Before engaging in a detailed discussion of the forms and functions of uptalk, it is important to provide an outline description of what is meant by uptalk and to motivate why this book refers to this phenomenon as 'uptalk'. In addition, this chapter provides some background information on intonational analysis more generally, as well as introducing some of the methodological issues that will be expanded on in a later chapter.

1.1 Defining uptalk

It would seem that uptalk needs a new publicity agent. It has been referred to as an 'irritating verbal tic' (Marsh, 2006) and a 'real credibility killer' (DiResta, 2010). If you are a speaker who uses uptalk, then you sound 'as if you don't know your own mind and would like someone else to make it up for you' (Parkin, 2005), or that you have 'lost your own sense of power' (Edenson, 1996). You may also suffer from a crisis of identity, since an utterance with uptalk 'sounds like a question posed by an Australian' (Adams, 2009), but may also indicate that you are 'really a central Canadian' (Watson, 2000) or are someone who has 'tinges of California upspeak curling the edges of his sentences' (Hoad, 2005). These comments give a flavour of the opinions expressed in the popular press about this intonational feature, but they also indicate that discussion of this phenomenon is widespread. As we will see in Chapter 7, these opinions have tended to be negative, largely condemning the use of uptalk and often providing strong advice that it should be avoided if you want to speak properly.

The term 'uptalk' is not (yet) listed in the *Oxford English Dictionary* or the *Merriam-Webster Dictionary*, not even in their online versions (www.oed.com and www.merriam-webster.com. All online dictionary entries discussed in this section were accessed on 6 November 2014). However, the online resource Oxford Dictionaries calls uptalk 'A manner of speaking in which declarative sentences are uttered with rising intonation at the end, as if they were questions' (www.oxforddictionaries.com), while Dictionary.com defines it as 'a

rise in pitch at the end usually of a declarative sentence, especially if habitual: often represented in writing by a question mark' (http://dictionary.reference.com) and the Urban Dictionary as a 'way of speaking that puts an upward inflection on the last word of a statement that makes it sound like a question when it's not. (Common among teens and surfers)' (www.urbandictionary. com). Objections can be raised with each of these definitions. To take just one point from each definition in turn: even if we disregard uptalk, rising intonation is not only found on questions, and not all questions are marked by intonation (see further discussion in Section 2.1); question marks may of course be used to mark uptalk in written texts (supernumerary question marks are mentioned in this context in Section 5.5), but they are of little use as a guide in dealing with what is largely a spoken phenomenon; and while uptalk is frequently found on the last word of a statement, it often begins earlier in the utterance. Nevertheless, these definitions are of interest in that they highlight the general location and nature of the intonation pattern (rising intonation at the end of a declarative sentence, see Chapter 2) at the same time as they comment on the speaker groups likely to use it (young people, and from 'surfers' one might infer Californians - see Chapters 4 and 6). Dictionary.com highlights that uptalk is 'habitual', i.e., there is a tendency for certain speakers to use it more regularly than others (see Chapter 6 for discussion of which types of speakers these may be), and the definition from the Urban Dictionary importantly acknowledges that while uptalk utterances might sound like questions, they are not (see Chapter 3).

As we will see elsewhere in this book, linguists have typically taken a more objective, descriptive view of uptalk than the characterisations found in the media, trying to gain a better understanding of who does it, why they do it and what it is really like. However, as pointed out by Di Gioacchino and Crook Jessop (2010: 2), 'the use of variable descriptions of uptalk by researchers makes it difficult to assign a concrete and stable definition'. As a working definition, uptalk is taken in this book to be

a marked rising intonation pattern found at the ends of intonation units realised on declarative utterances, and which serves primarily to check comprehension or to seek feedback.

This definition provides a lot of leeway, but at the same time constrains the possible scope of uptalk. The leeway is necessary because, as we will see in later discussion, the shape of uptalk is variable and quite possibly differs from one variety of English to another. Hence it would be too restrictive to define the shape of uptalk, as has been done, as a rise that climbs to at least 40 per cent above the voice pitch level found at the starting point of the rise (Guy et al., 1986). Not only would that exclude many uptalk rises with smaller relative pitch changes, but it would also require us to include other rises of 40 per cent



1.88 s

Figure 1.1 Speech wave, pitch track and text grid for a list utterance (female speaker of New Zealand English).



