

Equiper le journalistes per les méthodes numériques : le cas du Climate Negotiation Explorer

Tommaso Venturini

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The strabismus of social sciences



The quali/quantitative divide

poor data on large population
extensive data



intensive data
rich data on small population

Extensive data

*Paul Butler, 2010
Visualizing Friendships*



facebook

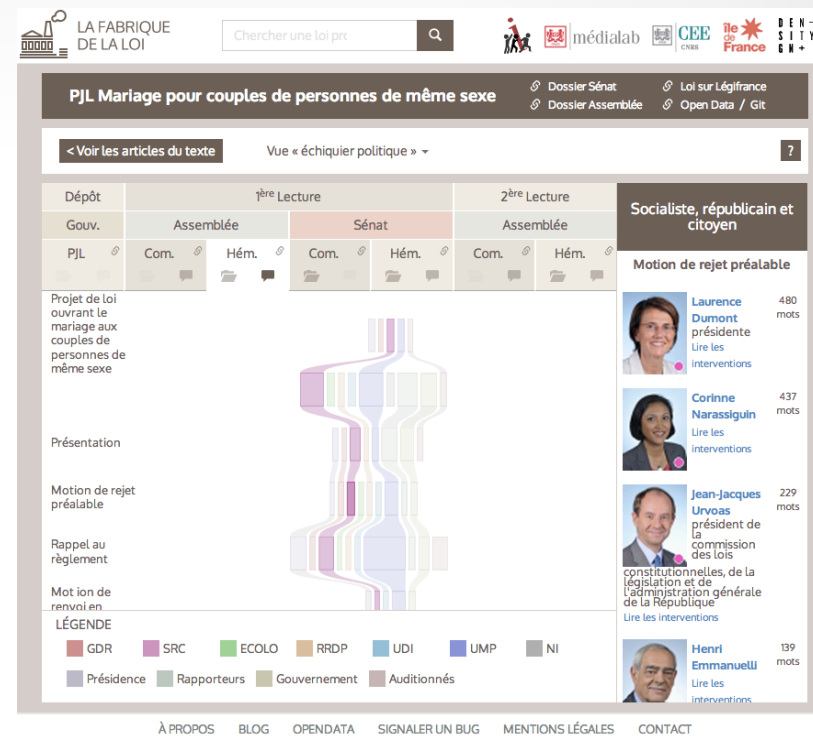
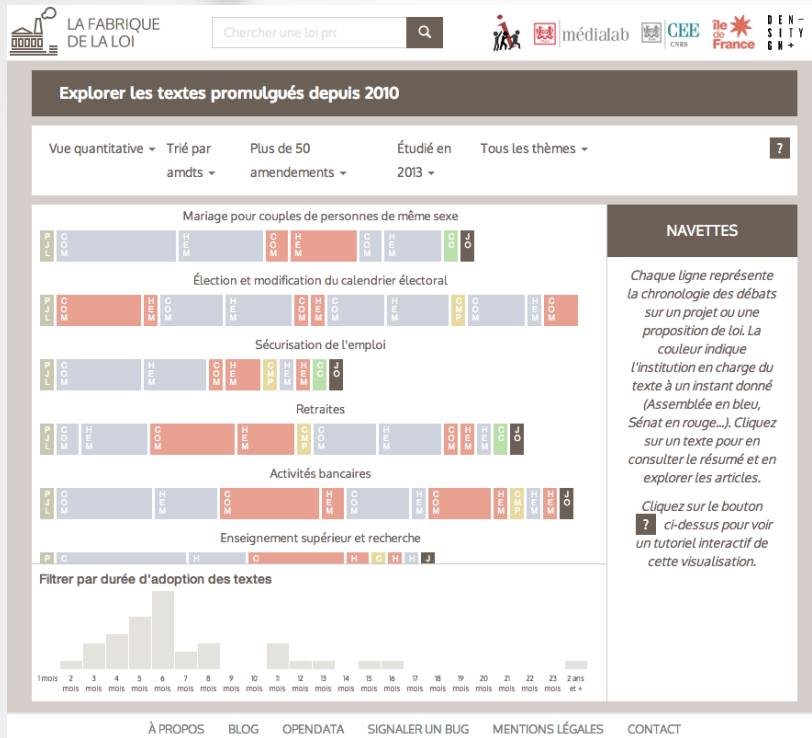
Intensive data

