

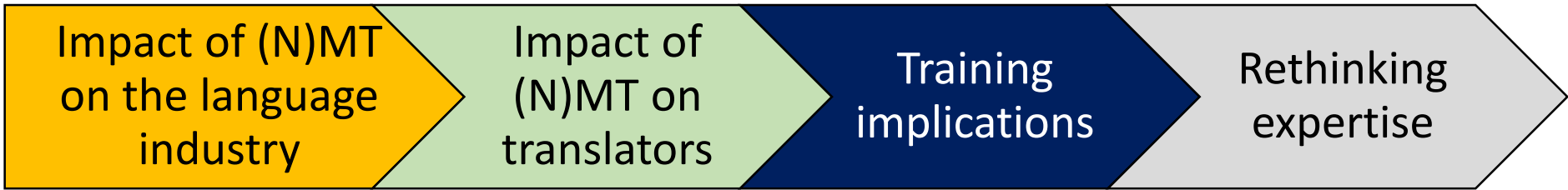


Re-conceptualizing expertise in the language industry: The impact of machine translation on translator training

ILR T&I Committee Meeting
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Presentation overview



Taking stock: The impact of (N)MT on the language industry

Increasing demand for MT post-editing (MTPE) services
(Guerberof Arenas and Moorkens, 2019)

Focus on crisis translation
→ MT-dependent

ISO 17100

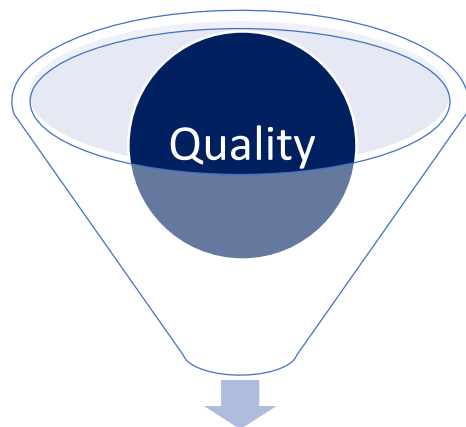
Real-time free NMT is available to everyone

“Good enough” translation

Fork-in-the-road:
1. Optimization of MT
2. “Non-routinized” domains

Taking stock: The impact of (N)MT on translators

“Questioning the utility of MT has become moot” (Way, forthcoming)



PERFORMANCE



PERFORMANCE



- Adaptive MT (i.e., Lilt)
- Adaptive MT feed in TM
- Cloud-based collaboration
- Speech-to-text apps (?)
- Physical ergonomics
- Cognitive ergonomics
- ...

Taking stock: The impact of (N)MT on translators

Some mixed messages...

NMT lowers overall post-editing effort → fewer morphological, lexical, syntactic errors (Bentivogli et al., 2016)

but...

Only for certain language pairs

Deceptive fluency (Guerberof Arenas and Moorkens, 2019) → Lexicographically/stylistically flawless, but CONTENT is off

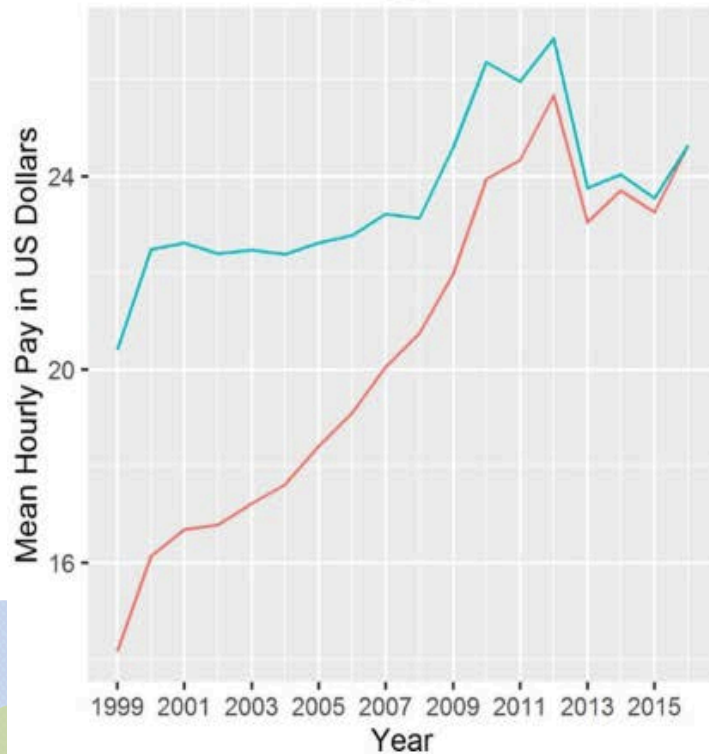
Taking stock: The impact of (N)MT on translators

