39.
A first approach
to intonation

39.1. We will now concisely introduce the bare essentials of *intonation*. In fact, all languages have their own intonation system, and phonetics should therefore not be treated without examining intonation as well, by means of tonetics.

Unfortunately, intonation is often left out entirely, even in descriptions of particular languages or in transcriptions of sentences or passages! A notably bad example of this omission is given by the recent ‹official manual› of the International Phonetic Association: *Handbook of the International Phonetic Association*: *A Guide to the Use of the International Phonetic Alphabet* (found in the bibliography).

39.2. Of course, we will follow the *natural tonetics method*, since we find it to be the most objective and unbiased of all, and the fittest one for actual comparisons between languages. It is a fair combination of auditory impressions and acoustic analyses, expressed in a clear diagrammatic way, by means of tonograms and signs which are derived from those of the British school.

As a matter of fact, the British approach has been among the few to have some practical use; but sometimes its diagrams are decidedly excessive. In fact, for [·ˈ.] or [·ˈ·] (*cf fig* 39.1), it gives diagrams like ⌐ or ⌐ when there is only one short voiced element: for example, [ɪ] in *Dick*. If the result were truly as extended as their diagrams show, it would rather sound like a police siren!

These are not the only differences between these two methods, as it will appear below. However, for the time being, we will deal only with British English intonation, because it is also the most widely described one, and because it is better not to introduce other accents, which might complicate things.

Of course, the International and American systems will be given soon after, in order to compare them appropriately (Ⓒ 42).

39.3. In every language the *three marked intonemes* (/. ? ;/) and the *unmarked preintoneme* (the normal / /, without a special symbol) should be clearly indicated with appropriate symbols (both on a phonetic, or rather, *tonetic* level, and on a phonemic, or *tonemic* one).

The *intoneme* involves the final stressed syllable of an utterance and the syllables around it (cf fig 39.1), while the *preintoneme* is what is found before the intoneme in the same intonation group (cf fig 39.2). In the example *his cousin's name is Bartholomew* /hɪzˈkɐzn̩z ˈnɛɪm ɪz-baːɹˈθɒləmjuu/, the intoneme is constituted by the full name of *Bartholomew*, while the preintoneme is everything prior to it: *his cousin's name is…*

39.4. The example of *Bartholomew* is particularly interesting because it allows us to consider the four ideal components of an *intoneme*: the *pretonic* syllable (*Bar-*), the *tonic* syllable (*-thol-*), and the two *posttonic* ones (*-omew*).

The pronunciation of this example normally provides a reasonably adequate realization of the schematic tonal movements shown in fig 39.1-2 (which besides the unmarked preintoneme and the three marked intonemes, give the important interrogative preintoneme, /¿ /, which is marked, and the continuative intoneme, /,/ – which is unmarked).

39.5. If the example were *his cousin's name is Dick* /hɪzˈkɐzn̩z ˈnɛɪm ɪzˈdɪk/, the intoneme would be *is Dick*. The tonic and posttonic syllables would consist of only one syllable (*Dick*). In consequence, the ideal movement shown in the diagrams (for the case with four syllables) would be compressed, not just horizontally, but inevitably in terms of the vertical range as well.
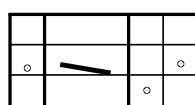
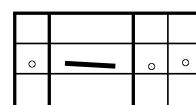fig 39.1. The four neutral intonemes of British English.
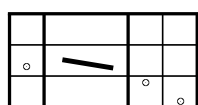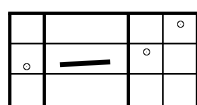
| conclusive	interrogative	suspensive	continuative
/./ [·ˈ‚‚] ⟨ˋ⟩	/?/ [·ˈ·˙] ⟨ˊ⟩	/;/ [·ˈ‚·] ⟨ˎ⟩	/,/ [·ˈ·] ⟨ˈ⟩

When only one syllable is present (as in the answer to a question like *what is his cousin's name? – Dick*), the result is a fusion of the expect-

ed pitch patterns which maintains the characteristic movements, but in an attenuated form.

39.6. The preintoneme and the intoneme taken together are usefully called an *intonation group*. We use examples such as *My favorite dictionary*, or *That patient thinks he's Giuseppe Verdi*, to show that the parts of an intonation group do not necessarily respect word boundaries. In fact, the intonemes in these utterances are, respectively: /ɹət'dɪkʃənə̣ɹi./ and /i'vɛə̣ɹdi./ (*-rite dictionary* and *-pe Verdi*). The preintonemes, on the other hand, are /'ðæts maɛ'fɛɪv/ and /ðæt'pɛɪʃənt 'θɪŋks (h)izʤuu'sɛp/ (*My favo-* and *That patient thinks he's Giusep-*). The full examples are: /'ðæts maɛ'fɛɪvɹət 'dɪkʃənə̣ɹi./ and /ðæt'pɛɪʃə̣nt 'θɪŋks (h)izʤuu'sɛpi 'vɛə̣ɹdi./.