AOL user 711391 search history
www.minimovies.org/documentaires/view/ilovealaska



Datascape navigation (quali-quantitative methods)

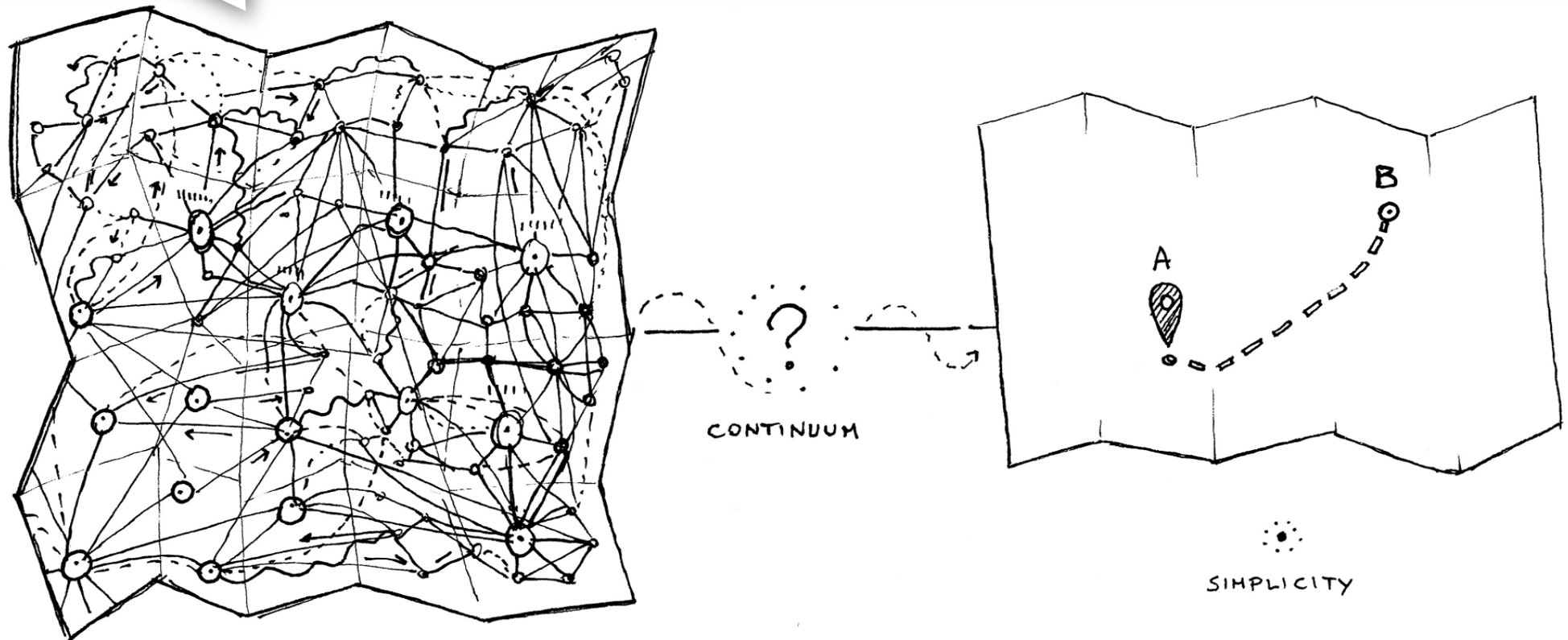
www.lafabriquedelaloi.fr



Latour, B., Jensen, P., Venturini, T., Grauwil, S., & Boullier, D. (2012). *The whole is always smaller than its parts*. *The British Journal of Sociology*, 63(4), 590–615.

Venturini, T., Jensen, P., & Latour, B. (2015). *Fill in the Gap: A New Alliance for Social and Natural Sciences*. *Journal of Artificial Societies and Social Simulation*, 18(2), 11.

