MT&AI: probing near- and medium-term impacts
an MT researcher's perspective

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Shared Benefit: Professional Linguists

How could MT augment translators/interpreters performance?

- MT for translators
  - A long-standing area of research

- MT for interpreters
  - Can MT-based tools lighten the cognitive load?

Shared Prosperity

Will difference between resource-poor and resource-rich languages reflect and amplify social and economic inequalities?

- MT data reflects world it comes from
- Impacts MT performance, but also nature of models

What can be done?

- Multilingual models
- Diverse evaluation settings
- Diverse research community

Accountability

From Asilomar principles:

"Designers and builders of advanced AI systems are stakeholders in the *moral implications* of their use, misuse, actions, with a responsibility and opportunity to shape those implications".

- Dual use is inevitable

- What can researchers do in practice?
  - Probe weaknesses of MT
  - Develop systems that know when they don't know
  - Engage in public conversation

Accountability

From Asilomar principles:

AI systems designed to recursively self-improve or self-replicate in a manner that could lead to rapidly increasing quality or quantity must be subject to strict safety and control measures.

Does this apply to MT?

- MT can self-improve
- Proliferation of MT translated content

- Safety & control measures?
  - Identifying MT
  - Watermarking MT

Accountability

Once we limit the use of human translators, where will we get human translation data from?

In the long term, can this affect the nature of human language itself?

- Bilingual humans are here to stay

- Language is always changing
- MT can amplify change
  - reinforce linguistic hegemony
  - amplify work of "language activists"

Malagasy
Digital Activism

Malagasy

Native to	Madagascar, Comoros, Mayotte
Native speakers	18 million (2007)[1]
Language family	Austronesian
	• Malayo-Polynesian
	• East Barito
	• **Malagasy**
Writing system	Latin script (Malagasy alphabet)
	Malagasy Braille
Official status	
Official language in	Madagascar

Source: Wikipedia

Malagasy (Ελληνικά, Español, 繁體中文, Italiano, Português, 简体中文, عربى, Français, English)

GlobalVoices

Afrika | Amerika | Azia | Eoropa | Afovoany Atsinanana | Politika | Kolontsai

Nanolotra vola 2 tapitrisa dolara ho an'ny tambajotram-pirenen'ny tranomboky ao Shily ny Melinda Gates Foundation, mba hampiroboroboana ny fampidirana bebe kokoa ao amin'ny habaka sosialy maoderina.

5 andro izay

Nanolotra Vola 2 Tapitrisa Dolara Hampitomboana Ny Fandraisana Anjara Amin'ny Habaka Ara-tsosialy Shiliana ny Gates Foundation

Mpanoratra **David Sasaki** · Mediam-bahoaka

Malagasy GlobalVoices & Wikipedia story
Source: "Digital Cosmopolitans" Zuckerman, 2013 chap. 5

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