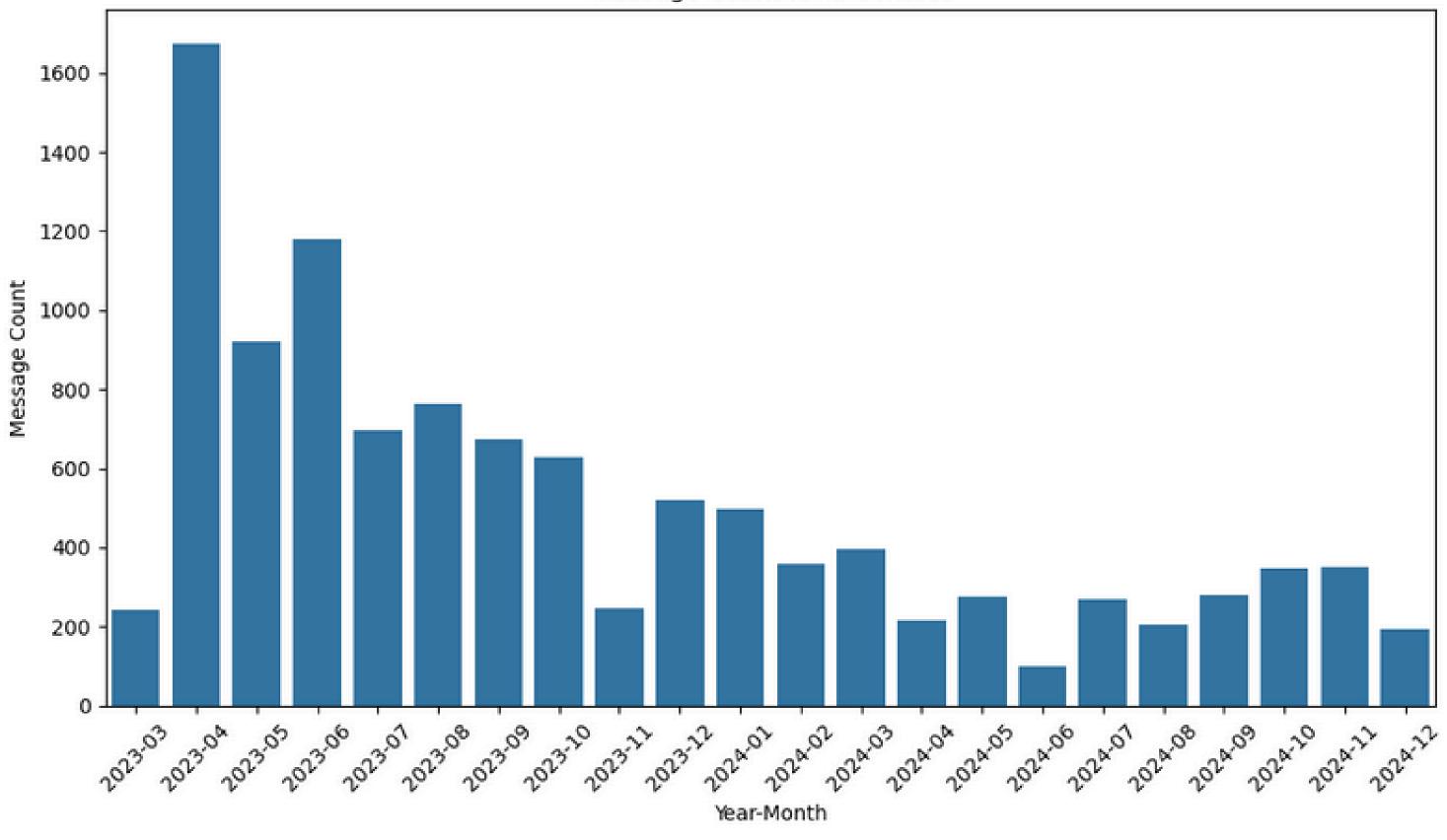


Message Count for a Contact



whatsapp love stories

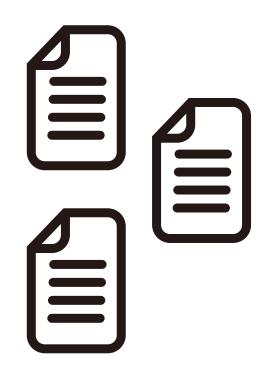
Juanjo **MONTERO**

mentor: Yunier CORDOVA

ITAcademy 2025

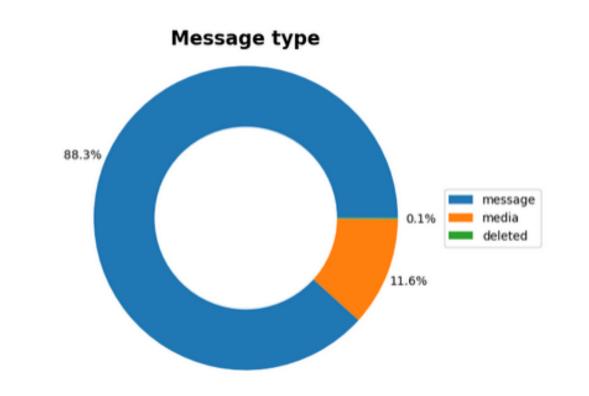
Exported WhatsApp backup files

52 different txt files - around 200k messages

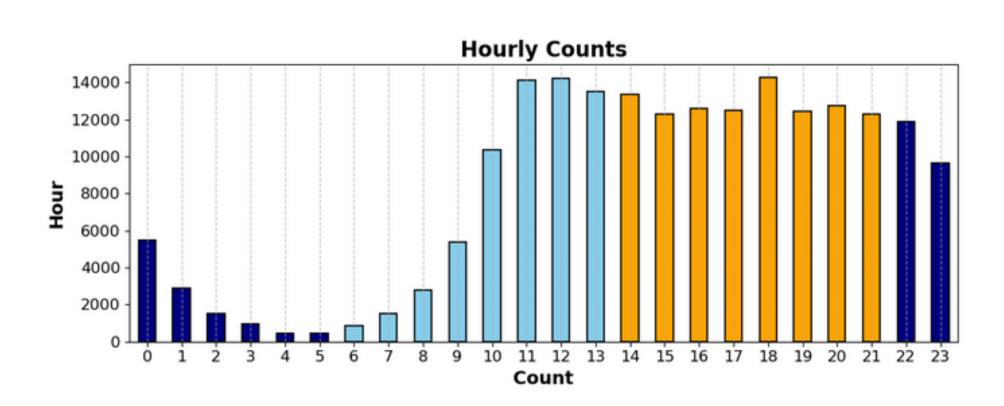


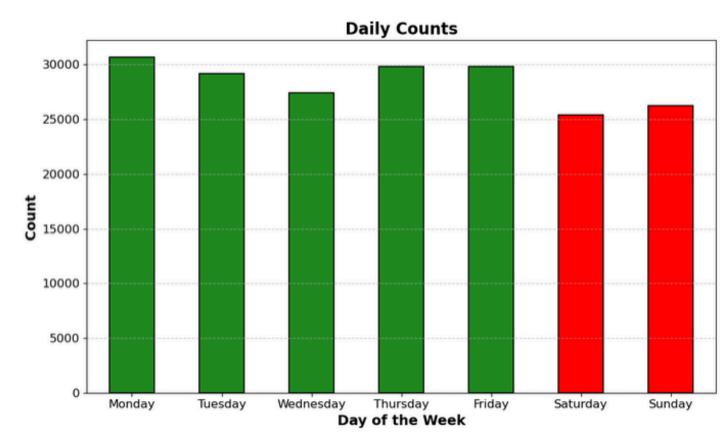
CERES 2022-03-04 14:34:00	ME	CERES	Nah, par de horas basta.
CERES 2022-03-04 14:34:00	CERES	ME	Poke te hace pues?
CERES 2022-03-04 14:34:00	ME	CERES	Sii ♥ €
CERES 2022-03-04 14:34:00	CERES	ME	No, lo compro
CERES 2022-03-04 14:36:00	CERES	ME	Pero el pescado lo compro congelado?
CERES 2022-03-04 14:37:00	ME	CERES	Es que debe haber estado congelado! Por el ani
CERES 2022-03-04 14:39:00	CERES	ME	Ya, pero no sé si se descongelara s tiempo
CERES 2022-03-04 16:19:00	CERES	ME	Ya estoy

