

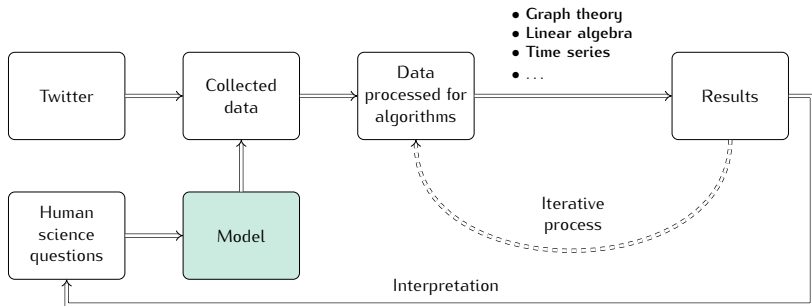
A web application for event detection and exploratory data analysis for Twitter data

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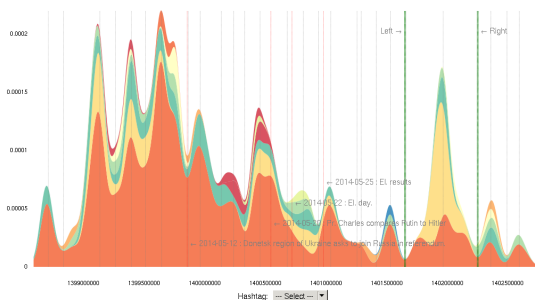
Methodology



Observatory of Twitter dynamics

Temporal density of hashtags + characterisation of selected periods

Time density



Top 10 hashtags

50 #hashtag1
60 #HASHTAG3
60 #hashtag2
...

Top 10 users

500 Ya
400 TY
300 On
200 Ona
...

Tweets

1398777777: User1: bla-bla #hashtag1 #hashtag2
1398777778: User1: bla-bla #HASHTAG3
1398777788: User2: bla-bla #hashtag2
...

Events and Twitter

Model

◆ Local minima of temporal density

◇ Hashtag based decomposition of the semantic space (ongoing work)

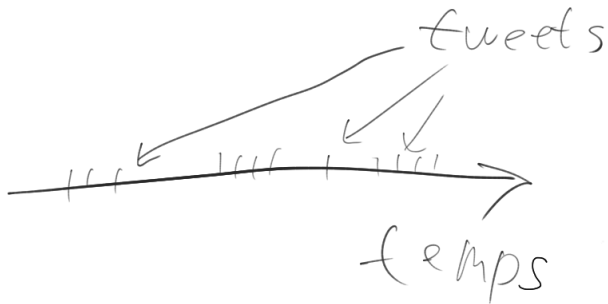


Real events

◆ Starting point (timestamp)

◇ Description

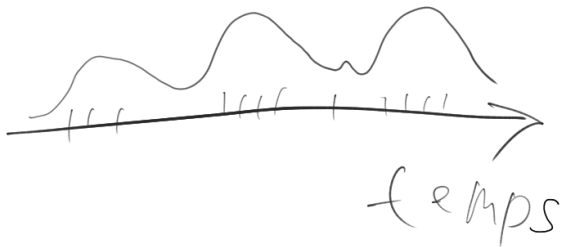
- Duration/length
- Importance
- etc.



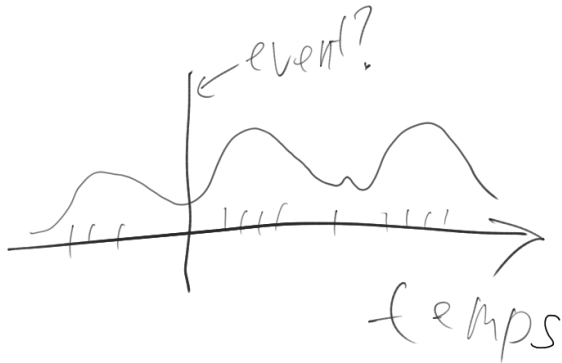
Histogramme?