ƒɪg 39.2. Two neutral preintonemes of British English.
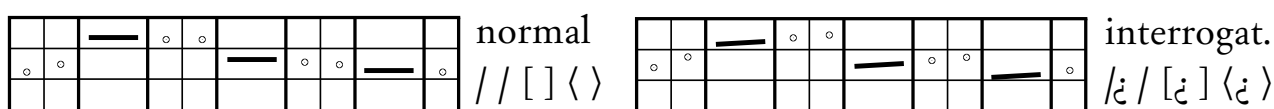
39.7. It will be seen that our transcriptions are not subdivided, pedantically, along word boundaries. That practice is still quite common (in the best case, motivated by hopes of helping the reader). It is much more useful to subdivide transcriptions into *rhythm groups*, as we have done, instead of giving things like ‹/'ðæt ɪz 'maɪ 'feɪvrət 'dɪkʃən(e)ri/›, or ‹/'ðæt 'peɪʃnt 'θɪŋks hiːz ʤuːˈsepi 'veədi/›, where the stresses and some un-reduced forms (for current ‹weak forms›) are also unnatural (ɪe in the cases of ‹/ɪz 'maɪ/› in the first example and ‹/hiːz/›, at least, in the second, which are weakened in normal speech, both articulatorily and prosodically).

39.8. ƒɪg 39.3 will be a useful explanatory tool in order to understand more explicitly the use of tonograms (given that we are not all musicians or singers, for whom the analogy with a musical score is obvious). Let us observe, then, the graphemic text, to which we have given the form of the intonation curve. Normally this curve is shown with the lines and dots of tonograms, but here we have used a more ‹intuitive› first approach. We show just four examples, based on the segment *see you on Saturday* (in neutral British pronunciation expressly to compare them with ⌐ and ⌐ , seen above). These examples contrast pairwise: a

conclusive utterance is contrasted with an *interrogative* one (of a total question), and a *suspensive* utterance with a *continuative* one.

fig 39.3. An iconic way to introduce people to intonation.

39.9. In the case of the last two sentences, the semantic importance of what follows (given in parentheses) is fundamental, whether it is expressed out loud, or instead remains implicit.

In any case, the suspensive intoneme is characterized by decidedly greater and more immediate anticipation, while this is lacking with the continuative one.

This difference, and certainly not their syntax, explains the difference in intonation between the third and fourth examples.

39.10.1. Applying the movements of the three intonemes to a slightly different example, we see that in neutral (better than ‹standard›) British English, the *conclusive intoneme* is falling (/./ [·′ˎˎ]), of the type shown in *fig* 39.1 (and also in three examples in *fig* 39.3):

[b]['khɹɪstʃən˛˛] /'kɹɪstʃən./ *Christian*.

39.10.2. The *interrogative intoneme* is rising (/?/ [·′·ˈ]), as in the question:

[b]['khɹɪstʃən·] /'kɹɪstʃən?/ *Christian?*

39.10.3. The third intoneme, the *suspensive*, is used to create a sort of anticipation, or ‹suspense›. In neutral British pronunciation, it is falling-rising, /;/ [·′˳·]:

[b]['khɹɪstʃən˳] /'kɹɪstʃən;/ *Although his name's Christian, he's no good Christian at all.*

39.11.   In *fig* 39.2 (as well as in the second example of *fig* 39.3), we have the *interrogative preintoneme*, /¿ /, as well. This preintoneme is a modification of the normal preintoneme, and it anticipates on the rhythmic-group syllables of the preintoneme the characteristic movement of the interrogative intoneme (although in an attenuated form).

Obviously, in the part specifically dedicated to the topic, we will be more explicit and more exhaustive (*cf* Ⅷ 41-47). Here, we remark only that the interrogative preintoneme is the same in all types of questions, whether these are *total* questions, like *Is his cousin's name Christian?*, or *partial* ones (containing a question word, such as *why*, *when*, *who*, *how…*), such as *Why is his cousin's name Christian?*

39.12.   Thus, we must warn the reader that, contrary to what grammar books and writing-based teaching imply, not all questions have an interrogative intoneme, nor should they. In fact, partial questions, in order to sound truly natural and authentic, should be pronounced with a conclusive intoneme (or at most, with the unmarked *continuative* intoneme, with pitch in the mid band, which will be seen in greater detail later on):

> *b*[¿⁻waǝɪz (h)ɪzˈnɛˑɪm ˈkhɹɪstʃǝn̩.] /¿ˈwaɛɪz (h)ɪzˈnɛɪm ˈkɹɪstʃǝn./ *Why is his name Christian?* (or *b*[ˈkhɹɪstʃǝn·] /ˈkɹɪstʃǝn,/, with a continuative intoneme).

fig 39.4. Difference between total questions (1) and partial questions (2).