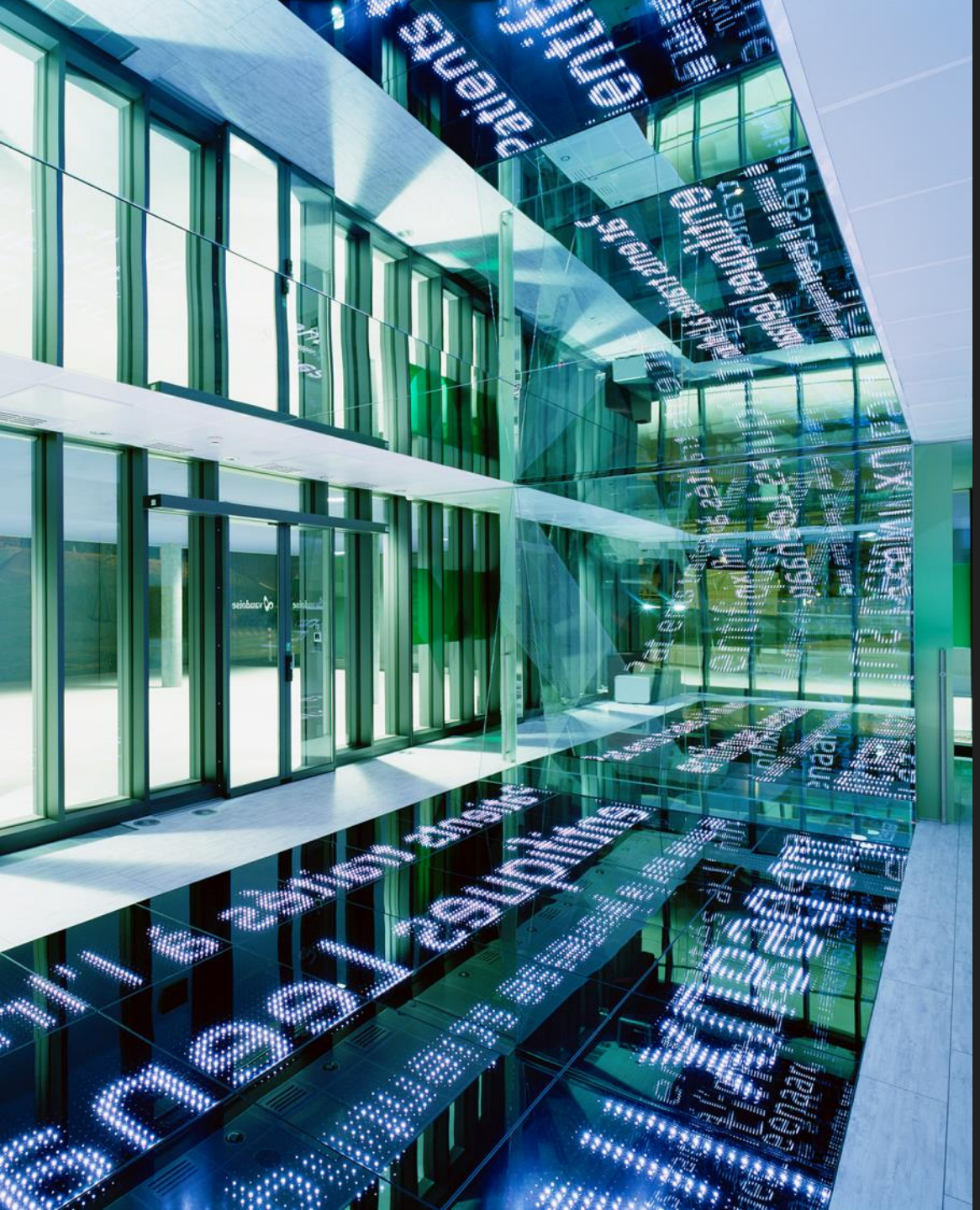


ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE

EPFL+ECAL LAB

GAMI / NEM

A vision of Disruptive Innovation between Academia and News Industry

Why an effort is needed?

Democracy is based on well informed people

Competitiveness relies on information

Education needs information

Freedom means information independency

Privacy is more than good doors, walls and curtains

But big players now

Controls the whole chain of Hardware, Software, Data

Follow us at any seconds of our life

Set the rules of what we can say and how we can say it

Buy the last land of freedom: buys content and publishers, set the new economic rules

Who is to blame?

