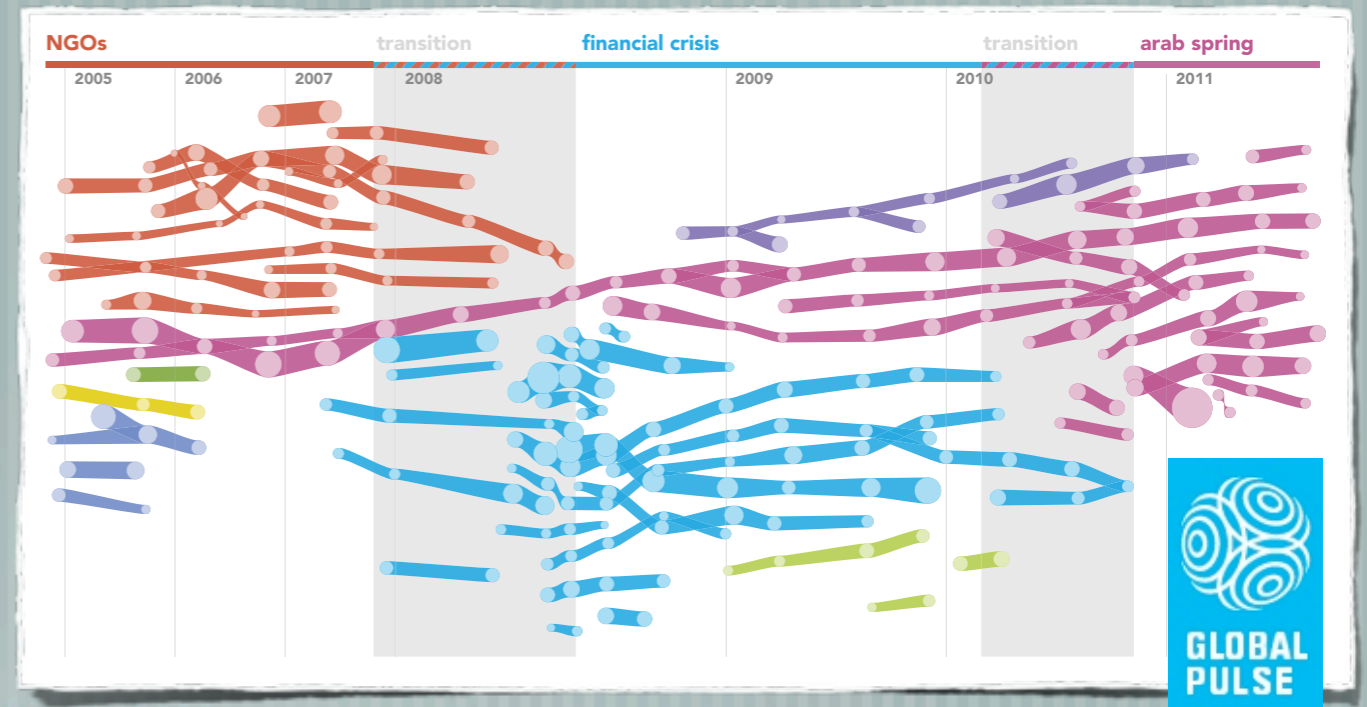


# pulseweb

Reconstructing streams  
of media issues  
from large textual corpora



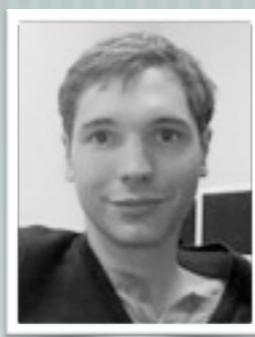
Andrei  
MOGOUTOV



Camille  
ROTH



David  
CHAVALARIAS



Jean-Philippe  
COINTET



Lionel  
VILLARD



Lise  
CORNILLEAU



Tam-Kien  
DUONG



Thierry  
SAVY



# A. Corpus

A press article corpus

