

# Interaction of spatial prepositions *ti7*, *tiam3* and *tua3* and verbs in Taiwan Southern Min: From a corpus-based approach

Chihkai Lin  
Tatung University  
[linchihkai@gmail.com](mailto:linchihkai@gmail.com)

Keywords: spatial prepositions, Taiwan Southern Min, corpus linguistics, Taiwanese Concordancer, interaction of verbs and prepositions

**Introduction:** This study explores the interchangeability of three spatial prepositions *ti7*, *tiam3* and *tua3* in Taiwan Southern Min from a corpus-based approach by looking into its preceding verbs. The three spatial prepositions have been regarded interchangeable, but there are some minor differences (Lien 2003, Tiu<sup>n</sup> 2009, Yang and Lu 2018). Lien (2013) contends that *ti7* can be declarative, while *tiam3/tua3* can be imperative. The three prepositions are more like in a continuum (Tiu<sup>n</sup> 2009). There are several nuances between the three prepositions. The three prepositions are interchangeable for a past event; only *tiam3* and *tua3* are interchangeable for a future event. When the prepositions *ti7/tiam3/tua3* precede *toh4 ting2* 'the top of a table', *ti7 / tiam3 toh4 ting2* are acceptable. *Tua3 toh4 ting2* is ungrammatical, due to the interpretation that *tua3 toh4 ting2* only means 'to live on a table'.

**Questions:** Although several differences between the three prepositions have been discussed within the domain of a preposition phrases or from a pragmatic perspective, there is no lengthy research to focus on the preceding verb and to investigate whether there is an interaction between the verbs and prepositions.

**Corpus:** To better account for the interaction of verbs and the three prepositions, I adopt a corpus-based approach by extracting data from an on-line corpus, Taiwanese Concordancer (Lunn and Lau 2007). I pay specific attention to the distributions of the three spatial prepositions after thirty verbs. In total, there are 2312 tokens in the corpus.

**Results:** All the three prepositions are attested in the corpus, making them become interchangeable in use, but the frequency in the corpus reveals that *ti7* is the most favored, as the distributions of the two verbs suggest that *ti7* significantly outnumbers *tiam3* and *tua3* in the corpus. Out of 2313 tokens, 2072 tokens are in *ti7*, 179 tokens in *tiam3*, and 61 tokens in *tua3*. In the thirty verbs, three verbs exceed 10 percent of the corpus data (> 300 tokens): *khia7* 'stand', *khng3* 'put' and *che7* 'sit'. 449 corpus instances are attested in *khia7* 'stand' (19%), 384 instances in *khng3* 'put', and 306 in *che7* 'sit'. In the three verbs, preposition *ti7* tremendously outnumbers the other two prepositions (408 vs. 41 in *khia7* 'stand', 297 vs. 87 in *khng3* 'put', 279 vs. 27 in *che7* 'sit'). A Chi-square test is conducted to check whether there is a significant difference between the three verbs and three prepositions. The result suggests that there is a significant difference between the three verbs and the three prepositions. ( $p < .0001$ ). The data reveal that *khng3* 'put' is associated more frequently with *tiam3* than the other two verbs are. In the corpus, verb *chhai7* 'place' has eight tokens of *tua3*, but it has only five tokens of *tiam3*. The distribution differs from the other verbs in the ranking that *tiam3* outnumbers *tua3* ( $5 < 8$ ).

**Implications:** The findings have two implications. First, the corpus data suggest that the three prepositions are interchangeable (Lien 2003, Tiu<sup>n</sup> 2009), but the distribution is skewed, and thus the prepositions should be treated with different weight,  $ti7 > tiam3 > tua3$ . Second, the preposition interacts with the preceding verbs, especially *khng3* 'put' and *tiam3*.

## References:

- Lunn, U.-G. & Lau, K.-G. (2007). An introduction to Taiwanese online dictionary and corpus. In *Language, Society and Culture Series II: Multi-Cultural Thinking in Language Policy* (pp. 311-28). Taipei: Academia Sinica.
- Lien, C. (2003). In search of covert grammatical categories in Taiwanese Southern Min: A cognitive approach to verb semantics. *Language and Linguistics*, 4, 379-402.
- Tiu<sup>n</sup>, Jühōng. (2009). *TJ's dictionary of non-literary Taiwanese*. Tainan: Asian A-Tsiu International.
- Yang, Yu-chun and Chia-rung Lu. (2018). The Semantic Network of Near-synonymous Spatial Prepositions *ti*, *tiam*, and *tua* in Taiwan Southern Min. Paper presented at *The 28<sup>th</sup> Annual Meeting of the Southeast Asian Linguistics Society*, Wenzao Ursuline University, Kaohsiung, May 17-19.