Figure 1.2 Speech wave, pitch track and text grid for the beginning of a two-clause utterance (female speaker of New Zealand English).

or more that most researchers would not consider to be uptalk. The use of the term 'marked' in the definition is intended, however, to indicate that the uptalk rise is not the same as other more expected rises. That is, the focus of this book is not on rising intonation in general, although discussion of other types of rise will inevitably be necessary as part of the process of narrowing in on uptalk. These other types of rise include the continuation rise at the end of each of a set of listed items apart from the final one, as in Figure 1.1 or at the end of an introductory adverbial clause, as in Figure 1.2. Each of these figures shows the recorded speech wave, the pitch track extracted from the speech data, and a

text grid segmenting the utterance into words. The pitch track shows the fundamental frequency (F0) of the voice, which is the main acoustic correlate of the perceived pitch of the speaker's voice. This type of representation of speech recordings will be used throughout this book. The figures have been generated using the Praat software package (Boersma and Weenink, 2014).

It would be wrong to take the term 'marked' in the definition above to reflect a judgement that uptalk is peculiar. While this is clearly the view of many critics, and while it may be the case that uptalk is unusual or infrequent in some varieties of English, the discussion in this book should make it clear that for many speakers and speaker groups, uptalk is a perfectly usual and useful means of communicating a particular meaning, and as the Dictionary.com definition points out, uptalk can be habitual.

As regards the functions of uptalk, one meaning that uptalk is not intended to convey, or at least not directly or in the usual sense that is given by critics, is that of a question. Later discussion (in Chapter 3) will show that the meanings conveyed by uptalk may nevertheless be indirectly related to questions; for example, as a means of inviting the listener to engage in the conversation or as a check that she is still following what the speaker is saying. Defining uptalk as a rising intonation realised on a declarative utterance attempts to make it clear that these rises are not directly asking questions, and adding some broad functions in the definition reinforces this.

1.2 Labels

Given the comments cited above, and those foreshadowed for discussion in Chapter 7, it may seem surprising that I have decided to use the term *uptalk* in this book, rather than choosing a less negatively loaded label or indeed one that entails a more rigorous linguistic definition of the phenomenon. However, it is partly because *uptalk* is a label that is in the broader public domain that it can function as a useful and largely theory-neutral cover term. The sample of media coverage presented in more detail in Chapter 7 shows that the term *uptalk* is commonly used in the northern hemisphere (both in North America and in the United Kingdom), and is also known (but not as widely used) in the southern hemisphere (especially in Australia and New Zealand).

Some of the less flattering labels for uptalk, such as the 'moronic interrogative' (Robinson, 2010), can be found in media outcry about the phenomenon. In this section, however, our focus will be on the labels used in the linguistic literature. There are plenty of alternative terms to *uptalk*. Some of the differences in usage are geographic, reflecting the fact that the descriptions are of patterns of intonation that have arisen quasi-independently in different regions. Some differences, however, result from attempts to characterise particular aspects of the tunes in question. These differences are more problematic – do

1.2 Labels

the labels reflect the specific focus of the researcher, or regional differences in how these tunes are realised by different speech communities, or do they mean that different phenomena are being referred to? That is, do they reveal more fundamental, systemic differences between varieties of English with respect to the tonal inventories that can be called upon?

One of the earliest and most widespread labels is *HRT*, which variously stands for *high-rise tone* or *high-rising tone* (e.g., McGregor, 1979; Guy and Vonwiller, 1989; Dineen, 1992; Steele, 1996; Shobbrook and House, 2003; Fletcher et al., 2005; Kiesling, 2005), *high-rising tune* (McGregor, 2005) and *high-rise terminal* or *high-rising terminal* (Meyerhoff, 1991; Britain, 1992; Ainsworth, 1994; Rehner and Legate, 1996; Borgen, 2000; Tennant and Rampersaud, 2000; Wolff, 2000; Spindler, 2003; Ueki, 2005; del Giudice, 2006; Stanton, 2006; Webb, 2008). An additional variant is found in the label *HRTD* or *high-rise* (or *rising) terminal declarative* (Allan, 1984, 1986; Meyerhoff, 1992), making it clear that the reference is to a rising tune used on declarative utterances. This is reflected also in Webb's (2008) use of the phrase 'declarative HRT' alongside 'question HRT'.

