

TRENDY PLOTS

A Google Trends-based inquiry on the social determinants of conspiracy theories

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CONSPIRACY IDEATION : A PSYCHOLOGICAL PHENOMENON ?

- Huge literature in psychology and cognitive science on "conspiracy ideation".
- According to the results of existing surveys and psychological questionnaires, individuals who claim to believe in a given conspiracy theory tend to report believing in the same way in the majority, if not all, of the conspiracy theories that are submitted to their judgment.
- See e.g. Brotherton, French & Pickering, 2013; Goertzel, 1994; Swami, Coles, Stieger, Pietschnig, Furnham, Rehim & Voracek, 2011; Swami, 2012; Dagnall et al., 2015; Dagnall et al. 2017.
- There would thus be a kind of "conspiracy mentality", correlated with psychological phenomena (paranoia, anomie etc.)

CONSPIRACY IDEATION : A SOCIAL PHENOMENON ?

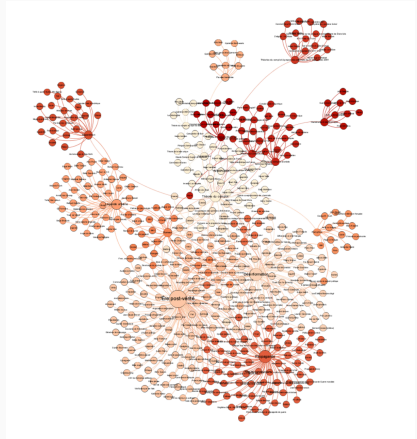
- Yet, most models or phenomena put forward by psychology can only explain so much of the variance in that kind of phenomena.
- It also hardly explains the focus on a specific type of conspiracy theory rather than on another.
- Rare attempt at finding social factors explaining it : "The social determinants of conspiratorial ideation", Socius, Di Grazia, 2017.
- **Goal of this paper** : using a widely adopted typology of conspiracy theories, trying to see if certain types of conspiracy are adopted together or not, and if there are some social determinants to the adoption of a one type of conspiracy rather than another.

TYPOLOGY OF CONSPIRACY THEORIES (BROTHERTON ET AL., 2013)

- **Government malfeasance (GM)** : theories that claim to reveal covert and criminal actions committed by the government.
- **Extraterrestrial cover-up (ET)** : theories that claim to reveal the existence of extraterrestrials
- **Malevolent global conspiracies (MG)** : theories that claim to reveal the malicious actions of secret groups acting on a global level
- **Personal well-being (PW)** : theories that claim to reveal secret actions aimed at harming the health or freedom of individuals
- **Control of information (CI)** : theories claiming to expose the fact that government, media, scientists and corporations control or withhold important information

TOPICS EXTRACTED

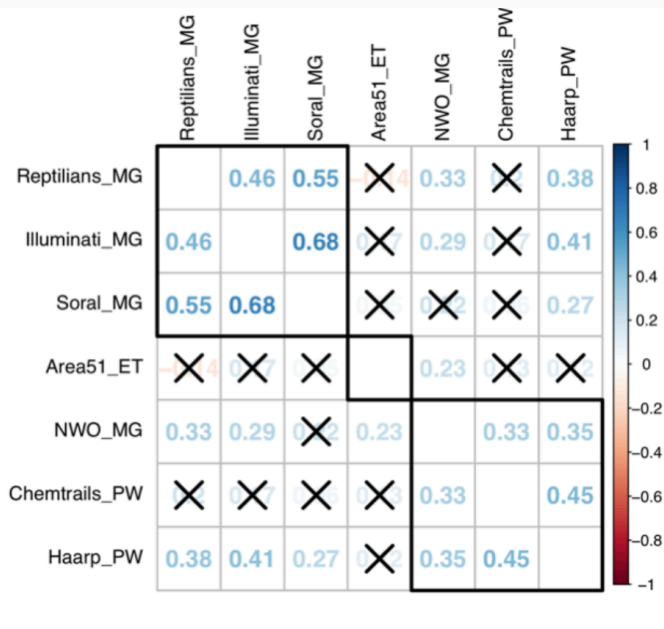
- To define which conspiracy theory to work on, we relied on **Wikipedia's** ontology.
- We extracted all the topics related to "théories du complot" to the degree 2, then annotated to select all the relevant ones.
- We then used the **Google Trends** API to get data on queries regarding those topics.
- We kept for analyses all the topics or which we had on data on more than 50 % of the French "départements".



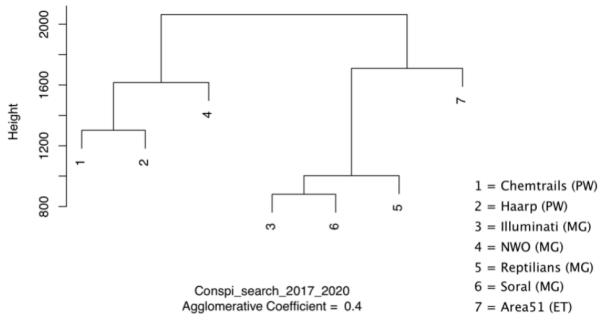
- **Chemtrails (PW)** : some of the white trails created by passing aircraft would be composed of chemical or biological agents deliberately spread at high altitudes by various government agencies for trouble reasons.
- **Haarp (PW)** : from an Alaska base studying the atmosphere called HAARP, we would be able to control and weaponize the climate.
- **Area 51 (ET)** : Extraterrestrial life would be hidden in an American military facility for obscure reasons.

- **Illuminati (MG)** : an evil and hidden group, the Illuminati, would control the world.
- **Reptilians (MG)** : humanoid reptiles govern our planet in an occult manner
- **Jewish Conspiracy (by proxy) (MG, CI)** : Jewish people would collude to govern the world in secret. Approached here through a specific French movement advocating that theory.
- **New World Order (MG)** : there would be a a project of planetary domination by democratic institutions, non-governmental organizations or totalitarian regimes.
- **Intermediary conclusion** : some classes of conspiracy theories more popular than others in France, malevolent global conspiracies being the most looked after on Google, followed by Personal well-being. Maybe interrogating those persons would lead them to approve of other conspiracy theories; yet, they do have an active interest only in some.

RESULTS : CORRELOGRAM



RESULTS : HIERARCHICAL CLUSTERING



INTERMEDIARY CONCLUSION

- Theories of the same classes indeed seem to be popular in the same places.
- New World Order : seems to correlate a bit with every theories. Gathers a bit of every conspiracy theory, in a similar way as QAnon in the US.
- ET theories seems very separate from the rest of those theories, and popular in different places as the other theories tested.
- **Why these differences in places of popularity?** Specific distribution of psychological pathologies or traits across the French territory? Or social phenomenon?

- Regression analyses to try and find some explanatory variables (unemployment, inequalities in revenue, crime, PCS structure, Age structure etc.)
- We collected the results of the 2017 presidential election by département thanks to the French Ministry of the Interior's datasets.
- Unemployment has been monitored through to the data collected by the Institut National de la Statistique et des Etudes Economiques (INSEE) in its « Enquête Emploi ».
- Numbers on education levels by département, age and gender, come from the last global census of the French population in 2014 (« Recensement de la population 2014 »).
- The proportion of age groups in each département are estimations for the situation on January 1st, 2018 computed by the INSEE.

- Stepwise regression, by minimization of Akaike Information Criterion (AIC).
- Differentiated results according to the type of theory studied.
 - Extra-Terrestrial cover up : no social determinants
 - Personal Well-Being : some
 - Malevolent Global : many