initial exploration

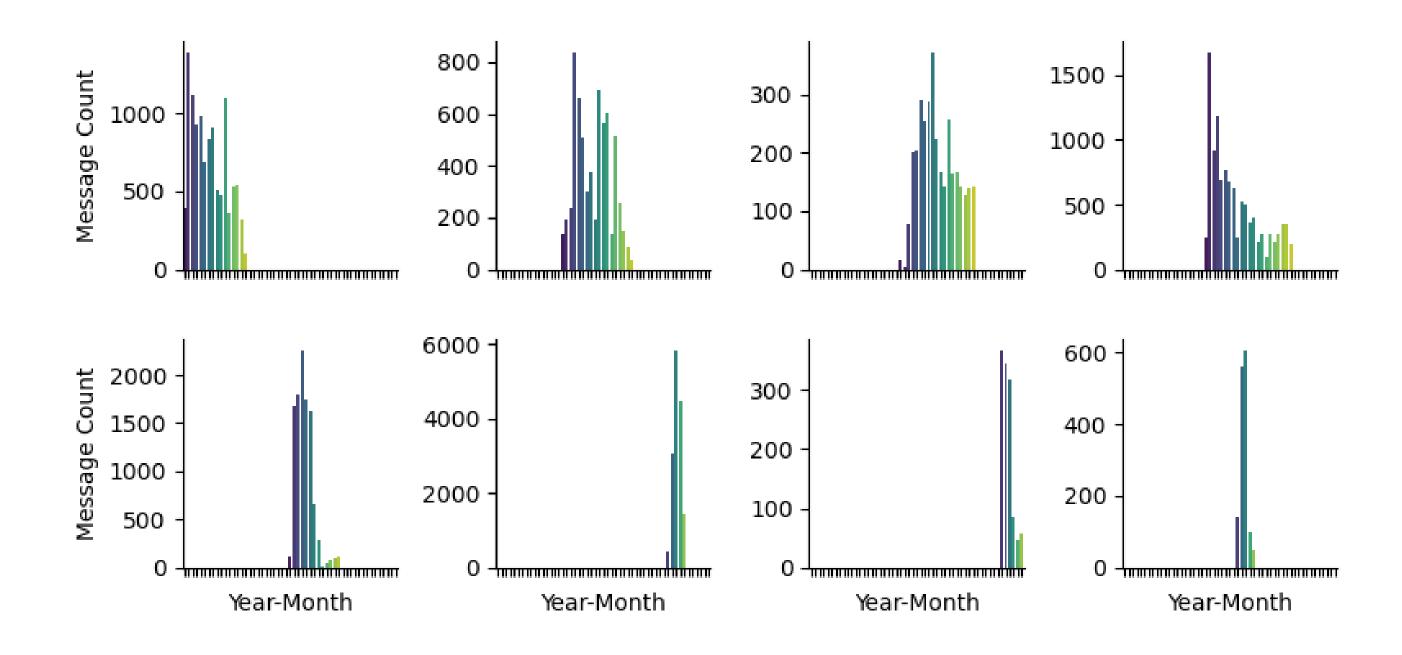


media can be voicenotes, pictures, videos and GIFs



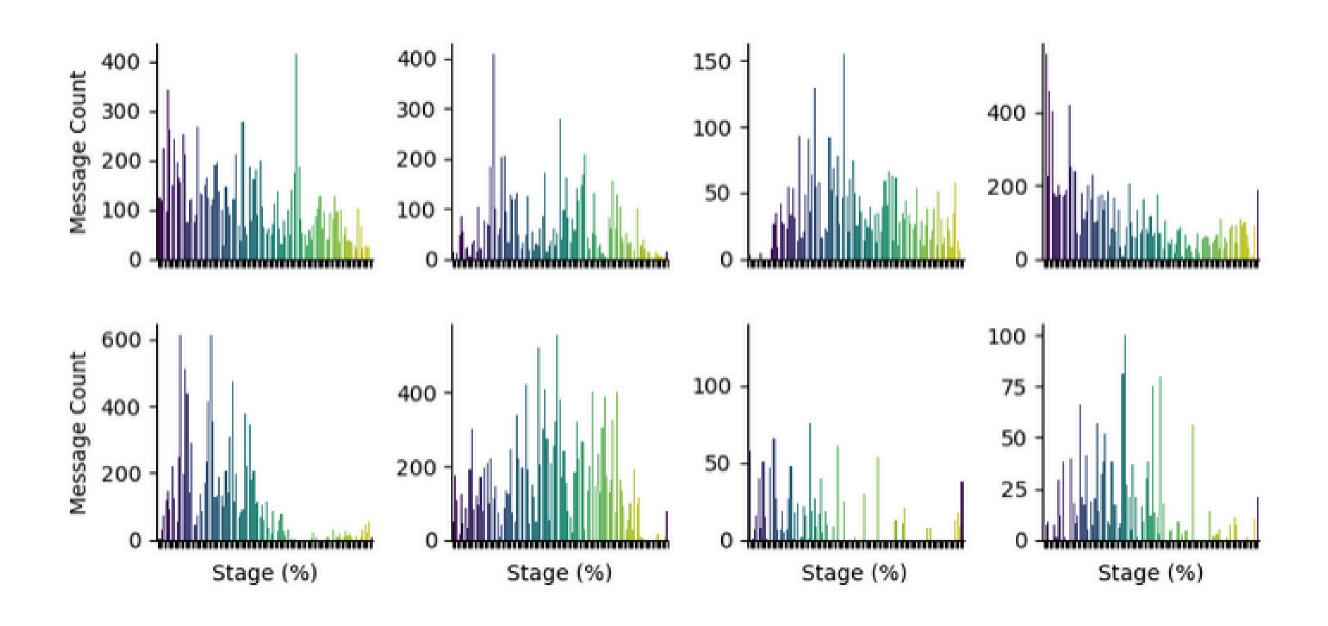


message count over time



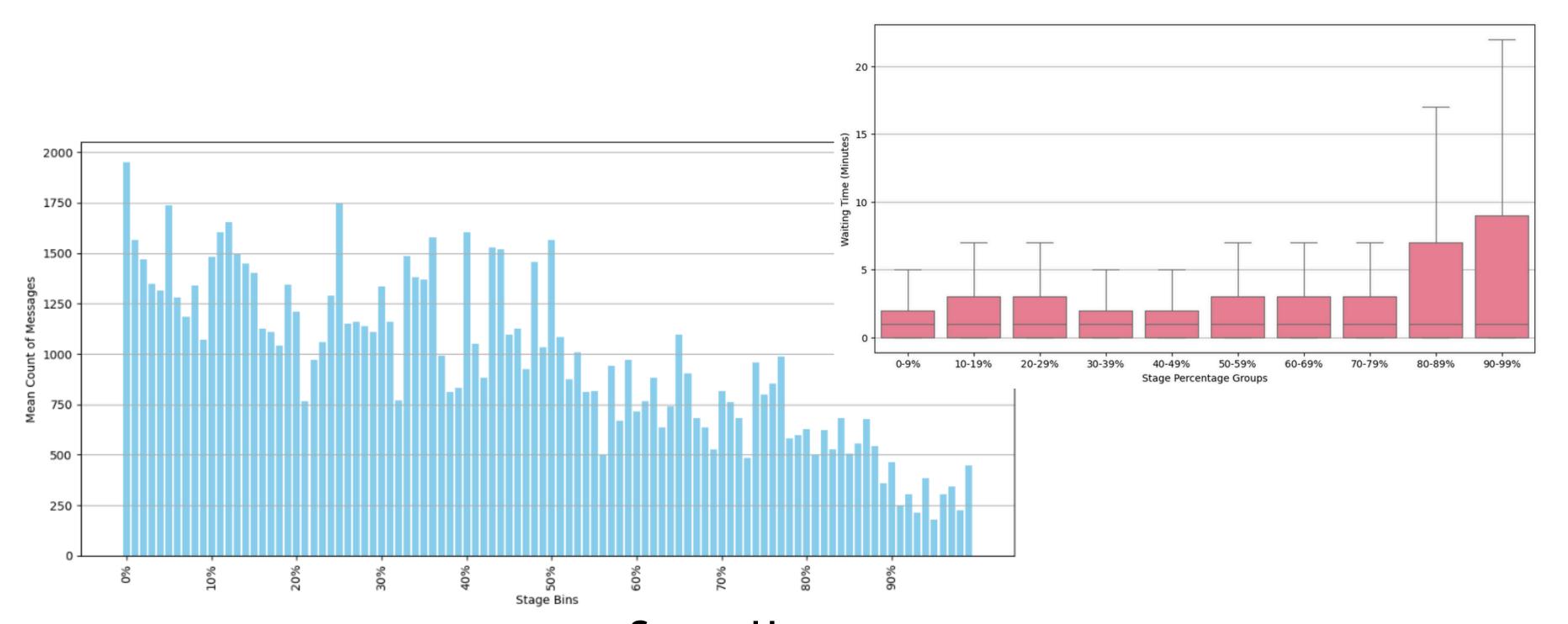
for 8 randomly selected contacts out of 16

message count from the beginning to the (bitter) end



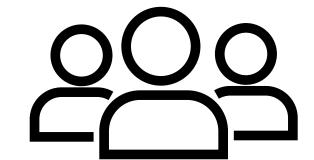
for the same randomly selected contacts

waiting time at different stages

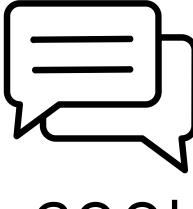


mean message count for all contacts with the length of the relationship normalized

