Chapter 2  
Markedness Considerations in L2 Prosodic Focus and Givenness Marking  

Sabine Zerbian  

Abstract  The chapter presents a markedness scale of sentence prosody that allows formulating predictions concerning linguistic differences in language contact, based on the general assumption that marked features are prone to change. It builds on the markedness scale of sentence accent that has been proposed for foreign language acquisition by Rasier and Hiligsmann (Nouv cah linguist fr 28:41–66, 2007), but motivates a separation of pragmatic considerations of sentence prosody into prosodic focus and givenness marking. Furthermore, it is sketched out how the markedness scale can be combined with other prominence scales in order to allow more fine-grained predictions. The markedness scale provides a unified basis from which predictions concerning sentence prosody as it relates to focus and givenness marking in learner and L2 contact varieties can be derived. Contact varieties under consideration in this chapter are mainly ‘indigenized’ varieties of former colonial languages.  

2.1 Introduction  
When languages get in contact with each other, be it in individual speakers through foreign language acquisition or in communities with geographical contiguity through second language acquisition, the prosodic systems of the languages involved in the contact might be affected. Thomason (2001, p. 11) observes that it is not just words that get borrowed but all aspects of language structure are in principle subject to change given the right social and linguistic circumstances. The linguistic phenomenon of interest in the current chapter is prosody.  

The term prosody refers to systematic variations in pitch, intensity and/or duration at the phrase or clause level that serve linguistic functions such as demarcation of syntactic units, differentiation of sentence types and the indication of information structure.  

Crosslinguistic work shows that languages’ intonation systems might differ in various respects from each other. Considering only pitch, Ladd (1996, p. 119) states  

S. Zerbian (✉)  
Institute of Linguistics, English, University of Stuttgart, Stuttgart, Germany  
e-mail: sabine.zerbian@ifla.uni-stuttgart.de  

© Springer-Verlag Berlin Heidelberg 2015  
E. Delais-Roussarie et al. (eds.), Prosody and Language in Contact,  
Prosody, Phonology and Phonetics, DOI 10.1007/978-3-662-45168-7_2
that the intonation systems of languages can show ‘semantic differences’, i.e. regarding the meaning or use of phonologically identical tunes, ‘systemic differences’, i.e. regarding the inventory of phonologically distinct tune-types irrespective of semantic differences, ‘realizational differences’, i.e. regarding the phonetic realization of what may be regarded phonologically as the same tune, or ‘phonotactic differences’, i.e. regarding tune-text association and the permitted structure of tunes. A comparable typology of other prosodic features, such as duration or intensity, does not exist.

Contributions in Bhatt and Plag (2006) as well as Brousseau (2003) and Hualde and Schwegler (2008) report specifically on prosodic features in creole languages and how they differ from the superstrate language. Queen (2001) and Simonet (2011) are examples of studies that report on sentence prosody in early bilingual speakers. In the field of foreign and second language acquisition, several studies report on a wide range of phonetic and phonological differences in the prosody of the newly acquired language (see Mennen (this volume) 2007; Gut 2009 for recent overviews).

The central prosodic phenomenon in this chapter will be prosodic focus and givenness marking. The term focus is used following Krifka (2008) in that focus is understood as that part of a sentence which introduces alternatives relevant for the interpretation of linguistic expressions. Focus can be elicited by means of wh-questions in which the constituent questioned corresponds to the focus of the answer, also referred to as information focus. Givenness is a second important category of information structure in Krifka (2008). It indicates that the denotation of an expression is present in the immediate common ground context. This is the case if a constituent has been explicitly mentioned in the preceding discourse and is not in focus. Other discourse-relevant notions, such as topic, which can also be marked by prosody, are not considered in the following.

Central in the discussion are languages that are ‘indigenized’ varieties of a target language spoken by a community which has shifted to another group’s language. This shift need not necessarily be a complete shift, i.e. resulting in a loss of one’s own language. On the contrary, in all of the contact situations discussed in this chapter the speakers actively maintain their indigenous languages. The target language is often considered an L2 for these speakers and the features of this group’s variety of the target language differ from the standard form of the target language. Examples include Spanish-Quechua contact and English-Bantu contact. Note that this setting corresponds to cases for which Thomason (2001, p. 75) predicted interference through shift (see also Sect. 2.3.1). The approach proposed here should, however, be extendable to other contact situations as well.

