

地方自治体職員によるMT品質保証 (QA) ストラテジー：現状と課題

第1回 AAMT翻訳通訳研究会 2026年3月18日

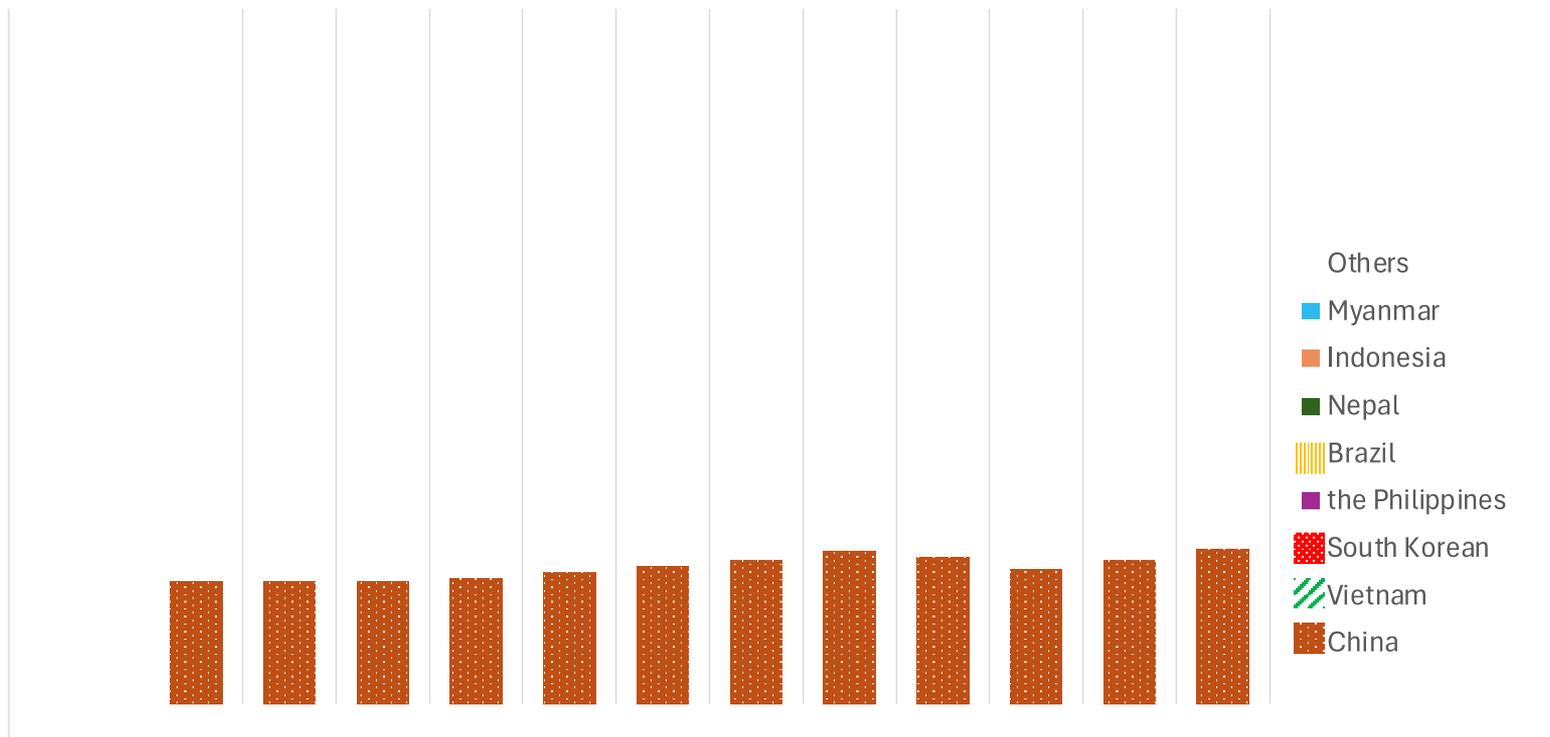
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外国人住民の増加 国籍構成の変化

- 東南アジア国籍の増加 (ベトナム、インドネシアなど)



