THE ART OF TRANSLATION AT THE DAWN OF THE 4TH INDUSTRIAL REVOLUTION

Translating and the Computer 40
London, 15-16 November 2018
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<tr>
<th>LOCALIZATION</th>
<th>SPEECH</th>
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<td>SL&gt;SL</td>
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<td>Live sign language interpreting</td>
<td>Live events audio description</td>
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<td>SPEECH</td>
<td>Intralingual respeaking</td>
<td>Simultaneous interpreting, interlingual respeaking</td>
<td>Audio subtitles, live narration</td>
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<td>SYNCHRONOUS</td>
<td>Dialogue &amp; SFX editorial</td>
<td>Consecutive interpreting, dubbing, interlingual VO &amp; narration, lektoring, fandomubbing</td>
<td>Voice-over narration, ADR recording</td>
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<td>DELAYED</td>
<td>Audio books, audio recordings (for STT training)</td>
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<td>ASYNCHRONOUS</td>
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<td>WRITING</td>
<td>Live captioning, teletext subtitling</td>
<td>Live interlingual subtitling</td>
<td>Live MT post-editing</td>
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<td>SYNCHRONOUS</td>
<td>Transcription &amp; spotting, captioning, SDH subtitling</td>
<td>Interlingual subtitling, surtitling, fansubbing</td>
<td>Narrative title lists, annotations</td>
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<td>Creative series overviews</td>
<td>Copy writing, editing, proofreading</td>
<td>Text translation, MT post-editing, (transcreation)</td>
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<td>ASYNCHRONOUS</td>
<td>Live sign language interpreting</td>
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<td>(Transcreation)</td>
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YOTA GEORGAKOPOULOU

- BA in English Language and Literature, MA in Translation, PhD in Subtitling
- Started as a translator & subtitler English>Greek
- Set up first subtitling modules in UK universities in the late ’90s, invited speaker, external examiner, external advisor, EDGE reviewer, etc.
- Set up the first industrial placement scheme for AV localization in the UK
- Wrote the first industry guidelines for multilanguage production of subtitles
- Managed an SME specialising in multilanguage subtitling production for home entertainment
- Led global translation coordination & language resources teams over three continents
- Tested and evaluated multiple offline and online subtitle editors and TMS for AV localisation
- R&D in the application of language technologies in AV localization workflows
- AV localization consultancy
The tools of the trade

you've been stuck with me for 20 years and you miss me already?

I'd like to give you a big thank you...
TECHNOLOGY

- Broadband internet
- Ubiquitous infrastructure
- Growth of automation
- Collaborative tools

- Ability to scale efficiently
- Strategic transformation based on technology
Live subtitling

Welcome to the year of the whores. People around the globe celebrate.
Example: Unbabel with its current 20-minute service-level agreement for customer service e-mails translation.

“Unbabel brings together an extensive network of unprofessional translators and the power of MT. A mid-term ambition of this company is to drive the delivery time down to 1 minute that dictates totally new requirements to the quality of raw MT content presented to post-editors. 1 minute leaves room for very light post-editing that means the adequacy output has to be very high, while fluency is almost ideal. This is exactly what NMT technology can deliver.”

Maxim Kalilov, Product Manager, Booking.com
THE SIZE OF THE LANGUAGE INDUSTRY

Revised CSA estimate: Global language services market to reach $56.18B by 2021
2017: Revenue vs. Volume vs. Employment change

Figure 1: 2017 revenue reports from the largest LSPs. Copyright 2018 by Common Sense Advisory, Inc.

- Up
- Unchanged
- Down
FUTURE PROSPECTS

OTT TV & video revenues (2017-2023)

- New golden age of TV
- Documentary format: ‘true’ stories; live streaming: feeling of authenticity
- Immersive experiences
- Content is still king
- End-to-end integration
- The Experience economy
- Digital ecosystems
- Priorities of digital leaders: getting the right culture, processes and teams in place

Latest headlines

- Comcast acquires European telecom giant Sky
- Hearst TV debuts OTT/local hybrid ad platform
- Comcast adds Amazon Prime Video to Xfinity
- Netflix makes a total of 112 Emmy nominations
- AT&T acquires Time Warner and DirecTV
- CBS to stream NFL games on mobile
- Hulu inks Viacom licensing deal
- YouTube TV signs on Starz

