

Chương 9

1) Using the Cn function described in section 9.4 compute the score of each of the senses of the word *bridge* in the five-word window “*the suspension bridge the construction*”.

Giải

	with <i>bridge</i> / STRUCTURE1	with <i>bridge</i> / DENTAL-DEV37	in any window
<i>teeth</i>	1	10	300
<i>suspension</i>	200	1	2000
<i>the</i>	5500	180	500,000
<i>dentist</i>	2	35	900
total occurrences	5651	194	501,500

$$\text{Cn}(\text{bridge} / \text{STRUCTURED}, \text{the}) = (10^7 * 5500) / (5651 * 500\,000) = 19.47$$

$$\text{Cn}(\text{bridge} / \text{STRUCTURED}, \text{suspension}) = (10^7 * 200) / (5651 * 2000) = 176.96$$

$$\text{Score}(\text{STRUCTURED}) = 19.47 * 176.96 = 3445.4112$$

$$\text{Cn}(\text{bridge} / \text{DENTAL-DEV37}, \text{the}) = (10^7 * 180) / (194 * 500\,000) = 18.56$$

$$\text{Cn}(\text{bridge} / \text{DENTAL-DEV37}, \text{suspension}) = (10^7 * 1) / (194 * 2000) = 25.77$$

$$\text{Score}(\text{DENTAL-DEV37}) = 18.56 * 25.77 = 478.2912$$

2) Extend the grammar, lexicon, sense hierarchy and selectional restriction given in section 9.2 as necessary to appropriately interpret the following sentences:

a) *He gave the book to the college.*

b) *He knows the route to the college.*

Giải

a) (<PAST GIVE> g1 [AGENT <HE1>] [THEME <THE b1 (BOOK b1)>] [TO-POSS <The c1 (COLLEGE c1)])

b) (<KNOW> k1 [AGENT <HE1>] [THEME <THE r1 (ROUTE r1)>] [TO-LOC <The c1 (COLLEGE c1)])