データソース：出入国在留管理庁 (2024) 『令和6年6月末現在における在留外国人数について』

https://www.moj.go.jp/isa/publications/press/13_00047.html

行政文書の多言語化 例

For households Osaka City Environment Bureau
Created in April 2025

ABC of Waste Disposal Rules

SUSTAINABLE DEVELOPMENT GOALS 環境目標

Osaka City is implementing waste sorting and collection at facilities to promote resource recycling, with the goal of cutting down the consumption of natural resources and minimizing environmental impacts, such as responding to climate change, and conserving biodiversity. In order to strengthen and implement waste separation rules, if not followed, the city will put warning stickers on waste, and leave it uncollected. Waste should be placed in transparent or semi-transparent bags that allow the contents to be visible. Bags in which the contents cannot be seen, as well as cardboard boxes and paper bags, cannot be collected. Please avoid using them when disposing waste.

Your cooperation in preventing fires in waste collection vehicles and disposal facilities is appreciated.

Small rechargeable batteries such as lithium-ion batteries, electronic devices (those with built-in lithium-ion batteries, mobile batteries, etc.), lighters, and cassette cylinders have been found in household waste, and fires have occurred in waste collection vehicles and waste disposal facilities.

To prevent fires, lighters, spray cans, and cassette cylinders should be depleted before disposal. Please do not dispose of lithium-ion batteries in household waste collection. Refer to page 7 for proper disposal instructions. For other items that are dangerous or difficult to dispose (listed on page 8), please consult a retailer or manufacturer.

Be sure to accurately separate household waste by type.

Please check the waste pickup time (a timeframe of approximately 2 hours) for each area posted on the "Osaka City Garbage Collection Map" in the Osaka City website or the waste separation promotion app, "San-Aru". Your cooperation in putting waste out in time for collection is appreciated.

Waste Disposal Instructions
Osaka City Garbage Collection Map

Website

Stoppage of waste collection during strong winds situation such as typhoons

In the maximum wind speed is predicted to be 25 mph or more, collection of waste other than combustible waste is stopped, and if the maximum wind speed is 30 mph or more, all waste collection may be stopped. In the event of cancellation, a notification will be posted on the Osaka City website or the garbage separation promotion app "San-Aru" around 6 a.m. on the day of collection. In that case, please dispose of waste on the next collection day.

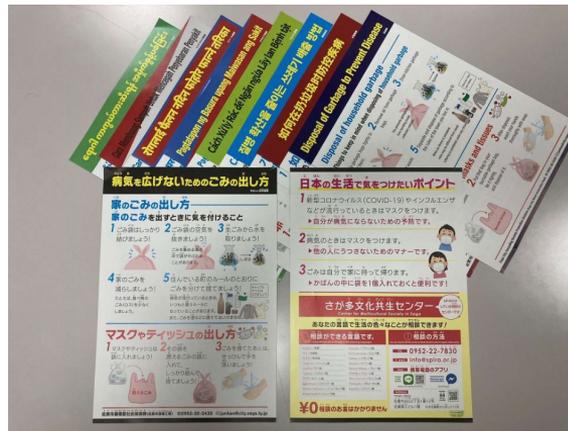
Service for visiting your house to collect waste (Fureal waste collection)

Osaka City provides a service to dispatch Environment Bureau staff to collect household waste for free (Fureal waste collection). This service is available for those who have difficulty taking waste out of their houses to designated waste collection spots or the designated garbage areas of their apartments in households consisting of elderly people (aged 65 or over) or persons with disabilities. For more details, please contact the Environment Management Center in charge of your area. (See page 8)

Safety Confirmation Service

Upon request, we also provide a safety confirmation service for the Fureal waste collection service users. If there is no response from the household when visited, or if the waste is not out in the designated spot on the appointed date, the Environment Bureau will contact the contact person registered in advance to let them know that they need to check on the safety of the people in the household.

<https://www.city.kishiwada.lg.jp/uploaded/attachment/154853.pdf>



<https://www.city.saga.lg.jp/main/50358.html>

Cách xử lý rác ở thành phố Kishiwada

Phiên bản đơn giản (tiếng Việt)

- Phân loại trước khi vứt rác
- Có những quy định về loại rác phải vứt, vào ngày nào trong tuần, khi nào và ở đâu.
- Đồ rác ở những nơi đã được quy định vào buổi sáng ngày xe rác tới
- Hỏi những người sống gần đó và chủ nhà (chủ nhà) về địa điểm thu gom rác.