MT has resulted in
stagnant/decreased rates

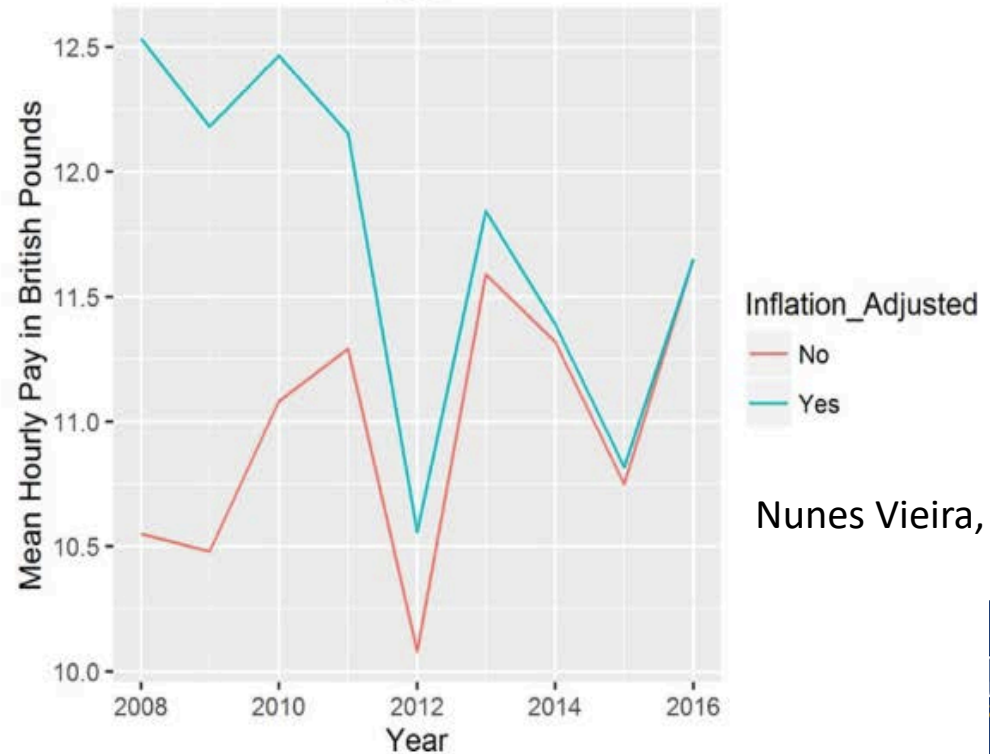
but...

Tipping point →
greater productivity
= less cents per
word, but more
dollars per hour

