

## Appendix

**Table A1:** Statistical results of object order distribution in the different discourse topic conditions in both participant groups.

|             | Estimate | Std. Error | Z value | p.value              | Significance |
|-------------|----------|------------|---------|----------------------|--------------|
| (Intercept) | 0.8508   | 0.4182     | 2.034   | 0.041                | p<0.05       |
| Ad DT-S     |          |            |         |                      |              |
| Ad DT-DO    | -1.3042  | 0.3611     | -3.611  | 0.000304             | p<0.001      |
| Ad DT-IO    | 1.671    | 0.3802     | 4.395   | 1.11e <sup>-05</sup> | p<0.001      |
| Ch DT-S     | 0.8244   | 0.4582     | 1.799   | 0.072003             | p<0.1        |
| Ch DT-DO    | 1.5274   | 0.4149     | 3.682   | 0.000232             | p<0.001      |
| Ch DT-IO    | -1.8247  | 0.4515     | -0.042  | 5.31e <sup>-05</sup> | p<0.001      |

**Table A2:** Statistical results of object orders of NP-NP occurrences.

|             | Estimate | Std. Error | Z value | Pr (>z)              | Significance |
|-------------|----------|------------|---------|----------------------|--------------|
| (Intercept) | 0.6774   | 0.4901     | 1.382   | 0.1669               |              |
| Ad DT-S     |          |            |         |                      |              |
| Ad DT-DO    | -1.9698  | 0.4547     | -4.332  | 1.48e <sup>-05</sup> | p<0.001      |
| Ad DT-IO    | 1.2443   | 0.5176     | 2.404   | 0.0162               | p<0.05       |
| Ch DT-S     | 1.1344   | 0.5628     | 2.016   | 0.043848             | p<0.05       |
| Ch DT-DO    | 2.0878   | 0.5386     | 3.877   | 0.000106             | p<0.001      |
| Ch DT-IO    | -1.5058  | 0.6069     | -2.481  | 0.013092             | p<0.05       |

**Table A3:** Statistical results of variation of referring expressions according to discourse topic.

|             | Estimate | Std. Error | Z value | Pr (>z)              | Significance |
|-------------|----------|------------|---------|----------------------|--------------|
| (Intercept) | -0.1765  | 0.4556     | -0.387  | 0.6983               |              |
| Ad DT-S     |          |            |         |                      |              |
| Ad DT-DO    | 1.9494   | 0.5296     | 3.681   | 0.000232             | p<0.001      |
| Ad DT-IO    | -1.0815  | 0.3503     | -3.088  | 0.002018             | p<0.01       |
| Ch DT-S     | -1.8494  | 0.4124     | 4.485   | 7.30e <sup>-06</sup> | p<0.001      |
| Ch DT-DO    | -1.9088  | 0.3816     | -5.002  | 5.68e <sup>-07</sup> | p<0.001      |
| Ch DT-IO    | -0.2679  | 0.3555     | -0.753  | 0.4512               |              |

**Table A4:** Adult word order distribution in the task.

| Adults                 | DT-S      | DT-DO    | DT-IO     |
|------------------------|-----------|----------|-----------|
| <b>DO-IO</b>           | 35% (63)  | 54% (83) | 12% (20)  |
| <b>IO-DO</b>           | 63% (113) | 40% (62) | 68% (113) |
| <b>Object omission</b> | 2% (4)    | 6% (9)   | 19% (32)  |
| <b>Total</b>           | 180       | 154      | 165       |

**Table A5:** Children's word order distribution in the task.

| Children               | DT-S      | DT-DO     | DT-IO     |
|------------------------|-----------|-----------|-----------|
| <b>DO-IO</b>           | 23% (71)  | 17% (43)  | 20% (52)  |
| <b>IO-DO</b>           | 72% (224) | 56% (138) | 59% (150) |
| <b>Object omission</b> | 5% (15)   | 27% (66)  | 21% (53)  |
| <b>Total</b>           | 311       | 247       | 255       |

**Table A6:** Adult word order distribution of NP-NP combinations.

| Adults       | DT-S     | DT-DO    | DT-IO    |
|--------------|----------|----------|----------|
| <b>DO-IO</b> | 42% (60) | 69% (61) | 36% (17) |
| <b>IO-DO</b> | 58% (82) | 31% (28) | 64% (30) |
| <b>Total</b> | 142      | 89       | 47       |

