</u>

And the rise is part of the (spoken) *yes/no* question likewise:

- is China the country with the largest population in the /<u>world</u>

A rise has a similar effect when accompanying a declarative clause:

- China s got the largest population in the /<u>world</u> (= "Is that what you said/what you're claiming?")

And likewise, a fall may accompany an interrogative clause:

- is China the country with the largest population in the \<u>world</u> (= "I am expecting you to answer "Yes", a 'conducive question', or = "I think that was your question", a 'repeat question')

Falls and rises communicate different states of knowledge and therefore have different discourse functions ('speech acts'). In English *wh*-questions are usually accompanied by falls indicating that the speaker knows that at least part of the proposition is valid:

- which country has the largest popu \<u>lat</u>ion (= "I know there must be one country that does")
- what \<u>happened</u> (= "I know something happened")

These *wh* interrogatives could also be accompanied with rises:

- which country has the largest popu /<u>lat</u>ion (= "Was that the question you were asking?", a 'repeat *wh*-question')
- /<u>which</u> country has the largest population (= "Which country did you say?", 'echo question')

The communicative function is not only about the communication of knowledge; it is also about power over other people's actions. A fall indicates the speaker's **dominance**: they know and say, or they have power and tell. The difference between a command and a request, for example, is that if the speaker feels that they have power, they expect to be able to tell someone to do something and will expect them to do it (a 'command'); but if the speaker feels that they do not have power, they can ask for something to be done, but they allow the other person to decide whether to do it or not (a 'request'). Consider the difference between

- I want you back by \<u>ten</u>   (= command)
- can you be back by /<u>ten</u>   (= request)

and then between

- be back by \<u>ten</u>   (= command)
- be back by /<u>ten</u>   (= request)

The rise indicates the speaker's **deference** to the knowledge that they presume the addressee has as in *yes/no* questions, or to the right that the addressee has to make the final decision. Consider the following similar contrasts:

- dont argue with your \mother   (= prohibition)
- dont argue with your /mother   (= plea)
- come \on   (= demand)
- come /on   (= coaxing)
- you should check your \watch   (= advice)
- you could check your /watch   (= suggestion)
- I will be back by \ten   (= promise)
- I will be back by /ten   (= offer)
- \watch it   (= threat)
- /watch it   (= warning)

Finally, the communicative function impinges on social interaction. A fall indicates the speaker's dominance in expressing their own feelings, while the rise indicates their deference in consideration of the *addressee's* feelings. Consider the simple difference between:

- good \morning
- good /morning

The first sounds a little formal, and the second much more friendly – it is as if the greeter is thinking more of the effect of the greeting on their addressee than on themselves. Knowles (1987: 195) provided a similar explanation for

- \thank you
- /thank you

Further examples of social interaction, and fuller explanations of speaker dominance and deference in knowing the validity of a proposition, and in assigning power are to be found in Tench 1996: 91-105.

Attitudinal function

Return to the quiz. There are more ways of giving the answer than the two so far given. Instead of using a simple, plain ('neutral') fall or rise, a speaker could indicate to the addressee something of their *attitude* about the information. (*Which country has the largest population in the world?*:)

- ˈChina

The high fall indicates 'strength of feeling', in this case a strong assertion ("Of course!") A low fall would indicate 'mildness':

- ˌChina   (= "Everyone knows that")

In both cases, the speaker uses the fall to express their dominance (they know and say), but adds a new dimension of meaning, namely attitude. The type of fall expresses a level of personal involvement or commitment (strong, or mild) to the information being given.