Big players just do their job, and they do it well

They are coming from the academic world and understand the need for time

They have a culture of Risk

They come from another culture of investment

They have the money

They set a global market

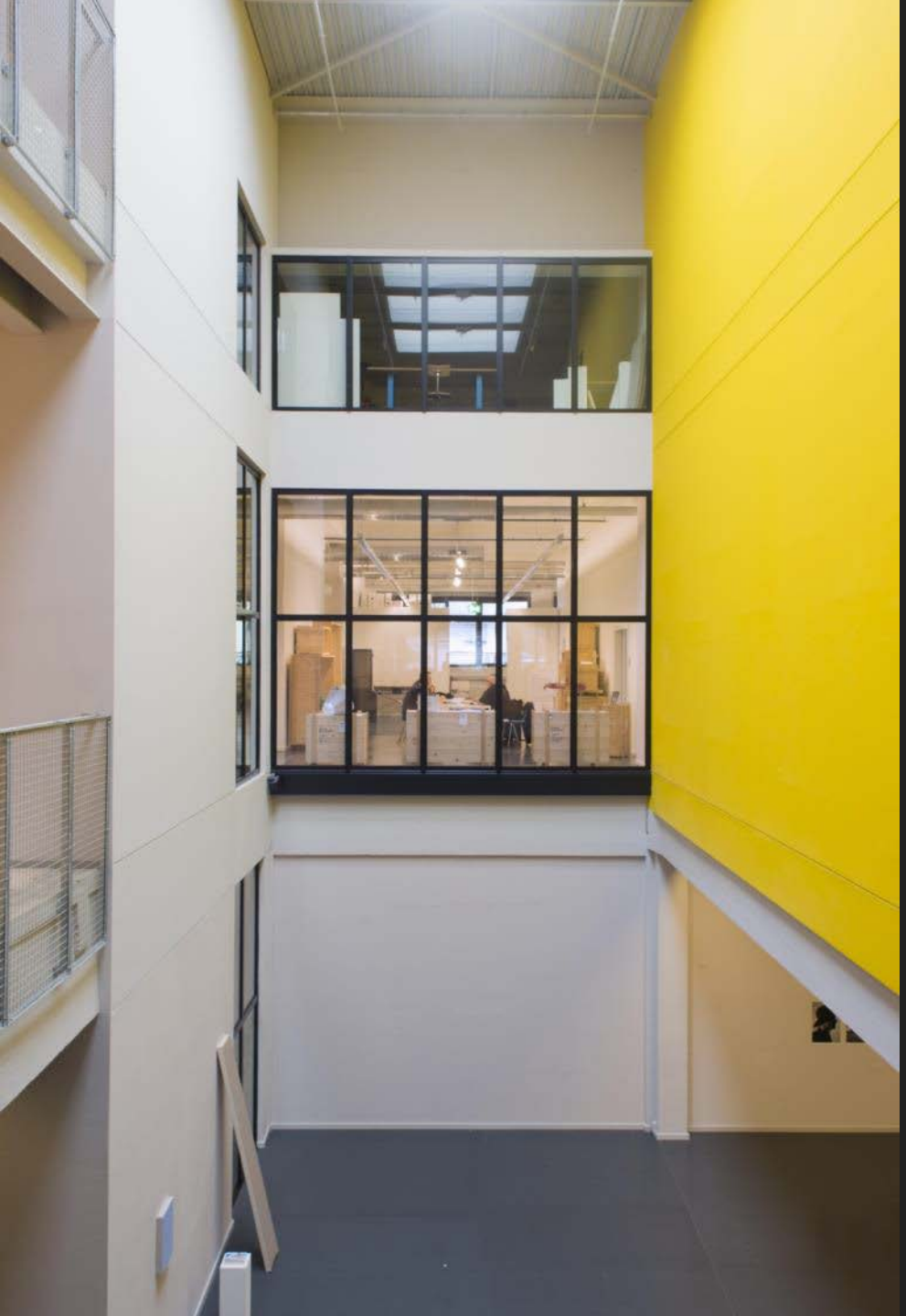
Can We Still do Something ? Yes!

EPFL / Ecole Polytechnique Federale de Lausanne
10’000 Students
2’000 PhD
360 Labs
1 -7 EU rankings

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

EPFL+ECAL LAB

ECAL/Ecole Cantonal d’art de Lausanne
640 Students
Graphic Design/Product Design/
Media & Interaction Design/ Cinema
Art Direction /Fine Arts.
EPFL+ECAL LAB



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EPFL Design Center on ECAL Campus
Vice Presidency for Innovation
and Tech Transfer

Missions:
Innovation
Research
Education

EPFL+ECAL Organisation & Partnerships

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Academic Partners

ECAL (Lausanne)

ENSCI (Paris)

Parsons (NYC)

RCA & HHC (London)

Funding

EPFL (Federal Budget)

Industrial Partners

Scientific and Innovation

Technical Suppliers

Private Partners

Kudelski Group

Faveeo

Verallia

Agence France Presse

Vaudoise Assurances

Melissa

Lombard Odier

Vacheron Constantin

Logitech

Red Cross Museum

Louis Vuitton

Montreux Jazz Festival

Pro Senectute

Décision

Solaronix

Collaborators

Interaction designers

Graphic designers

Object designers

Software Developper

Computer engineers

Electronic Engineer

Materlial science engineer

UX/UI Analyst & researcher

Research architects

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Disruptive Innovation?
Innovation involves adoption
But how people can adopt something not in relation to what they know?

Toward Adoption

Academia

-> Disruptive technologies (ex Scala)

-> Disruptive scenarios (ex. Twitter)

-> Set it in the cultural and social context of the user

Project instigation

Emerging technologies

Industrial needs

Societal needs

User needs

But the goal is a new experience for the users !

The COP21 Challenge

3 Labs together

Science Po Paris	Understanding the challenges in complex public debates
Distributed system Laboratory/EPFL	Big Data Analysis
EPFL+ECAL Lab	Designing a user experience

Debate structure

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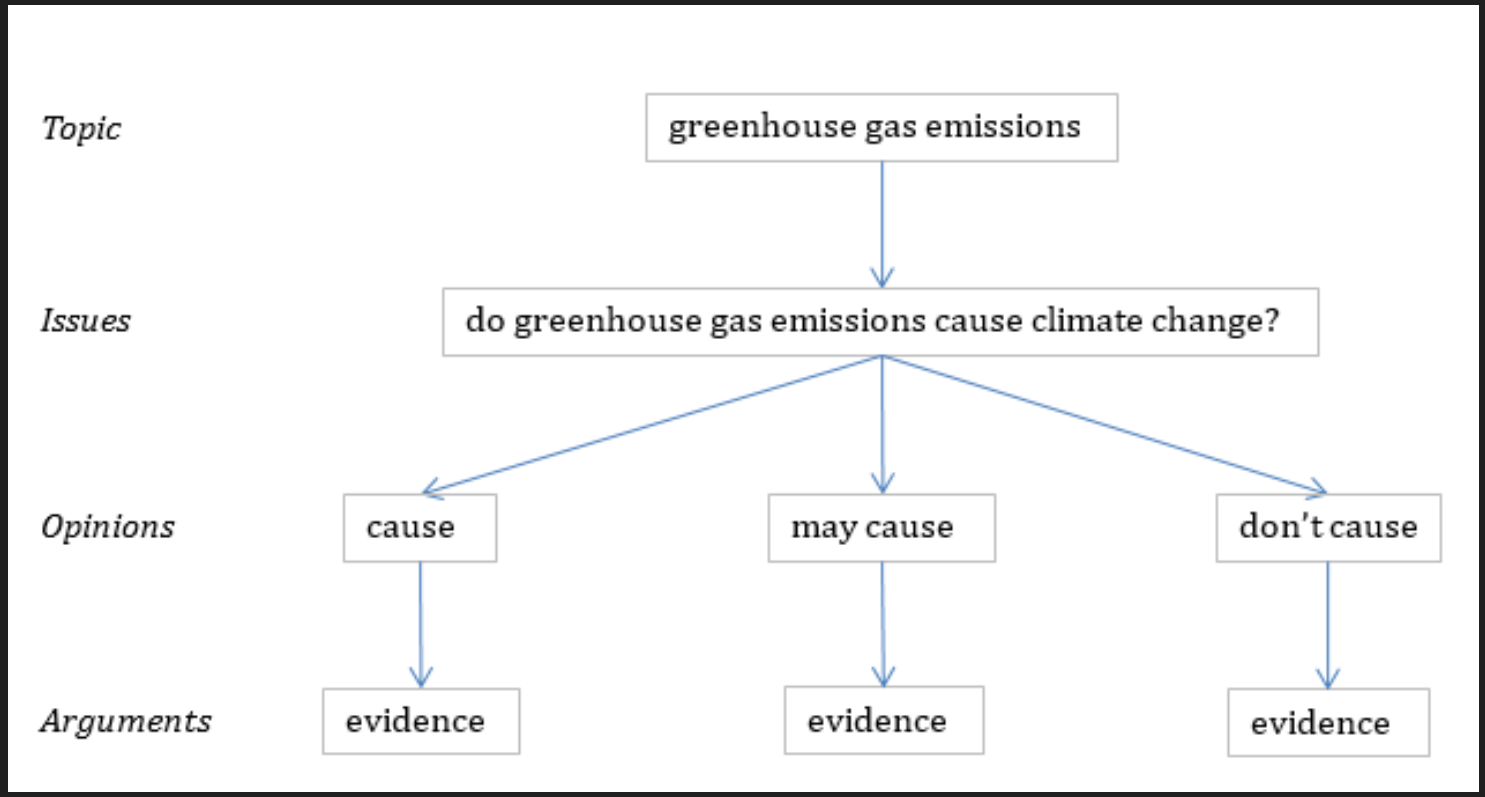