Following Winford (2003, p. 235), the varieties under consideration in this chapter can be characterized by group second language acquisition (group SLA) and language shift. Principles and processes relevant for the linguistic outcome are target language, L1 influence, processes of simplification and internally driven changes (p. 243). Related to simplification, (typological) markedness constraints play a role. This chapter defines markedness as a typological implication (though see Haspelmath (2006) for a critical review of the notion ‘markedness’), and explores the notion markedness as it relates to the prosodic marking of focus and givenness.
In studying the use of prosody for information structuring in contact languages, the current chapter aims at establishing a scale of markedness with respect to sentence prosody that allows formulating predictions about what can be expected in language contact. The argument that will be developed is that prosodic marking of information structural categories like focus and givenness is typologically marked, and hence difficult to acquire. In contact languages, prosodic marking of these categories is therefore less likely to be found.

A general remark on the use of the terms first and second language (L1 and L2): L2 is used in the literature to refer to language varieties drawn from an array of diverse bilingual populations, including simultaneous and consecutive early bilinguals, late bilinguals to learners of a foreign language, with varying proficiency in the target language. It remains an open question if the grammars of these different speaker groups form a continuum and follow the same principles and processes. The view expressed in Winford (2003) is adopted here that there are parallels between SLA of an individual (e.g. a learner) and a group (as in those contact languages that the current chapter concentrates on).

For foreign language acquisition, reference is often made to the learner’s first language (L1), and the observed differences between learner variety and standard variety are explained with respect to transfer from the first language (see, e.g. Raiser and Hiligsmann’s (2007) study on prosodic transfer in 2.3). For contact varieties, however, the relevance and usefulness of the concept ‘L1’ that is comparable to the scenario in foreign language acquisition is debatable. Contact varieties can be native languages to the speakers, or acquired in simultaneous or consecutive early or late bilingualism. Keeping this in mind, I will use the terms L2 and L1 in the rest of the chapter for ease of reference. The term target language will be used in order to refer to the standardized form of the language that the speaker group shifted to.

The focus of this chapter will be on L2 varieties that have established themselves as language varieties in their own rights due to a long history of language contact through geographical contiguity. In this sense, L2 and the term contact language will be used interchangeably in the remainder of the chapter (see Winford 2007 for a recent discussion of terminology in contact linguistics). For further clarification, where English has been one of the languages in contact, the terms ‘New Englishes’ or ‘World Englishes’ are often used to refer to these contact varieties. For the parallelism between individual and group SLA in these cases, see also Mesthrie and Bhatt (2008, p. 156): ‘given that New Englishes arose mainly in situations of bilingualism stimulated by classroom education, it is a natural expectation that they should be characterized, especially at earlier stages of development, in terms of processes of Second Language Acquisition’.

This chapter is structured as follows. In Sect. 2.2, the role of markedness in the field of foreign language acquisition and contact linguistics is discussed in more detail. Section 2.3 introduces a markedness-based account to sentence accent, which has been developed in the field of foreign language acquisition. In Sect. 2.4, an extended markedness scale is proposed for the study of contact languages. Section 2.5 discusses the predictions that the markedness scale makes and tests them against
Section 2.6 provides further discussion by addressing additional predictions and sketching out directions for future research.

2.2 Markedness in Language Contact

In the field of foreign language acquisition, markedness has been established as having an influence on grammars emerging in language learners. Eckman’s (1977) Markedness Differential Hypothesis (MDH) is well known. It has been formulated in order to predict learner’s difficulties. It states that, when two languages differ, marked structures are more difficult to acquire than unmarked structures. As a second, more general hypothesis, the Structural Conformity Hypothesis (Eckman 1984, 1991) states that learners will perform better on less-marked structures. Eckman (1985) gives a brief summary of how the predictions of the MDH have been borne out in various studies concerning foreign language acquisition.

In the study of contact linguistics, three linguistic factors have been isolated that are relevant for the linguistic features that result from language contact. These factors are the degree to which features are integrated into the linguistic system, the typological distance between the two languages involved in language contact, and universal markedness (Thomason 2001, p. 76).

Thus, individual second language acquisition mirrors the acquisition of group second language (Winford 2003, p. 236). In other words, language acquisition by learners of a foreign language mirrors the acquisitional process which leads to new varieties of languages emerging from language contact, which is the focus of this chapter. This is because the same structural principles and processes are said to operate in individual and group second language acquisition. As a consequence, markedness plays a role in both of them.

Adopting the basic insights of Eckman’s MDH to contact linguistics, the prediction is that marked features of an L2 are less likely to be taken over by a shifting speaker group because they are harder to acquire. Thus, marked features are prone to change in language contact. The only exception would be between languages that show typologically very similar systems; in this case, even features that are highly marked would be expected to be exchanged between these systems.