Although the references just listed include a few studies of British, US American and Canadian English, as well as Japanese, the HRT terms are predominantly used in Australia and New Zealand, with the *terminal* labels (rather than *tone* or *tune*) more frequent in New Zealand. HRT is clearly associated with Australia and New Zealand by Burchfield (1994: 559) in the glossary of linguistic terms that he provides for *The Cambridge History of the English Language*, where he defines it as 'a distinctive rise in intonation at the end of declarative statements, a characteristic feature of Australian and New Zealand English'.

Note however that the HRT label is sometimes deliberately avoided because of confusion with 'hormone replacement therapy', which is a more frequent 'hit' on an internet search. There is also some confusion when the search term is 'high-rise terminal', returning the occasional discussion of a new airport building.

A label often used in Australia, and consequently in attempts to 'blame' this intonation on Australians (e.g., Fry, 2001), is *Australian question(ing) intonation*, or AQI. In a newspaper discussion, the similar term *Australian interrogative intonation* has also been used (Beachcomber, 2012). Originally coined by Bryant (1980), the AQI label has also been used by Guy and his colleagues (Guy et al., 1986; Guy and Vonwiller, 1989). In explaining their choice of the use of the term AQI over HRT, Guy and Vonwiller (1989: 21) acknowledge that AQI is misleading because the intonation form that is being referred to neither creates questions nor is it limited to Australia, but they nevertheless use it as a 'convenient cover term for the full complex of rising intonation in a declarative syntactic frame with a particular meaning, in contradistinction

with HRT, which describes only the intonational contour'. Another term that invokes the notion of question is Maekawa's (2012: 1304) *quasi-question*, a 'Japanese counterpart of uptalk'.

Keeping our focus on the same geographic region as AQI, we find the term *Antipodean Rise* (and indeed 'idiotic-sounding antipodean rise', Beachcomber, 2012), where 'Antipodean' is being used with a common northern hemisphere perspective, i.e., referring specifically to Australia and New Zealand.

A similar term to *uptalk*, but less widespread in usage, is *upspeak*, which is frequently found in discussions centring on the United Kingdom (Bradford, 1996, 1997) and on Canada (Talla Sando, 2009), but is not generally encountered in other regions.

The term *uptalk* itself was introduced by James Gorman in 1993 in a language column in the *New York Times* (Gorman, 1993a). Gorman, a journalism lecturer at New York University, was originally commenting on the English of his young female students. The linguist Mark Liberman, in his *Language Log*, agrees that the label *uptalk* is more appropriate, and explains why *HRT* is not an ideal term for the phenomenon (Liberman, 2006b, 2008d). In particular, he argues that definitions that describe HRT as a rise that must start high in the speaker's range before going even higher are based on contested ideas about a qualitative distinction between low-rises (i.e., rises starting low in the speaker's pitch range) and high-rises, and are therefore too limiting (Liberman, 2006b). This would also be an argument against adopting Tench's term *raised rising* or *raised rise* (Tench, 2003, 2014).

While some geographical variants of uptalk may indeed have the phonetic characteristics of being high and rising, it is by no means certain that this is the case in all regions. For example, in their study of Californian English, Tomlinson and Fox Tree (2011: 58, fn1) prefer the term *uptalk* 'because it encompasses rising pitch starting from both the lower and upper parts of a speaker's pitch range, not just the upper part as historically understood with the label high rise terminals'. For Australian English, Fletcher et al. (2002b: 301) point out that 'the phenomenon of uptalk goes beyond the simple high rise'. They find that low-onset high-rises are predominantly associated with statements, action directives or instructions, whereas high-onset high-rises are found with tag questions or information requests. Furthermore, Fletcher (2005) uses *uptalk* to refer not just to simple rises but also to complex/compound contours such as the 'expanded' range fall-rise.

It might seem that a term such as *declarative rise* might match the observations that the contours under discussion are rising in a very general sense (and not always high-rises) and that they are found on declarative rather than on interrogative utterances. However, this term is not adequate because it also covers a type of rise used in urban northern Britain (hence also the term *UNB rises*), where rises are found on statements but with different meanings from 1.3 The forms and functions of intonation

7

those involved in uptalk. In many commentaries, uptalk and UNB rises are confused with one another, despite evidence showing that they are different (see further discussion in Chapter 2).

In summary, uptalk may – at least linguistically speaking – be a more neutral label.