US



UK



Nunes Vieira, 2018

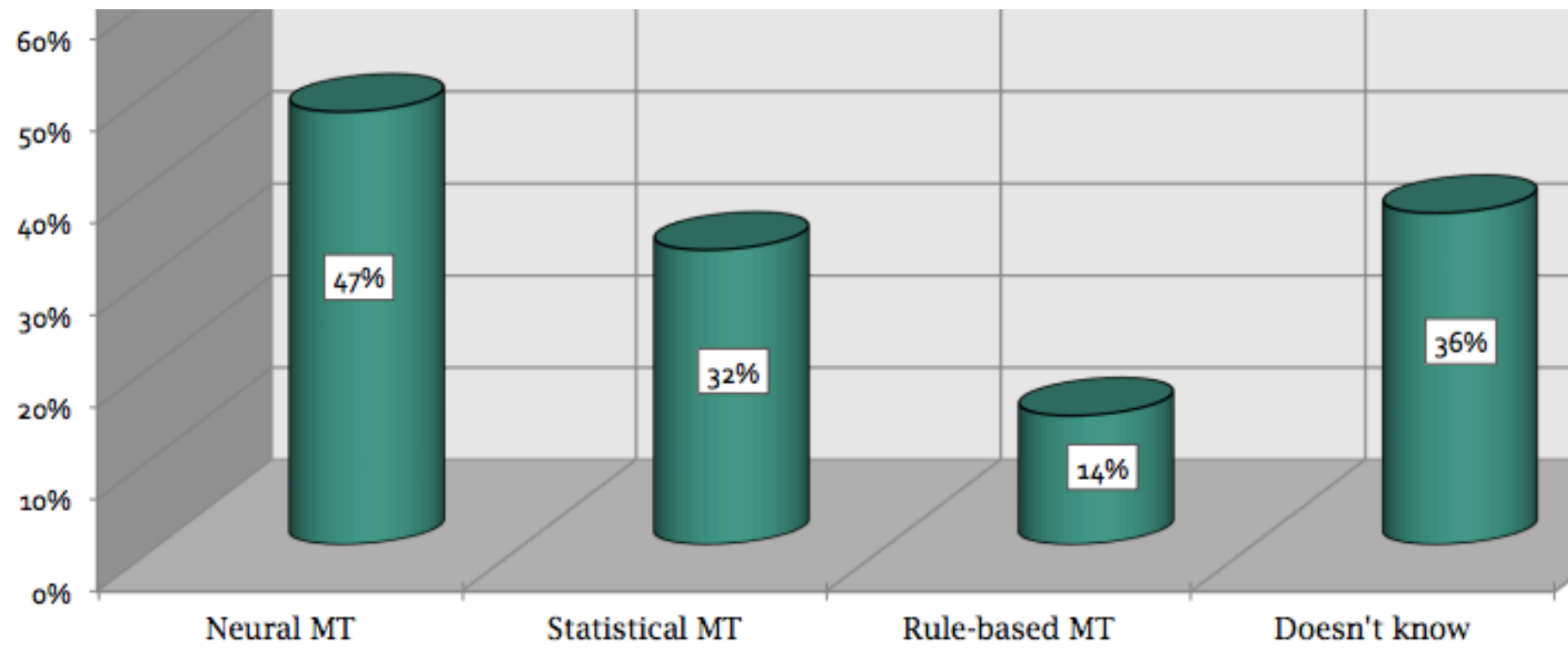


Taking stock: The impact of (N)MT on translators



Findings from a 2018 EAMT survey
n = 122, w/ 78 using MT

Type of MT used





Taking stock: The impact of (N)MT on translators

Findings from a 2018 EAMT survey
n = 122, w/ 78 using MT

Preferred systems?

1. DeepL
2. Google Translator API
3. SDL Trados
4. Proprietary of the company (developed inhouse)
5. eTranslation, Memsource, Open NMT, Softcatalà, Systran, Yandex, among others

