Table 2a. Topic, prompt, and content specific p-frames that were deleted in the LBE corpus

| | p-frame | Freq. (raw) | Variants (type) |
|----|--------------------------|-------------|-----------------|
| 1 | we can * you | 161 | 6 |
| 2 | the * of the | 159 | 102 |
| 3 | you * to improve | 134 | 4 |
| 4 | you * be more | 129 | 7 |
| 5 | your * in our | 120 | 12 |
| 6 | you a * discount | 116 | 10 |
| 7 | for * interest in | 115 | 5 |
| 8 | you must * more | 115 | 5 |
| 9 | for your * in | 114 | 8 |
| 10 | areas in * you | 109 | 5 |
| 11 | let me * the | 109 | 5 |
| 12 | your interest * our | 108 | 4 |
| 13 | me outline * areas | 106 | 4 |
| 14 | outline * areas in | 105 | 4 |
| 15 | outline the * in | 105 | 4 |
| 16 | me * the areas | 105 | 3 |
| 17 | you * to be | 104 | 8 |
| 18 | you * improve your | 103 | 7 |
| 19 | from smith * enterprises | 103 | 3 |
| 20 | interest * our products | 102 | 3 |
| 21 | interest in * products | 102 | 2 |
| 22 | be more * with | 101 | 17 |
| 23 | from * son enterprises | 101 | 2 |
| 24 | you to * your | 97 | 12 |
| 25 | we * give you | 94 | 4 |
| 26 | we * offer you | 93 | 3 |
| 27 | to improve * work | 89 | 4 |
| 28 | to ask * to | 89 | 3 |
| 29 | to * your work | 88 | 4 |
| 30 | ask * to improve | 84 | 2 |
| 31 | which * need to | 83 | 3 |
| 32 | in which * need | 83 | 2 |
| 33 | john * smith son | 82 | 5 |
| 34 | which you * to | 82 | 3 |
| 35 | letter of * to | 80 | 3 |
| 36 | is a * letter | 80 | 3 |
| 37 | a * letter of | 80 | 3 |
| 38 | of * to ask | 79 | 2 |
| 39 | a formal * of | 79 | 2 |
| 40 | your * let me | 78 | 9 |
| 41 | pens and * notebooks | 78 | 7 |
| | | | |

| 42 | thank you * your | 77 | 2 |
|----|-------------------------|----|----|
| 43 | you for * interest | 74 | 5 |
| 44 | formal letter * warning | 69 | 2 |
| 45 | formal * of warning | 69 | 2 |
| 46 | your * style and | 66 | 3 |
| 47 | brought to * attention | 65 | 3 |
| 48 | be more * and | 64 | 14 |
| 49 | my attention * to | 61 | 4 |
| 50 | to * attention relating | 61 | 3 |
| 51 | attention * to your | 60 | 4 |
| 52 | working * and habits | 60 | 2 |
| 53 | you * to communicate | 43 | 6 |
| 54 | i * to say | 33 | 4 |
| 55 | to * the database | 31 | 3 |
| 56 | you * to pay | 26 | 10 |
| 57 | you * to update | 24 | 5 |
| 58 | to * your time | 23 | 7 |
| 59 | to * to the | 22 | 11 |
| 60 | to * a new | 22 | 12 |
| 61 | you * the order | 20 | 3 |
| 62 | to * more professional | 18 | 2 |
| 63 | a * of the | 17 | 14 |
| 64 | the * about the | 16 | 13 |
| 65 | can * the products | 16 | 3 |
| 66 | to * about teamwork | 16 | 3 |
| 67 | work * a team | 16 | 5 |
| 68 | a new * of | 13 | 3 |
| 69 | be * to deliver | 13 | 2 |
| 70 | you * the products | 10 | 3 |
| 71 | will * the pens | 10 | 3 |
| | | | |

Table 2b. Topic, prompt, and content specific p-frames that were deleted in the WP corpus

| | p-frame | Freq. (raw) | Variants (type) |
|---|------------------------|-------------|-----------------|
| 1 | the * policy committee | 18 | 2 |
| 2 | the * energy and | 15 | 3 |
| 3 | in the * energy | 13 | 5 |
| 4 | the * energy committee | 13 | 2 |
| 5 | of the * energy | 12 | 7 |
| 6 | the senate * committee | 11 | 4 |
| 7 | the * of energy | 10 | 9 |
| 8 | a * amendment to | 10 | 3 |

Table 3a. Overlapped p-frames that were deleted in the LBE corpus

| | p-frame | Freq. (raw) | Variants (type) |
|-----|---------------------|-------------|-----------------|
| 1 | can * you a | 132 | 4 |
| 2 | in * you need | 114 | 8 |
| 3 | the * in which | 86 | 6 |
| 4 | been * to my | 65 | 2 |
| 5 | the * and the | 52 | 36 |
| 6 | to * you for | 41 | 10 |
| 7 | to * you that | 26 | 8 |
| 8 | you * to do | 23 | 8 |
| 9 | will * to the | 21 | 5 |
| 10 | you * a good | 20 | 6 |
| _11 | you * to buy | 20 | 6 |
| 12 | your * and i | 20 | 15 |
| 13 | be * with your | 18 | 10 |
| 14 | can * an additional | 17 | 2 |
| 15 | the * and i | 16 | 13 |
| 16 | to * you a | 15 | 7 |
| 17 | to * that i | 15 | 9 |
| 18 | is * to be | 15 | 9 |
| 19 | to * about your | 14 | 8 |
| 20 | to * more with | 12 | 5 |
| 21 | to * a lot | 12 | 12 |
| 22 | am * to you | 11 | 2 |
| 23 | be * for you | 11 | 10 |
| 24 | you * in a | 11 | 3 |
| 25 | is * that you | 10 | 8 |
| 26 | to * as a | 10 | 3 |

Table 3b. Overlapped p-frames that were deleted in the WP corpus

| | p-frame | Freq. (raw) | Variants (type) |
|----|----------------|-------------|-----------------|
| 1 | in the * of | 73 | 39 |
| 2 | to the * of | 44 | 35 |
| 3 | on the * of | 42 | 32 |
| 4 | of the * of | 38 | 33 |
| 5 | the * and the | 34 | 27 |
| 6 | be * to the | 32 | 19 |
| 7 | is a * of | 31 | 16 |
| 8 | in the * and | 28 | 22 |
| 9 | the * of a | 25 | 21 |
| 10 | for the * of | 24 | 22 |
| 11 | of the * in | 24 | 18 |
| 12 | to be * to | 24 | 15 |
| 13 | and the * of | 23 | 21 |
| 14 | in the * we | 17 | 13 |
| 15 | be * in the | 19 | 14 |
| 16 | by the * of | 19 | 10 |
| 17 | to the * that | 18 | 11 |
| 18 | the * of our | 17 | 14 |
| 19 | in the * we | 17 | 13 |
| 20 | from the * of | 16 | 14 |
| 21 | to be * by | 13 | 11 |
| 22 | about the * of | 12 | 10 |
| 23 | will be * by | 11 | 10 |
| 24 | of the * on | 11 | 8 |
| 25 | need to * on | 11 | 7 |
| 26 | the * that we | 11 | 6 |
| 27 | will be * in | 10 | 9 |
| 28 | for the * i | 10 | 6 |
| 29 | not be * to | 10 | 6 |