Lin-shan Lee, Lee-Feng Chien, Long-Ji Lin, James Huang, K. J. Chen, “An Efficient Natural Language Processing System Specially Designed for the Chinese Language”, Computational Linguistics, Vol. 17, No. 4, Dec 1991, pp. 347-374.

The first journal paper in the world presenting computer analysis of Chinese natural language sentence structures.

Chinese sentences have very complicated structures. Computer analysis for them is very different from that for western languages. Figure 12 of page 362 is a simple example, “被李四叫去吃飯的小孩 (the children who were asked by Li-s to go to dinner)”. Here e1 is the dummy subject of “去吃飯(go to dinner)” but missing, e2 is the dummy object of “李四叫(Li-s asked)” but missing, e3 is the dummy subject of “被李四叫(asked by Li-s)” also missing, while all of them refer to the same word “小孩(children)’’. Pages 372, 373 are the analysis output of a complete example sentence, “我去年丟掉的那隻狗，我以前以為已經死掉了，昨天居然被我找到了(I used to assume the dog I lost last year must have died, but it was unexpectedly found by me yesterday)”.

國際期刊上第一篇有關華語自然語言句型文法之電腦分析之全文。

中文句型變化萬千，用電腦分析時和西方語言大不相同。第362頁的圖12是一個簡單的例子「被李四叫去吃飯的小孩」。其中「去吃飯」的主詞是e1但省略，「李四叫」的受詞是e2也省略，「被李四叫」的主詞是e3也省略，但他們都是指同一個詞「小孩」。第372、373頁為一複雜例句的分析結果：「我去年丟掉的那隻狗，我以前以為已經死掉了，昨天居然被我找到了」。