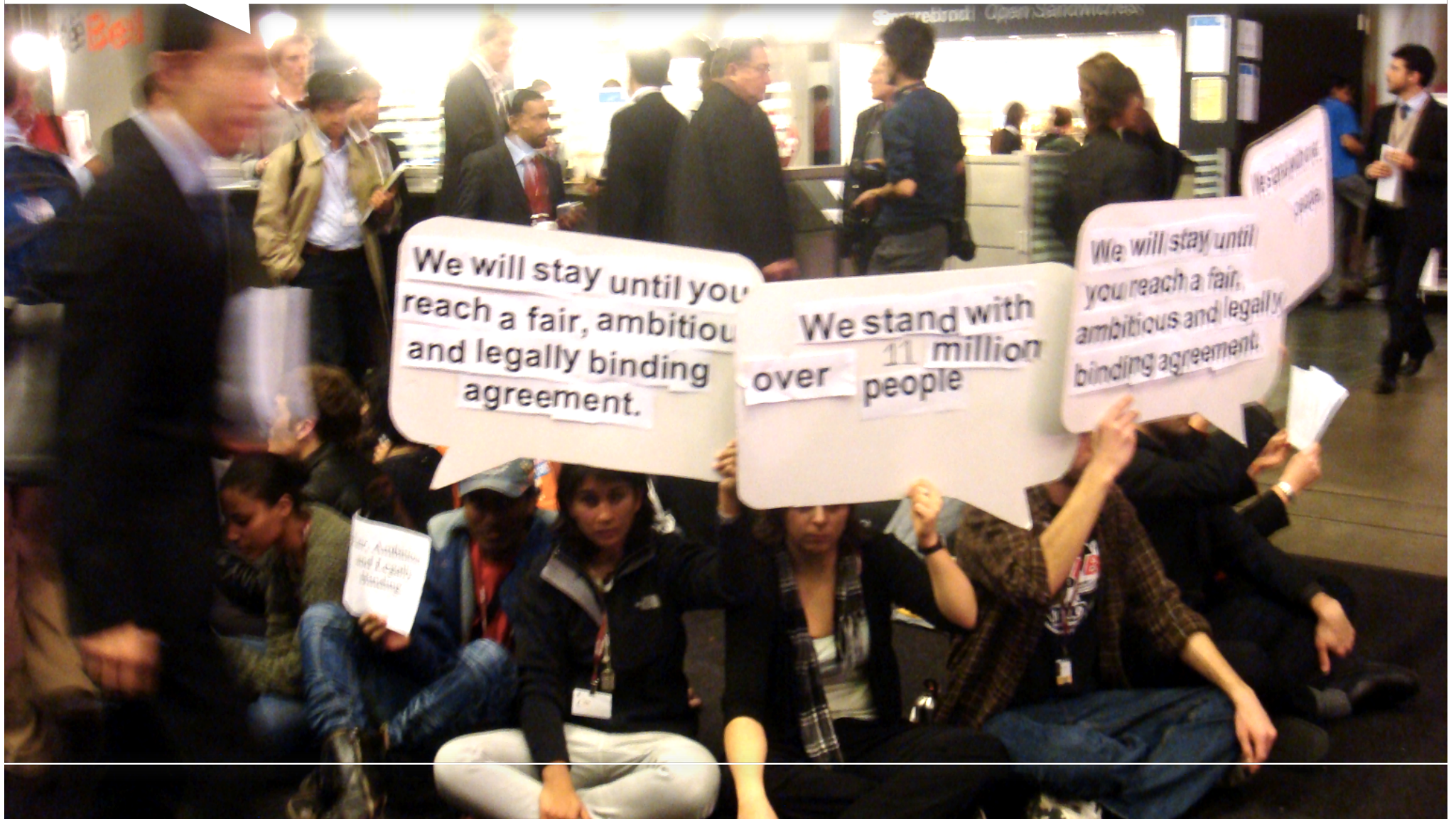
Navigation for journalists



Deploy the **richness**
of public debates

Offer public opinion
a **readable** description

The Danish puzzle (COP15 Copenhagen)



