



Untying the Gordian Knot

Legally Compliant Sound Data Collection and Processing for TTS Systems in China

STEFANIE MEYER, SVEN ALBRECHT
CHEMNITZ UNIVERSITY OF TECHNOLOGY

Untying the Gordian Knot: Authors

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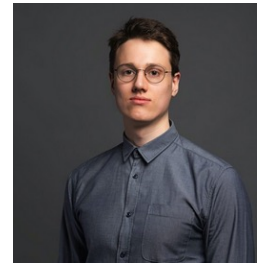
Stefanie Meyer^{1}, Sven Albrecht², Maximilian Eibl³, Günter Daniel Rey⁴, Josef Schmied^{2f}, Rewa Tamboli⁴, Stefan Taubert³, Dagmar Gesmann-Nuissl¹*

¹ Professorship for Private Law and Intellectual Property Rights, Chemnitz University of Technology, Germany

² Professorship for English Language and Linguistics, Chemnitz University of Technology, Germany

³ Professorship for Media Informatics, Chemnitz University of Technology, Germany

⁴ Professorship for Psychology of Learning with Digital Media, Chemnitz University of Technology, Germany



Agenda

- A. Introduction
- B. Sample Project Description
- C. Legal Impacts on the Collection of Data
- D. Final Comparison
- E. Conclusion

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Introduction: Data Security in China

- 2016 Cybersecurity Law: 中华人民共和国网络安全法
- 2021 Data Security Law: 中华人民共和国数据安全法
- 2021 Personal Information Protection Law:
中华人民共和国个人信息保护法



Credibility Through Non-native Language Varieties in Conversational Pedagogical Agents

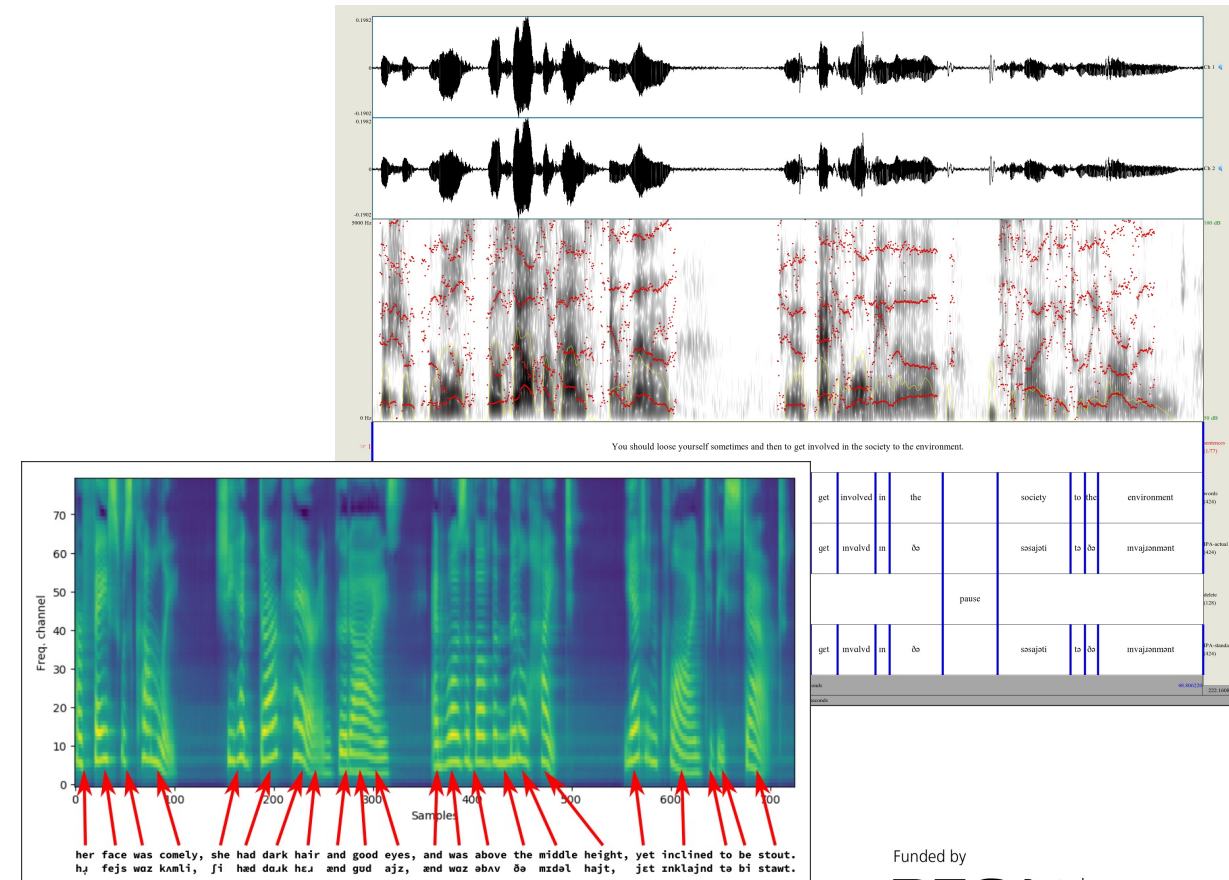
Mission: In hybrid societies, humans and embodied digital technologies should interact as seamlessly as humans among each other.