UPSTREAM

- Language is **big** business
  
  2018: $46.52 billion => 2021: $56.18 billion

- When localization becomes **core** business

- Disintermediation

  **LaaS**
Disruption is the new normal

*It is not technology that has disrupted the localization market – data has*
THE FUTURE OF OUR MARKET

- AI
- Exponential growth
- New locales
- Shorter content; shorter jobs
- Faster turnarounds
- Video
- Quality
- Transparency
- Rates
- From competition to collaboration

THE WAR FOR TALENT: UBER-TRANSLATORS

1.8 million
jobs lost to AI by 2020

2.3 million
jobs created by AI by 2020
+2 million new jobs created by 2025

$\text{talent}$

Adaptive, Augmented, Agile
AI Asilomar principles

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

• **Shared Benefit**: AI technologies should benefit and empower as many people as possible.

• **Shared Prosperity**: The economic prosperity created by AI should be shared broadly, to benefit all of humanity.

• **Recursive Self-Improvement**: 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.

To date, the Principles have been signed by 1273 AI/Robotics researchers and 2541 others. (Learn how these principles were developed [here](https://futureoflife.org/ai-principles/?cn-reloaded=1) and join the discussion of them [here](https://futureoflife.org/ai-principles/?cn-reloaded=1).) The list of signatories includes:

**AI/Robotics Researchers:**

- **Demis Hassabis** DeepMind, Founder & CEO
- **Ilya Sutskever** OpenAI, Research Director, Co-Founder
- **Yann LeCun** Director of AI Research at Facebook, Professor at New York University
- **Yoshua Bengio** University of Montréal, head of the Montreal Institute for Learning Algorithms
- **Stuart Russell** University of California, Berkeley, Professor of Computer Science, director of the Center for Intelligent Systems, co-author of the standard textbook Artificial Intelligence: a Modern Approach.
- **Peter Norvig** Google, Research Director
- **Ray Kurzweil** Google, Research Director; Inventor, Author and Futurist, author of The Singularity is Near and How to Create a Mind
- **Jeff Dean** Google, Inc., Leader of Google Brain project, Google Senior Fellow, member of AAAI, ACM, National Academy of Engineering
- **Tom Gruber** Apple: Co-Founder, CTO and VP Design for Siri
- **Nils J. Nilsson** Past President of AAAI, Emeritus Kumagai Professor of Engineering, Stanford, member of AAAI
- **Ramon Lopez de Mantaras** Spanish National Research Council, Director

**Other Endorsers:**

- **Stephen Hawking** Director of research at Dept. of Applied Mathematics and Theoretical Physics at Cambridge, 2012 Fundamental Physics Prize laureate for his work on quantum gravity
- **Elon Musk** Founder, CEO & CTO of SpaceX, Co-Founder & CEO of Tesla Motors, Co-Founder of OpenAI & Solar City
- **Jaan Tallinn** Co-Founder of Skype, of the Centre for the Study of Existential Risk & Future of Life Institute
- **Sam Altman** Co-founder of OpenAI & Loopt, president of Y Combinator
- **Gill Pratt** CEO of Toyota Research Institute
- **Anthony Romero** Executive director of American Civil Liberties Union
- **Tasha McCauley** GeoSim Systems, Co-Founder of Fellow Robots
- **Joseph Gordon-Levitt** Actor and Filmmaker
- **Andrew Serazin** President of Templeton World Charity Foundation
- **John C. Havens** The IEEE Global Initiative for Ethical Considerations in Artificial Intelligence and Autonomous Systems, Executive Director, member of IEEE CS
- **Keith Abney** Cal Poly - San Luis Obispo, Senior Fellow, Ethics + Emerging Sciences Group, Philosophy Dept., member of IEEE RAS
WHAT IF...?

- ...There was an independent international translation platform/market for everyone to create a profile on and pass a translation test
- ...Professional translation qualifications were highlighted but not obligatory
- ...The translation testing module was endorsed by the translation academia
- ...An industry recognised quality standard was used to assess translation quality
- ...Your translation test was peer-reviewed by a minimum of 2 highly skilled reviewers and you were allocated a quality score on the platform
- ...Where this platform would not be owned by any LSP but would be endorsed and used by most
- ...You were in charge of publishing and amending your own rates using a set cost metric
- ...You could view your own analytics with respect to your quality and cost percentile as compared to that of the rest of the registered translators in your language pair
- ...You had the tools to hack your own growth
- ...Your analytics were available to all prospective clients for their human or machine sourcing agents to access and recruit you

Are translators ready for this level of TRANSPARENCY?
THANK YOU! 🙏

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