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Similar variation occurs with rises. The sense of uncertainty or guessing is increased with a high pitched rise:

- $^/$ <u>Chi</u>na

With a low pitched rise, the speaker expresses mild deference, which will be interpreted as non-committal, or uninterested:

- $_/$ <u>Chi</u>na

The sense of strength/mildness is felt also in the cases of authority over people's action and in social interaction. Say all these examples are commands and requests with high and low varieties of falls and rises and consider the effect:

- I want you back by $^\backslash$ <u>ten</u>   (= "By ten, do you understand", strong)
- I want you back by $_\backslash$ <u>ten</u>   (= "As you already know", mild)
- can you be back by $^/$ <u>ten</u>   (= "By ten, if at all possible", more tentative request)
- can you be back by $_/$ <u>ten</u>   (= "Not really bothered, but ten would do", non-committal)
etc

- good $^\backslash$ <u>morning</u>   (= formal, with extra effort to sound that you mean it)
- good $_\backslash$ <u>morning</u>   (= speaker's own feelings, but little of it)
- good $^/$ <u>morning</u>   (= very friendly)
- good $_/$ <u>morning</u>   (= acknowledgement of addressee, but little interest)
etc

In English, there is also a stronger expression of attitude than the high fall, and that is the rise fall. The pitch of the voice rises to the high pitch level of the high fall and then completes the fall. This extra intensive tone usually accompanies exclamatives like

- of /\ <u>course</u> it is
- thats /\ <u>right</u>
- /\ <u>well</u>

The expression of attitude might also be heard in variations of pitch *before* the tonic syllable (or nucleus; the tonic/nucleus has been marked by underlining so far). The section *before* the tonic is usually called the 'pre-tonic segment', or the 'head'. So, for instance, the pretonic/head might be pitched higher than usual, giving a sense of insistence to a statement

- $^-$ China is the country with the highest population in the \<u>world</u>

For the full range of pretonic variations, consult the centre fold **Intonation Information** and Tench (1996: 128-137).

The communicative and the attitudinal functions received the main attention in the older traditions of Jones (1964), Gimson (1989), O'Connor & Arnold, and Pike, but Halliday drew particular attention to what might be considered to be a more fundamental function, that of organizing the information in a message.

Informational function

If you have something to say, you have to decide how best to manage all the information you intend to give, in such a way that you indicate to the addressee

i)   how many pieces of information you have
ii)   whether all the information you have is new, or whether some of it is already known
iii)   what is of primary or secondary importance
iv)   whether one piece of information is dependent on another for full understanding
v)   whether some if it can be left unsaid but implied, and
vi)   when a piece of information is being highlighted

When we have something to say, it may be brief and contained in a single unit of intonation ('tone unit'/'tone group'). But most often, what we have to say will take a bit of time, and a message, our 'discourse', will be composed of a series of intonation units. Consider the following introduction to a talk:

- the capital of Wales is Cardiff | and Cardiff has been celebrating this year | its centenary as a city | and its jubilee as the capital | Cardiff became a city in nineteen o five | and a capital | in nineteen fifty five | and that | is why IATEFL is here this week |

The discourse – any discourse – will be segmented into a sequence of units of information (unless there is only one unit). This segmentation is called **tonality**. Tonality, the segmentation of discourse, marked by |, represents the speaker's management of the total message into separate pieces of information. In other words, a unit of intonation holds a unit of *information*. The information is 'encoded' in units of grammar, and so, very typically, a unit of information contains a whole clause or a significant element of clause structure.

Notice how there is a very significant tie up here in phonology, grammar and semantics. The design of a clause is to represent the information about what happened to something/someone, or what happens to be the situation with something/someone. Hence, clauses have subjects and predicates, and predicates have verbs which are either followed by a complement or a direct object and possibly an indirect object, or by no kind of object at all. The design of any clause represents our perception of a happening or situation – one piece of information. Thus, typically, a piece of *information* is encoded on a single *clause* which is itself pronounced as a single unit of *intonation*.

In the example above, *the capital of Wales is Cardiff* and *Cardiff became a city in 1905* are cases of 'neutral tonality', that is, one piece of information in one clause pronounced as one unit of intonation. The clause *and Cardiff has been celebrating this year its centenary as a city and its jubilee as the capital* is too long to be pronounced as a single unit of intonation, and so the speaker organizes it as three separate pieces of information, as indicated. The usual maximum length of an intonation unit is five stresses ('beats'), whereas this clause has seven.