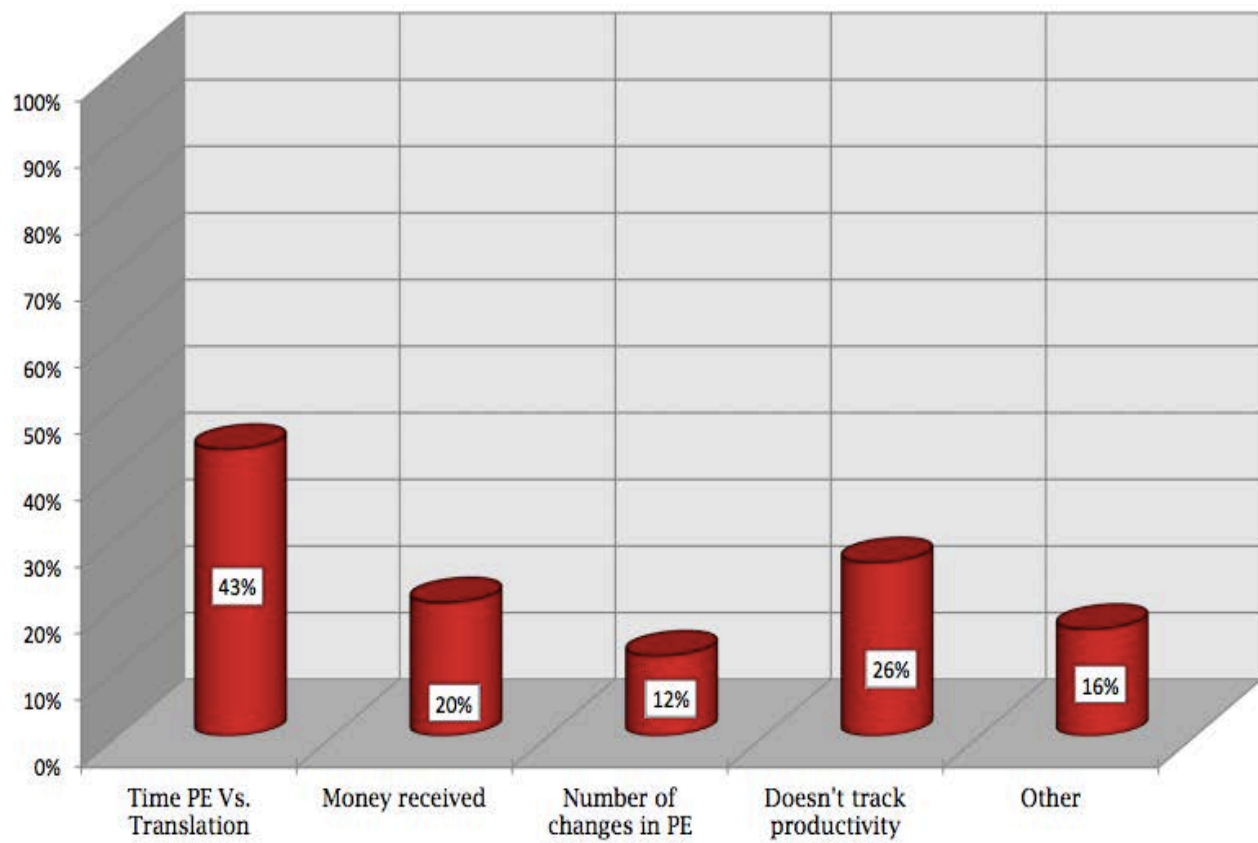


Taking stock: The impact of (N)MT on translators



Findings from a 2018 EAMT survey
n = 122, w/ 78 using MT

Method to track productivity when using MT

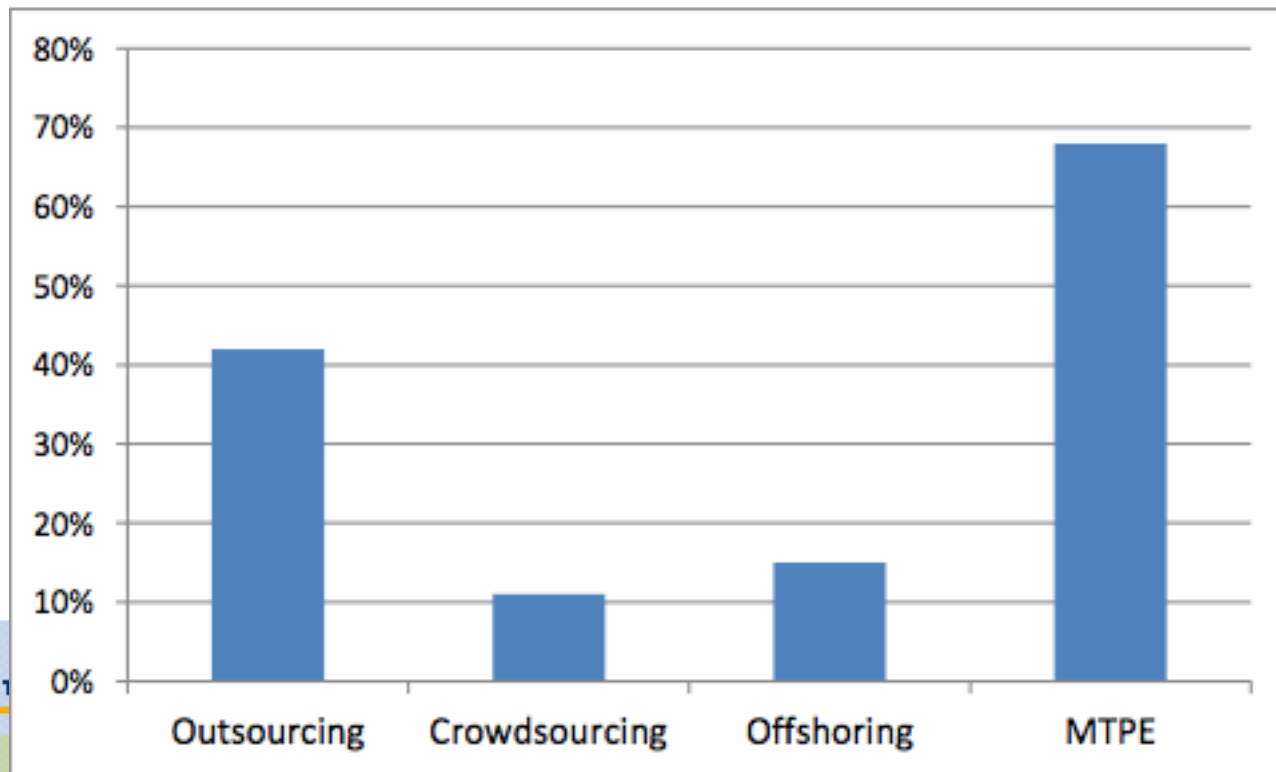


Taking stock: The impact of (N)MT on translators



2018 European Language Industry Survey, n = 1,285 from 55 countries (incl. U.S.)