Courtesy of LSIR/EPFL

Ontology entities

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Countries (C)

States
(ex. France, China, USA...)

Groupings
(ex. AOSIS, Umbrella Group, G77, Annex I, OCDE...)

Actors (A)

Experts & Spokespersons
(ex. Rajendra K. Pachauri, Christiana Figueres, Laurent Fabius...)

Institutions
(ex. SBSTA, IPCC, UNDP, World Bank...)

Issues (I)

Themes or Topics
(ex. forestry, migration, sea level rise, *Bangladesh*, *Small Island States**...)

Courtesy of Science Po Medialab

Entities relations

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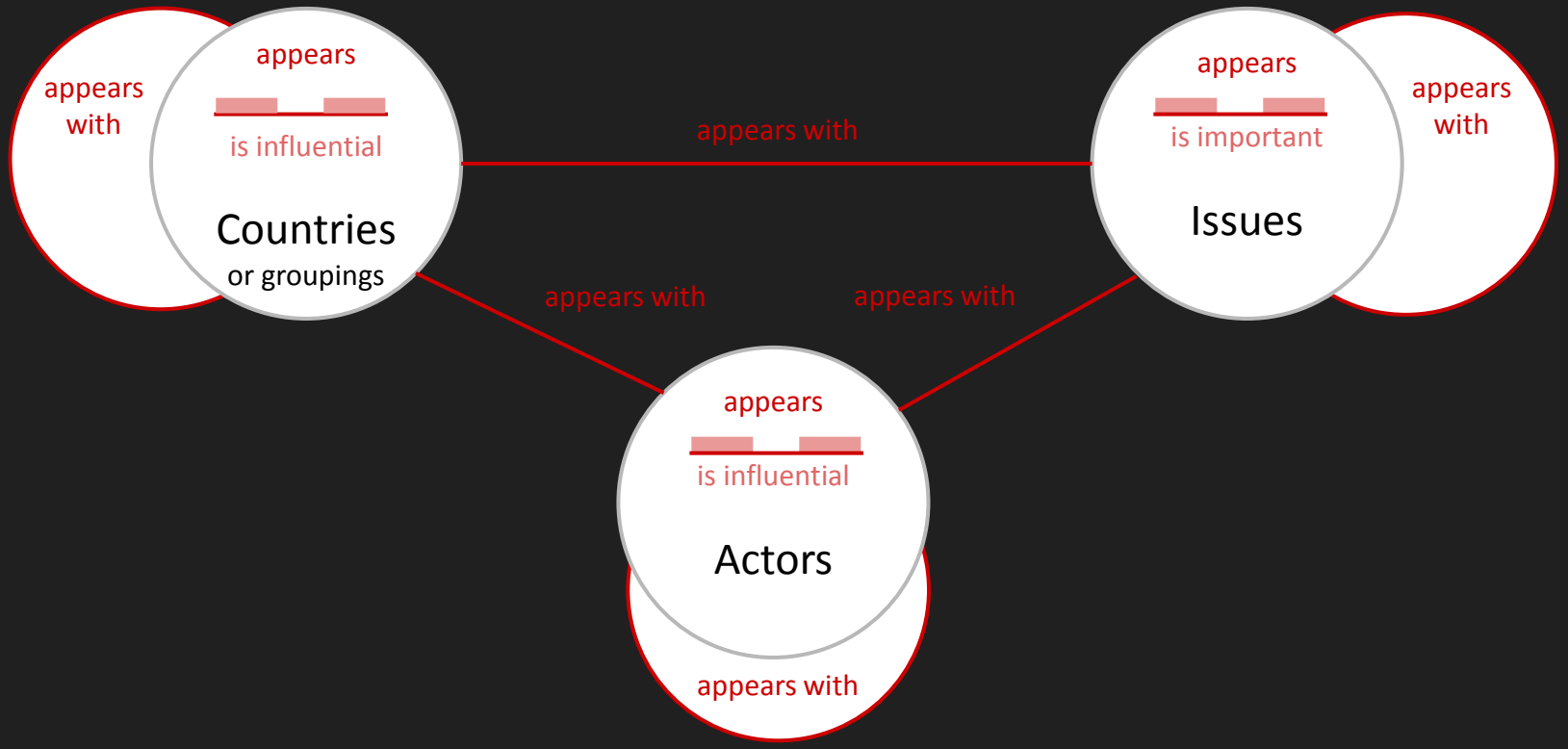