There are in that discourse two other cases of clauses being split up into more than one intonation unit, even though they contain less than five stresses. These cases demonstrate that tonality is a **system**, that is, we can make choices in the way we segment discourse. The clause *and a capital in 1955* (with *Cardiff became* understood) could easily be pronounced as one intonation unit:

- | and a capital in nineteen fifty five |

But the speaker chose not to present this information as one piece, but as two: he decided to draw attention to *a capital* by giving it its own intonation unit in order to make the contrast to *a city* plainer.

The other case is *and that is why IATEFL is here this week.* It is one main clause: *that* is subject; *is* is the verb, and *why IATEFL is here this week* is the complement (in this case, the 'attribute' of *is* - and thus a subordinate clause within the main clause). As a single main clause, it could easily have been pronounced as one intonation unit:

- | and that is why IATEFL is here this week |

But, again, the speaker chose not to do so. He decided to present this information as two pieces, not one. He wanted to highlight the subject by giving it its own intonation unit and, as we shall see, its own special tone.

To summarize, tonality is the segmentation of discourse into a sequence of intonation units, each with a usual maximum of five stresses; the intonation units represent units of information which are typically encoded in clauses. However, tonality is also a system of choices available to the speaker for the organization ('management') of information into as many pieces as they perceive it (see Tench 1996, ch 2). We shall also see later, that tonality disambiguates cases of identical wordings that have different grammatical structures and thus different meanings.

The second system we have for organizing our information is **tonicity**. Tonicity is the location of the most prominent word (or, even, syllable) in each intonation unit and causes a significant movement of pitch. Its function is to indicate what is new and what is not new information in each intonation unit. The most prominent word/syllable is called the tonic (or 'nucleus') and it usually occurs as the final lexical item in the intonation unit. Listen to that bit of discourse again and note where the tonics occur:

- the capital of Wales is <u>Car</u>diff | and Cardiff has been celebrating this <u>year</u> | its centenary as a <u>ci</u>ty | and its jubilee as the <u>capi</u>tal | Cardiff became a city in nineteen o <u>five</u> | and a <u>capi</u>tal | in nineteen <u>fif</u>ty five | and <u>that</u> | is why IATEFL is here this <u>week</u> |

You will see that in seven cases out of nine, the tonic is the final lexical item in the intonation unit. So high is this rate - approximately 80% in any kind of English discourse - that the case of the tonic on the final lexical item is known as 'neutral tonicity'. And there is good reason why this is so in English. In the vast majority of units of information/intonation, new information follows on after old (already known or 'given', not new) information, just as 'rheme' follows 'theme'.

Look at the transcript above. Everything can be considered 'new' in the first unit, but in the second, *Cardiff* is 'given' (the theme) and what is new is *has been celebrating this year* (the rheme); the next two units are treated as 'all new'. In the fifth unit, *Cardiff became a city* is given, and *in nineteen o five* is treated as new. In the following unit, there is only one lexical item, and although it has been used already, it is treated as new in the sense it is now being used for a new purpose, contrast. Now follows an intonation unit where the tonic is shifted away from the final lexical item, because *five* is a direct repeat. And the next unit contains no

lexical item at all; *that* is highlighted and so takes the tonic. The final unit returns to 'neutral tonicity'.

Tonicity, like tonality, is a system, because despite the high rate of 'neutral tonicity', a speaker does *not have* to choose it. A non-final lexical item can be chosen, or a grammatical ('non-lexical') item. That gives the speaker the option of how to organize the information within an intonation unit into 'new' and 'not new'.

If all the information in an intonation unit is new, then that is known, following Ladd (1980), as 'broad focus'. Broad focus is found in a number of the units in that bit of discourse. If some of the information is already known (that is, 'given', 'old', 'not new') within an intonation unit, the remaining new information has 'narrow focus'.

We have stated above, that 'given' information usually precedes new, as it does in most cases of our bit of discourse. But just occasionally that is not the case as in *in nineteen fifty five*; here, *in nineteen* and *five* is 'given', and only *fifty* is new: *fifty* thus has narrow focus. (Whether the focus is narrow or broad, the tonic always marks the end of the new information.)

Try this little exercise.