Language service company plans for increase in 2019 and beyond

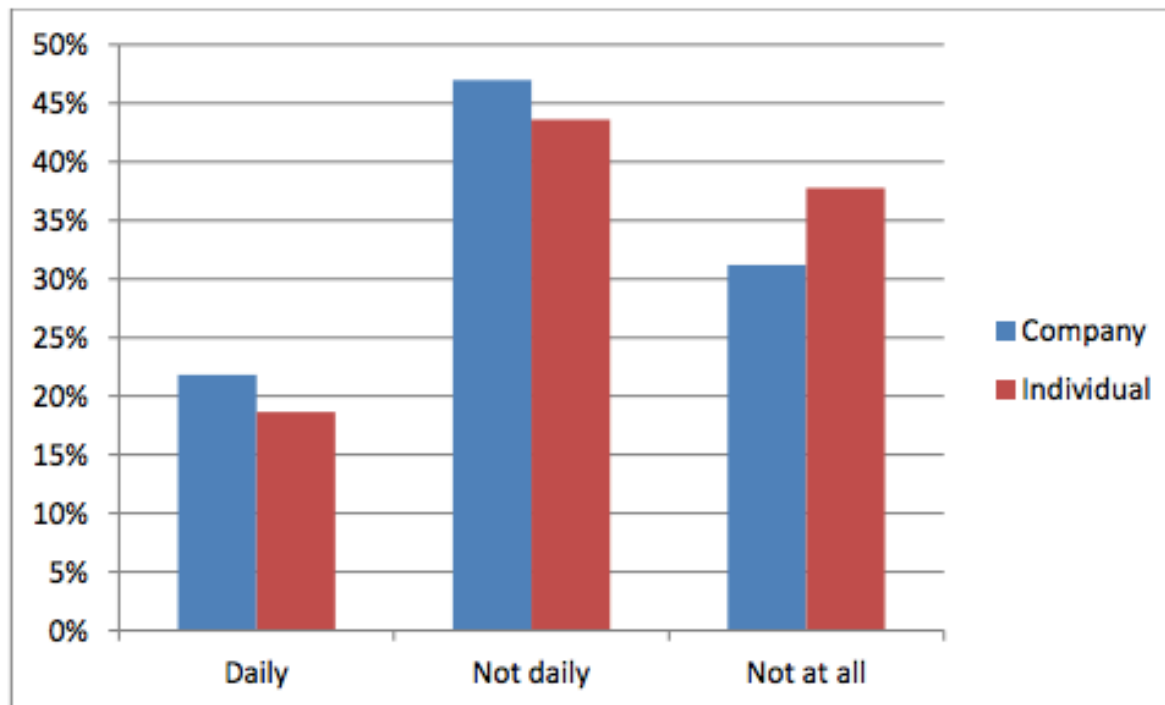


Taking stock: The impact of (N)MT on translators



MACHINE TRANSLATION

We will remember 2018 as the year in which more than 50% of both the companies and the individual language professionals reported that they are using MT in one form or another.