Courtesy of Science Po Medialab

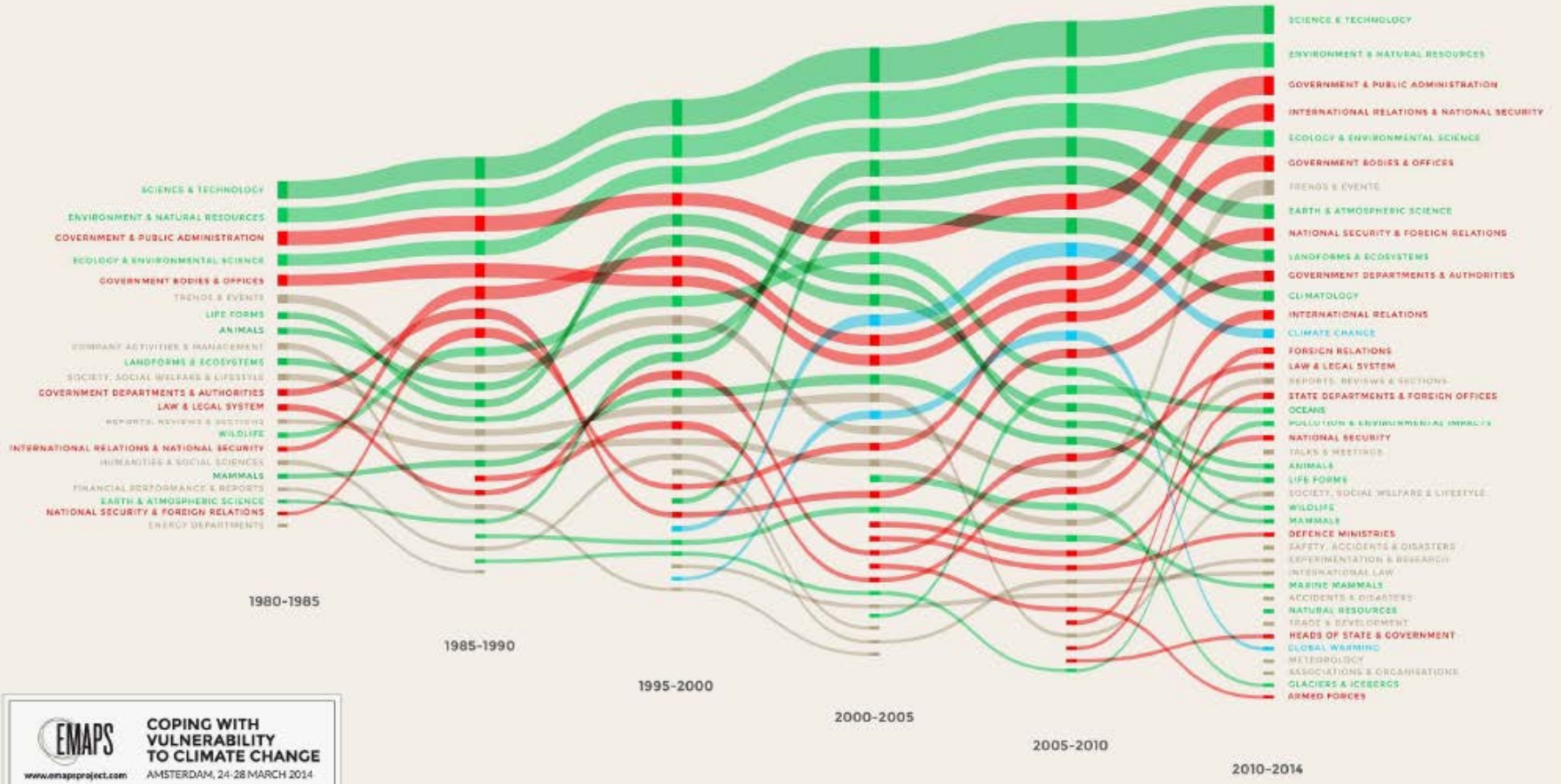
Source of information

EPFL ECAL LAB

1 master arena	6 secondary arenas					
UN negotiations	**Twitter**	**Web**	**Scientific Literature**	**IPCC**	**Climate Funding**	**Climate Projects**
ENB reports UNFCCC newsroom UNFCCC negotiation documents The ECO news letters	Twitter APIs Twitter special data access	Climate-related websites (more precisely Hyphe web entities The (clean) text extracted from these websites	Bibliographical notices from ISI Web of Science Notices from Scopus	Assessment and special reports by IPCC Summary for Policy Makers (SPR) and Synthesis Reports (SYN)	Climate Funds Update OECD Official Development Assistance World Bank	UNDP adaptation learning mechanism Ci-Grasp UNFCCC Private Sector Initiative ClimateWise NAPAs