- RQ1 Which specific non-native linguistic cues of CPAs influence the learning performance of non-native human learners?
- RQ2 Which specific non-native linguistic cues influence attributed credibility and acceptance of CPAs by non-native human learners?
- RQ3 How much does a linguistically credible CPA influence the learning performance in non-native educational contexts?



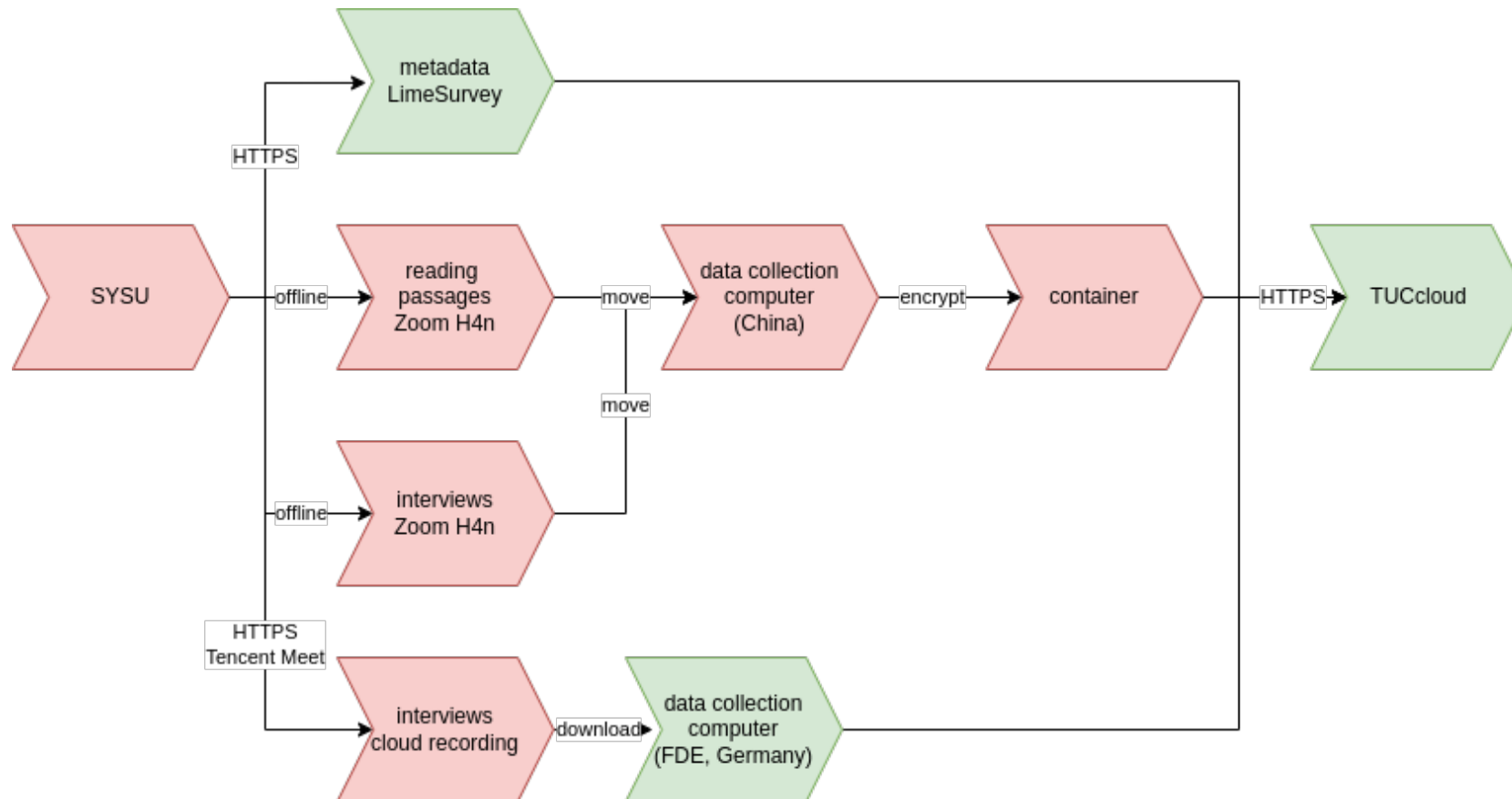
Credible CPAs: Research Process

- Sociolinguistic interviews
- Transcription (orthographic and IPA)
- Neural TTS training
- Synthesis, control of morphosyntactic, phonetic and prosodic cues
- Participant studies (learning outcomes and attitudes)





Credible CPAs: Data Flow



Legal Impacts on the Collection of Data

GDPR, Art. 1 (1), (2)

- Protection of individuals or their fundamental freedoms

Addressee: any data processor
(Art. 4 No. 7 GDPR)

PIPL, Art. 1, Art. 11

- Fair conditions for governments, companies, industry associations and the public
- Standardization of data processing procedures

Addressee: primarily private sector actors
(Art. 73 No. 1 PIPL)



Legal Impacts on the Collection of Data

GDPR, Art. 4 Nr. 1, Nr. 2

PIPL, Art. 4

Personal data, i.e. any information relating to an identified or identifiable natural person, the so-called data subject; including sensitive data.

Processing, i.e. activities such as collecting, storing, using, processing, transmitting, making available and disclosing.

Legal Impacts on the Collection of Data

GDPR

- Legitimate interests (Art. 6 (1) f) GDPR).
- Consent (Art. 7 (1) GDPR), but facilitations for research (cf. Rec. 33, Art. 89 (1) 3 GDPR)
- Obligations to erase (Art. 17 GDPR), but facilitations for research (Art. 5 (1) e) GDPR).

PIPL