Wicked problems cannot be solved by simplification

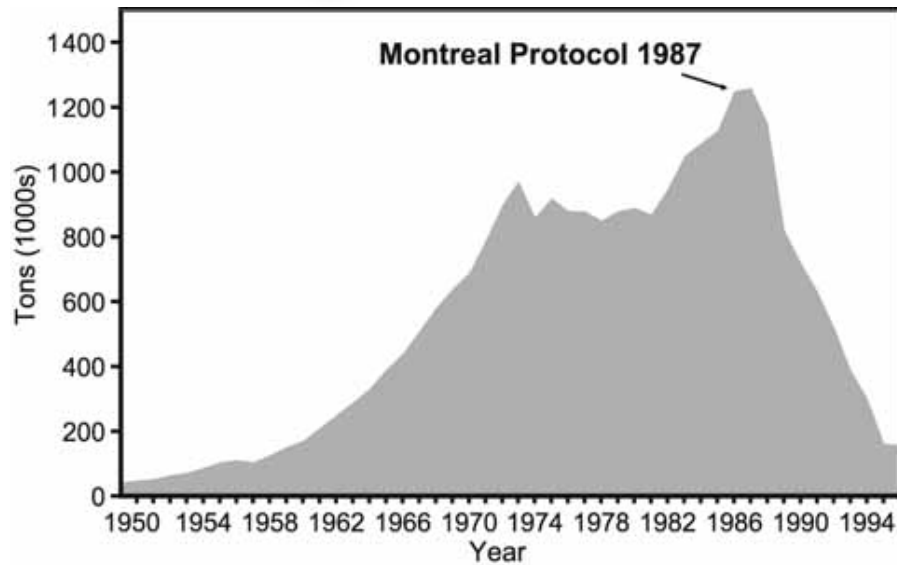
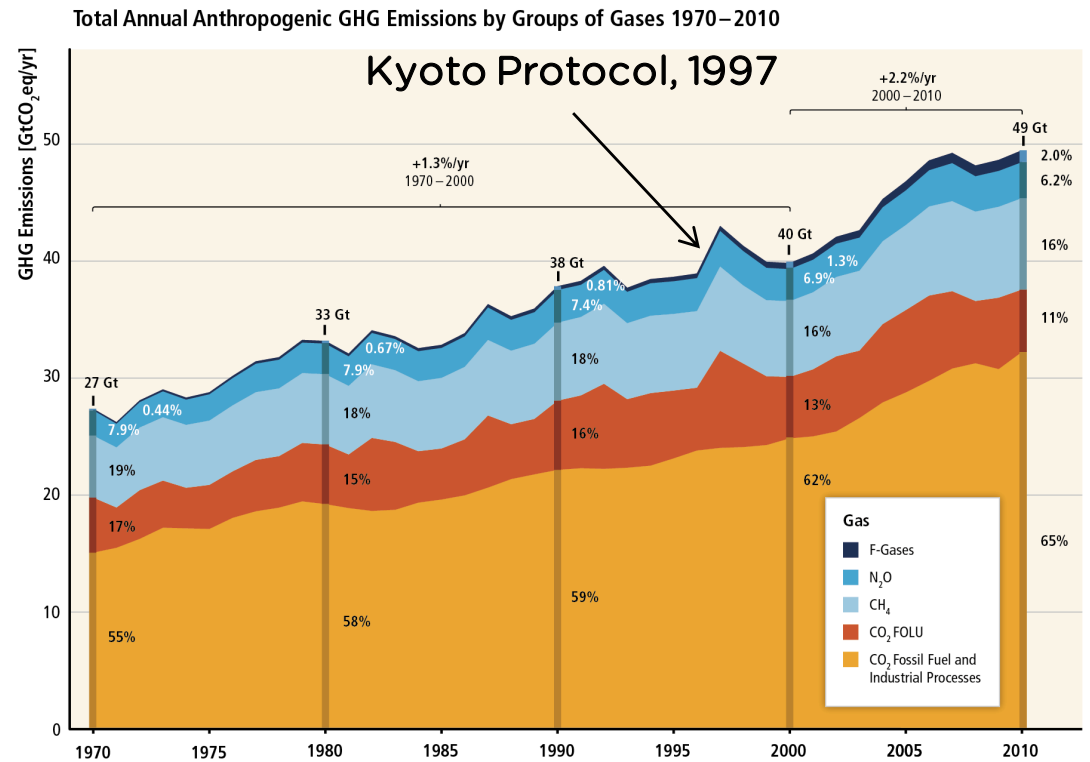