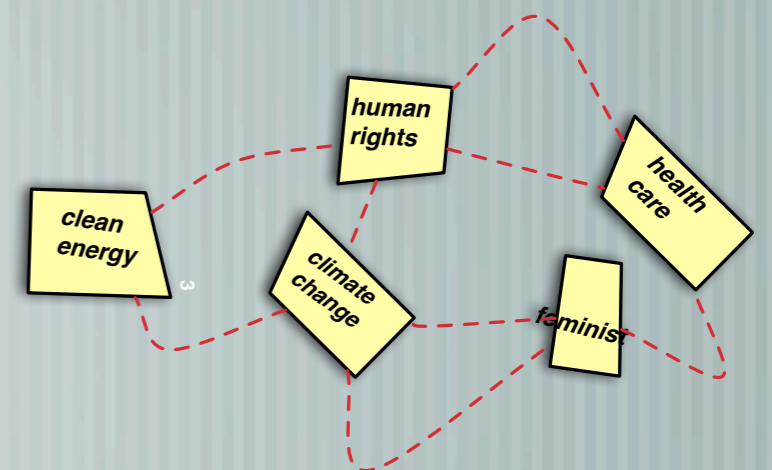
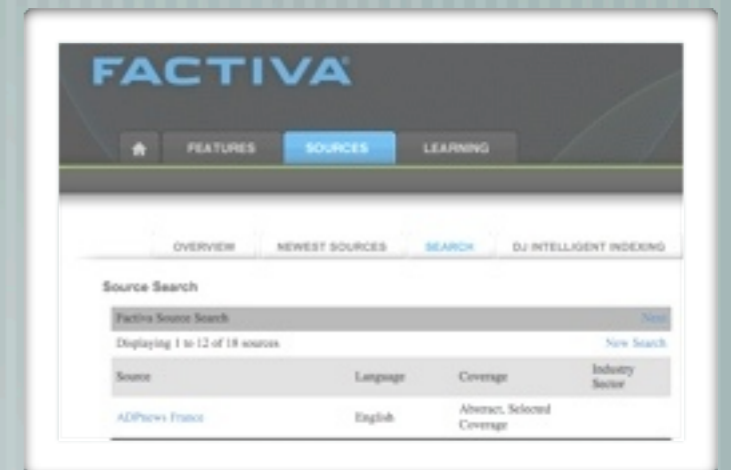
made up of around 20,000 French-speaking articles

published between 2004 and 2011

based on a Factiva request around food security

n-grams are extracted

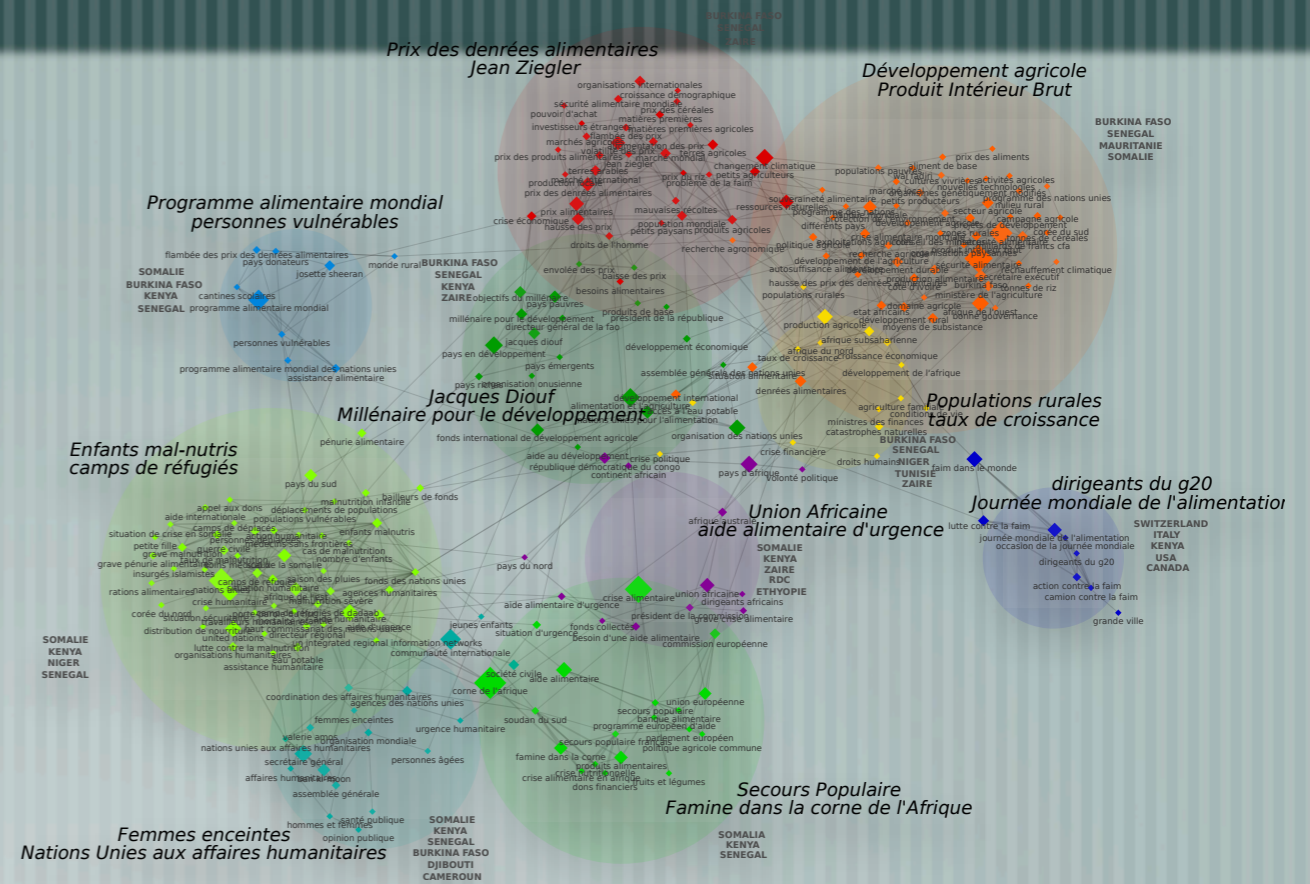
resulting in a temporal semantic network of n-gram co-occurrence



