## Zero-shot MT

Firat et al. 2016 (two papers)

- Finetuning: what if we use a small amount of parallel data in this setting?
- Q: Where would we get this data?

	Pivot		Many-to-1	Dev	Test
(a)		Ī		< 1	< 1
(b)	$\checkmark$	I		20.64	20.4

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