1.3 The forms and functions of intonation

In order to provide a framework in which the nature of uptalk might be better understood, this section considers both the forms and functions of intonation. To do this, I first provide a summary of two main approaches that have been taken to the transcription and analysis of intonation, before then considering key elements in the study of the uses to which intonation is put by speakers.

1.3.1 Traditions of intonational transcription and analysis

There are a number of systems for the transcription and analysis of intonation. Two main streams have developed for English – a holistic or tune-based system and a compositional, tone- or target-based system. The tune-based system has its origins in work carried out by British researchers in the middle of the twentieth century (O'Connor and Arnold, 1961; Halliday, 1967; Crystal, 1969) and is often referred to as the British tradition. It treats intonation as a system of tunes or pitch movements. The tone or target-based system has evolved from work in the United States (Pike, 1945; Trager and Smith, 1951), and has its most recent incarnation in the ToBI (Tones and Break Indices) system developed by Pierrehumbert and colleagues (Pierrehumbert, 1980; Silverman et al., 1992; Beckman et al., 2005). Target-based systems analyse intonation as a sequence of pitch targets, with the tunes arising through the movement of pitch from one target to the next.

Both of these traditions work on the basis that there are accented syllables. These are syllables that are stressed and that additionally carry pitch marking. Stressed syllables in English are lexically determined; that is, each content word has its own characteristic stress pattern. So for instance '*publish* has two syllables, of which the first is stressed (marked by ' preceding the stressed syllable), and while *en'gage* also has two syllables, it is the second that is stressed. Longer words can have multiple stresses, of which one will be the main or primary stress and the others are secondary stresses (marked by '), as in *'disser'tation*. Syllables that carry stress (primary or secondary) tend to be longer and to have fuller vowels than unstressed syllables, which are generally weaker and have shorter or reduced vowels and may have no vowel at all but a syllabic consonant, as in many pronunciations of the second syllables of '*bottle* or '*button*. When words are used in utterance contexts, some



Figure 1.3 'Tadpole' drawings of two statement utterances in English.

of the stressed syllables are also accented, i.e., have pitch prominence. This highlights the words containing those syllables in the utterance context, perhaps because they convey novel or contrastive information. A further important aspect of intonational analysis is phrasing, i.e., the grouping of words or syllables into intonational units. One such unit is the intonational phrase (also referred to, especially in the British tradition, as the tone unit or tone group). The intonational phrase may contain multiple accented syllables, but typically one of these is more prominent than the others. This is referred to as the nuclear accent (or just nucleus, or 'tonic' in the British tradition). It is most frequently the final accented syllable in the utterance, and is for that reason sometimes known as the terminal accent (hence high-rising terminal).

With these characteristics in mind, we can now briefly summarise the British and American traditions of intonational analysis. Figure 1.3 shows what are known as 'tadpole' diagrams, in this case schematically representing the intonation of two utterances containing the same words. Such diagrams are frequently found in descriptions using the British tradition, although the properties they represent are relevant in all intonational analyses. They are impressionistic, rather than an objectively accurate representation of the speaker's utterance. The horizontal lines show the upper and lower reaches of the speaker's pitch range. The dots represent the syllables of the utterance, with larger dots indicating the stressed syllables. The vertical position of the dot indicates the relative pitch height of the syllable. If a dot has a trailing tail (making it look like a tadpole, hence the label 'tadpole' diagram) then the latter shows the direction of any pitch movement starting on that syllable. This is the nuclear accent. In addition, the text above the tadpole diagrams has been annotated with stress marks as well as with marks indicating falling pitch movement ($^{\setminus}$).

In both of the diagrams in Figure 1.3 the stressed syllables are the first syllable of *leaving*, the first syllable of *Wellington* and the second syllable of *tomorrow*. In (a) the nuclear pitch accent is on *tomorrow*, and in (b) it is on *Wellington*. In both cases the pitch falls from that accent and remains low throughout the remainder of the utterance. The step up in pitch from a low pitched unstressed syllable on *she's* to the first syllable of *leaving* contributes to the perception of a pitch accent on *leaving*.



Figure 1.4 'Tadpole' drawings of two question utterances in English.