Fig. 14.1. World production of chlorofluorocarbons 1950–97 (reproduced with permission from the Worldwatch Institute)

commons.wikimedia.org/wiki/File:Retrospective_video_on_the_Montreal_Protocol.ogg/



IPCC AR5 WG3 SPM Fig. 1

Climate as a wicked problem

(Churchman, C. W., 1967. Wicked Problems. *Management Science*, 14:4, pp. 141–142)

1. Variety of mobilized actors:

- Almost all World countries have stakes in this debate
- Non-governmental actors – NGOs, corporations, scientific groups

2. Dynamics of alliances:

- Multiple and overlapping negotiation groupings,
- Variable coalitions and cross-representation

3. Interlock of negotiation tables:

- Tracks (COPs; subsidiary bodies; IPCC; Funds; ad hoc working groups...)
- Issues (GHGs reduction, adaptation, but also loss compensations, climate migrants, carbon sinks, carbon markets...).

4. Twenty years history

... where each word matters

Article 4

4.1 In order to achieve the long-term temperature goal set out in Article 2 ...

...

4.4 Developed country Parties shall/should continue taking the lead by undertaking economy-wide absolute emission reduction targets. Developing country Parties should continue enhancing their mitigation efforts

...

On COP21 text

Welcome to Deconstructing Paris

Read our latest coverage of COP 21



DECEMBER 11, 2015

Days 9-10

The second week of COP21 has been extended until Saturday. The draft Agreement released on Wednesday was welcomed by all parties as a good

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DECEMBER 8, 2015

Days 7-8: sitting tight

The second week of negotiations are progressing on time – supposedly. Civil society has no access to any of the negotiation spin-off

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DECEMBER 6, 2015

Week One and ADP comes to a close

Week one ends On Saturday morning the ADP met for the final time. During this meeting, the co-chairs released their final proposed Draft

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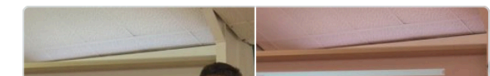
TWITTER FEED

Tweets by @paristext2015

Deconstructing Paris Retweeted

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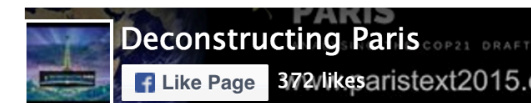
Sharing with @MADALNZ how @paristext2015 is helping deconstruct the #COP21 jargon.



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On COP21 text

A banner for the Paris Agreement website. The background is a night view of Paris with the Eiffel Tower illuminated. The text 'PARIS AGREEMENT' is in the top left, with the 'A' shaped like the tower. The main text reads 'PARIS AGREEMENT.ORG COLLABORATIVE MEDIA PLATFORM. CLARIFYING THE AGREEMENT.' At the bottom, three circular buttons offer 'COP21 BREAKING NEWS FEED', 'PARIS AGREEMENT ANALYTICS', and 'INTERACTIVE TIMELINE'.

PARIS AGREEMENT

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PARIS AGREEMENT ANALYTICS

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parisagreement.org

Climaps

BY EMAPS

A GLOBAL ISSUE ATLAS of CLIMATE CHANGE ADAPTATION

<http://climaps.eu/>

This website presents the results of the EU research project EMAPS, as well as its process: an experiment to use computation and visualization to harness the increasing availability of digital data and mobilize it for public debate. To do so, EMAPS gathered a team of social and data scientists, climate experts and information designers.

[Issue stories](#) [Issue maps](#)