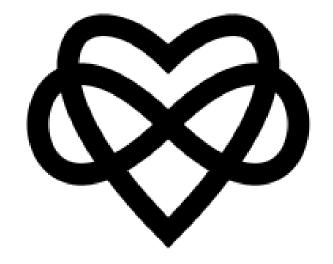
ethical non-monogamy



16 contacts

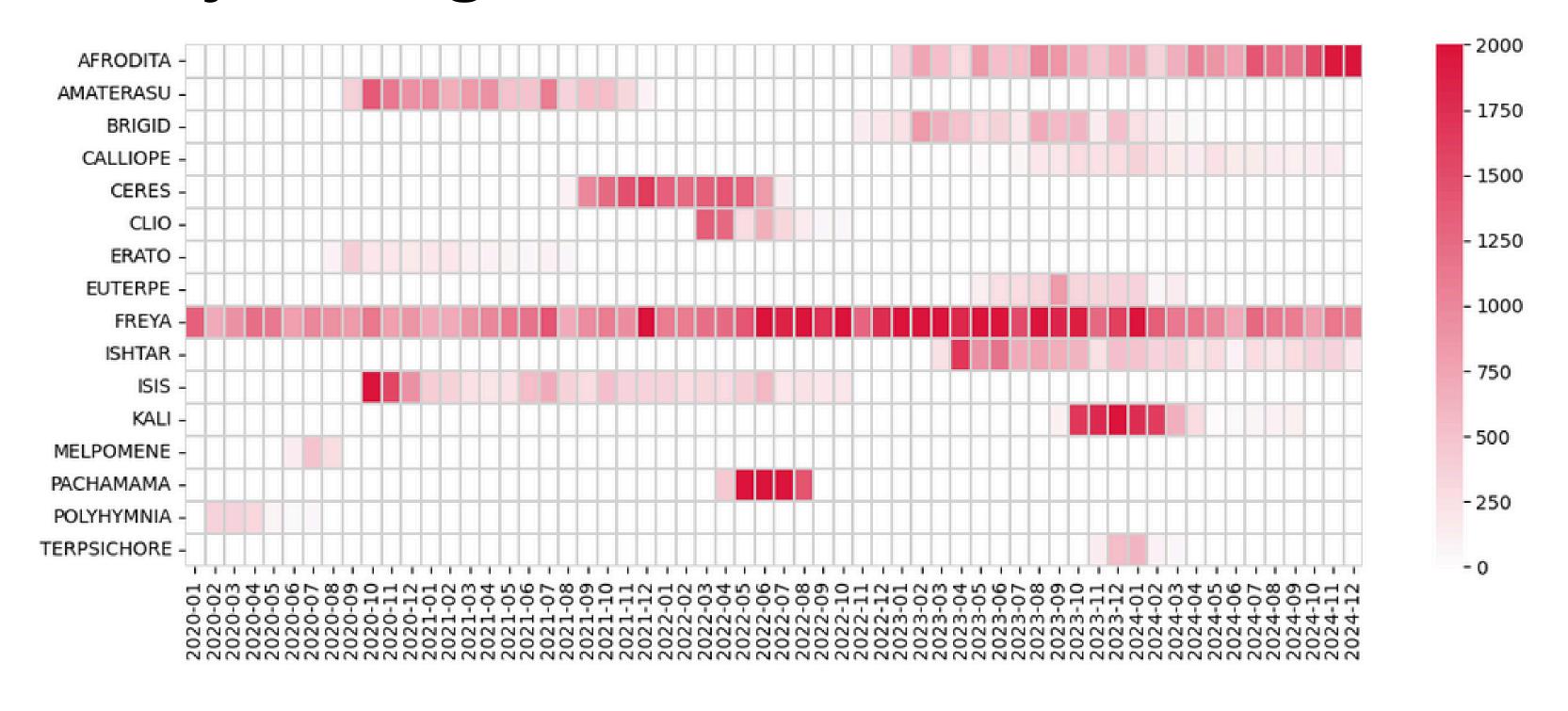






In contemporary discourse, non-monogamy is understood to encompass a variety of practices, ranging from culturally institutionalised arrangements like polygamy to consensual agreements such as **open relationships and polyamory**.

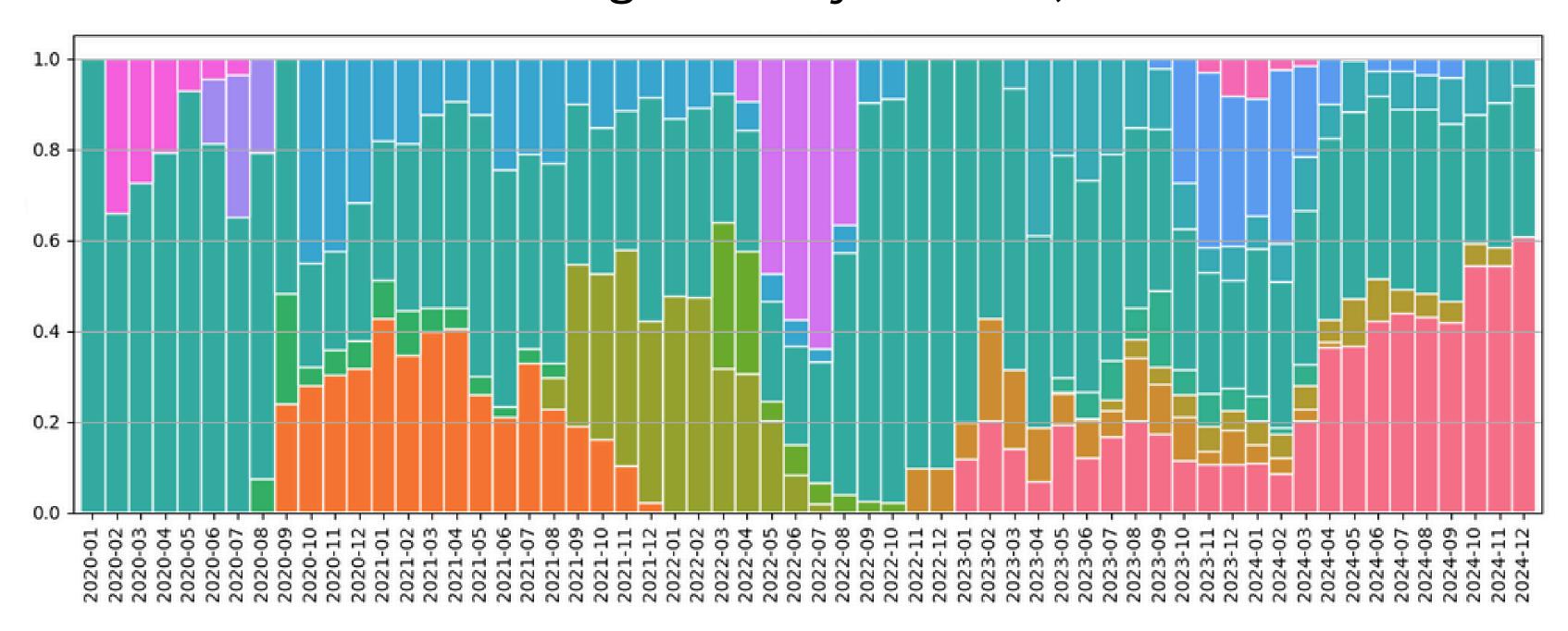
monthly message count for each contact



5 years period (2020-2024)