# B. Topic detection

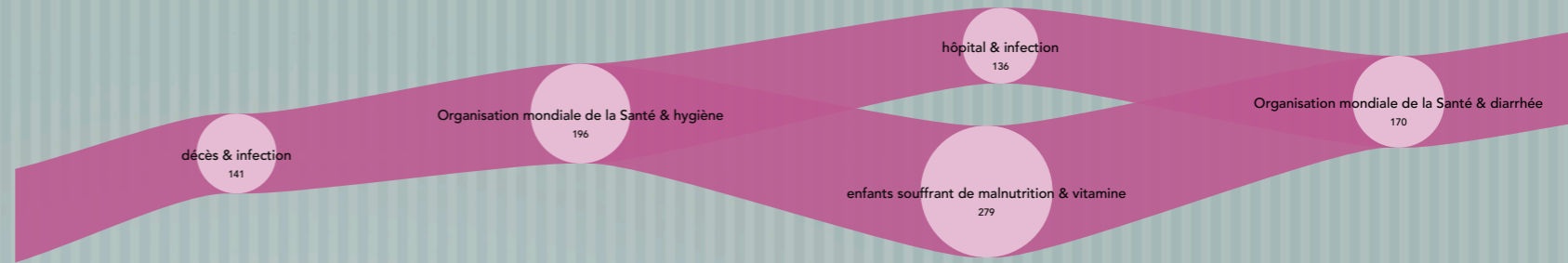
Clustering of the semantic network

Intertemporal matching of clusters



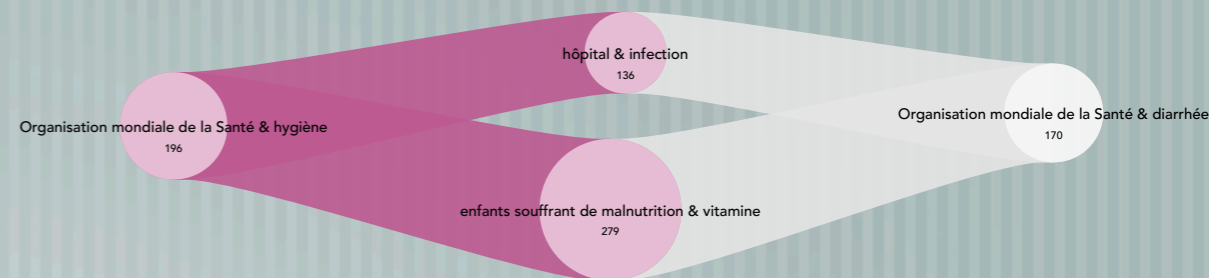
# B. Topic detection

Clustering of the semantic network