Hãy xem lịch để rác được dán ở nơi thu gom rác

Rác thông thường (rác cháy được) Thu gom rác vào trong tuần

Gom rác vào cả những ngày nghỉ

Hãy cho rác thông thường (Rác cháy được) vào túi đã được quy định (Túi đỏ thành phố Kishiwada quy định)

Bạn có thể mua túi chỉ định tại các cửa hàng như siêu thị, cửa hàng tiện lợi.

Túi 45 lít 450 yên (10 cái)
Túi 30 lít 300 yên (10 cái)
Túi 20 lít 200 yên (10 cái)
Túi 10 lít 100 yên (10 cái)

Rác sinh hoạt hàng ngày và rác thải từ nhà bếp như rau vụn, các phần cá bỏ đi

Tàn thuốc tóps thuốc, khăn giấy, giấy vụn

Một chút cỏ hoặc cành cây

Rác đốt được như các sản phẩm nhựa (xô, đĩa CD, bàn chải đánh răng, thùng nhựa, hộp đựng, v.v.), quần áo, giày dép, túi thú nhồi bông, v.v.

Xô, Đĩa CD, Bàn chải đánh răng, Thùng nhựa, Túi, cặp sách, Quần áo, giày, Thú nhồi bông

Không được vứt
Rác sinh hoạt thì hãy hong khô nước trước khi vứt rác
Cho rác vào túi được chỉ định buộc lại rồi mang đi để rác

Ngậm trong nước

<https://www.city.kishiwada.lg.jp/uploaded/attachment/154853.pdf>

MTの3つのリスク (Canfora & Ottmann, 2020)