- but I saw him yesterday in the <u>libr</u>ary (neutral tonicity; narrow focus: *him* must be given)
- but I saw him yester<u>day</u> in the library ('marked tonicity': *him*, *in the library* is given)
- but I <u>saw</u> him yesterday in the library ('marked tonicity': *him yesterday in the library is given)*
- but <u>I</u> saw him yesterday in the library ('marked tonicity': *seeing him yesterday in the library* is given)

(Any other possibilities?)

The third system in the organization of information is **tone**. Remember: tonality handles the matter of how many pieces of information the speaker has in mind, and tonicity the matter of new and given information and broad and narrow focus. Now, tone handles the other matters: primary and secondary information, 'dependent' information and implied and highlighted information. Tone is the contrastive movement of pitch on the tonic.

Tone contrasts have already been introduced as indicating speaker dominance or deference in the communicative function of intonation, and types of attitude. As we shall now see, it is also involved in expressing these few factors in a speaker's management of the information they give. Back to our little bit of discourse and listen for the pitch movements on the tonics of each intonation unit.

- the capital of Wales is \ <u>Cardiff</u> | and Cardiff has been celebrating this / <u>year</u> | its centenary as a / <u>city</u> | and its jubilee as the \ <u>capital</u> | Cardiff became a city in nineteen o / <u>five</u> | and a \/ <u>capital</u> | in nineteen \ <u>fifty</u> five | and \/ <u>that</u> | is why IATEFL is here this \ <u>week</u> |

You will hear 4 falls, 3 rises and 2 fall-rises; they each have different meanings. The fall indicates not only a statement, but also a statement with major information, as in the first unit. The second unit also contains a statement, but the rise on *year* tells you that this

information is not complete; the full understanding of this information depends on other information to come. Now, further information does come in the next unit, but since that too is marked by a rise on its tonic, that information is also indicated as incomplete. Then, more information follows but this time with a fall which indicates major information completing the build up of the preceding 'dependent' information. Falls for major, independent, 'completing' information; rises for dependent, incomplete information.

The next unit is accompanied by a rise signalling that it is incomplete, but it is followed by a unit with a fall-rise tone. The fall-rise has two functions: it either indicates that extra information is implied, or that a theme is being highlighted. In this case, the speaker has chosen to use the fall-rise as implying a contrast, as if he is saying "Take note of *capital* as I am contrasting it with *city*". He doesn't say that in words, but he implies it through intonation. The following unit has a fall, completing the build up of intonation.

The next unit *and that* is also accompanied by a fall-rise. The word *that* is the theme of that whole clause, and the speaker has chosen to highlight it; he draws attention to the reason, given already, why the conference is being held in Cardiff at this time. The final unit has a fall completing the build up with major information.

Tone provides the speaker with choices about the status of each piece of information (Tench 1996:80): what is major, what is incomplete ('dependent'), what is implied but not stated, and what is highlighted. Also what is minor. Look at the second unit again; it could easily have been pronounced as

- and Cardiff has been \ <u>cele</u>brating | this / <u>year</u> |

In this case, the speaker would be choosing to present the *celebrating* as the major information, but what then about *this year* – especially if it had *not* been followed by anything else? The speaker also wishes to give some prominence to this information, but does not want to detract from the attention given to *celebrating*. So he would be choosing to give primary attention to *celebrating* and merely 'secondary' attention to *this year*, and does so by giving it a rise immediately after the fall. Here are some other examples of major information being followed by 'minor' information

- we might well come back to \<u>Wales</u> | for our /<u>ho</u>lidays |
- Cardiff was much \<u>nic</u>er ǀ than I ex /<u>pec</u>ted
- so we might come \<u>back</u> here | next /<u>year</u> |

Minor information always follows major information and usually takes the form of a prepositional phrase or a short subordinate clause – it is, after all, *minor* information.