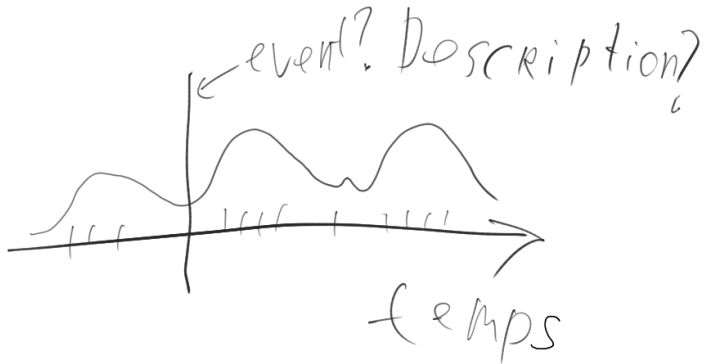
Parkzen - Rozenblatt



Parkzen - Rozenblatt



Parkzen - Rozenblatt



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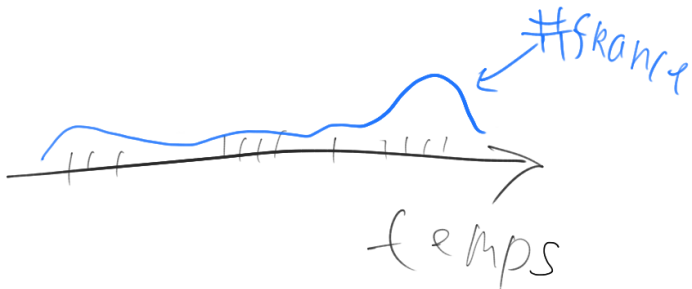
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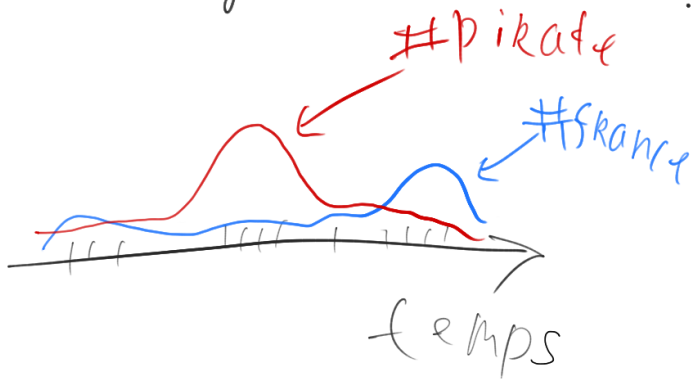
Parzen-Rosenblatt



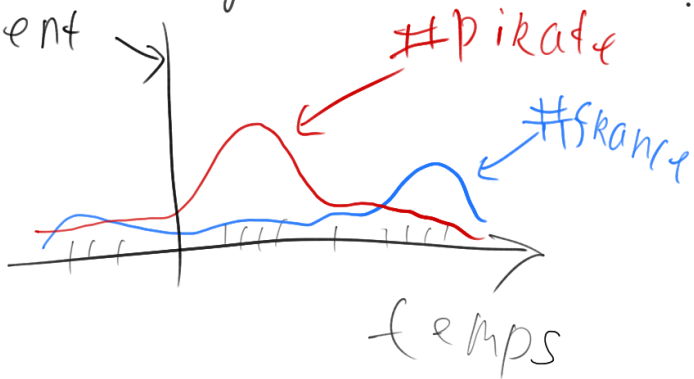
Hashtag-decomposition.



Hashtag-decomposition.



Hashtag-decomposition.
event



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1398777788: User2: bla-bla #hashtag2
...

./demo.gif

Example applications/talks

1. Twitter in mediatized society: the dynamics of news circulation through politicians' tweets

Alexander Frame and Tatiana Kondrashova

6th International "Language In The Media" Conference, September 2015, Hamburg

2. Approche multi-paradigmes pour l'analyse et la caractérisation des réseaux sociaux complexes

Éric Leclercq

*Séminaire Traitement de l'information multimodale et "Big Data"
Direction Générale de l'Armement, Arcueil, October 2015*

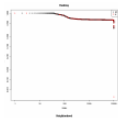
The Twitter Observatory: work in progress

♣ Online data processing

♠ Dynamic community detection

Network : hashtags \leftrightarrow users + users $\xrightarrow{RT, @, \dots}$ users

(modified version of “carryover opinion” and “pagerank”)



Thanks for your attention

Questions ?