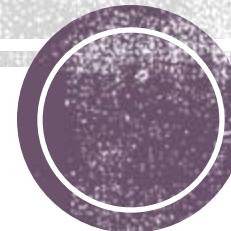


Creating and translating audio descriptions with the help of *Frazier*



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Outline

- Introduction into audio description
- TADS project (Translation of Audio Description Scripts)
- *Frazier*
 - Functions
 - How to create audio descriptions
 - How to translate audio descriptions (& DeepL)
 - How to use the text-to-speech function
- Comparison of the AD obtained by machine translation with the author ADs
- Tool evaluation
- Implications for research

Audio description sample: *In den Gängen*

The screenshot shows a video editing software interface for the documentary 'In den Gängen'. On the left, there's a sidebar with icons for 'Projekte' (selected), 'Kontakte', 'Hilfe', 'Profil', and 'Abmelden'. The main area displays a video frame of a man in a blue jacket working in a supermarket aisle. Below the video is a timeline with an audio waveform. A script panel on the right contains the following audio descriptions:

- In the locker room. The neck tattoo disappears, the wrists are covered.
- 00:48:25.04 Christian pulls a pallet trolley of mineral water into the market through an automatic door. A forklift truck crosses his path.
- 00:48:36.00 At a cross shelf he loads boxes of fruit juices from a pallet and stacks them.
- 00:48:47.19 Two young men with short-cropped hair come down the hall.
- 00:48:51.18 The one tattooed with a vest?
- 00:48:54.08 the other with a bomber jacket

Audio description script

10:50:53

s Der Tätowierte hält zwei Schnapsflaschen. Sein Einkaufswagen ist voller Getränke.

10:51:01

„Arbeitest du hier? - Nee!“
(bisschen Lachen übersprechen)
Christian schaut sich verlegen um und geht auf die beiden zu.

s (schnell)

10:50:53

f The tattooed man is holding two liquor bottles. His shopping cart is full of drinks.

10:51:01

„You are working here? - Nah!“
(crosstalk a bit of laughter)
Christian looks around sheepishly and walks up to the two.

f (fast)

Brief research overview

- Around 2007, research on audio description (AD) starts in many disciplines (e.g. in applied linguistics).
- Research focus lies on the AD of artefacts like films and museum exhibitions.
- The language pairs "German-French/French-German" are not well represented in translation studies focussing on AD.

The TADS project

- **Origin:**

Initiated by a French-German research team (Sorbonne Université & Universität Hildesheim)

- **Research question:**

How to best produce AD scripts for the dubbed version of movies, TV shows, and documentaries?

- **Working assumption:**

For some target languages, translating AD manuscripts seems to be a good alternative to direct AD manuscript production (Jankowska et al. 2015; Jankowska et al. 2017), called "author ADs".

- **Choices to be made:**

Human translation (HT) and/or machine translation (MT) with post-editing?

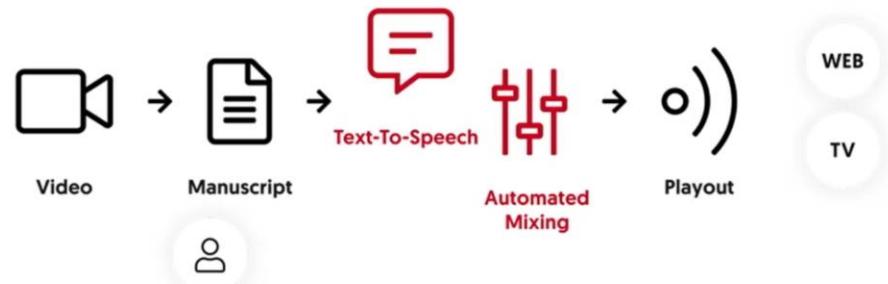
Hypotheses

- **Hypothesis 1:** Since AD scripts contain strongly standardised recurrent elements (Kleege 2016), machine translation is likely to lead to good results at least for translating certain parts of ADs (Fernández-Torné 2016).
- **Hypothesis 2:** Localisation tasks (cultural adaptation and user orientation) are better handled by human translators than by MT.

