

Much ado about one (single) thing ?

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SUMMARY

Many recent research has pointed the existence of an exceptional perturbation of classical and social media agenda during the period of outbreak of Covid-19 from January to May 2020. But the majority of studies are focusing on isolated countries and propose *ad hoc* explanations of the variation of salience of the topic by specific international events (e.g. declaration of WHO) or national political decisions (e.g. date and forms of lockdown). The perspective of the research proposed here is different as we try to catch a perturbation of the world agenda of media, assuming the existence of a globalization of the crisis at one point of time, producing a mega-bubble effect which appear to some extent exceptional as compared to events observed during the last 30 years. Our overarching hypothesis can be formulated as follows : **The Covid media outbreak is not a classical historical focusing event like Sept. 11 terror attacks of 2001 in the US. It is rather a giant case of international spreading with a complexity of form and a level of intensity that has never been observed during the last 30 years.**

1. Definition of the research object

The word **coronavirus** can be considered as a signal that reveals the presence of a **media outbreak** that has been disseminated in the majority of stories published by newspapers during the first months of year 2020. The word **covid-19** is a mutation of the initial diseases but participate from the same outbreak. **Coronavirus** or **covid-19** can be identified in all languages of the world. We define therefore a function of infection of news by viral words by a boolean function

- A news N published in language L_N is composed of a set of words $W_N = \{W_1..W_k\}$.
- For each language L the infection of the news is defined by a set of keywords $KW_L = \{KW_{L,1}..KW_{L,p}\}$
- $f_{0,1}(N, L_N) \rightarrow (W_N \cap KW_{L_N}) \neq \emptyset$

2. Data collection

1. **Mediacloud** appears as the most interesting source for analysis of recent events. It will be chosen for an extended spatial coverage at global scale (125 medias from 25 countries).
2. **Factiva or Europresse** are very similar in terms of content. They are useful for the collection of **full text** and for the realisation of **historical comparisons** (9 medias and 3 press agencies) with previous global events.

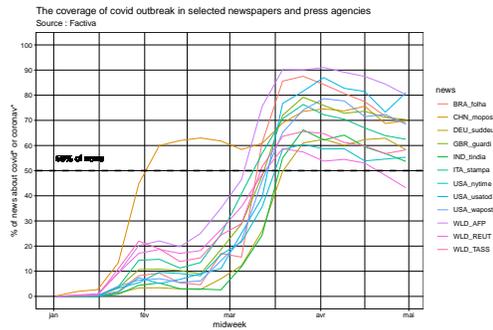
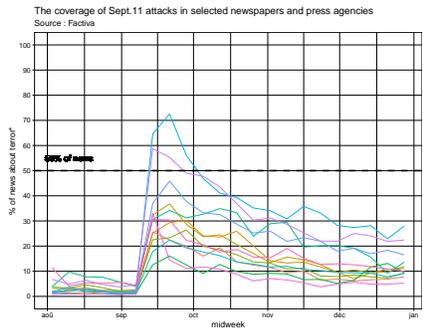
3. Covid-19 as giant focusing event ?

We started from the initial assumption that both events belongs to the category of focusing events defined by Birkland as ‘ *an event that is sudden; relatively uncommon; can be reasonably defined as harmful or revealing the possibility of potentially greater future harms; has harms that are concentrated in a particular geographical area or community of interest; and that is known to policy makers and the public simultaneously.*’

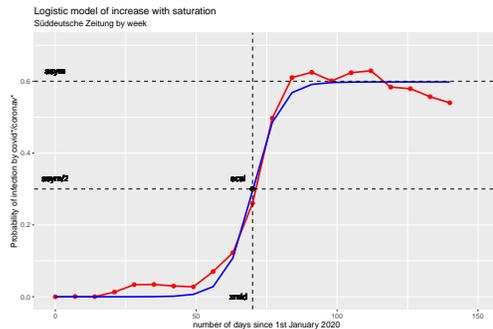
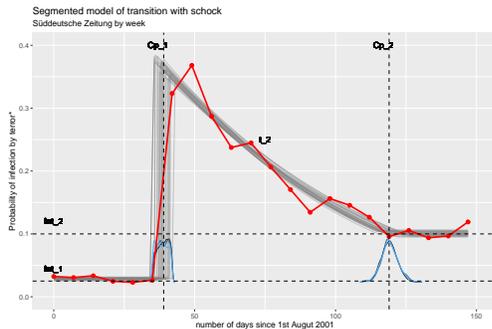
Source : Birkland, Thomas A. 1997. After Disaster: Agenda Setting, Public Policy, and Focusing Events. Georgetown University Press.

Then we test the hypothesis **The level of salience reached by the Covid-19 is exceptional, compared to the reference event of Sept. 11** which can be divided in sub-hypothesis

- H1 The peak of coverage of covid-19 is **higher** than the one observed in Sept. 11
- H2 The duration of the peak of high coverage is **longer** for Covid-19 than for Sept.11
- H3 The world coverage is **more homogeneous** for Covid-19 than for Sept. 11



The hypothesis H1, H2 and H3 are validated. But we can really ask if the two events belongs to the same category. In mathematical terms, it appears obvious that it is not the case. Sept.11 attack can be modelised as a transition between two state with a schok and an exponential decline. Covid-19 is better approximated by a logistic curve, at least until mid-april.



4. Covid-19 as giant spreading international event ?

The logistic model is not sufficient to describe the complexity of the curves associated to the salience of covid-19 in daily newspaper. When data are collected at the level of days, we can notice a lot of discontinuities revealing changing in slopes or intercepts. The final part of the paper will discuss some proposal for the modelisation of the complex curves established for the 125 media of 25 countries. And finally adress some hypothesis concerning the explication of the multiple breakpoints that are revealed by the analysis of the different countries :

- influence of global events like declarations of WHO ?
- co-variation between number of cases/deaths and number of news ?
- influence of national events like beginning and end of lockdown ?
- Regional effects related to diffusion of news between neighbouring countries ?

(c) This summary is based on preliminary results of research. Do not disseminate without the agreement of the authors (claude.grasland@parisgeo.cnrs.fr / jean-marc.vincent@imag.fr)