- Consent (Art. 14 PIPL), including implied consent
- Obligation to erase (Art. 19 PIPL) without exception



Legal Impacts on the Collection of Data

GDPR

PIPL

Data transfer only with explicit consent
(Art. 25 PIPL) and after risk assessment
(Art. 56 (1) No. 3 PIPL)

Shared data responsibility, Art. 26 GDPR or Art. 20 PIPL

Supervisory authorities

Final Comparison

Similarities.

Particularly in terminology, Chinese and European data protection law converge - it even goes further than U.S. data protection law.

Differences.

Consent as the only legitimacy for data processing by private actors. In particular, no facilitation for research.

Final Comparison

Differences.

State interference rights, in particular Art. 13 (1) No. 5 PIPL:

Article 13: Personal information handlers may only handle personal information where they conform to one of the following circumstances:

5. Handling personal information within a reasonable scope to implement news reporting, public opinion supervision, and other such activities for the public interest;

Translation: <https://digichina.stanford.edu/work/translation-personal-information-protection-law-of-the-peoples-republic-of-china-effective-nov-1-2021/> (retrieved on 24.03.2022)



Conclusion

"We are stricter than the U.S., but not as strict as the EU. "*

Purpose of new regulations: China's aim to participate in international trading, which requires mandatory compliance with privacy standards of the global world.

But: While privacy protection is strengthened with respect to private actors, the government still has broad powers to act - see Art. 13 (1) No. 5 PIPL.

*Hong, Y.: Responses and explanations to the five major concerns about the Personal Information Security Specification. WEIXIN (2018).