Project tools

- The corpus management system TXM to do textometric analysis (Heiden et al. 2010)
- The transcription tool EXMARaLDA to display the videos and the ADs of the original and of those produced for other languages (Schmidt 2012)
- *Frazier* to create ADs and/or to automatically translate ADs

Frazier functions

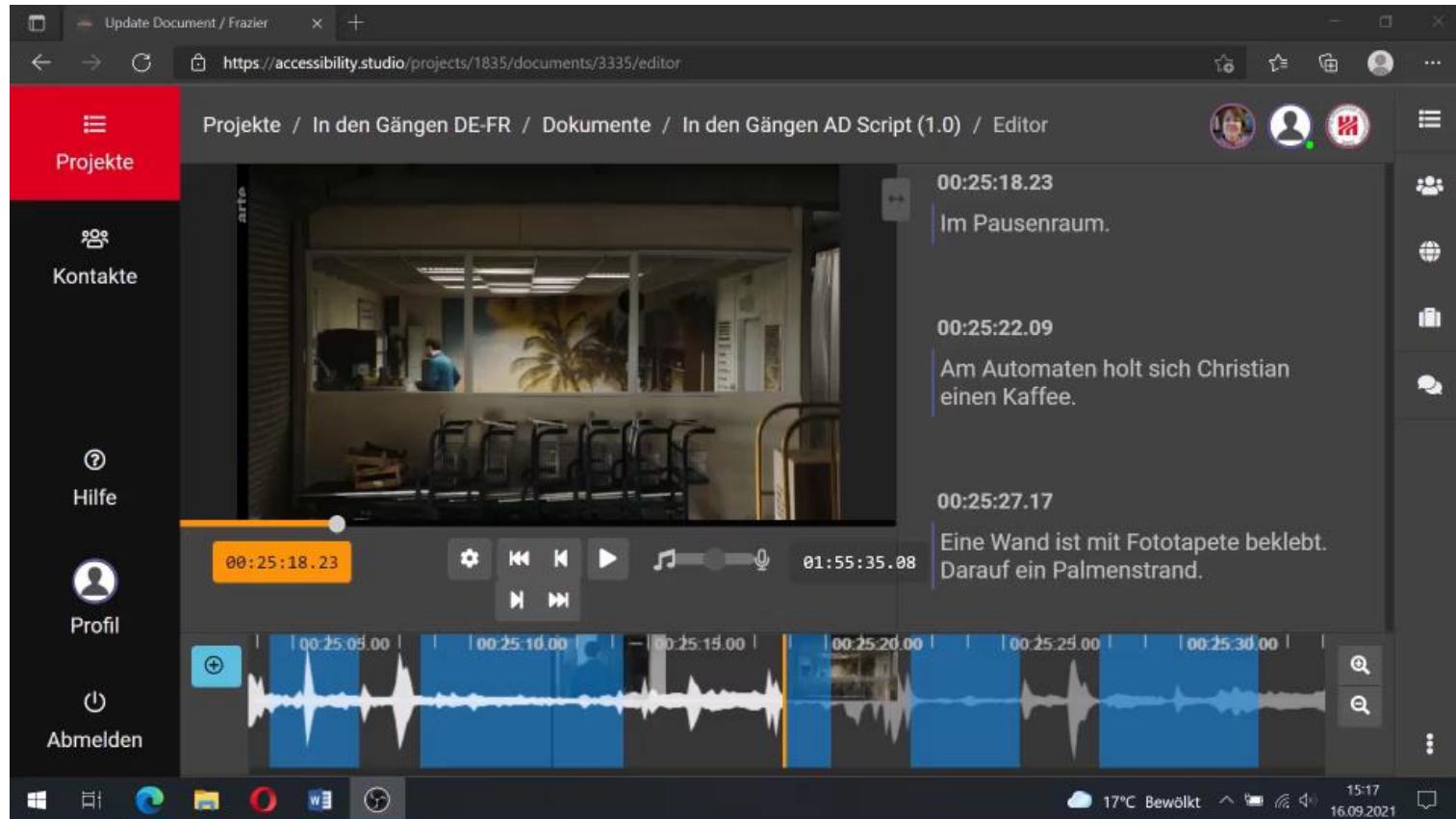


- Manual insertion of parts to be recorded & automatic creation of time slots
- Synthetic voice (text-to-speech)
- Automatic volume mixing
- Automatic translation of added audio descriptions
- Various export options: srt, vtt, csv, .docx, .adc