どのように品質保証
(QA)？

- 翻訳ミス
- アカウンタビリティ (説明責任)
- サイバーリスク

研究参加自治体

A市

- 人口
500,000+
- 外国人住民
2.41%

B市

- 人口
200,000 –
500,000
- 外国人住民
1.46%

C市

- 人口
50,000 –
200,000
- 外国人住民
3.4%*

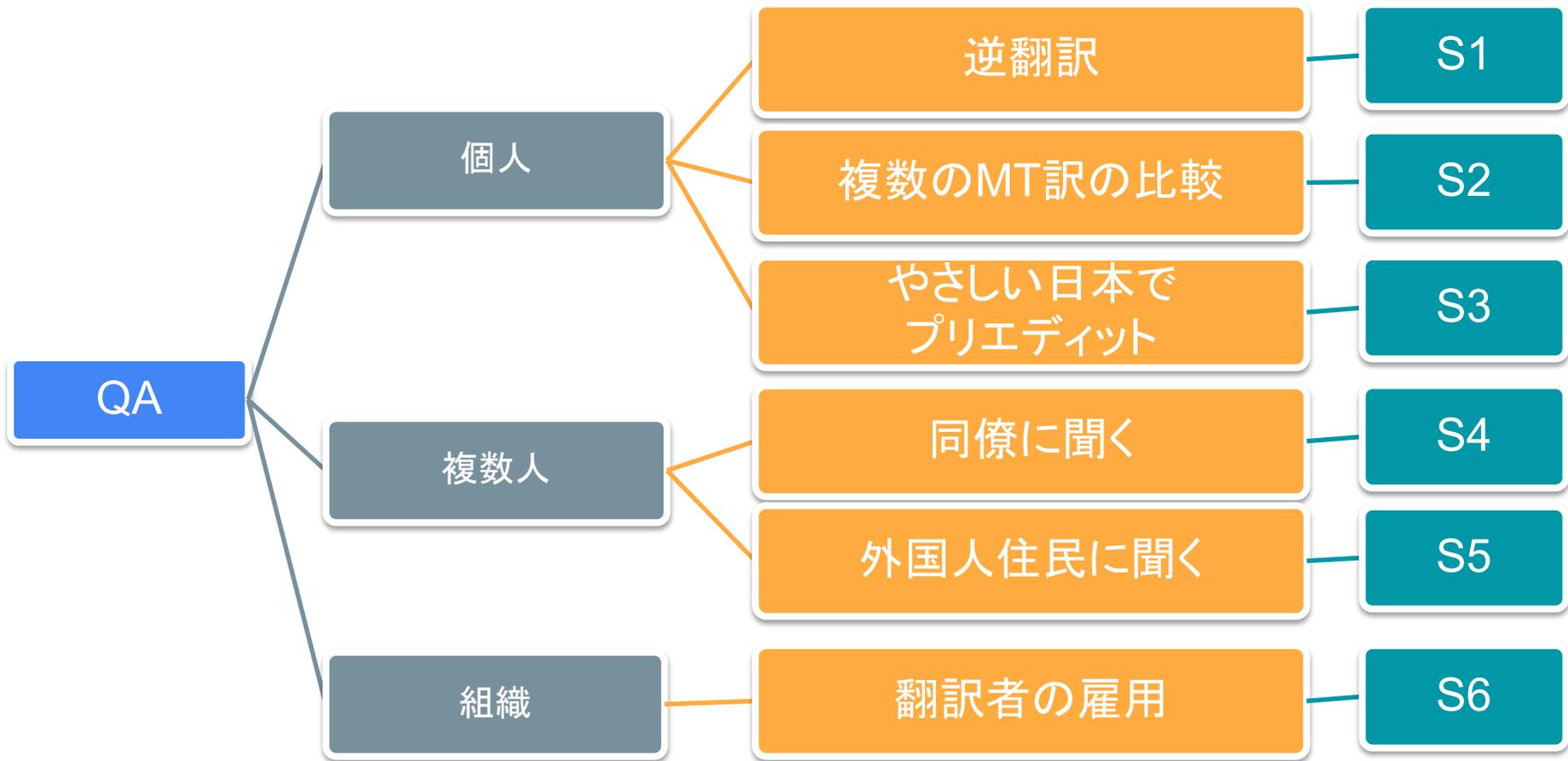
- 翻訳ポリシーの欠如（「多文化共生推進プラン」でも具体的記述の不足）

（島津 2022, 2023；宮田・島津 2025）