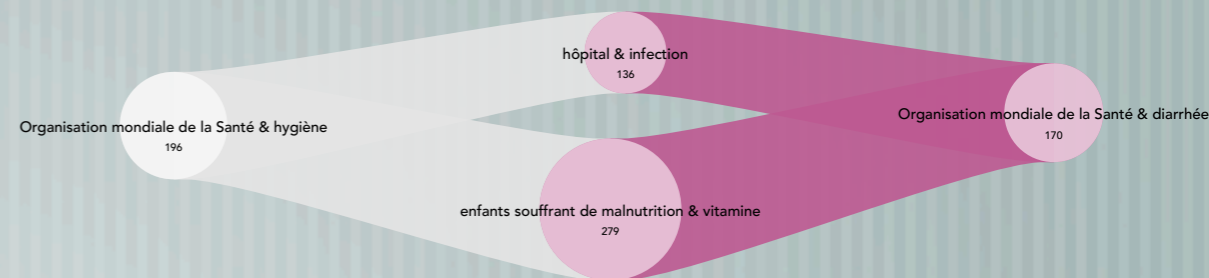


Intertemporal matching of clusters

forking



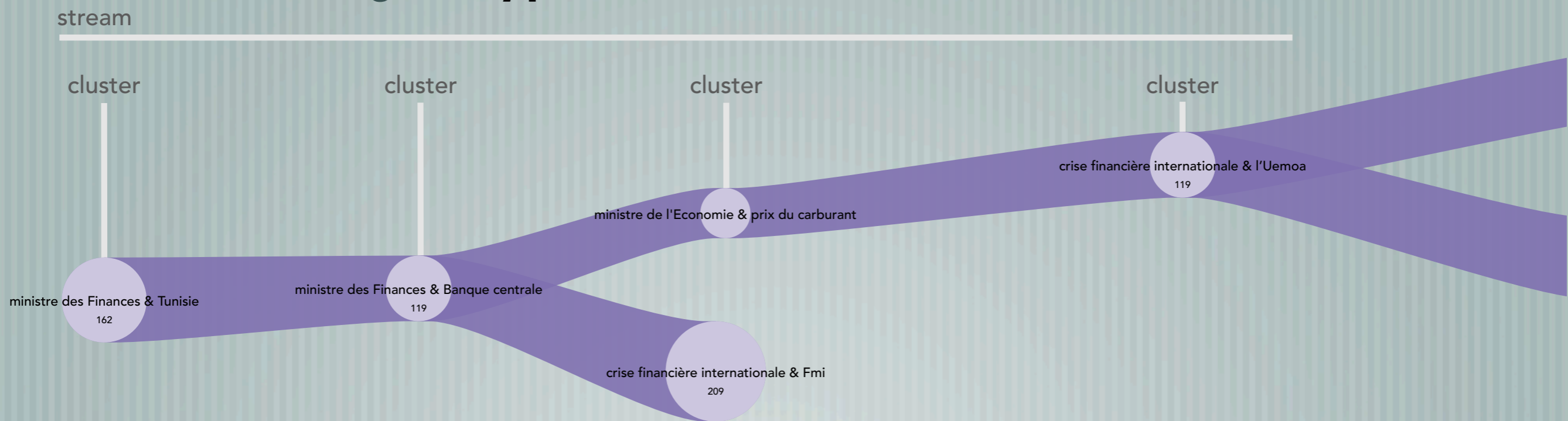
merging



# B. Topic detection

A stream is a connected component of clusters