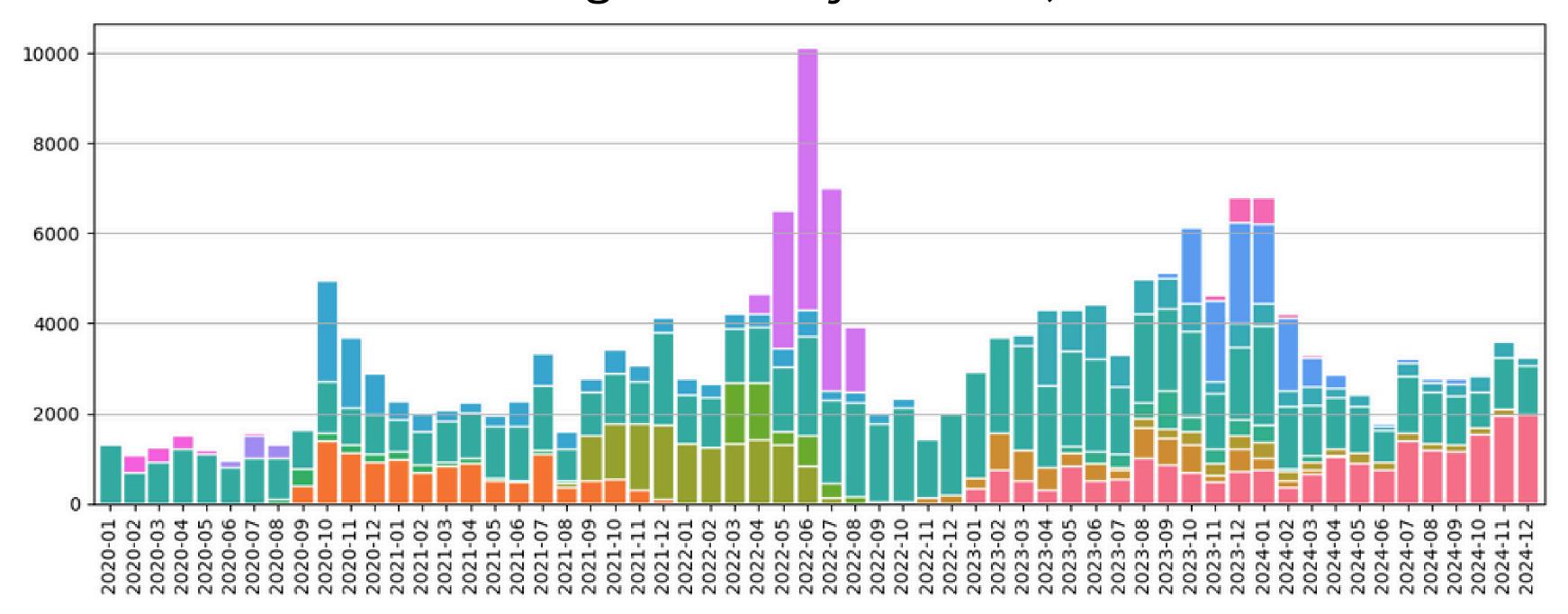
what about sharing?