How to create an AD with *Frazier*



How to create an AD with Frazier

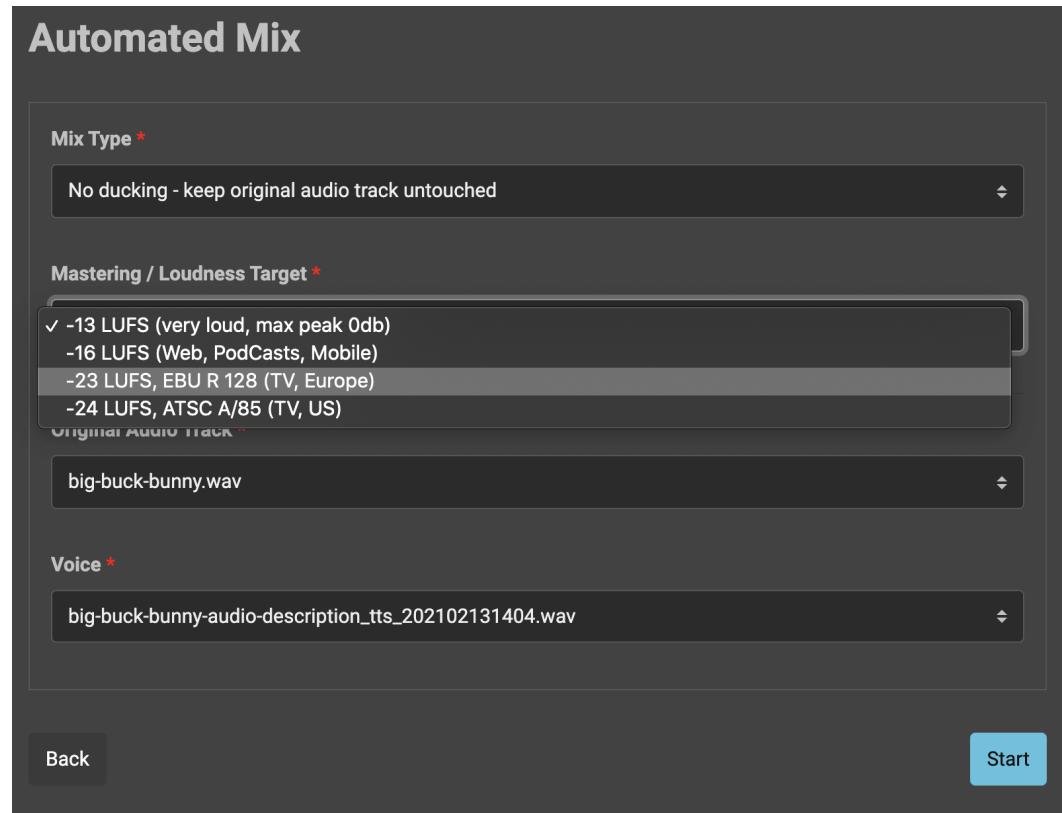


How to create an AD with *Frazier*



Ducking function

- Automated mix between AD and the audio track of the video
- Different broadcasting standards
 - between countries
 - between TV and online media



<https://www.videotovoice.com/knowledge-base/mixing-mastering/>

How to use *Frazier* to translate ADs



Limits of the result obtained by MT (DeepL)

| German author AD | French MT AD |
|--|--|
| 10:12:37 Bruno grinst nachsichtig. | 10:12:37 Bruno sourit avec indulgence. → Length |
| 10:12:43 Bedächtig zieht Christian den Wagen mit drei leeren Paletten in den breiten Hauptgang. | 10:12:43 Christian tire pensivement le chariot avec trois palettes vides dans la grande allée principale. → Erroneous syntax |
| 10:13:21 Neugierig betrachtet er die Deichsel. | 10:13:21 Curieusement, il regarde le timon. → Erroneous meaning |

Limits of the result obtained by MT (DeepL)

German author AD

10:12:37

Bruno grinst nachsichtig.
[Bruno grins indulgently.]