The full system of choices in information status is:

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            \         =      major
 non-final /          =      incomplete
     final /          =      minor
 non-final \/         =      highlighted theme
     final \/         =      implied
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Now try this exercise

- but I saw him yesterday in the \<u>lib</u>rary | (major)
- but I saw him yester /<u>day</u> | in the \<u>lib</u>rary | (incomplete followed by major)
- but I saw him yester \<u>day</u> | in the /<u>lib</u>rary | (major followed in minor)
- but \/ <u>I</u> | saw him yesterday in the \<u>lib</u>rary (highlighted theme followed in major)
- but I saw him yesterday in the \/<u>lib</u>rary   (other information implied)

Incidentally, a speaker would only use the fall-rise to imply additional information if they felt sure that the addressee would recognize what that additional information would be. Different situations would suggest different implications, but the addressee must be able to perceive it – otherwise, misunderstandings will develop (as, no doubt, has often happened!). Think of the range of possible implications, in different situations, of the following statement:

- he s got lots of \/<u>mo</u>ney | ("but he's not very generous"; "he hasn't got anything else"; "I wouldn't think of marrying him"; "we should invite him to join us"; etc, etc, etc …..)

One final point. People do not usually have a problem in recognizing the meaning of a rise despite its range of uses. Rises for incomplete information are (eventually) followed by a unit with a fall; rises for minor information follow a fall very closely; rises for questions are quite independent of other units.

Tone, tonicity and tonality work together to express a speaker's management of information. It may seem complicated, but intonation simply does what we want it to do – just like any other part of language. We make distinctions between, say, new and given information, and between major and minor information, etc, because we feel the need to. Adults use all these systems when speaking and listening, without realizing that we do so. Children acquire them. A language learner would be well advised to do their best to acquire them in their target language, too. Teachers will be able to teach them more effectively when they understand how they operate. The study of the systems of tone, tonicity and tonality have, therefore, very great value.

Syntactic function

Although intonation is a universal feature – and all languages use intonation to convey meanings through the kind of communicative, attitudinal and informational functions presented so far, not every language uses intonation to distinguish grammatical categories. But English does.

Consider the words *she washed and brushed her hair*. They are ambiguous in print. Did she wash her hair, or not? The written version could be disambiguated if a comma was placed after *washed*: *she washed, and brushed her hair*; in that case, she probably didn't wash her hair. That would be pronounced as

- she \<u>washed</u> | and brushed her \<u>hair</u> |

The verb *washed* is intransitive. But the words could be pronounced as

- she washed and brushed her \\hair |

without any pause after *washed*. This would mean that she did two things to her hair: she washed it and brushed it. In that case, *washed* is transitive – a different grammatical category – with *her hair* as direct object. So a change in tonality – and, therefore, also a change in tonicity and tone - matches a change in grammar. This means that intonation, in English, has a syntactic function.   In this respect, it parallels one of the functions of punctuation, but whereas many writers treat punctuation as optional – as many people writing in English do – all speakers are obliged to operate the systems of intonation.   This means that potential ambiguities in writing are usually resolved in speaking. Here is another kind of example:

- they didn't get \\married | because of the \\war (= that is why they didn't get married)
- they didn't get married because of the \/war (= they did get married, but the war was not the reason why they did)

Other instances of this kind of syntactic function can be found in the centre fold **Intonation Information** and in Halliday (1967), Crystal (1975) and Tench (1996:339-49).   Intonation plays a similar role in German (Tench 1996a) and Portuguese (Crystal 1975:43-5) but they are not exactly equivalent to English, and thus constitute a potential stumbling block to learners. This potential problem is the subject of an interesting study by Helen Beer in this issue who has tackled it in a most commendable – even, valiant – manner with Chinese learners of English.

Textual function

Intonation also works on a higher level than the sentence in discourse. Halliday has not dealt with anything above the sentence, but Pike, Brazil, Couper-Kuhlen and Crystal have (see Tench 1990:246-298).   Just as written text is divided into paragraphs, spoken text is also divided into larger sections ('breath groups', 'pitch sequences', 'paratones', 'phonological paragraphs').   Briefly, a new topic is signaled by a high pitched 'onset' syllable in the pretonic/head of the first intonation unit and its completion by a relatively low pitch on the tone (and any 'tail') in the final unit. There is a gradual lowering of the 'baseline' of pitch in each unit; this gradual 'declination' is observable in our short Cardiff discourse. The first unit starts with a relatively high baseline and each succeeding unit 'drifts' gradually down and reaches a relatively low point at the end of *in nineteen fifty five*. A second 'paragraph' then begins with the relatively high pitch on *that*.