Issuefication of the Arctic on mainstream media during time

*Lexis Nexis database



Big Data Vizualisation

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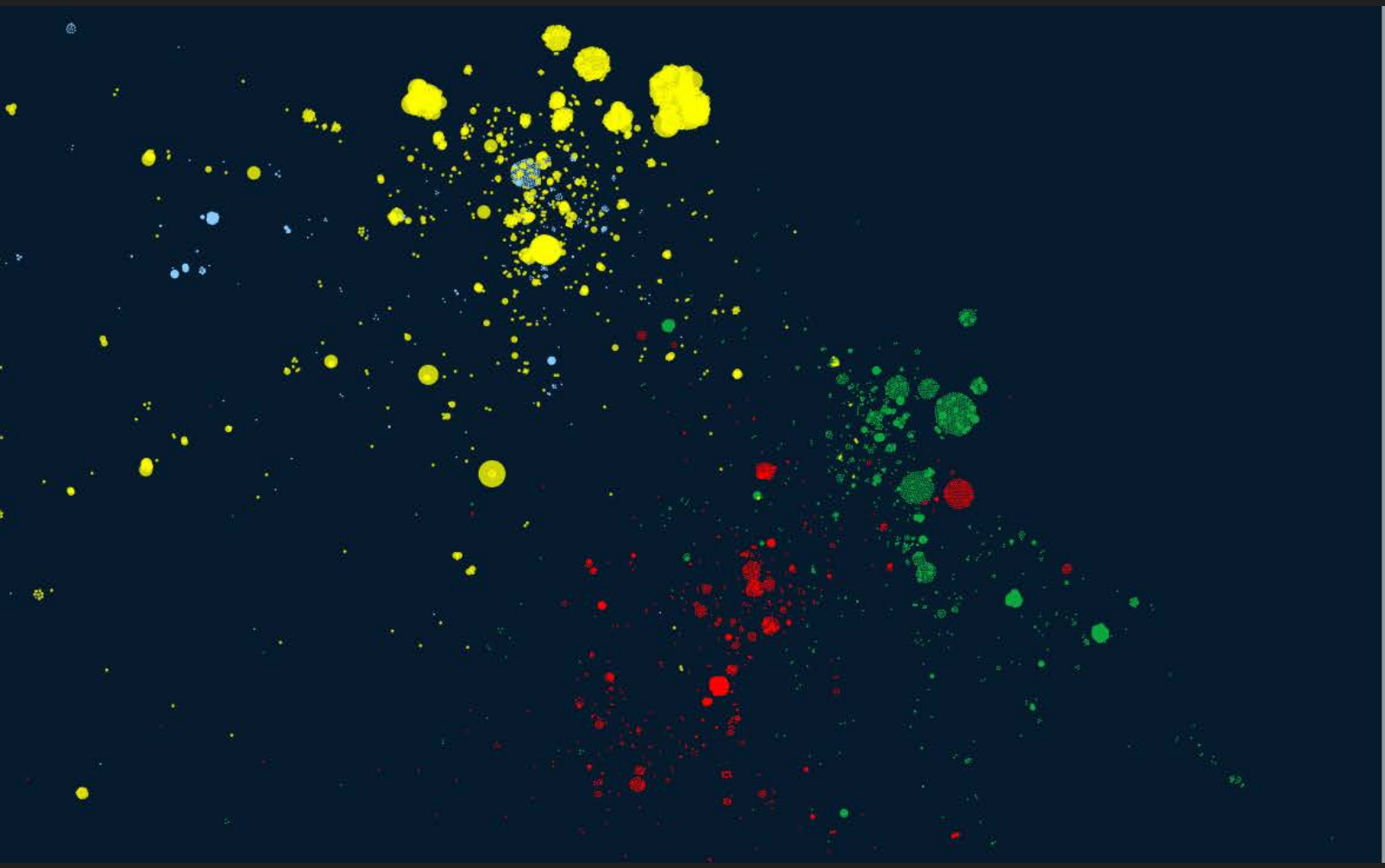

Courtesy of LSIR/EPFL

Principles

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- Mobile based
- All public magnet
- Entity navigation based
- Simple two dimensional comparison
- Meaningful relations
- Icon / Text for efficiency / flexibility

