

# Zero-shot MT

Firat et al. 2016 (two papers)

- Suppose our bilingual parallel data include a pair of languages for which we have no parallel data.
- Q: Can we use the multi-way encoder-decoder system to translate Spanish into French?

	Pivot	Many-to-1	Dev	Test
(a)			< 1	< 1
(b)	√		20.64	20.4

A: Not really

Must pivot  
(explicitly)  
through English

**Table 4:** Zero-resource translation from Spanish (Es) to French (Fr) *without* finetuning. When pivot is √, English is used as a pivot language.