Corpus constitution

<http://www.iisd.ca/vol12/>



Earth Negotiations Bulletin

A Reporting Service for Environment and Development Negotiations

Volume 12

The United Nations Framework Convention on Climate Change

Linkages

Our multimedia resource for environment and development policy makers

Eleventh Session of The INC for the Framework Convention on Climate Change (UNFCCC)				
Volume 12 Number 01 11th Session of the INC February 06, 1995 New York, USA	TEXT	HTML		Daily Issue
Volume 12 Number 02 11th Session of the INC February 07, 1995 New York, USA	TEXT	HTML		Daily Issue
Volume 12 Number 03 11th Session of the INC February 08, 1995 New York, USA	TEXT	HTML		Daily Issue
Volume 12 Number 04 11th Session of the INC February 09, 1995 New York, USA	TEXT	HTML		Daily Issue
Volume 12 Number 05 11th Session of the INC February 10, 1995 New York, USA	TEXT	HTML		Daily Issue
Volume 12 Number 06 11th Session of the INC February 13, 1995 New York, USA	TEXT	HTML		Daily Issue
Volume 12 Number 07 11th Session of the INC February 14, 1995 New York, USA	TEXT	HTML		Daily Issue
Volume 12 Number 08 11th Session of the INC February 15, 1995 New York, USA	TEXT	HTML		Daily Issue
Volume 12 Number 09 11th Session of the INC February 16, 1995 New York, USA	TEXT	HTML		Daily Issue
Volume 12 Number 10 11th Session of the INC February 17, 1995	TEXT	HTML		Daily Issue

Terms identification

“Qatar, on behalf of the G-77/China, noted the impacts of recent climate-related disasters on developing countries and emphasized Annex I Parties’ responsibility for financial resource mobilization for adaptation, stressing the principle of common but differentiated responsibilities.”

“The Netherlands, on behalf of the EU, Bulgaria, Romania and Turkey, expressed continued commitment to addressing climate change and highlighted the launch of the EU emissions trading scheme in January 2005. He supported limiting global temperature rise to 2 degrees Celsius, noting that a greater increase would result in irreversible damages. Tuvalu, on behalf of the Alliance of Small Island States (AOSIS), highlighted the need for strong linkages with the 10-year review of the implementation of the Barbados Programme of Action for the Sustainable Development of Small Island Developing States (BPOA+10) and the World Conference on Disaster Reduction (WCDR), both to be held in January 2005, and emphasized the importance of dialogue on adaptation.”

Terms extraction

<http://medialab.sciences-po.fr/publications/misunderstandings/table-1>

<i>main form</i>	<i>forms</i>
C target	C target
adaptation actions	adaptation actions & adaptation action & action on adaptation
adaptation and response measures	adaptation and response measures & Adaptation and Response Measures & adaptation respons measures & response measures under adaptation
adaptation measures	adaptation measures
adaptation technologies	adaptation technologies & adaptation technology & technologies for adaptation & technology adaptation & technology and adaptation & adaptation and technology & adaptation or technology & technology for adaptation
adaptation work programme	adaptation work programme & work programme on adaptation & adaptation programme of work & programme of work on adaptation
adaptation	adaptation & Adaptation & ADAPTATION & adaptive
enhanced action	enhanced action & Enhanced Action & enhancing action
loss and damage	loss and damage & LOSS AND DAMAGE
Marrakesh Accords	Marrakesh Accords & MARRAKESH ACCORDS
national adaptation programmes of action	national adaptation programmes of action
vulnerability and adaptation	vulnerability and adaptation & Vulnerability and Adaptation & VULNERABILITY AND ADAPTATION & adaptation and vulnerability & ADAPTATION AND VULNERABILITY & Adaptation ; Vulnerability
vulnerable countries	vulnerable countries
water resources	water resources
work on adaptation	work on adaptation & adaptation work & Work on Adaptation

