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			abstract	Evaluation of cross-lingual encoders is usually performed either via zero-shot cross-lingual transfer in supervised downstream tasks or via unsupervised cross-litextual similarity. In this paper, we concern ourselves with reference-free machine translation (MT) evaluation where we directly compare source texts to (sometimes low-quality) system translations, which represents a natural adversarial setup for multilingual encoders. Reference-free evaluation holds the promis web-scale comparison of MT systems. We systematically investigate a range of metrics based on state-of-the-art cross-lingual semantic representations obtaine with pretrained M-BERT and LASER. We find that they perform poorly as semantic encoders for reference-free MT evaluation and identify their two key			
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	abstract			low-quality literal translations. We propose two partial remedies: (1) post-hoc re-alignment of the vector spaces and (2) coupling of semantic-similarity based			
	versions			metrics with target-side language modeling. In segment-level MT evaluation, our best metric surpasses reference-based BLEU by 5.7 correlation points.			
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