This declination can be interrupted by a speaker maintaining the baseline instead of allowing it to drift down. This means that one piece of information has to be treated as equivalent in meaning to the previous one. If the speaker raises the baseline, the information is to be treated as contrastive; and if the speaker drops the baseline lower than expected, then the information is to be treated as incidental (the equivalent of bracketing!).

All languages use intonation for this function, and it is quite possible that this function is expressed in similar ways. If that is the case, there will be no need to teach it. The most useful study of this function is Brazil (1997).

However, there is one further point of interest here, which concerns the development of a recent innovation in English intonation: the so-called high rising tone, or better described as a raised rising tone. Some people use it when they want to simultaneously provide information and check the addressee's recognition of the significance of it. It is different from the checking mechanism introduced early on

- China s got the largest population in the /<u>world</u> (checking whether that is what was said, or meant)

In the innovation form, the rise begins from a higher pitch level (hence, 'raised') and accompanies the provision of new information, *not* reference back to what has already been said

- China s got the largest population in the ↑/<u>world</u>

(providing new information and checking on the addressee's appreciation of its significance, *not* checking on what they themselves had said or meant). This development, and others, are fully explored in Bradford (1997) and Tench (2003).

Genre-specific function

Finally – and briefly – one other function of intonation, this time affecting whole discourses. One kind of discourse sounds quite different from another, like news-reading from poetry recitation. In each culture there is a recognition of different kinds, or genres, of spoken discourse by the very sound of them. The distinctive genre-specific sound is an amalgam of different factors: the length of intonation units, the proportion of falls and rises, the degree of variety in tones and pretonics/leads, the amount of variation in speed, loudness, pitch and rhythm, and the presence/absence of vocal qualities like whisper, huskiness, laughter, etc. This amalgam can be called the 'prosodic composition' of a genre, and intonation plays a crucial role in it. Think, for instance, of the crucial role of intonation in the British tradition of ghost stories; they would not be the same without the low pitched, slow paced build up to the frightening situation. But such a sequence of low-pitched, slow paced intonation units would be quite out of place, for instance, in a weather forecast (apart from comedy!).

Cultures vary in the prosodic composition of spoken genres. (The news sounded much more exciting in Brazilian Portuguese, as I recall! Their football commentaries certainly sounded more dramatic too, especially when a goal was scored!) The teaching of prosodic composition will not be offered to all learners, but might be offered to highly proficient speakers of the target language.

Finally …

What should be offered to all learners? Everything in the communicative, attitudinal, informational and syntactic functions that differs from their mother tongue. Think of greetings, for a start. Although English and German, for instance, have much in common in intonation, German intonation in greetings is different from English. Check differences in other aspects of social interaction. Check whether the usual intonation of wh-questions in the mother tongue matches that in English. Do the equivalent of tags in English have the same choice of tones? Are there differences in the way attitudes are expressed? Does, for instance, the intonation of a plain statement in the mother tongue correspond to the intonation for expressing, say, insistence, or complaining, in English? Does the mother tongue have a rise-

fall like English? More importantly, does it have a fall-rise? (See Dolores Ramírez Verdugo's article in this issue.) Is the position of the tonic variable as in English? Does the mother tongue distinguish meanings by intonation that English doesn't? And what about tonality and key? (See Barbara Bradford's article in this issue.)

It is worth investigating questions like these, for be sure: a learner will tend to transfer their mother tongue intonation, as they do rhythm, syllable structures and consonant and vowel qualities, unless they notice the differences. And intonation that is inappropriate in an English context will still suggest meaning even if it is not the intended meaning!

Cruttenden (1997), Hirst & Di Cristo (1998) and Chun (2002) are good sources for studying the intonation of different languages.

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