The ongoing encliticisation process of numeral yi 'one' in Mandarin

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There is a debate about whether the numeral yi 'one' in Mandarin is deleted from the nominal phrase yi + classifier + noun (yi + CL + N), resulting in classifier + noun (CL + N). The sentences in (1) illustrate the optional existence of yi. I argue that, based on the tone 3 sandhi (T3S) phenomenon, yi is encliticised in yi + CL + N. Instead of being deleted, yi leaves the original syntactic constituent, the nominal phrase, to form a phonological word with the preceding verb, leaving the CL + N in the nominal phrase.

Previous analyses approached the relationship between yi + CL + N and the yi-less CL + N through questioning if yi is deleted from the former, resulting in the latter. The debate about the status of yi has covered syntactic, semantic, pragmatic, and prosodic areas. Jiang (2012, 2020), Li & Feng (2015), and Wang (1989) follow Lü (1944), arguing for the deletion of yi. The other group led by Cheng and Sybesma (1999), argued against the derivational connection between the two structures (Li & Bisang, 2012; Zhang, 2014). However, no account has been given regarding the substantial use of CL + N in informal spoken Mandarin, compared to formal written Mandarin, invoking further phonological analysis.

The current proposal takes a novel perspective to address the issue through observing the phonological behaviour of the numeral yi when yi + CL + N changes into CL + N and argues that yiencliticises in the process. The difficulty to tell where yi goes in the latter structure is overcome by analysing what is explicit: the tonal realisation of the word preceding yi. For example, in (1b) above, the underlying tone of the verb mai 'buy' and the classifier pi is both Tone 3 (T3). T3S happens which changes T3 into Tone 2 (T2) when it precedes another T3. On the surface form, mai 'buy' in (1b) is realised as T2. However, in (1a), T3S does not happen to mai 'buy' because the two T3 words are separated by yi, which does not have an underlying T3 variation in Mandarin. The tone of mai 'buy' in (1a) remains to be T3. The evidence for the cliticization of *yi* appears when (1a) is used in informal spoken form. The tone of *mai* 'buy' changes from T3 to T2 in casual speech, with a weakened pronunciation of yi. Two more sets of sentences of the same nature were tested among five native speakers and achieved high agreement among them. This suggests that the non-T3 yi is phonologically invisible in the structure, making it no longer a hindrance of T3S in (1a). Because more prominent stress is assigned to the verb over the classifier in this phrase, yi cliticises to the preceding word, resulting in encliticisation. When yi is encliticised, it loses independent phonological status and groups with the preceding syntactic word. Being dependent on the host in the phonological word (PW) [mai=yi]_{PW}-T3, yi is expected to show the same phonological behaviour as the host, especially regarding the tonal realisation. I argue that yi's encliticisation has not fully developed such that the dependent phonological status of yi is influenced by not only the preceding syntactic word but also the one that follows it. When the following word is a lexical word, such as a noun, vi's encliticisation does not happen. When the following word is a semi-lexical word, such as a classifier, yi encliticises to the preceding lexical word.

The first implication of the current proposal is that phonological evidence is provided by going beyond the frame of whether yi is deleted, with emphasis on the informal register. Secondly, the current analysis supports the claim that phonological grouping can happen across syntactic boundaries, in consistent with the findings such as Lahiri and Plank (2010) in Swedish. Finally, encliticisation is revealed for the first time in Mandarin with supporting evidence. It records the formation of a clitic in Mandarin, a Sino-Tibetan language, which has different morphological and phonological systems from the relatively well-researched language families.

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