**Table A7:** Children's word order distribution of NP-NP combinations.

| Children     | DT-S      | DT-DO     | DT-IO    |
|--------------|-----------|-----------|----------|
| <b>DO-IO</b> | 26% (64)  | 24% (35)  | 31% (41) |
| <b>IO-DO</b> | 74% (185) | 76% (109) | 69% (92) |
| <b>Total</b> | 249       | 144       | 133      |

**Table A8:** Adult omission distribution in the task.

| Adults        | DT-S      | DT-DO  | DT-IO    |
|---------------|-----------|--------|----------|
| <b>DO-om</b>  | 0,06% (1) | 3% (5) | 0%       |
| <b>IO-om</b>  | 2% (3)    | 2% (4) | 19% (32) |
| <b>Total:</b> | 180       | 154    | 165      |

**Table A9:** Children's omission distribution in the task.

| Children      | DT-S    | DT-DO    | DT-IO    |
|---------------|---------|----------|----------|
| <b>DO-om</b>  | 1% (5)  | 19% (46) | 2% (6)   |
| <b>IO-om</b>  | 3% (10) | 8% (20)  | 18% (47) |
| <b>Total:</b> | 311     | 247      | 255      |

**Table A10:** Referring expression of the S in the adult data.

| Adult        | NP        | Pronoun | Omission |
|--------------|-----------|---------|----------|
| <b>DT-S</b>  | 47% (84)  | 0%      | 53% (96) |
| <b>DT-DO</b> | 57% (89)  | 4% (6)  | 39% (61) |
| <b>DT-IO</b> | 71% (117) | 0%      | 28% (46) |

**Table A11:** Referring expression of the DO in the adult data.

| Adults       | NP        | Pronoun  | Clitic   | Omission |
|--------------|-----------|----------|----------|----------|
| <b>DT-S</b>  | 97% (175) | 0%       | 1% (2)   | 0,6% (1) |
| <b>DT-DO</b> | 79% (123) | 0,6% (1) | 17% (27) | 0,3% (5) |
| <b>DT-IO</b> | 99% (164) | 0%       | 1% (1)   | 0%       |

**Table A12:** Referring expression of the IO in the adult data.

| Adults       | NP        | Pronoun  | Clitic   | Omission |
|--------------|-----------|----------|----------|----------|
| <b>DT-S</b>  | 82% (147) | 0,5% (1) | 12% (21) | 2% (3)   |
| <b>DT-DO</b> | 73% (114) | 2% (3)   | 22% (34) | 26% (4)  |
| <b>DT-IO</b> | 30% (49)  | 1% (2)   | 50% (84) | 18% (30) |

**Table A13:** Referring expression of the S in the child data.

| Children     | NP        | Pronoun | Omission |
|--------------|-----------|---------|----------|
| <b>DT-S</b>  | 75% (213) | 3% (8)  | 22% (62) |
| <b>DT-DO</b> | 70% (174) | 4% (11) | 26% (65) |
| <b>DT-IO</b> | 70% (178) | 7% (18) | 23% (58) |

**Table A14:** Referring expression of the DO in the child data.

| Children     | NP        | Pronoun | Clitic   | Omission |
|--------------|-----------|---------|----------|----------|
| <b>DT-S</b>  | 98% (278) | 1% (2)  | 0%       | 1% (3)   |
| <b>DT-DO</b> | 78% (194) | 3% (7)  | 0,4% (1) | 18% (46) |
| <b>DT-IO</b> | 95% (243) | 3% (8)  | 0%       | 1% (3)   |

**Table A15:** Referring expression of the IO in the child data.

| Children     | NP        | Pronoun  | Clitic   | Omission |
|--------------|-----------|----------|----------|----------|
| <b>DT-S</b>  | 91% (257) | 3% (8)   | 4% (11)  | 2% (7)   |
| <b>DT-DO</b> | 72% (181) | 4% (10)  | 14% (36) | 9% (22)  |
| <b>DT-IO</b> | 55% (140) | 11% (29) | 16% (4)  | 18% (47) |