message ratio by contact, month after month

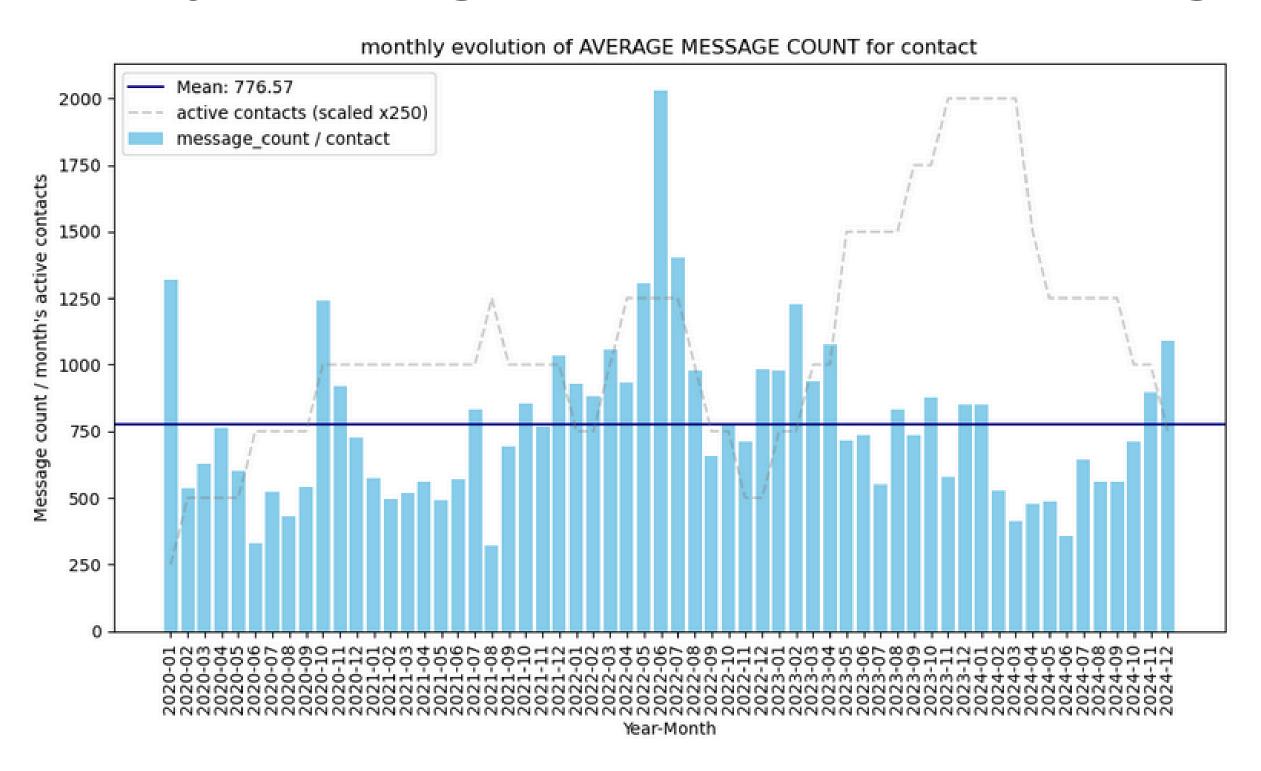


what about sharing?

stacked message count by contact, month after month

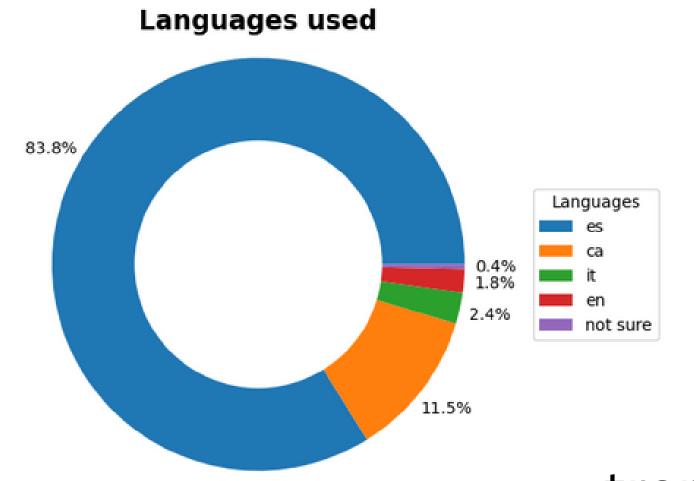


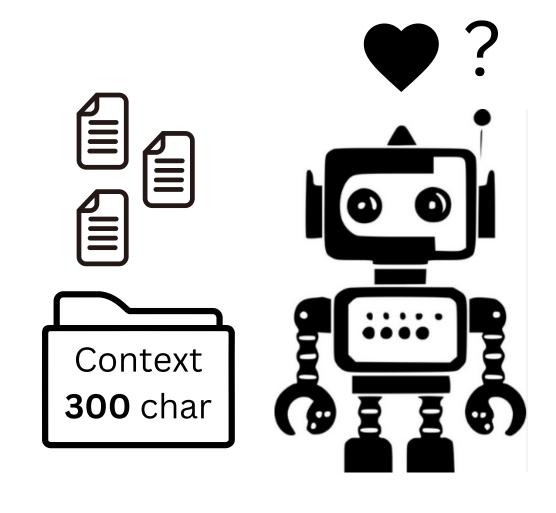
how many messages does each contact get?



the message should be in the message

polyglot for language detection



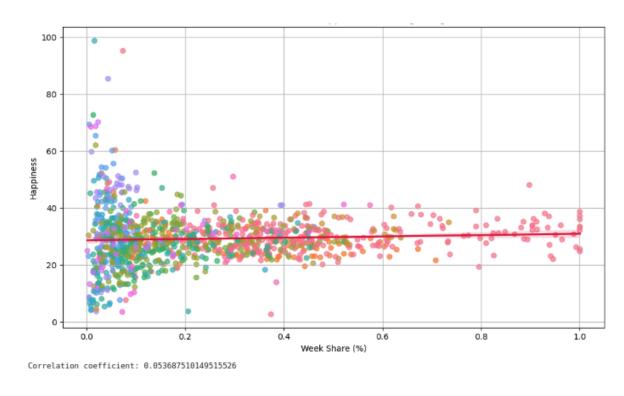


transformers **sentiment analysis** pipeline, **BERTopic** for topic analysis

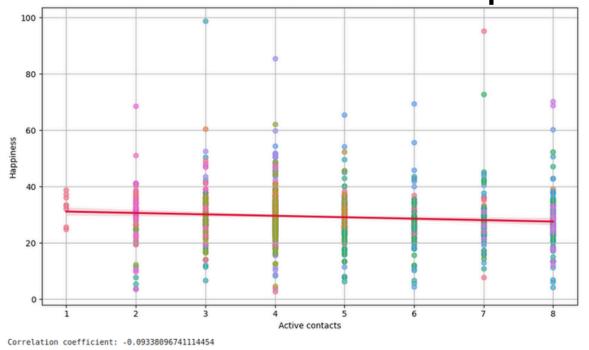
both over **multilingual BERT**

what happens with happiness as...