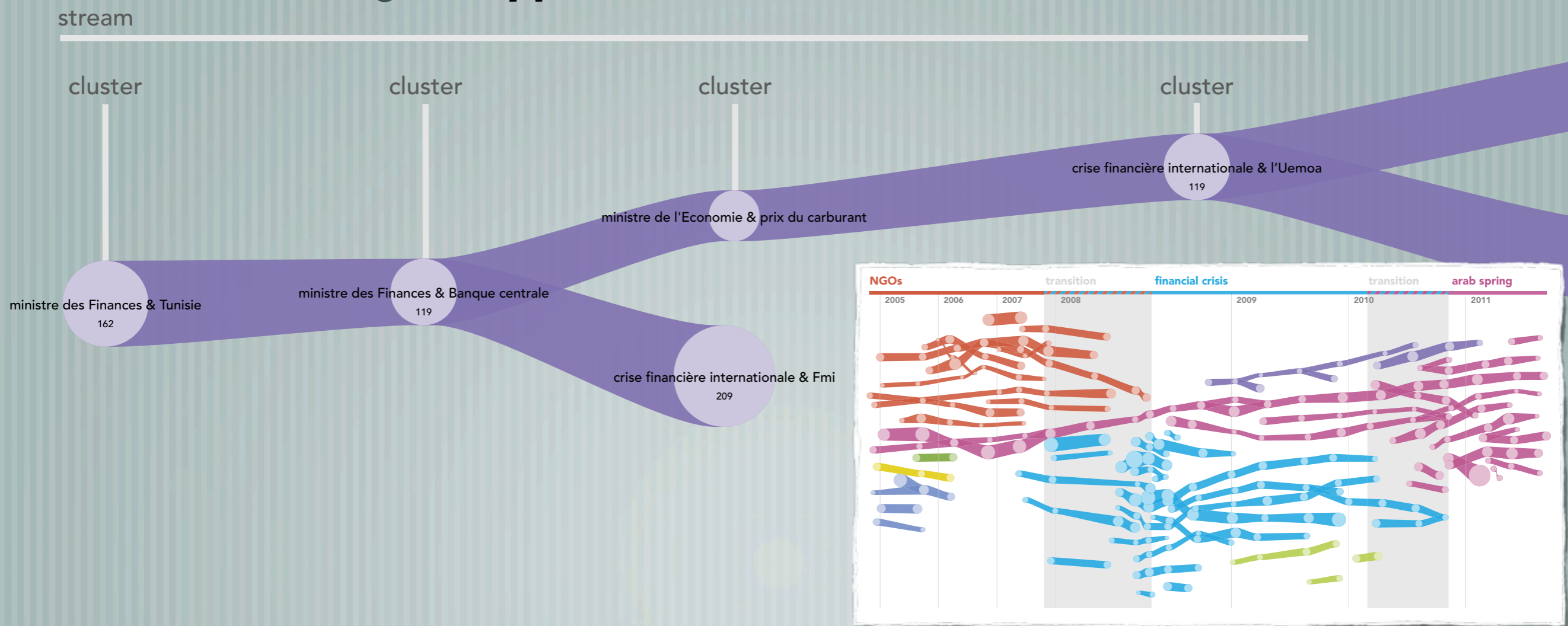
Clustering of hyper-streams



# B. Topic detection

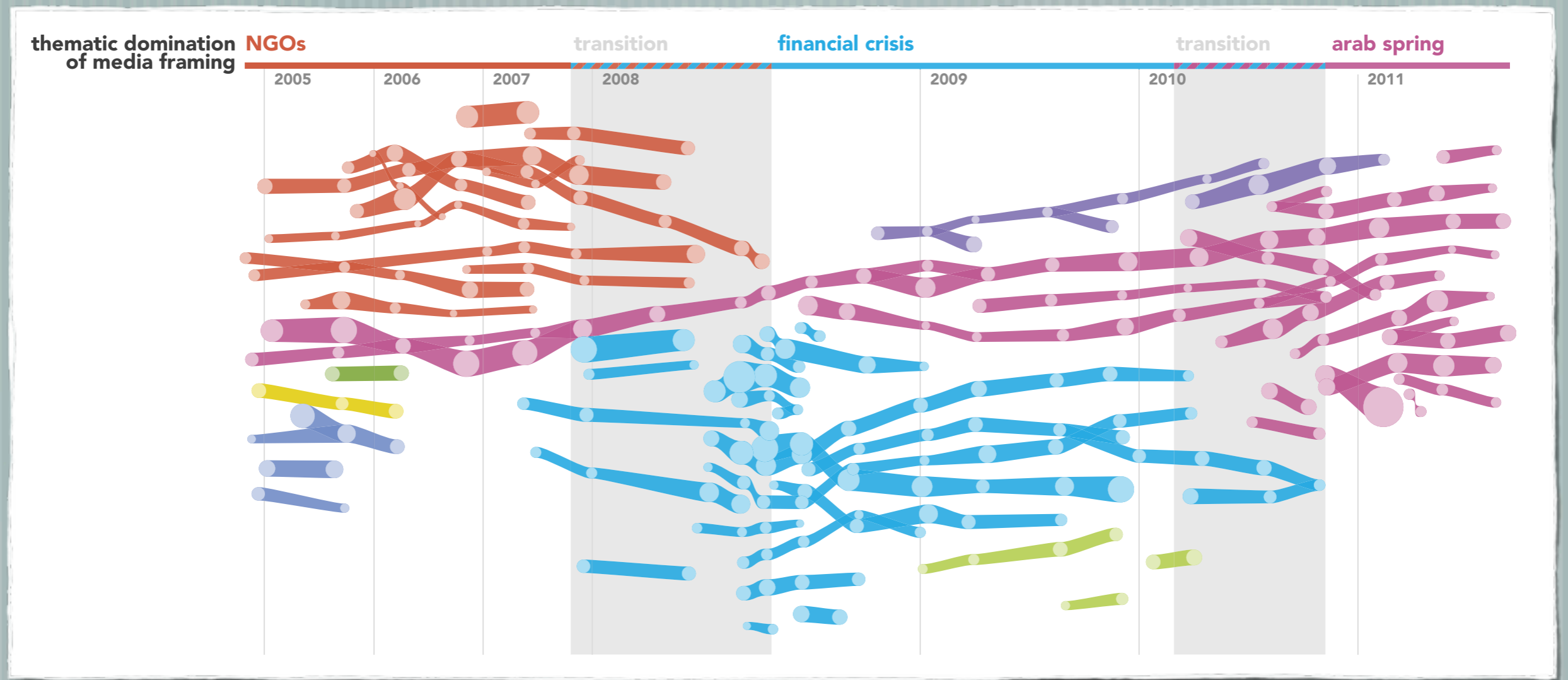
A stream is a connected component of clusters