It needs to be noted that although the relevance of markedness in contact linguistics is not disputed, the actual definition of markedness remains rather unspecified. Thomason and Kaufman (1988, p. 26) wrote that ‘markedness rests on a basis, however ill-defined, of relative productive and perceptual ease’. Note that in this chapter, markedness is defined typologically, and markedness relations are derived by implications (see Sects. 2.3 and 2.4).

The attempt to provide a unified approach to the role of markedness in second language acquisition and language contact has already been put forward by Major (2001) in his Ontogeny Phylogeny Model. The Ontogeny Phylogeny Model was originally developed for second language acquisition, and postulates that second language acquisition is characterized by influence of L1, L2 and universal constraints.
The relative influence of each of these factors differs across different acquisition stages and is further determined by similarity and markedness. In the acquisition of marked structures, the influence of L2 increases slowly, L1 transfer decreases slowly, and the influence of universals increases first rapidly and then decreases slowly. In the summary of Major’s work, Gut (2009, p. 26) notes that Major claims that his model can be applied to both second language acquisition and contact languages alike.

In addition, the relevance of markedness in second language acquisition in general is uncontroversial. The next section presents a markedness-based account to sentence accent that has been developed in the field of foreign language acquisition.

2.3 A Markedness-Based Approach to Sentence Accent

In their study on prosodic transfer from L1 to L2, Rasier and Hiligsmann (2007) apply the ‘Markedness Differential Hypothesis’ (Eckman 1977, 1987) to sentence prosody and test it experimentally with Dutch and French learners of French and Dutch, respectively. The participants of their study were students with 10 years of learning in an institutional setting, thus, constituting a prototypical case of foreign language acquisition.

Eckman’s (1977, p. 321) MDH has been formulated in order to predict learner’s difficulties. It states that, ‘the areas of difficulty that a language learner will have can be predicted on the basis of a systematic comparison of the grammars of the native language, the target language and the markedness relations stated in universal grammar, such that,

• those areas of the target language, which differ from the native language and are more marked than the native language, will be difficult.

• [...]  

• those areas of the target language which are different from the native language, but are not more marked than the native language, will not be difficult’.

In order to predict learner’s difficulties with respect to sentence prosody a markedness scale of sentence prosody is needed. Rutherford (1982, p. 104) writes that ‘serious justification of [predictions concerning the acquisition of discourse features, SZ], however, will depend upon a clearer notion of how markedness applies to higher levels of language organization, and specifically discourse’.

Rasier and Hiligsmann (2007) develop a typology of accent systems which lends itself as a markedness scale for sentence prosody. They distinguish between structural constraints on accentuation (e.g. placing main stress on the right-most constituent) and pragmatic factors (e.g. an accent on focused constituents). Languages differ as to which of these factors determine their intonation or to what extent the factors interact. As examples for languages in which sentence accent is determined structurally, Rasier and Hiligsmann (2007) cite Italian and Spanish. Catalan would be a further example of a language in which free accent placement
is not possible in order to render any constituent focused (e.g. Vallduví 1991 who introduced the term non-plastic). Then, there are languages that take both structural and pragmatic information into consideration for accent placement. Examples are French, Romanian, Dutch, German and English. There are differences between the languages though, concerning the order of preference: Rasier and Hiligsmann (2007) categorize French and Romanian as relying more on structural rules and to a lesser extent on pragmatic rules for the placement of sentence accent. The Westgermanic languages, on the other hand, allow a pitch accent on any focused constituent and frequently show deaccentuation of given constituents so that pragmatic considerations strongly determine the placement of sentence accent, thereby overriding structural considerations. No language totally lacks structural constraints and relies on pragmatic constraints only. Thus, there is a systematic gap concerning purely pragmatically determined sentence accent, also mirrored by the observation that all languages display a default prosody associated with all-new sentences. Thus, pragmatically determined sentence accent implies the presence of structurally determined sentence accent, but not vice versa.

Interpreting markedness as typological implications, a markedness scale of sentence prosody can be derived from the typology of accent systems suggested by Rasier and Hiligsmann (2007): a phenomenon A in some language is more marked than B if the presence of A implies the presence of B; but the presence of B does not imply the presence of A. For the prosodic case at hand, the typological survey reveals that the presence of pragmatic constraints in accent placement implies the presence of structural constraints but not vice versa. Hence, structural constraints in sentence accent placement constitute the unmarked case.

