The goal of this dissertation is to make clear the prosodic structure of Japanese discourse. The first step is to explain the importance of research on phrase-end intonations, the key crossing-point between the analysis of discourse/conversation on the one hand, and the study of intonation on the other. This importance is illustrated by focusing especially on the so-called 'high-rising' phrase-end intonation in Japanese. In fact, this is not really a rising but a rising falling intonation of the phrase-end, heard with particular frequency during discussions. The second step is to set out an objective classification and description of Japanese phrase-end intonations. The third, and final, step is to make clear physically and statistically the prosodic features (such as speed of speech, length of pose and phrase, pitch-range and phrase-end intonations) which comprise prosody on the scale of a whole discourse. This entails an objective linguistic description of WACHO (speech tone), a distinctive atmosphere that pervades and marks the nature of an entire discourse, in the sense that the verbal mannerisms in a radio newsreader’s presentation makes it immediately distinguishable from ordinary conversation. WACHO is often stigmatized in various ways because of the somewhat ambiguous meanings it conveys.

In the first chapter, I follow the history of intonational studies. The research revealed a shortage of intonational studies at the level of the whole discourse. Then I re-define intonation as an element of prosody concerning pitch, not in a sentence but in a discourse, closely related with other elements of it. And to grasp intonations in discourse means to focus on WACHO – a whole-speech melody, or an aural tone that permeates an entire discourse. In this dissertation WACHO is re-defined as a synthetic
tone of prosodic features that occurs throughout a discourse and conveys the speakers' intentions and/or emotions in each part of the discussion. Thus I emphasize that WACHO should be a focus of socio-linguistic studies. The concept of WACHO is essential to compensate for gaps in the existing research: namely, the lack of discourse level perspective and socio-linguistics in Japanese intonation studies. Therefore, I use the so-called 'high-rising' phrase-end intonation as an example to show the importance of those perspectives.

In the second chapter, I conduct detailed analysis on the so-called 'high-rising' phrase-end intonation along two paths of inquiry. One is a socio-linguistic study of the stereotype associated with this intonation, including the impressions that it conveys. The other path was a clarification of the actual acoustic features of this intonation, and of the actual grammatical, pragmatic, and discourse level functions of this intonation in actual use. This intonation conveys a clear impression to the hearer of a somewhat childish, coquettish sense in some cases. However, those impressions are not communicated solely by the acoustic features, such as pitch. This intonation has functions at the discourse level, conveying a break in the sentence or a change in informational content; to signal that the speaker intends to continue speaking; to strengthen the listeners' attention; and to stimulate a response from the listener in the form of a nod or "uh-huh" affirmation. The intonation is effective in improving the listeners' active participation in the conversation.

Therefore, this intonation appears even in relatively formal situations, when the speaker is explaining something in an ordered sequence, such as following a line of logic. Research into the usage consciousness of this intonation has revealed stereotypes attached to the extreme rising-falling form of the intonation. One such stereotype is the association of this intonation with highly informal discourses, such as conversations between family members or close associates. Another stereotype is the claim that the intonation comes from imitating idols of popular culture. For such reasons, its use in other situations has been criticized, sometimes in extreme terms. In fact, in the 1980's, the intonation was criticized with a vehemence that verged on the emotional. In this dissertation I consider this issue in the light of social advances by Japanese women at that time, and show the actual situation of this stereotype and the way in which this intonation was given meanings beyond its literal meanings and functions. To observe this process is helpful in gaining an understanding of the importance of prosody and achieving the goal of this dissertation.

In the third chapter, I establish an objective classification of phrase-end intonations in Japanese,
which is essential to a description of WACHO as a set of prosodic features in various kinds of discourse. Objectivity is regarded as the most important factor in classifying intonations, so discriminant analysis of six types of phrase-end intonations was executed. The result of this statistical analysis must be corroborated through perceptual examination. But this mode of classification can be comprehensively applied to intonations that appear in any discourse in any social situation, because it is based on values that are actually measurable. Although WACHO does not consist only of intonations, the role of intonations is quite important. This is because their distribution provides a uniquely valuable mode of comparison among WACHOs, so the establishment of the way of classifying intonation is very significant.

In this dissertation, the distribution of six types of phrase-end intonations in six recitations and six utterances were compared with each discourse. The results revealed that one of the causes of the difference of the distribution types of intonation among these recitations and utterances is the difference of the characteristics of the scene or the discourse.

In the fourth chapter, I demonstrate that it is possible to understand WACHO (despite its likely impression of being impossibly ambiguous) as a set of measurable prosodic features. I used factor analysis on the above-mentioned six recitations and six utterances by examining not only the distributions of intonations but also the measurable values relating to prosody, such as pose length, phrase-length pitch-range and so on, as explanatory variables. In consequence, the result of factor analyses well reflected the general impression of these discourses. For example, recitations and utterances are clearly divided into plus and minus by the first factor, and the dialogue part of recitations is distributed closest to the utterances range. Although limited types of discourse are treated in this dissertation, it may be said to establish one of the methodological frameworks of WACHO study.

In the fifth chapter, I consider the degree of discreteness in Japanese phrase-end intonations, from the theoretical viewpoint of the prototype category, and conclude that this viewpoint is valid for classifying Japanese phrase-end intonations. This conclusion is based on the findings of this dissertation and other empirical studies on Japanese intonation. Following the summarization of each chapter, problems concerning future WACHO studies and an overview of Japanese socio-linguistics are considered.

Finally, I summarize briefly the conclusion of this dissertation as the following four points: First, the distribution of phrase-end intonations, which shows not always fully discreteness because of
its correspondence to the prototype category, is considered important in characterizing WACHO. The phrase-end intonations of anyone's speech can be classified objectively by discriminant analysis, by using their physical, acoustic or objectively measurable values as explanatory variables when it is standardized. Second, WACHO exists as a set of prosodic features in every discourse. In some degree it is represented clearly only by measurable values related to prosody, and without reference to immeasurable features such as personal vocal natures or the ambiguous atmospheres that can color utterances. Third, WACHO makes impressions that the listener is not conscious of; beyond the explicit meanings it may convey. Such communication at the level of unconsciousness can engender a stereotype, creating a bias about the speaker through society. This is the result that emerged from the survey of the acoustic, functional and socio-linguistic characteristics of 'high-rising' intonation. Finally, if I may make an assertion, it is necessary for socio-linguists with scientific minds to study WACHO, especially the aspect of intonation. This is difficult, given the often unconscious nature of the communication, but it is likely to reveal a hotbed of ambiguous impressions and prejudice.