Training implications

Embracing/
leveraging/
optimizing
MT



Preparation
for career
paths that
MT/AI can't
touch (as
well) (yet)

Training implications: MT-oriented

Less “from scratch” and more post-editing

Should be TM/MT-based (from the start)

TRANSLATION PRACTICE COURSES

Gauge productivity:

- Words per hour when using/not using MT
- Words per hour when using/not using speech-to-text software
- What triggers/hinders burst of peak performance

Variation in assessment:

- Different models (MT metrics included)
- “Good enough” translation

Training implications: MT-oriented

Variation in quality levels → resisting the tendency to overcredit

EDITING COURSE

Pre-editing/controlled authoring

Identifying “rich points”
in SBMT vs. NMT output

Editing taxonomies → required, recommended, optional

User-centered/iterative approach (Suojanan et al. 2015)

Training implications: MT-oriented

To MT or not MT?

Personalization of UI to mitigate cognitive friction/ optimize performance

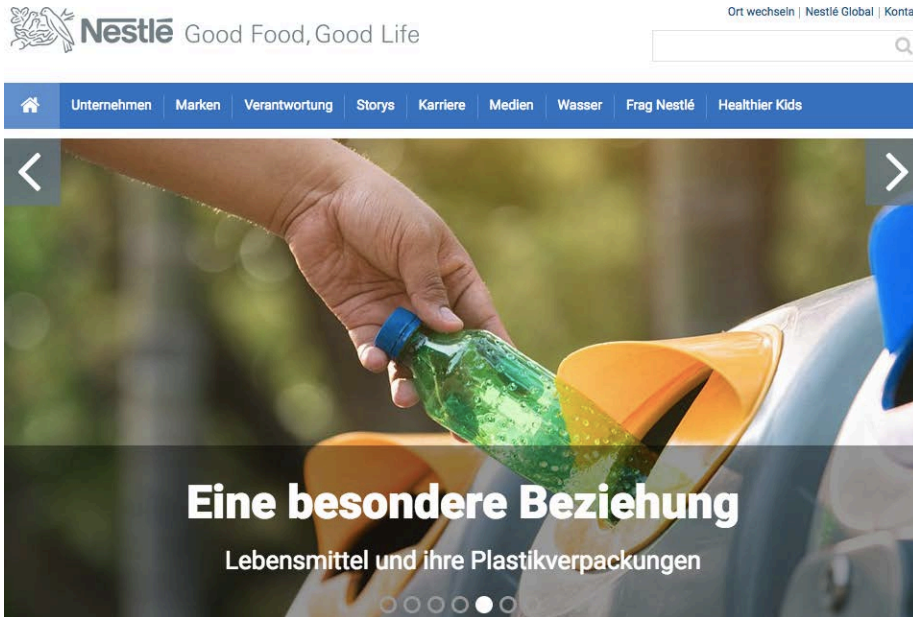
CAT TOOLS COURSE

Focus on teaching processes
as opposed to tools

Cloud-based collaboration

Exposure to SAT tools
→ smart device-based
assisted translation
tools = on cell phones,
tablets (not based on a
browser as such)

Training implications: Parallel to MT



LOCALIZATION



Training implications: Parallel to MT

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Jeder Fortschritt beginnt mit
einem Funken: Inspiration