From this markedness scale, Rasier and Hiligsmann (2007) derived their predictions concerning the acquisition of sentence accent in French and Dutch by Dutch and French learners, respectively. As stated above, French is a language in which structural constraints outweigh pragmatic constraints in accent placement, whereas in Dutch the order of preference is reversed, i.e. pragmatic constraints outweigh structural constraints. Hence, French is less marked than Dutch concerning sentence accent. The predictions of the MDH are that marked patterns are more difficult to learn than less marked ones, and that marked patterns that are less marked than the patterns of the mother tongue are not difficult to learn. Hence, Rasier and Hiligsmann (2007) expect to find difficulties for French learners acquiring sentence accent in Dutch, but no difficulties for Dutch learners acquiring French. Their results confirm the predictions: Dutch L1 speakers produced 74% correct accent patterns in French, whereas French L1-speakers only produced 47% correct accent patterns in Dutch. Their study thus successfully transferred Eckman’s MDH to the acquisition of sentence accent and lends empirical support to the markedness scale derived from the typology of accent systems.
2.4 An Extended Markedness Scale

This section argues for an extended markedness scale of sentence prosody suitable to contact languages (cf. Zerbian 2012 for an earlier version). It starts out by clarifying one aspect of the typology of accent systems which constitutes the basis of Rasier and Hiligsmann’s markedness scale in order to accommodate contact settings between languages with typologically diverse word-prosodic systems. It then motivates two extensions of the markedness scale which allow more fine-grained predictions.

2.4.1 Typology of Sentence Prosody

In order to eventually propose a markedness scale that is applicable crosslinguistically it is necessary to clarify one aspect concerning the typology of accent systems proposed by Rasier and Hiligsmann (2007). Based on their study on French and Dutch intonation, Rasier and Hiligsmann developed a typology with pitch accents of different shapes as correlate of sentence prosody. However, whereas all languages have intonation (Bolinger 1964), not all languages use pitch accents in sentence prosody. Instead, other acoustic parameters, such as intensity, duration or phrasing, could change under circumstances comparable to the different placements and shapes of pitch accent in French and Dutch.

In a crosslinguistic perspective, it is therefore appropriate to talk of a typology of sentence prosody instead of sentence accent. In all languages, sentence prosody is assigned based on structural considerations. This is necessarily the case as all languages display default prosody associated with all-new sentences. Some, but not all, languages change the sentence prosody due to pragmatic considerations. The shape or location of pitch accents might be changed, and/or phrasing. For French, e.g., phrasing is said to be used to express information focus (Féry 2001), whereas a certain kind of pitch accent occurs with contrastive focus (Delais-Roussarie and Rialland 2007). It is also conceivable (though less well-researched) that only intensity and/or duration change according to pragmatic considerations. A typology (and derived from that a markedness scale) that is not restricted to pitch accent, but encompasses prosody in more general is thus desirable in order to capture language-specific differences.

Because of the cross-linguistic perspective that this chapter takes, it is worth making an assumption explicit on which the current work is based, namely that the parameters that govern sentence prosody can in principle act independently of the word-prosodic system of the language under consideration, be it tone, stress or pitch-accent (following Jun 2005; against Fox 2000). Research has shown that prosodic focus marking is not restricted to stress languages, but can also occur in tone languages (e.g. Xu 1999). Therefore, parameters of word prosody, such as accent, should not feature in the markedness scale of sentence prosody in order to allow for its application to typologically different word-prosodic systems.
In the rest of the chapter, the typology of sentence prosody in Fig. 2.1 will be assumed, which ranges from structurally determined sentence prosody to pragmatically determined sentence prosody, leaving the concrete phonological categories and acoustic correlates of sentence prosody deliberately unspecified in order to accommodate crosslinguistic differences. Thus, other languages can be assigned their place in this typology as well. One example is Northern Sotho, a Southern Bantu tone language whose salient feature of sentence prosody is not pitch accent placement or pitch accent type, but lengthening of the penultimate syllable (cf. Hyman and Monaka 2008 on the related language Tswana). Research has shown that sentence prosody in Northern Sotho is not determined by information structure (Zerbian 2006). A similar observation has been made for Yucatec Maya (Kügler and Skopeteas 2007).

The typology of sentence prosody can be turned into a markedness scale based on the same argumentation as outlined in Sect. 2.3: Every language shows sentence prosody determined by structural constraints, but sentence prosody is not always determined by pragmatic considerations. From this implication it emerges that structural prosody is less marked than pragmatic prosody.