Towards Interaction Design

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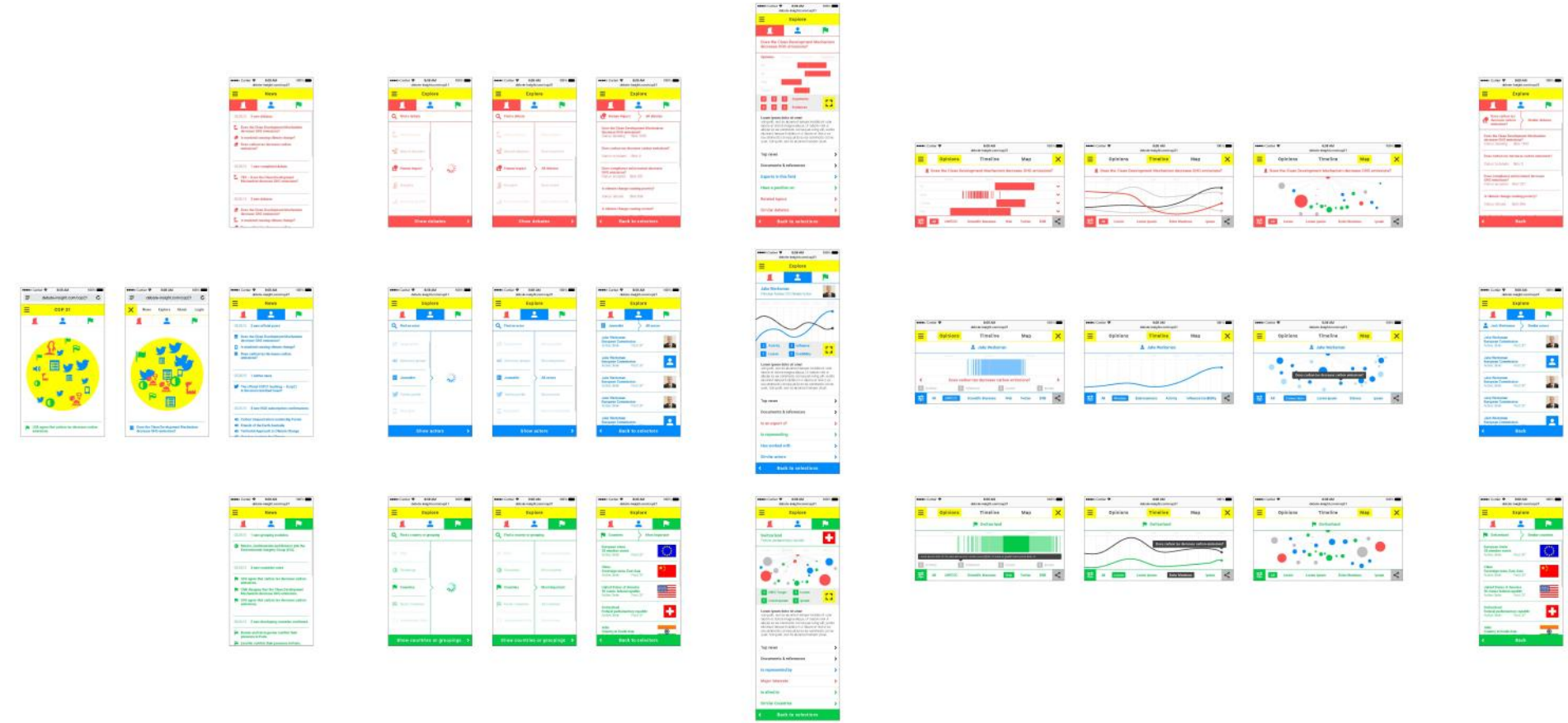
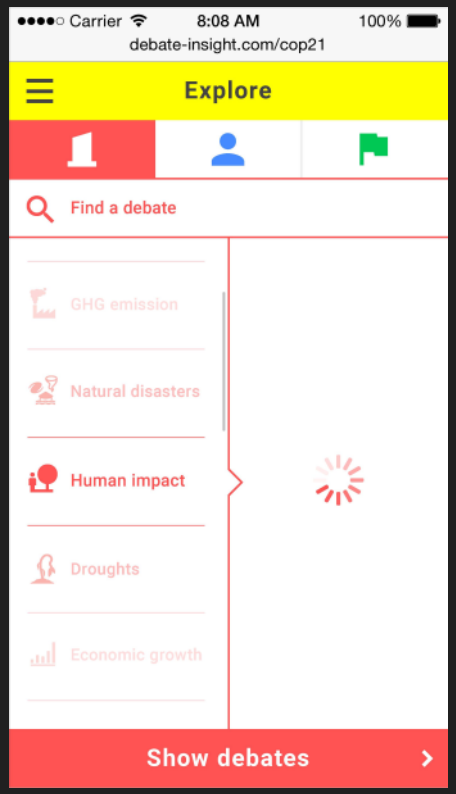
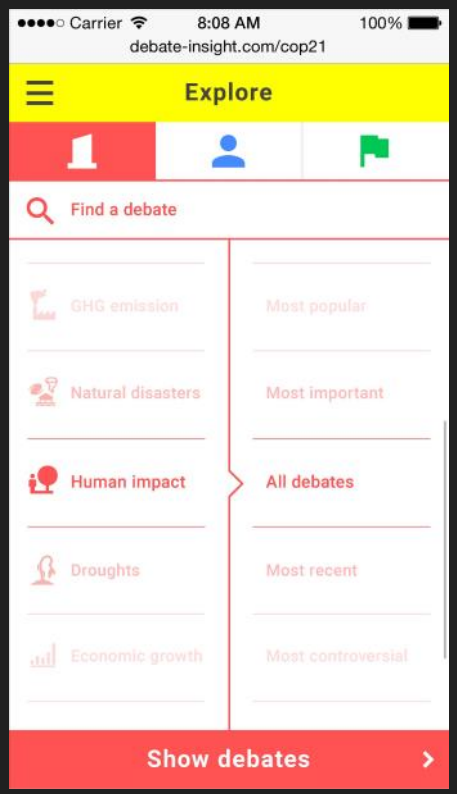
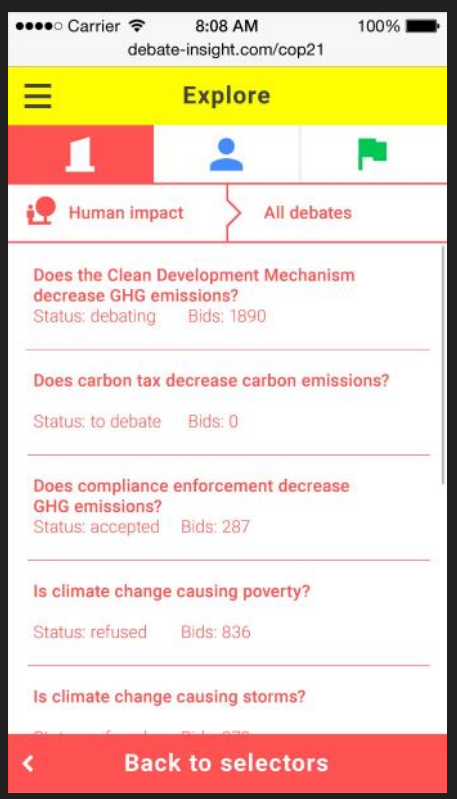


