## Appendix

Table 4: The frequency of triple frame combination and framshifts with each translation iteration for verb SEE in English-German dataset.

| Frame Combination | S-T-B Freq | S-T Freq | T-B Freq | Permutation Freq |
|-------------------|------------|----------|----------|-----------------|
| Perception_experience__Perception_experience__Perception_experience | 663 | Perception_experience__Perception_experience | 748 | Perception_experience__Perception_experience | 722 |
| Grasp__Grasp__Grasp | 172 | Grasp__Grasp | 205 | Grasp__Grasp | 188 |
| Grasp__Categorization__Grasp | 116 | Grasp__Categorization | 207 | Categorization__Grasp | 132 |
| Categorization__Categorization__Categorization | 100 | Categorization__Categorization | 126 | Categorization__Categorization | 168 |
| Grasp__Perception_experience__Grasp | 66 | Grasp__Perception_experience | 116 | Perception_experience__Grasp | 96 |
| Perception_experience__Becoming_aware__Perception_experience | 60 | Perception_experience__Becoming_aware | 184 | Becoming_aware__Perception_experience | 77 |
| Grasp__Categorization__Categorization | 59 | Grasp__Categorization | 207 | Categorization__Categorization | 168 |
| Grasp__Becoming_aware__Grasp | 53 | Grasp__Becoming_aware | 127 | Becoming_aware__Grasp | 66 |
| Perception_experience__Becoming_aware__Becoming_aware | 51 | Perception_experience__Becoming_aware | 184 | Becoming_aware__Becoming_aware | 111 |
| Grasp__Perception_experience__Perception_experience | 51 | Grasp__Perception_experience | 116 | Perception_experience__Perception_experience | 722 |
| Grasp__Becoming_aware__Becoming_aware | 31 | Grasp__Becoming_aware | 127 | Becoming_aware__Becoming_aware | 111 |
| Perception_experience__Perception_active__Perception_experience | 25 | Perception_experience__Perception_active | 77 | Perception_active__Perception_experience | 30 |
| Becoming_aware__Becoming_aware__Becoming_aware | 25 | Becoming_aware__Becoming_aware | 44 | Becoming_aware__Becoming_aware | 111 |
| Perception_experience__Awareness__Awareness | 23 | Perception_experience__Awareness | 28 | Awareness__Awareness | 48 |
| Grasp__Awareness__Awareness | 22 | Grasp__Awareness | 28 | Awareness__Awareness | 48 |
| Perception_experience__Perception_active__Perception_active | 22 | Perception_experience__Perception_active | 77 | Perception_active__Perception_active | 29 |
| Perception_experience__Perception_experience__Grasp | 21 | Perception_experience__Perception_experience | 748 | Perception_experience__Grasp | 96 |
Table 5: The frequency of triple frame combination and frameshifts with each translation iteration for verb FEEL in English-German dataset.

| S-T-B                                           | Freq | S-T                          | Freq | T-B                          | Freq |
|------------------------------------------------|------|------------------------------|------|------------------------------|------|
| Opinion__Opinion__Opinion                      | 123  | Opinion__Opinion             | 170  | Opinion__Opinion             | 125  |
| Feeling__Feeling__Feeling                       | 66   | Feeling__Feeling              | 88   | Feeling__Feeling              | 73   |
| Opinion__Awareness__Opinion                    | 33   | Opinion__Awareness            | 53   | Awareness__Opinion           | 34   |
| Opinion__Categorization__Opinion               | 25   | Opinion__Categorization       | 59   | Categorization__Opinion       | 27   |
| Opinion__Opinion__Awareness                    | 21   | Opinion__Opinion              | 170  | Opinion__Awareness            | 24   |
| Opinion__Sensation__Sensation                  | 19   | Opinion__Sensation            | 39   | Sensation__Sensation         | 24   |
| Opinion__Categorization__Categorization         | 18   | Opinion__Categorization       | 59   | Categorization__Categorization| 21   |
| Perception_experience__Perception_experience__Perception_experience | 12 | Perception_experience__Perception_experience | 18 | Perception_experience__Perception_experience | 14 |
| Opinion__Awareness__Awareness                  | 12   | Opinion__Awareness            | 53   | Awareness__Awareness         | 13   |
| Opinion__Sensation__Opinion                    | 11   | Opinion__Sensation            | 39   | Sensation__Opinion           | 12   |
| Feeling__Perception_experience__Feeling         | 6    | Feeling__Perception_experience| 12   | Perception_experience__Feeling| 6    |
Table 6: The frequency of triple frame combination and frameshifts with each translation iteration for verb SEE in English-Spanish dataset.