Clustering of hyper-streams



# D. Integration...

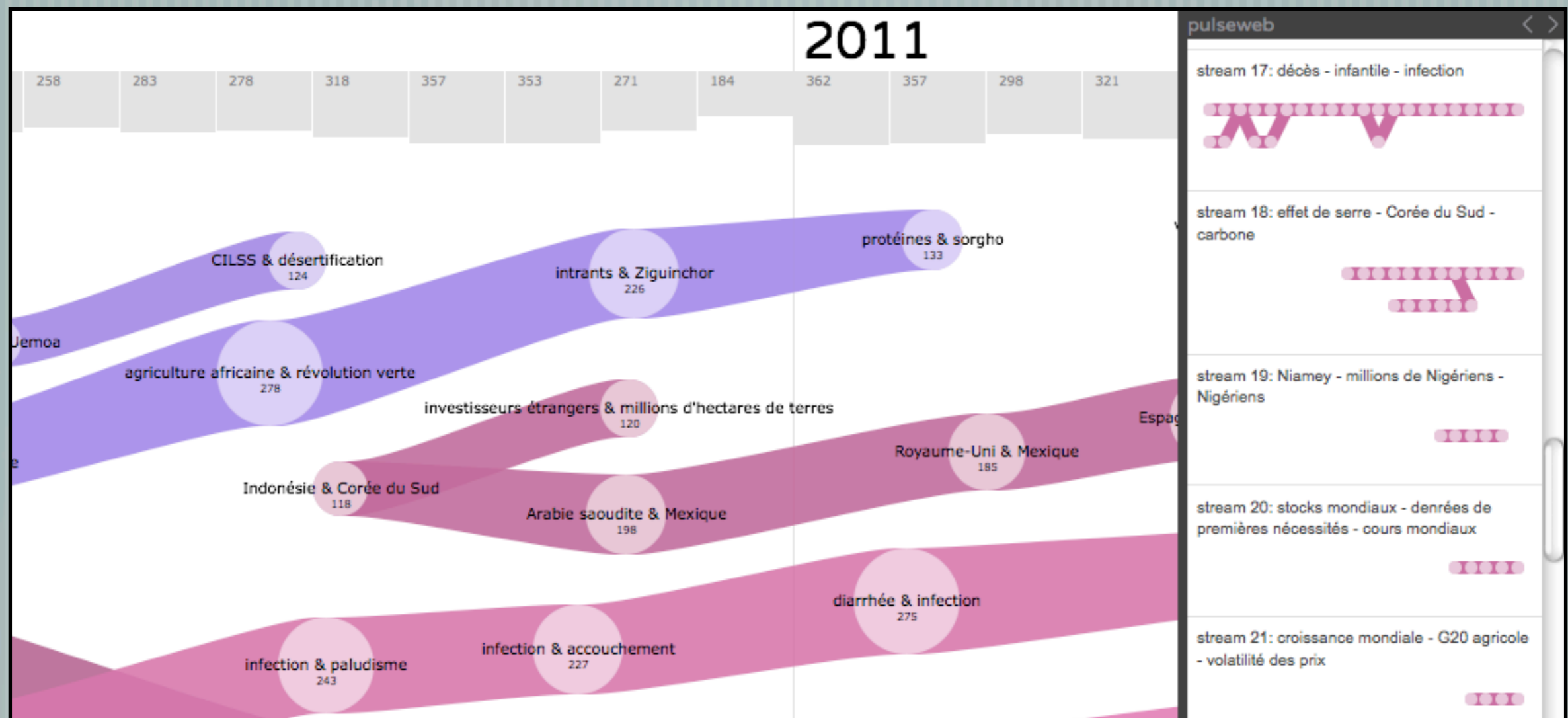
...into a web platform



The platform is available at the following address: <http://pulseweb.veilledynamique.com>