10:12:43

Bedächtig zieht Christian den Wagen mit drei
leeren Paletten in den breiten Hauptgang.
[Christian carefully pulls the trolley, loaded with
three empty pallets, into the wide main aisle.]

10:13:21

Neugierig betrachtet er die Deichsel.
[He casts an interested glance at the drawbar.]

French MT AD

10:12:37

Bruno sourit avec indulgence.
→ Length

10:12:43

Christian tire pensivement le chariot avec trois
palettes vides dans la grande allée principale.

→ Syntax and meaning

10:13:21

Curieusement, il regarde le timon.
[Strangly, he looks at the drawbar.]
→ Meaning

French MT AD versus author ADs

| German author AD | French MT AD (DeepL) | French author AD |
|--|--|---|
| 10:50:53 Der Tätowierte hält zwei Schnapsflaschen. Sein Einkaufswagen ist voller Getränke. [The tattooed man is holding two liquor bottles. His shopping trolley is full of drinks.] | 48:56 L'homme tatoué tient deux bouteilles d'alcool. Son caddie est rempli de boissons. | 49.31 Le jeune homme, blond, tatoué dans le cou, s'approche et affronte Christian du regard. [The young man, blond, tattooed on his neck, approaches and challenges Christian with his eyes.] |
| 10:51:01 Christian schaut sich verlegen um und geht auf die beiden zu. [Christian looks around sheepishly and walks towards the two.] | 49:04 Christian regarde autour de lui d'un air penaude et se dirige vers les deux. | 49.40 Christian fait oui et s'éloigne. [Christian nods and goes away.] |

Tool evaluation

Frazier is a powerful audio description tool:

- It allows perfect and comfortable timeslot management.
- Its text-to-speech function provides very natural sounding speech.
- Machine translation works fine.
- It offers various helpful teamwork options.

Implications for AD research

Which are the limits of automatic AD creation, translation, and voicing?

- Users may not appreciate synthetic voices, depending on the sort of film.
- Automatic pronunciation and prosody needs further training.
- Machine translation needs further specific training with AD data.

Is it possible to reduce the huge gap between French and German author ADs?

- Yes: Common AD production methods could be developed.
- No: Cultural and linguistic differences justify the use of the author AD creation method.

Acknowledgements

- Sommerhaus Produktion & permission to use the video *In den Gängen* for research purposes
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Original German and French AD

- Big difference between the choice of the elements to be described and the way how to describe them → French AD of the dubbed movie was newly written (author AD).

| German AD | French AD |
|--|--|
| 10:50:53 „Chrissi!“ <i>(Lachen übersprechen)</i> s Der Tätowierte hält zwei Schnapsflaschen. Sein Einkaufswagen ist voller Getränke. | 48.56 Krissy.. Krissy ! Christian se retourne. |
| 10:51:01 „Arbeitest du hier? - Nee!“ <i>(bisschen Lachen übersprechen)</i> Christian schaut sich verlegen um und geht auf die beiden zu. | 49.31 mieux que nous Le jeune homme, blond, tatoué dans le cou, s'approche et affronte Christian du regard |
| | 49.40 venir Christian fait oui et s'éloigne. |

Workflow

- The team creates the AD script using the built-in authoring tool.
- Text to speech automatically converts the script into a synthetic voice.
- The audio description is then automatically mixed and mastered.
- The final audio description export is automatically created in the right format for delivery.

Source (slightly modified):

<https://cdn.chimpify.net/5c459effa8587203198b4568/2021/03/Text-to-Speech-Februar-Film-Boosts-Audio-Described-Video-Output.pdf>