In the British tradition of intonation analysis, the *tune* is the overall pattern of intonation within the intonational phrase, and is largely determined by the pitch movement associated with the nuclear accent. In both of the examples in Figure 1.3 the tune is falling. Further key terms in the British tradition are tonicity, which refers to the location of the nuclear accent, and tonality, which is the amount of material that is included in the intonational phrase. The two utterances in Figure 1.3 show a contrast in tonicity – the falling nuclear accent (shown by before the accented syllable in the text above the diagram) is earlier in the right-hand diagram than in left-hand one. This may reflect a difference in focus – when the nuclear accent is on the final accentable (stressed) syllable, then focus is either broad, i.e., nothing in particular is being drawn to the listener's attention, or it is specifically on the final element, i.e., it is important that it is *tomorrow* that she is leaving. When the accent is earlier – for example, on Wellington in Figure 1.3 (b) - then there is narrow focus; the speaker is in this instance perhaps keen to convey that it is Wellington that the person is leaving. The portion of the utterance before the nuclear accent can include further accented syllables, as in both the examples in Figure 1.3. The stretch from the first of these accented syllables up to but not including the nuclear accent is referred to as the head (leaving Wellington to- and leaving in (a) and (b) respectively in Figure 1.3). The head can be preceded by unaccented syllables, which constitute the pre-head. The portion after the nucleus is the tail.

In the examples in Figure 1.4, the words being uttered are identical to those in Figure 1.3, but the tunes are rising, reflecting the fact that in these examples questions are being asked. The rises are marked on the text above the diagrams before the syllable on which the rise starts (with $_{/}$ or $^{/}$ for low- and high-rises respectively). We will discuss question types in more detail in Chapter 2, but the questions in these examples are often referred to as 'echo' questions, possibly repeating back something that another speaker has said, as a way of checking for understanding. The two diagrams in Figure 1.4 differ from one another in tonality or phrasing, in that (b) contains two intonational phrases, with the boundary between them marked by the vertical line symbol | in the text. This phrasing in (b) might correspond to the speaker's desire to question or to check two elements, i.e., that it is Wellington that she is leaving and that this is happening tomorrow. Only the first of these would be intended in the

utterance shown in (a), which is a question form corresponding to the second statement in Figure 1.3.

There are three primary criteria used in defining types of nuclear tones in English, with the options for each varying somewhat between varieties. These are: the movement of pitch in and from the nucleus, which can be falling, rising or level; the relative pitch location of the beginning part of the movement, which can be high or low; and any further changes of pitch direction that might take place after the first nuclear movement (giving us complex movements such as rise-fall and fall-rise). There are a number of different descriptions of English nuclear tones, each with different categories. One description of British English (Cruttenden, 1986, 1997) lists seven main nuclear types which are distinguished on the basis of what they can mean, while their forms are defined using the above criteria. These are high-fall ($^{()}$), low-fall ($_{()}$), high-rise ('), low-rise (), fall-rise (\lor), rise-fall (\land) and level (\Rightarrow). Some of these symbols have already been introduced in this text; others will appear below. In addition, the \nearrow and \searrow symbols will be used to show general rising and falling intonation, including over nuclear accents, especially where it is not crucial whether the fall or rise is a high one or a low one.

As an example of different intonational meanings conveyed by falling nuclear accents, it is argued that while a fall on declaratives shows finality or completeness, different types of fall show different meanings, often quite nuanced. For instance, low falls tend to show that the speaker is uninterested or unexcited, while high falls show more interest and involvement. A rise-fall can also show finality, but in addition it can convey either that the speaker is impressed, as in the following example. (Note that the symbol \land indicates a rise-fall movement over the following syllable(s), the vertical bar indicates the boundaries between intonational phrases and the material in parentheses is the preceding context for the utterance.)

(1) (He got an A+) \land Did he! | In Lin \land guistics, | \land too!

or that the speaker is challenging the listener:

(2) (I don't like to keep reminding him) But you 'damn well \land ought to!

Early analyses within the American tradition of describing intonation in terms of pitch levels characterised falling and rising patterns such as those illustrated above in terms of a sequence of different pitch heights. More recent developments within this tradition use just two underlying pitch levels, high (H) and low (L), with further levels resulting from phonetic interpolation between pitch targets and from the effects of combining sequences of pitch targets. This use of H and L is found for instance in the influential ToBI framework, which also reflects insights deriving from earlier work within autosegmental phonology and especially from Bruce's (1977) analysis of word accents in Swedish.