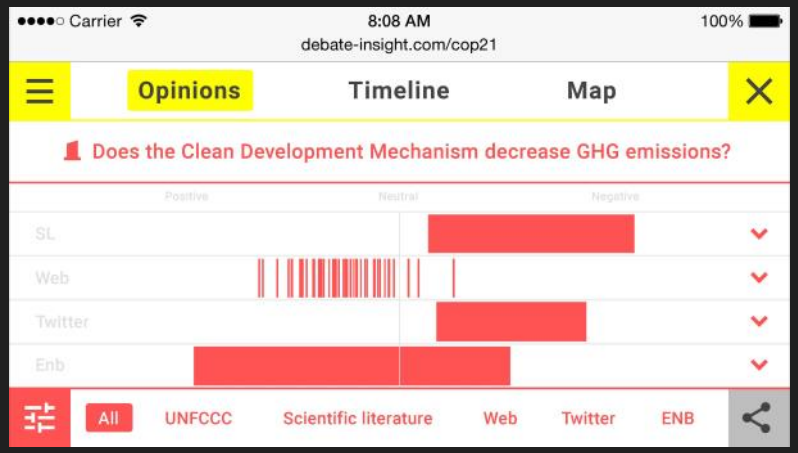
Data interactions

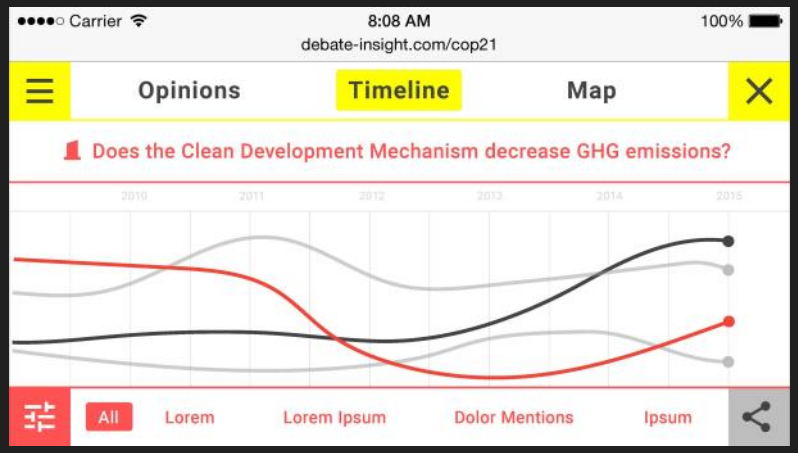


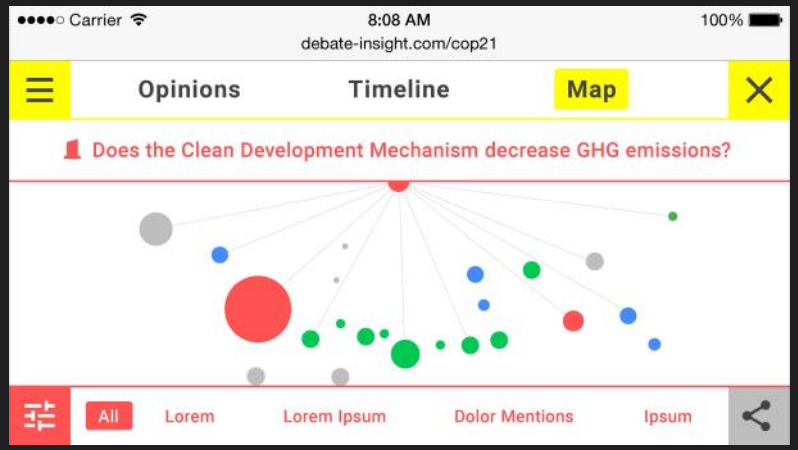




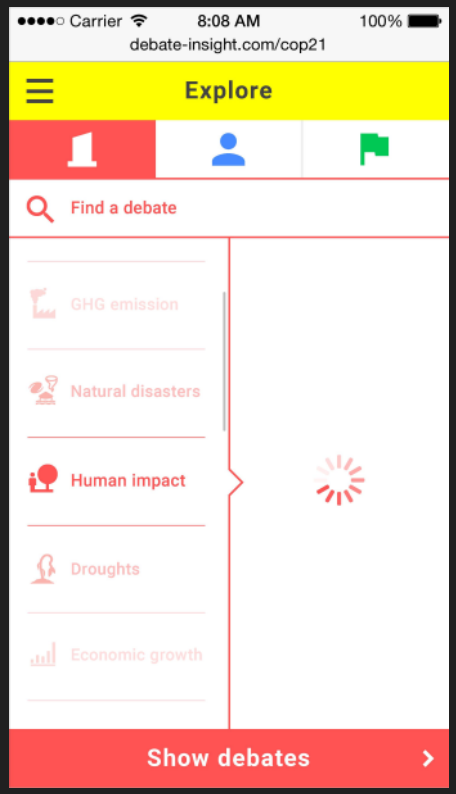
Data Interactions

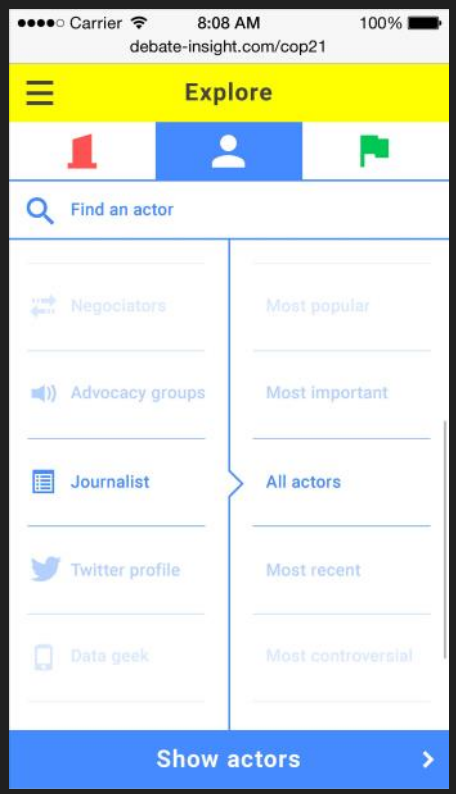


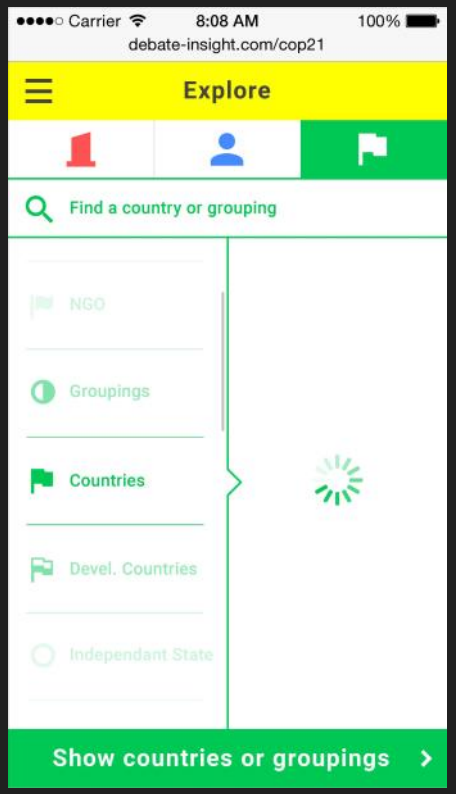


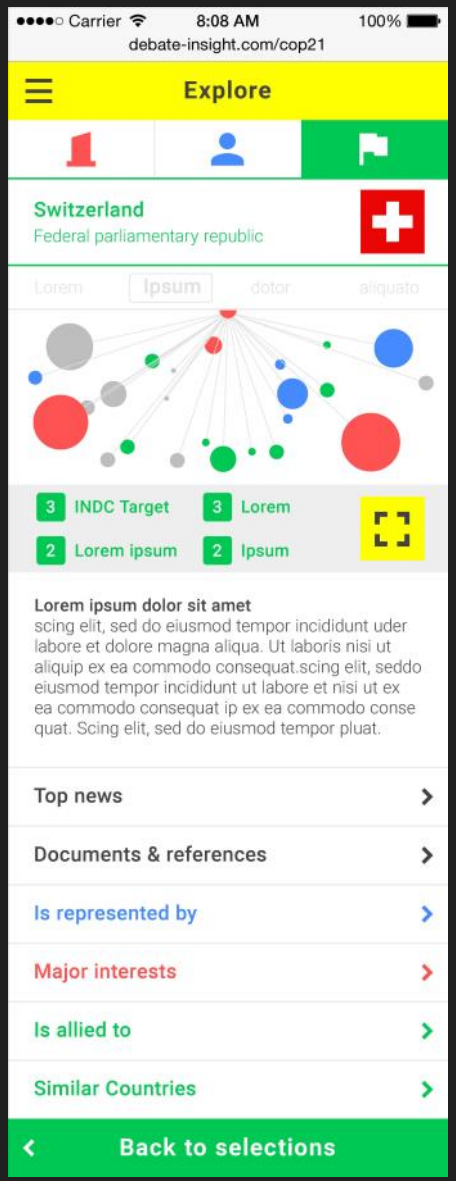


Entities Navigation









Visual representation & navigation

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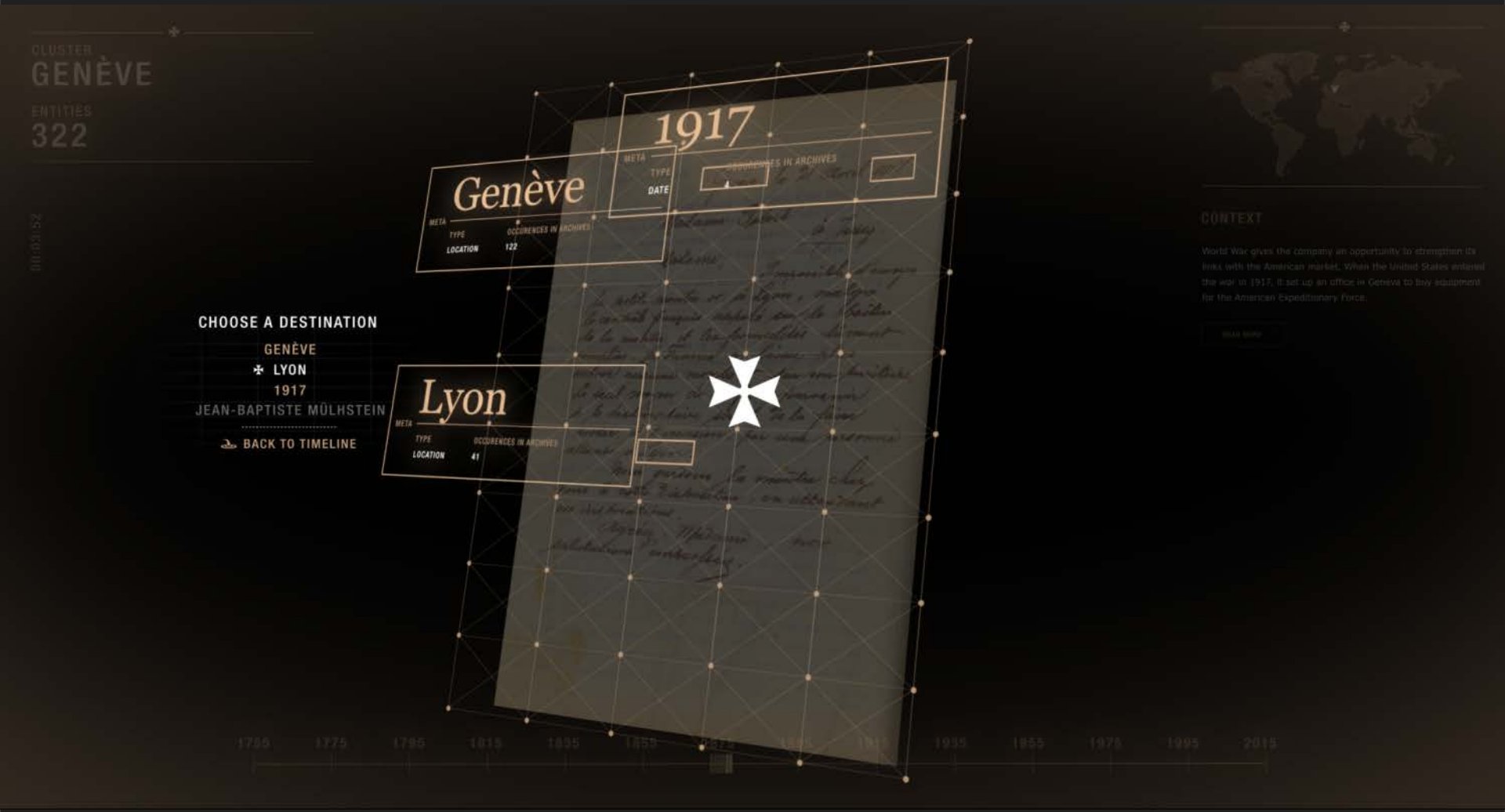

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CONTEXT

World War gives the company an opportunity to strengthen its links with the American market. When the United States entered the war in 1917, it set up an office in Geneva to buy equipment for the American Expeditionary Force.

READ MORE

CLUSTER

GENÈVE

ENTITIES

322

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Devices exploration

- Freedom
- Identity
- Status

Innovation is

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More than magic, it’s about generating knowledge

To imagine disruptive scenario of use

Creating new expression systems

True transdisciplinary effort, combining differences

Short and long term vision

Taking risks

Creating disruptive ways to capture value

What can be done?

Increased impact by integrating isolated project in a global vision

Set a strong network of Publishers, Start ups, SME, Academic Labs

Innovation based UX rather than only techno push

Call should include new type of content, new UX

Project should involve creative economics: disruptive strategies to capture value

Project should be pragmatic but still able to create knowledge

Improve communication though convincing Showcase

Better understanding of Long term and short term.

How does it fit into H2020?

One Next Step

Sports News Innovation Lab

Wan-IFRA / GAMI

EPFL

AISTS - Academy of Sports Science and Technology

23 International sports federation

IOC

Contact: nicolas.henchoz@epfl.ch