| S-T-B                          | Freq | S-T                          | Freq | T-B                          | Freq |
|-------------------------------|------|------------------------------|------|------------------------------|------|
| Perception_experience_        | 788  | Perception_experience_       | 858  | Perception_experience_       | 832  |
| Perception_experience_        |      | Perception_experience_       |      | Perception_experience_       |      |
| Grasp_Grasp_Grasp             | 114  | Grasp_Grasp                  | 135  | Grasp_Grasp                  | 125  |
| Perception_experience_Becoming_ | 97   | Perception_experience_Becoming_ | 167  | Becoming_aware_Perception_experience | 119  |
| Categorization_Categorization | 71   | Categorization_Categorization | 81   | Categorization_Categorization | 125  |
| Grasp_Becoming_aware_Grasp    | 51   | Grasp_Becoming_aware         | 96   | Becoming_aware_Grasp         | 64   |
| Grasp_Categorization_Grasp    | 51   | Grasp_Categorization         | 125  | Categorization_Grasp         | 55   |
| Grasp_Categorization_Categorization | 51 | Grasp_Categorization         | 125  | Categorization_Categorization | 125  |
| Perception_experience_P        | 34   | Perception_experience_P      | 60   | Perception_active_Perception_experience | 35  |
| Perception_active_Perception_experience |      |                              |      |                              |      |
| Grasp_Perception_experience_Grasp | 33  | Grasp_Perception_experience | 68   | Perception_experience_Grasp  | 51   |
| Perception_experience_Becoming_ | 31  | Perception_experience_Becoming_ | 167  | Becoming_aware_Becoming_aware | 56  |
| Grasp_Perception_experience_Perception_experience | 25  | Grasp_Perception_experience | 68   | Perception_experience_Perception_experience | 832  |
| Grasp_Awareness_Awareness     | 23   | Grasp_Awareness              | 35   | Awareness_Awareness         | 31   |
| Grasp_Becoming_aware_Perception_experience | 19  | Grasp_Becoming_aware         | 96   | Becoming_aware_Perception_experience | 119  |
| Perception_experience_Existence_Perception_experience | 19  | Perception_experience_Existence | 57   | Existence_Perception_experience | 19  |
| Perception_experience_Existence_Existence | 16  | Perception_experience_Existence | 57   | Existence_Existence         | 25   |
| Perception_experience_Perception_experience_Grasp | 15  | Perception_experience_Grasp  | 858  | Perception_experience_Grasp  | 51   |
Table 7: The frequency of triple frame combination and frameshifts with each translation iteration for verb FEEL in English-Spanish dataset.

| S-T-B                                      | Freq | S-T                                      | Freq | T-B                                      | Freq |
|--------------------------------------------|------|------------------------------------------|------|------------------------------------------|------|
| Feeling_Feeling_Feeling                   | 113  | Feeling_Feeling                          | 149  | Feeling_Feeling                          | 123  |
| Opinion_Opinion_Opinion                   | 65   | Opinion_Opinion                          | 101  | Opinion_Opinion                          | 68   |
| Opinion_Awareness_Awareness               | 31   | Opinion_Awareness                        | 50   | Awareness_Awareness                      | 40   |
| Perception_experience_Perception_experience_Perception_experience | 25   | Perception_experience_Perception_experience | 25   | Perception_experience_Perception_experience | 26   |
| Opinion_Give_impression_Give_impression   | 18   | Opinion_Give_impression                  | 25   | Give_impression_Give_impression          | 22   |
| Opinion_Awareness_Opinion                 | 16   | Opinion_Awareness                        | 50   | Awareness_Opinion                        | 16   |
| Opinion_Categorization_Categorization      | 13   | Opinion_Categorization                   | 24   | Categorization_Categorization             | 17   |
| Opinion_Opinion_Awareness                 | 13   | Opinion_Opinion                          | 101  | Opinion_Awareness                        | 13   |
| Feeling_Awareness_Awareness               | 8    | Feeling_Awareness                        | 12   | Awareness_Awareness                      | 40   |
| Opinion_Sensation_Sensation               | 8    | Opinion_Sensation                        | 9    | Sensation_Sensation                      | 9    |
| Opinion_Categorization_Opinion             | 7    | Opinion_Categorization                   | 24   | Categorization_Opinion                   | 7    |
| Opinion_Give_impression_Opinion           | 6    | Opinion_Give_impression                  | 25   | Give_impression_Opinion                  | 6    |
| Opinion_Feeling_Feeling                   | 6    | Opinion_Feeling                          | 10   | Feeling_Feeling                          | 123  |