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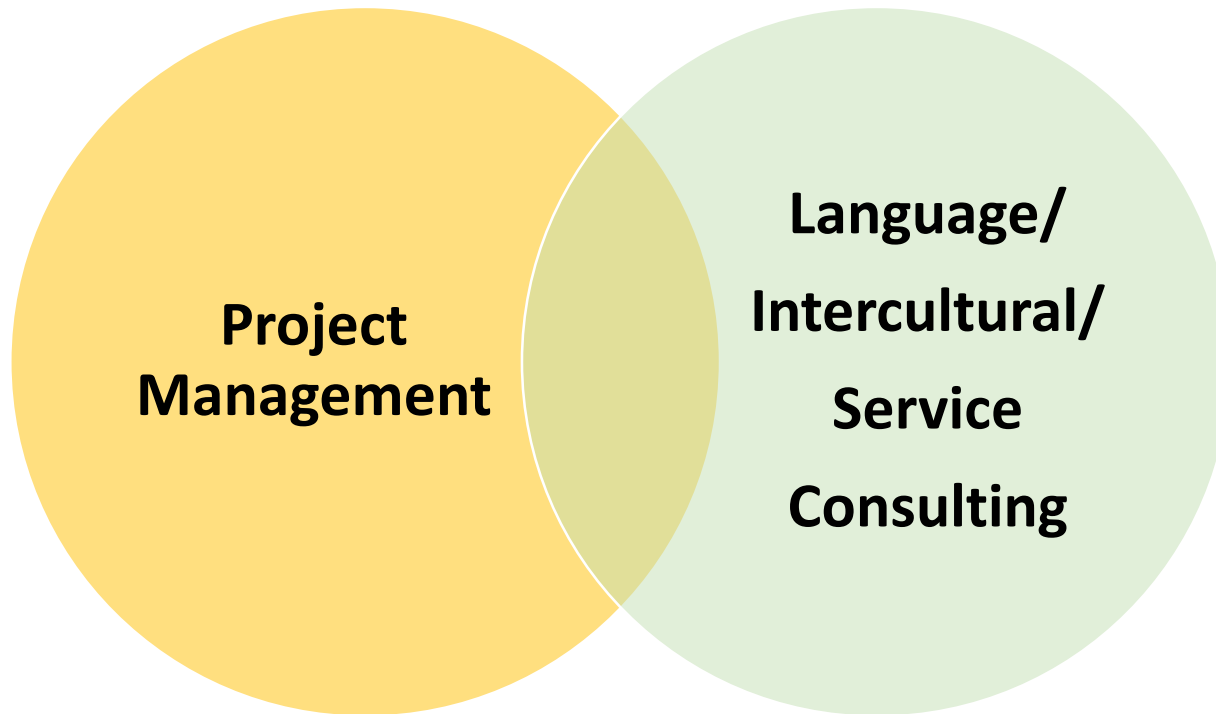
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Training implications: Parallel to MT