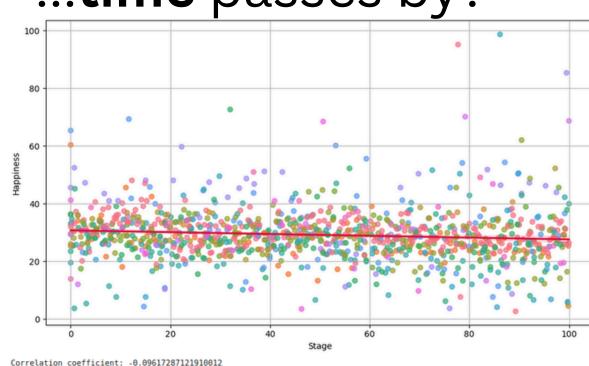
...attention grows?



...more contacts participate?



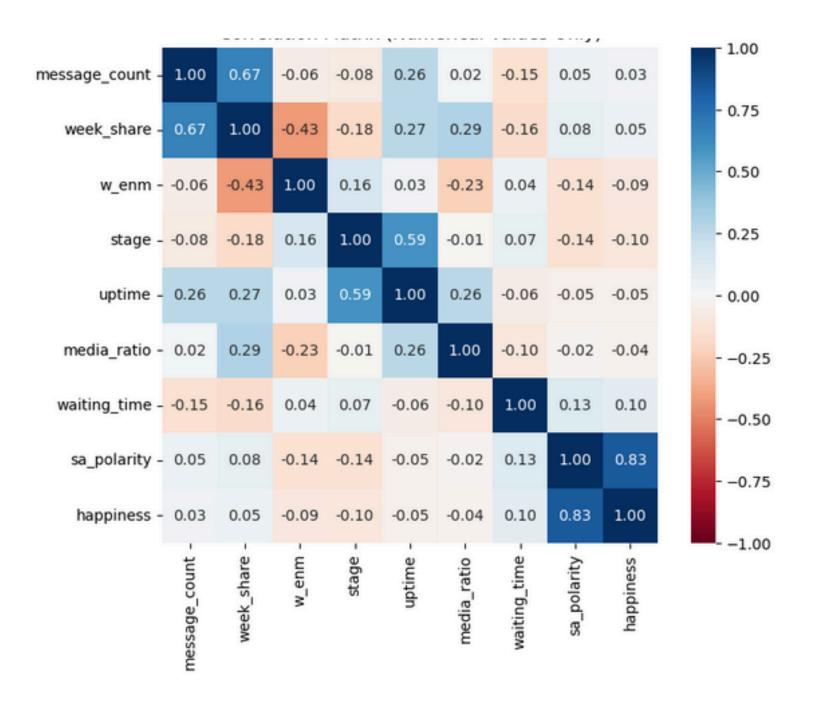




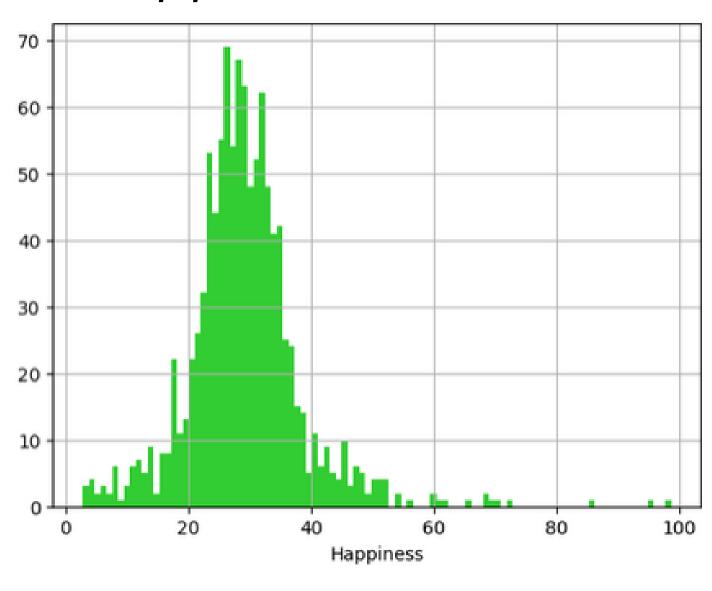
very low correlations: under 0.1 Is *happiness* a good indicator?

NO, really. What happens with happiness?!

correlation matrix



happiness distribution



BERTopic topic analysis

tren location Metro Shareddónde vas Duscar







Bonus track: **emoji timeline** a not-so-serious approach to **topic and sentiment** analysis

```
someone = getpass()
result = concatenate_emojis(emoji_df, someone, 2023, top_n=5)
print(result)
someone = qetpass()
result = concatenate_emojis(emoji_df, someone, 2023, top_n=5, separator='----')
print(result)
someone = qetpass()
result = concatenate emojis(emoji df, someone, 2022, top n=6, separator="\n")
print(result)
```

Conclusions



Do all interactions follow the same overall trend?



Do one contact activity affect other contacts?

Challenges



Private nature of the data



Locally run tools only



Relatively small dataset



questions and (maybe) answers

thank you all for listening



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