

## On the concept of neutral tone in Mandarin Chinese

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Neutral tone (henceforth T0) is often considered as a fifth tone in Mandarin Chinese (MC), besides the four lexical tones (T1 – T4). It is always realized on weak syllables with a phonetic pitch depending on the previous lexical tone. However, according to Wang (1980: 198), the neutral tone is not a tonal phenomenon, but a prosodic one.

Studies on T0 can be summarized into three hypotheses:

- 1) T0 has an underlying form (Duanmu 1999; Lin 2006);
- 2) T0 has no underlying form and depends on the previous lexical tone (Duanmu 2007; Liu 2008);
- 3) One feature of T0 is underlying, a second feature depends on the preceding lexical tone (Yip 1980).

All the three can explain T0's behavior after a lexical tone, yet two phenomena didn't draw enough attention: (i) in a sequence of several neutral tones (only one study in the literature, Wang 1997), the first one depends on the previous lexical tone, while others simply have a low (L) pitch; (ii) when a lexical tone is reduced to a neutral tone by de-stressing, it behaves exactly in the same way as a primary neutral tone (mentioned in Duanmu 2007).

These two phenomena would lead to two contradictions: (i) in MC, two successive L tones violate the OCP (Yip 2002), trigger of the famous 3th tone sandhi, if T0 is an underlying L tone, why several T0s as L tone are tolerated; (ii) when a lexical tone is reduced to T0, if T0 does have an underlying form, why should a lexical tone abandon its own underlying form to pick the underlying form of T0?

*We suggest in this paper that the concept of neutral tone is in fact the superposition of two phenomena: tone and prosody.* Underlyingly, T0 would be the absence of tone, realized as a L prosodic pitch. Since tone is absent, it could take the floating tonal element of the previous lexical tone (for instance, floating high tone of T3). Thus we would be able to explain in a sequence of several T0s, why only the first T0 after a lexical tone depends on this latter and why all other successive T0s take the L pitch.

This hypothesis would also predict why a reduced lexical tone behaves exactly like a T0: a syllable which has lost its lexical tone is a syllable without tone, just like T0, which is the absence of tone, they should behave in the same way.

### References:

Duanmu, S. (1999); Duanmu, S. (2007), Lin, H. (2006); Liu, T.-H. (2008); Wang, L. (1980); Wang, J. (1997); Yip, M. (1980); Yip, M. (2002)