Intonation of wh-questions with lexically unaccented wh-phrases

Many studies on the intonation of wh-questions in Tokyo Japanese (Maekawa 1991, Ishihara 2003, Hirotani 2005, among many others) have shown that they always exhibit a special prosody (akin to a focus prosody): an extra F0-rise on the wh-phrase followed by an F0-reduction of the post-wh-material.

The wh-phrases used in these experimental studies have always been lexically accented ones, as the core part of the wh-phrase such as náni ‘what’, dáre ‘who’, itu ‘when’ contains a lexical accent. As a result, pitch contours of wh-questions that have been studied so far have always been subject to the phonetic and phonological effects of lexical accent on the wh-phrase. Therefore it still remains unclear whether a pure intonational effect of wh-question exists independent of phonetic and phonological effects of lexical accent.

This study investigates the intonation of wh-questions containing a lexically unaccented compound wh-phrases, such as nani.iro ‘what.color’, nani.go ‘what.language’, etc. By systematically controlling (i) the sentence type (wh-interrogative vs. declarative), (ii) the lexical accent of the target word (wh- vs. non-wh), and (iii) the lexical accent of the post-target word, interaction of the phonetic effects of lexical accent and those of the focus prosody triggered by wh-question (both on the wh-phrase and on the post-wh-phrase) are examined.

Sample Stimuli

(1) Iiyama-wa ai.iro-no enogu-ni orénzi-o mazemasita.
   Iiyama-TOP indigo.color-GEN paint-DAT orange-ACC mixed

(2) Iiyama-wa nani.iro-no enogu-ni orénzi-o mazemasita ka?
   Iiyama-TOP what.color-GEN paint-DAT orange-ACC mixed Q

(3) Iiyama-wa néebi-no enogu-ni orénzi-o mazemasita.
   Iiyama-TOP navy-GEN paint-DAT orange-ACC mixed

(4) Iiyama-wa dóno.iro-no enogu-ni orénzi-o mazemasita ka?
   Iiyama-TOP which.color-GEN paint-DAT orange-ACC mixed Q?

Selected References