'Modalpartikeln': Can Sentiments Survive Translation with Emojis?

Decoding Sentiments from German 'Modal Particles' to Korean Using Emojis

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What are Modal Particles?

- small words that often used to add **nuance** and convey **sentiment** or **emotion** in a sentence.

Examples:

    - "doch" - expresses contradiction or emphasis, e.g. "Ich habe das **doch** gesagt" (I did say that)

    - "mal" - expresses suggestion or softening, e.g. "Kannst du mir **mal** helfen?" (Can you help me?)

Mollering, M. (2001). Teaching German modal particles: A corpus-based approach.

Why Modal Particles?

- the acquisition of modal particles is **difficult for non-native speakers** because each particle has at least one homonym and can be used in a variety of functions.

  Mollering, M. (2001). Teaching German modal particles: A corpus-based approach.

- To convey sentiment, emotion, and emphasis, Koreans usually use suffixes. However, they **may not align perfectly with the concept of modal particles** as found in German.

Why Modal Particles?

- The **limitations of translation** between German and Korean are clearly revealed in translation.

SAME RESULTS!

meaning "the bus isn't coming."

Idea:
How about using Emojis?

Why Emojis?

- emojis impact the **emotional significance** of a text message and subsequent text processing and can carry **different qualities of emotional information**.

  Valeria A. et al. (2022). Do all facial emojis communicate emotion? The impact of facial emojis on perceived sender emotion and text processing

- **face emojis** are more expressive and therefore more appropriate to use to express emotions.

  Patrick G. Grosz (2023). Expressivity and Emojis

- **How effectively** do German modal particles convey emotions?
- compare the modal particles that have similar sentiments but differ in their intensity.
- Do **emojis** enhance the translation of emotional nuances from German to another language?
- Can the use of emojis compensate for **potential losses in sentiment translation?**

Experiment

- **10 modal particles** that are commonly used are selected for sentence creation.

List of modal particles
mal, ruhig, doch, halt, eben, nun einmal, eigentlich,wirklich, ja, schon

Original Sentences (German):	Sentences without modal particles but with Emojis (German):
-Der Bus kommt **halt** nicht. -Dann gehen wir **eben** nicht ins Kino. -**Eigentlich** wollte ich heute früher nach Hause gehen. -Du hast das **wirklich** getan? -Darf ich **mal** deinen Kuli benutzen? -Kannst du **ruhig** gehen. -Das kannst du **ja** probieren. -Wir müssen **nun einmal** die Prüfung schreiben. -Aber das haben wir **doch** gelesen. -Das weißt du **schon**.	-Der Bus kommt **[ ]** nicht. -Dann gehen wir **[ ]** nicht ins Kino. -**[ ]** Ich wollte heute früher nach Hause gehen. -Du hast das **[ ]** getan? -Darf ich **[ ]** deinen Kuli benutzen? -Kannst du **[ ]** gehen. -Das kannst du **[ ]** probieren. -Wir müssen die **[ ]** Prüfung schreiben. -Aber das haben wir **[ ]** gelesen. -Das weißt du **[ ]**.

- https://forms.gle/7AcNZA4WKf5EjARa8

Bitte schauen Sie sich die folgenden zwei Sätze an und antworten.
- Der Bus kommt nicht.
- Der Bus kommt **halt** nicht.

Welche Stimmung vermittelt Ihrer Meinung nach der folgende Modalpartikel dem Satz?
Halt

1=sehr negativ, 3=neutral (beeinflusst nicht), 5=sehr positiv

	1	2	3	4	5	
Sehr Negativ	○	○	○	○	○	Sehr Positiv

- concern: are only five options sufficient?

- The emotions of the modal particle will be converted to **values between -1 and 1.**

Char	Image [twemoji]	Unicode codepoint	Occurrences [5...max]	Position [0...1]	Neg [0...1]	Neut [0...1]	Pos [0...1]	Sentiment score [-1...+1]	Sentiment bar (c.i. 95%)	Unicode name	Unicode block
😂	😂	0x1f602	14622	0.805	0.247	0.285	0.468	0.221		FACE WITH TEARS OF JOY	Emoticons
❤	❤	0x2764	8050	0.747	0.044	0.166	0.790	0.746		HEAVY BLACK HEART	Dingbats
♥	♥	0x2665	7144	0.754	0.035	0.272	0.693	0.657		BLACK HEART SUIT	Miscellaneous Symbols
😍	😍	0x1f60d	6359	0.765	0.052	0.219	0.729	0.678		SMILING FACE WITH HEART-SHAPED EYES	Emoticons

- Emojis with same/similar score of modal particles will be added to Korean sentences.

Experiment

- Compare two groups of translated sentences

Translated(Korean):	Translated(Korean with Emojis):
-버스가 안 와. -The bus isn't coming. -우리는 그럼 영화관 안 가지. -Then we won't go to the cinema. - 사실 오늘은 집에 일찍 들어가려고 했었어. - Actually I wanted to go home earlier. -진짜 그랬다고? -Did you really do that? -네 펜좀 빌려 써도 돼? -May I use your pen? -가도 돼. -you can go. -네가 한 번 해볼 수 있어. -You can try that. -우리는 시험을 쳐야 돼. -We have to take the exam. -하지만 그건 이미 한 번 읽었잖아. -But we read that already. -이미 알고 있잖아. -You already know that.	**TBD** + 😛😜😝😁😆😅🤣😂🤨 ….

Analysis

- **Basic Idea - compare the scores:**

- Sentiment score for the modal particles vs. Korean emoji contained sentences sentiment scores.

- Korean emoji contained text sentiment scores vs. Korean sentences without emoji sentiment scores.

- Evaluate whether emojis enhance the delivery of emotions in the translation process.

- There are still more things to consider: e.g. how emotions work? / cultural differences in emoji perception / dialect users etc.

References

Grosz, Patrick Expressivity and Emojis. (2023) The Oxford Handbook of Expressivity edited by Daniel Gutzmann. https://ling.auf.net/lingbuzz/007419

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