# D. Integration...

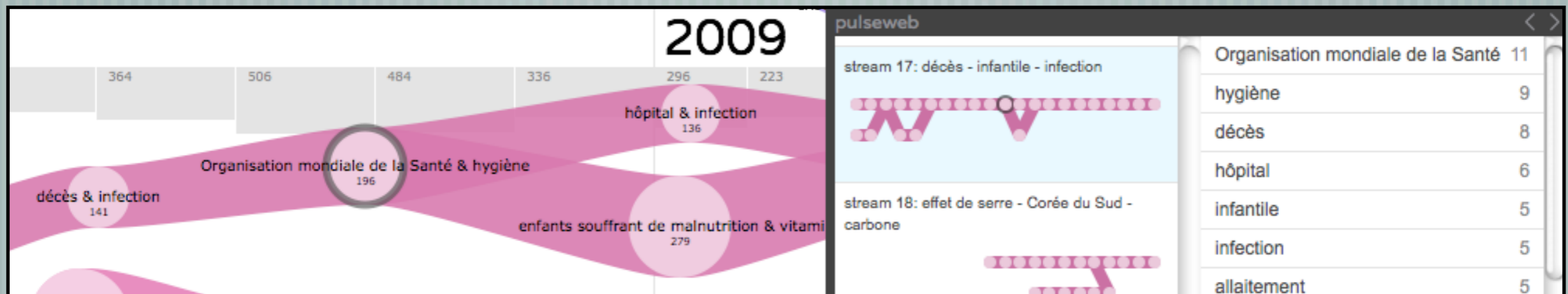
...into a web platform



The platform is available at the following address: <http://pulseweb.veilledynamique.com>

# D. Integration...

...into a web platform



The platform is available at the following address: <http://pulseweb.veilleodynamique.com>

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...into a web platform



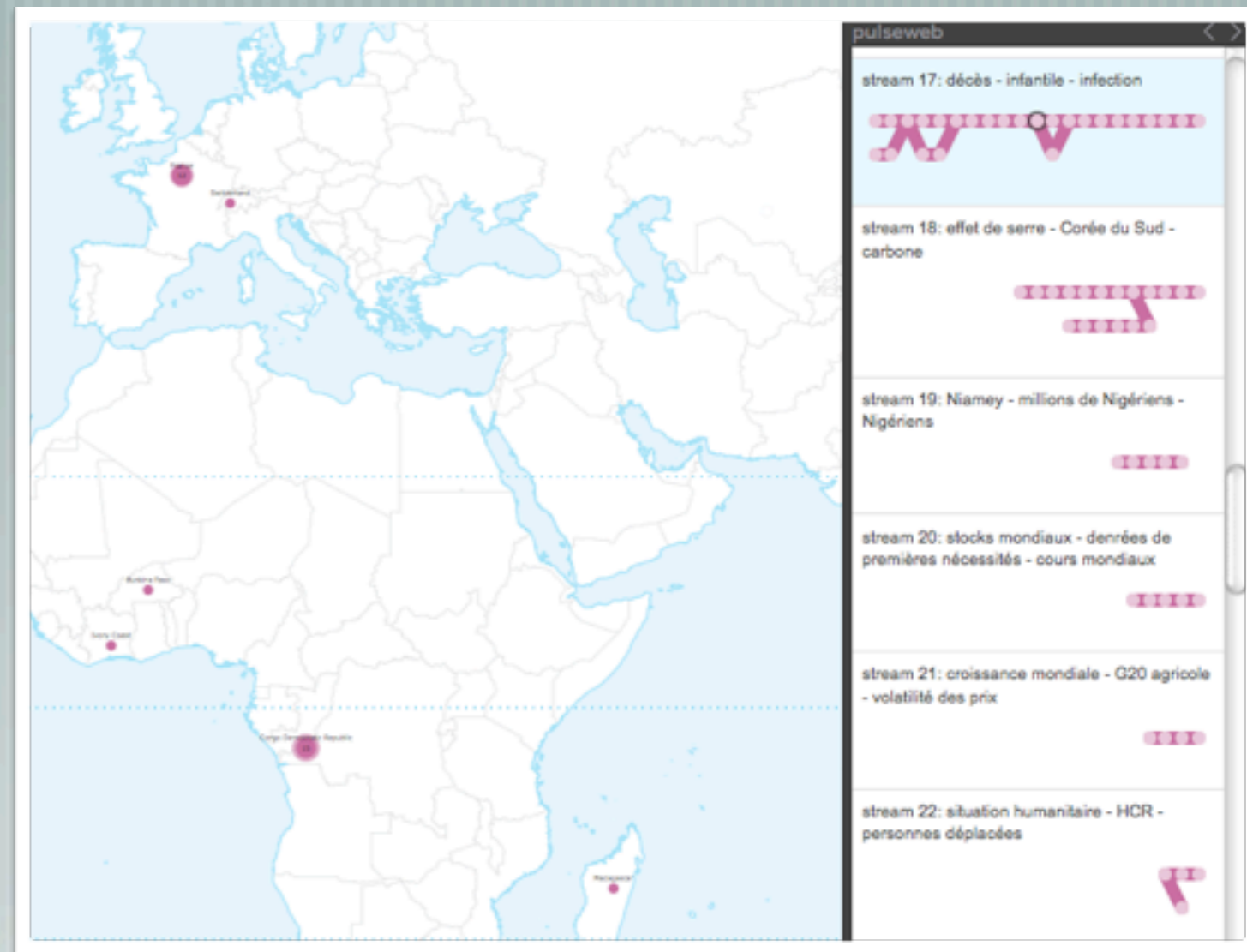
The platform is available at the following address: <http://pulseweb.veilledynamique.com>