Even less prone to automation





Changing conceptualizations of expertise in the language industry

ROUTINIZED EXPERTISE

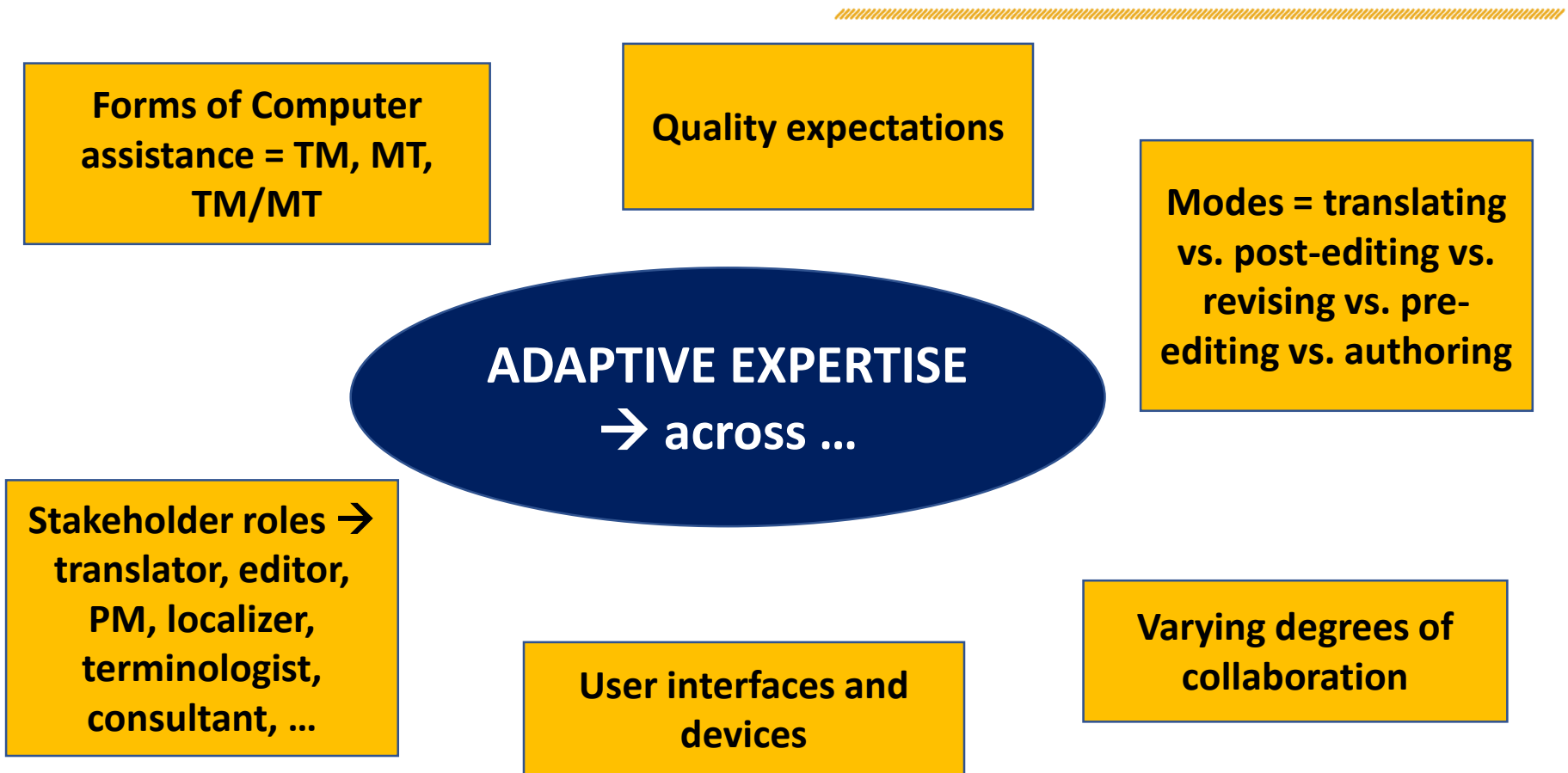
Specialized non-transferrable skills performing routine tasks in a given narrowly-defined domain

(Ericsson and Charness, 1997)

ADAPTIVE EXPERTISE

Flexible problem-solving heuristics, an ability to innovate solutions across different domains and a general capacity to excel in situations involving novelty and ambiguity (Hatano and Inagaki 1986)

From routinized expertise to adaptive expertise...



Some final thoughts from a training standpoint

A curriculum dedicated to fostering adaptive expertise...

- Acknowledges/respects the 10-year/10,000-hour “rule” associated with routinized expertise, but thinks outside of this box
- Moves away from well-defined tasks and incorporates ill-defined tasks that facilitate adaptation/creative thinking
- Teaches processes as opposed to tools

What LSPs want...



Small-scale survey of LSPs at the 2018 ATA conference:

9. Please rate your interest in the following course options in preparing students for work at your company on a scale of 1-5
(1 represents low interest, 5 represents high interest):

- ___ Business Translation
- ___ Legal Translation
- ___ Medical Translation
- ___ Scientific/Technical Translation
- ___ Literary Translation
- ___ CAT Tools ←
- ___ Localization
- ___ Machine Translation
- ___ Project Management ←
- ___ Intercultural Communication ←
- ___ Technical Writing
- ___ Research for Translation
- ___ An Overview of the Language Industry ←
- ___ Freelancing/Entrepreneurship
- ___ Subject area courses (in a given field)
- ___ Language learning courses
- ___ Other: SOFT SKILLS/INTERPERSONAL COMMUNICATION ←



Thanks for attending!

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