Test Set Influence on BLEU

Havlíček (2007) evaluates the influence of:

- number of reference translations,
- translation direction.

on human-produced text (1 human translation against 4 others).

| | cs→en, Professionals | | | | en $ ightarrow$ cs, Math Students | | | |
|------|----------------------|-------|-------|----------------|-----------------------------------|------|------|----------------|
| Refs | Indiv. Results | | | \mathbf{Avg} | Indiv. Results | | | \mathbf{Avg} |
| 1 | 41.15 | 32.66 | 34.03 | 35.95 | 3.66 | 8.62 | 5.79 | 6.02 |
| 2 | 49.09 | 49.78 | 41.26 | 46.71 | 9.82 | 8.26 | 9.36 | 9.15 |
| 3 | 52.63 | | | 52.63 | 13.06 | | | 13.06 |

- \Rightarrow heavy dependence on the number of references. More references allow to match more n-grams of MT output.
- \Rightarrow heavy dependence on the translation direction and quality.