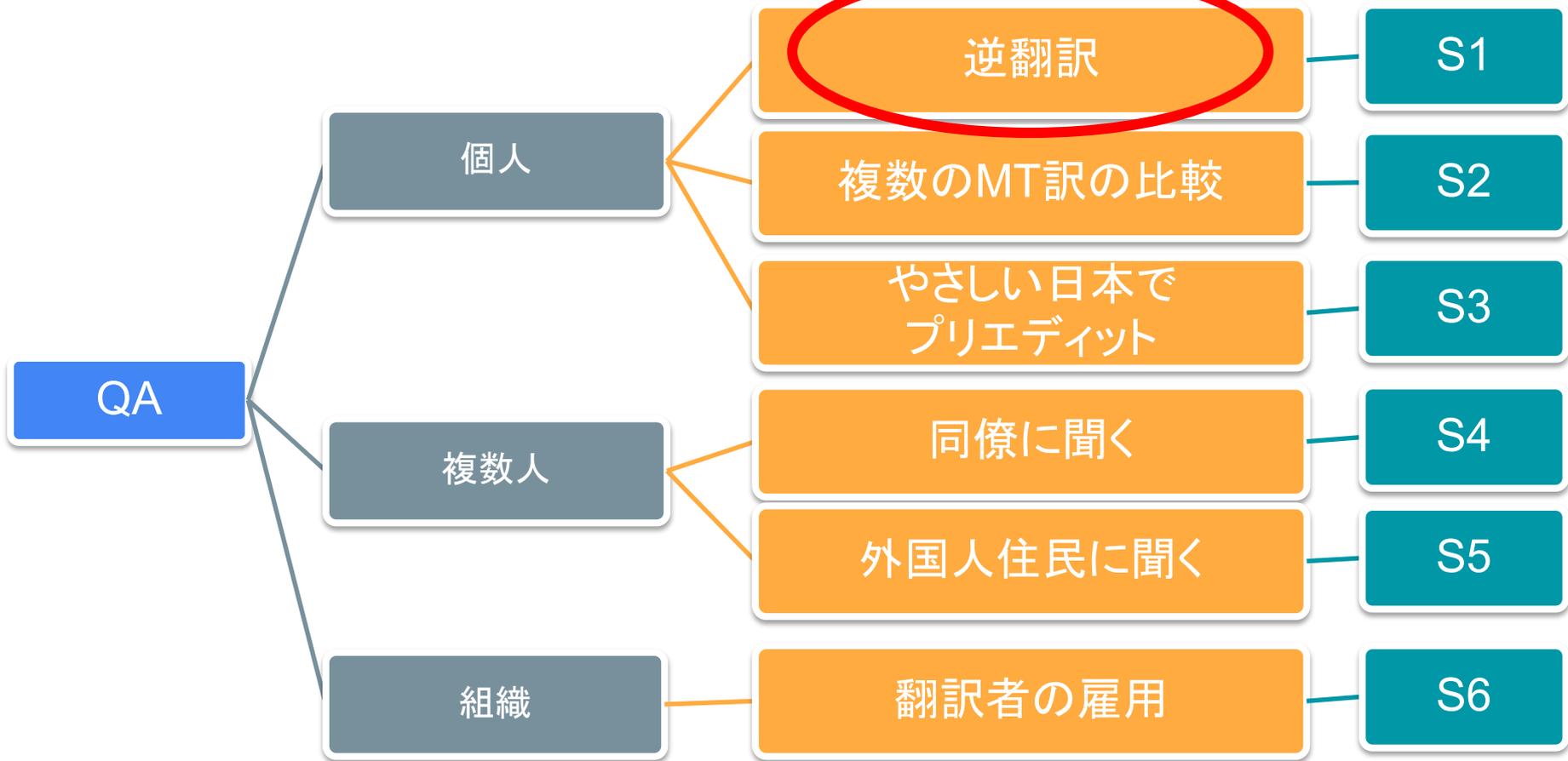
- 機械翻訳に関するガイドラインの欠如

正式なプロセスがないなら、実際に
どんな取り組み？

MTの品質保証（QA）戦略



MTの品質保証（QA）戦略



S1

逆翻訳

- 音声翻訳ソフトの多くでインターフェースに搭載
 - 総務省が音声翻訳サービスで奨励（総務省 2021, p.13）
 - しかしエラーを見過ごす可能性あり (Zouhar et al., 2021)
- > 間違ったMTリテラシー促進のリスク** (Bowker & Buitrago
Ciro, 2019)