### 2.4.2 Decomposing Pragmatic Constraints on Sentence Prosody

At least two information structural aspects converge in pragmatic constraints on sentence prosody, namely focus and givenness marking. This can be readily observed in languages like English, German and Dutch, and according to Rasier and Hiligsmann’s (2007) study, also in French. In the Westgermanic languages, narrow focus is marked prosodically by means of the placement of a pitch accent, resulting in increased fundamental frequency (F0), intensity and duration on the focused constituent (see Breen et al. 2010 for a recent overview on English). Constituents
Markedness Considerations in L2 Prosodic Focus and Givenness Marking

that are given in the discourse are deaccented in these languages. Deaccentuation is thus the pragmatically determined prosodic marking of givenness.

Crosslinguistic research suggests that there is a typological markedness relationship between prosodic focus and givenness marking. Of those languages, which have been reported to show prosodic focus marking, some also show deaccentuation of given information such as the Westgermanic languages English, German and Dutch. However, deaccentuation is not a language universal and languages have been reported that do not show deaccentuation to the same extent, e.g. Spanish and Arabic in Cruttenden’s study (2006), Hellmuth (2005) on Egyptian Arabic, Xu et al. (2012) on Taiwanese and Taiwan Mandarin. The latter show a pitch range expansion on the focused constituent, but not necessarily a prosodic effect on the given constituents.

Prosodic focus marking (e.g. through pitch accent placement) and prosodic givenness marking (e.g. through deaccentuation) are thus two independent factors that can each contribute to pragmatic constraints in sentence prosody. The distributional patterns of focus accent and deaccentuation described above suggest that those languages which have deaccentuation also have focus accent so that prosodic givenness marking simultaneously co-occurs with prosodic focus marking. However, I did not find studies that report prosodic givenness marking without some kind of prosodic focus marking at the same time. If this can be confirmed as a valid generalization, there is a crosslinguistic implication with respect to prosodic focus and givenness marking, which is lost if prosodic givenness marking is considered at par with focus marking. The implication that prosodic givenness marking seems to entail prosodic focus marking, but not the other way around, yields a markedness relation between these two notions according to which prosodic givenness marking is more marked than prosodic focus marking. The markedness scale of sentence prosody from the previous section can thus be expanded by these two notions and their relative ordering. This is shown in Fig. 2.2.

It should be kept in mind that the current article is concerned with a general markedness scale of sentence prosody, based on a typology of sentence prosody.
The fact that in some particular (more or less systematic) instances, we might find givenness marking, e.g. in English, without explicit focus marking would not as such provide counterevidence to the typology that is suggested here. A real counterexample that challenges the above typology would be constituted by a language that has at its disposal prosodic means only for givenness marking but not for focus marking.

The asymmetry between prosodic focus and givenness marking that is assumed in the approach advocated here is also reflected in Féry’s latest work (2013), where she posits a general crosslinguistic preference for alignment of focus (either prosodically or through syntactic movement) but only a language-specific constraint for deaccentuation which interacts with the focus alignment constraint.

The difference between prosodic focus and givenness marking might be reflected in other linguistic domains in a parallel way: There are languages for which focus markers have been reported, but I am not aware of givenness markers (the particle *wa* in Japanese is a topic marker and therefore does not fit into the dichotomy of focus versus given).

### 2.4.3 Extension of the Markedness Scale

So far, markedness has been motivated by typological implication, yielding the scale of sentence prosody outlined in the previous section. Language is full of further scales in which one end can be considered more prominent than the other. Such prominence scales are inferred orderings of linguistic objects. The term prominence is used in an abstract sense in this context. Examples of prominence scales can be found in any area of grammar: the sonority scale, the person scale on which the first person is more prominent than the second or third, or the grammatical relation scale on which the subject is more prominent than the object. A specific instantiation of the abstract notion of prominence is markedness, as in the case of sentence prosody. Note though that equating abstract prominence with markedness changes the definition of markedness followed so far.

In this section, I reinterpret the markedness scale of sentence prosody established so far as an abstract prominence scale, and combine it with other linguistic scales, following the technique of harmonic alignment in Optimality Theory (Prince and Smolensky 1993, Chaps. 6, 8). Harmonic alignment of prominence scales establishes a preferred correlation between two distinct but related dimensions. For example, combining the focus scale according to which focused elements are more prominent (in an abstract sense) than non-focused elements with the scale of grammatical relations (subjects are more prominent than non-subjects) yields a prominence relation in which focused subjects are more prominent than focused non-subjects (see Zerbian 2006, 192 ff. for a derivation, and e.g. Fiedler et al. 2010 for evidence from West African languages).

In work on information structure, a differentiation of focus types has been suggested which distinguishes between information focus and identificational focus.