# C. Geographic mapping

Articles are geographically tagged

Only the most specific geographic indicators are retained (sometimes, a whole continent)

Topics are associated with articles, and thereby with geographic areas



# E. Interpretation

## Red

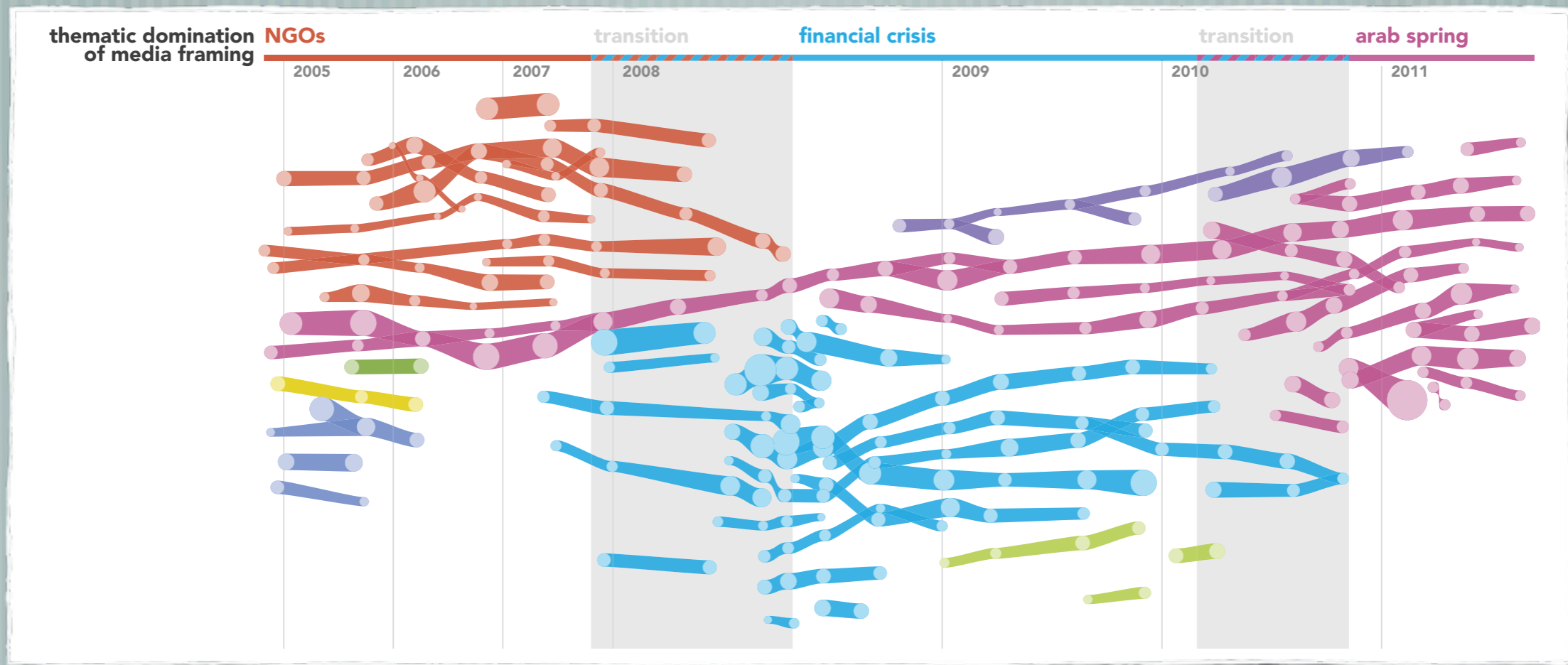
humanitarian crises  
due to natural disasters  
floods/droughts, wars and conflicts,  
role of agricultural innovations

## Blue

role of world prices  
in '08 food crisis  
discourse of international institutions, role of  
biofuels in rising staple food prices, financial  
crash & energy sustainability

## Pink

political issues,  
late link to Arab spring  
food prices and Arab riots,  
continuity of infant health issues,  
global governance issues



# Thanks

The platform is available at the following address:

<http://pulseweb.veilledynamique.com>