MTの品質保証（QA）戦略

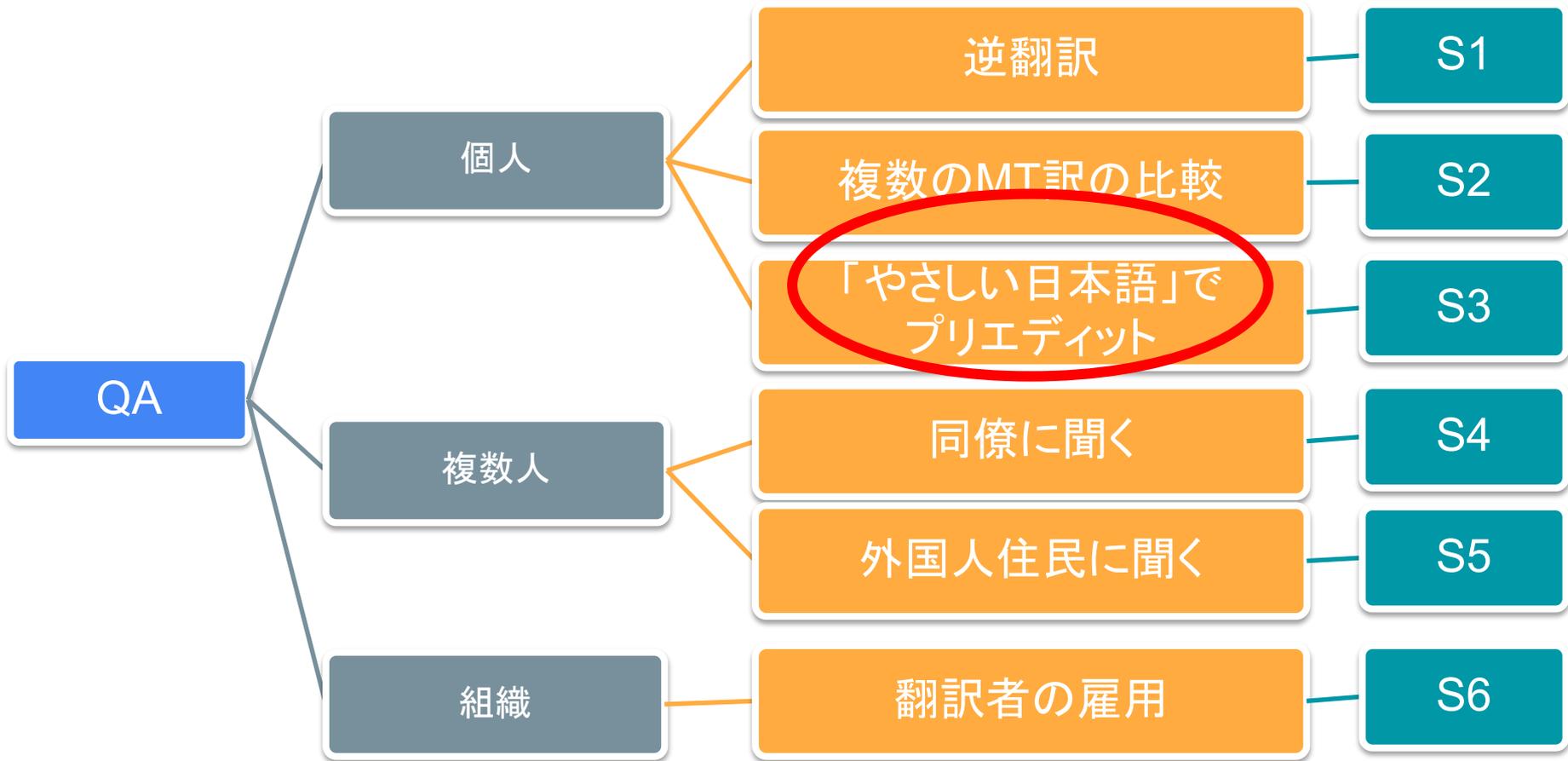


S2

複数のMT訳の比較

- 複数のMTエンジンを使用（LLM翻訳を含む）し、出力を比較
- しかし、母語話者不在では厳密な判断は無理

MTの品質保証（QA）戦略



- 多くの自治体がすでに「やさしい日本語」を推奨・使用
- プリエディットに応用したケース
 - 翻訳の品質評価ができない
 - 時間がかかる

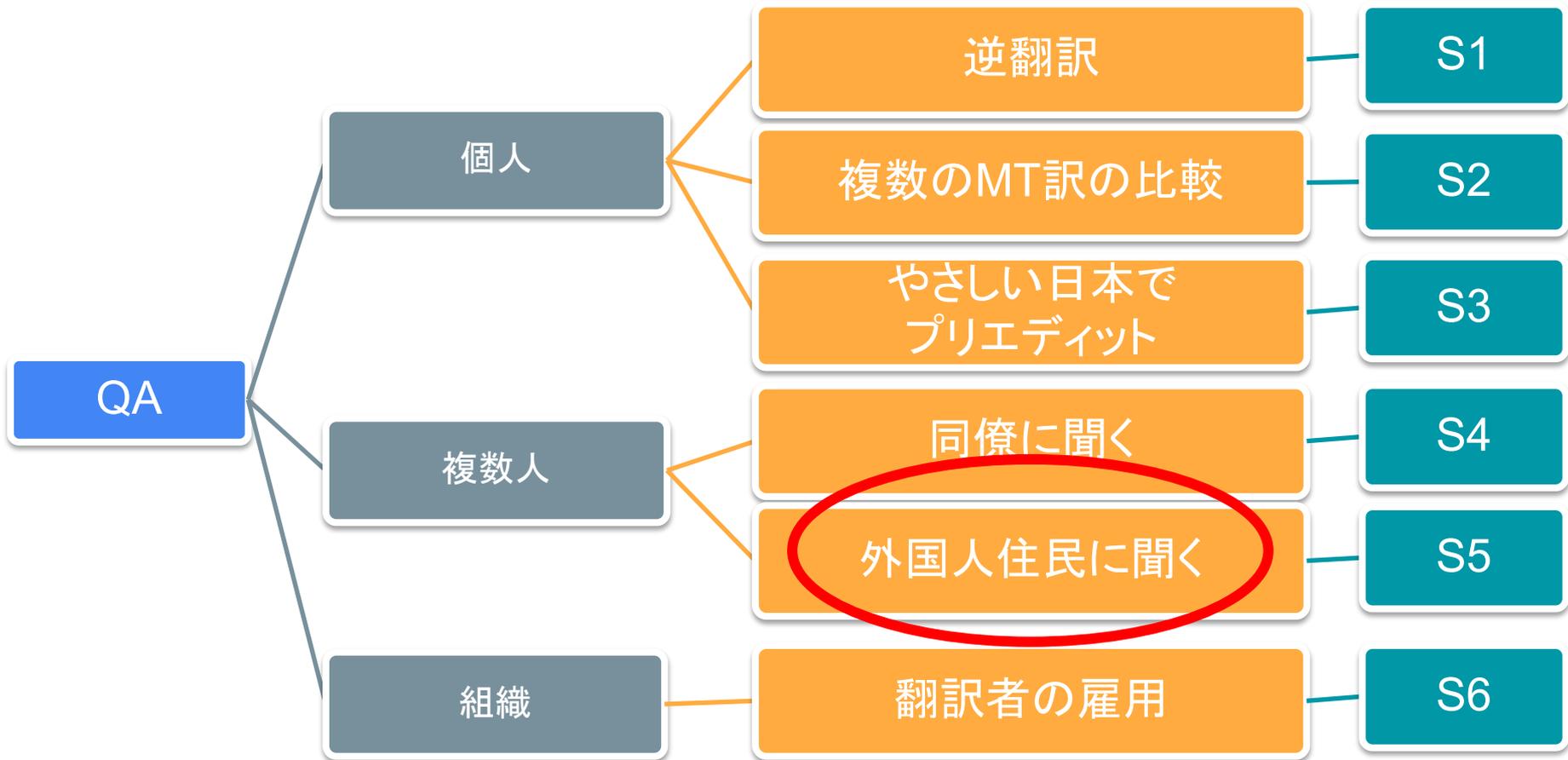
MTの品質保証（QA）戦略



『市職員の中にもその言語に優れてる者が別の部署にいるので、お願いして見てもらう』

- 母語話者が同僚にいないときは無理、または不完全
- マイナー言語は難しい
- 「言語能力」と「翻訳能力」の混同 (Klitgård, 2018)

MTの品質保証（QA）戦略



S5

外国人住民の協力

- *Accidental QA*（偶然のQA） - C市

ネパール人住民との会話で翻訳エラーが発覚

イベントでの屋台出店料 補助⇔支払い [重大エラー]

⇒ 計画的QAの欠如

⇒ 外国人住民の日本語能力に依存（QA人材の指針なし）

MTの品質保証（QA）戦略



- 英語母語話者の正規採用 外国の翻訳修士保持者
- 英語・韓国語・中国語の母国語話者またはニアネイティブ 翻訳者 計7人（会計年度職員）
- 採用時に『翻訳能力』をチェック
- 翻訳者によるポストエディット
- しかしそれ以外の言語は内部チェックができない

- ベトナム人 会計年度職員を採用
⇒ベトナム語翻訳効率アップ
- 『日本の大学を卒業してくれてて、日本語も割とできるし』 『たまたま運よく来ていただいた』
⇒翻訳関係の採用ポリシーの欠如、職員が翻訳能力を推測

まとめ



MTのQAには「人材」が重要

- 数年ごとに部署異動→暗黙知の損失
- 翻訳専門職の採用基準の欠如
- 翻訳ポリシーやガイドラインの欠如 →現場努力でのQAの実施

翻訳に関するガイドライン、ポリシー、訓練方法、
採用基準の明文化が望まれる

(最新MT技術だけでは不十分)



<https://tr4lg.p.u-tokyo.ac.jp/>

研究プロジェクト

円滑な多言語情報発信を可能にする自治体横断型翻訳資源
の構築 “TR4LG”



科研費
KAKENHI

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