Term cleaning

http://62.210.188.24/negotiations/web_cop_simpler2new.html

id	ENB_ref	ISItemscountries	projection_cluster_ISItemscopindex_ISItemscopindex	text
1	Volume 12 Number 01		- GHGs & emission measures (<i>emission, gas</i>) - Models and IPCC (<i>Intergovernmental Panel on Climate Change</i>)	Increasing scientific evidence about the possibility of global climate change in the 1980s led to a growing awareness that human activities have been contributing to substantial increases in the atmospheric concentrations of greenhouse gases . Concerned that anthropogenic increases of emissions enhance the natural greenhouse effect and would result, on average, in an additional warming of the Earth's surface, the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) established the Intergovernmental Panel on Climate Change (IPCC) in 1988. The Panel focused on: assessing scientific information related to the various aspects of climate change; evaluating the environmental and socio- economic impacts of climate change; and formulating response strategies for the management of global climate change. In 1990, the finalization and adoption of the IPCC report and the Second World Climate Conference focused further attention on climate change.
2	Volume 12 Number 01		- GHGs & emission measures (<i>differentiated responsibilities, CO2, emission</i>) - Energy + technology transfer (<i>technology transfer, technology</i>)	On 11 December 1990, the 45th session of the UN General Assembly adopted a resolution that established the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change (INC/FCCC). Supported by UNEP and WMO, the mandate of the INC/FCCC was to prepare an effective framework convention on climate change. The INC held five sessions between February 1991 and May 1992. During these meetings, participants from over 150 states discussed the difficult and contentious issues of binding commitments , targets and timetables for the reduction of carbon dioxide emissions , financial mechanisms , technology transfer , and common but differentiated responsibilities of developed and developing countries. The INC sought to achieve a consensus that could be supported by a broad majority, rather than drafting a treaty that dealt with specific policies that might limit participation.
3	Volume 12 Number 01			The United Nations Framework Convention on Climate Change (FCCC) was adopted on 9 May 1992, and opened for signature at the UN Conference on Environment and Development in June 1992 in Rio, where it received 155 signatures. The Convention entered into force on 21 March 1994 (90 days after receipt of the 50th ratification). The first session of the Conference of the Parties (COP) will take place in Berlin from 27 March - 7 April 1995.
4	Volume 12 Number 01		- GHGs & emission measures (<i>emission, CO2</i>) - Land use & forests (<i>forest, sink</i>) - Energy + technology transfer (<i>energy</i>)	Since the adoption of the Convention, the INC has met five more times to consider the following items: matters relating to commitments; matters relating to arrangements for the financial mechanism and for technical and financial support to developing countries; procedural and legal matters; and institutional matters. During these INC sessions, scientific work was done to improve the methodologies for measuring emissions from various sources, but the larger scientific problem is choosing the best methodology to estimate the removal of carbon dioxide by sinks , namely oceans and forests . The other major task before negotiators has been to work on the difficult issue of financial support for implementation, particularly for developing country Parties who will require new and additional resources to obtain data and implement energy - efficient technologies and other necessary measures.
5	Volume 12 Number 01		GHGs & emission measures (<i>emission, gas</i>)	The INC held its ninth session from 7-18 February 1994, in Geneva. In discussions on matters relating to commitments, delegates examined methodologies for calculations/inventories of emissions and removal of greenhouse gases , the first review of information communicated by Annex I parties, the role of the subsidiary bodies established by the Convention, and criteria for joint implementation . Delegates also reviewed the adequacy of commitments . The need for broader action beyond the year 2000 on the commitments in Article 4.2(a) and (b) was considered, based on the understanding that the provisions of this article refer to the present decade.
6	Volume 12 Number 01		adaptation funding & equity (<i>funding, financial resources, financial mechanism</i>)	In its discussions on matters relating to the financial mechanism and technical and financial support to developing country Parties, the Committee chose to focus on the implementation of Article 11. It was agreed that only developing countries that are Parties to the Convention would be eligible to receive funding upon entry into force of the Convention. There was general support for a cost-effective arrangement for the Permanent Secretariat that would encourage collaboration with other secretariats. The question of the location of the Permanent Secretariat was not resolved, but it was agreed that the Permanent Secretariat will start operating on 1 January 1996, and, in the interest of continuity, will be organized along the same lines as the Interim Secretariat.
7	Volume 12 Number 01			The tenth session of the INC was held from 22 August - 2 September 1994, in Geneva. The Committee agreed on the mechanisms for the first review of information communicated by Annex I Parties. Some countries expressed the need for a cautious approach to the review of the adequacy of commitments , since the scientific and technical assessments upon which existing commitments are based were essentially unchanged. Some countries also felt that the first meeting of the COP would be a good occasion to make progress on the elaboration of additional commitments. On the issue of joint implementation , comments were invited on: objectives, criteria and operational guidelines, functions and institutional arrangements, and communication and review and early experiences.
8	Volume 12 Number 01		- Vulnerability + adaptation action (<i>adaptation and response measures</i>) - adaptation funding & equity (<i>GEF, financial mechanism, funding</i>) - Energy + technology transfer (<i>technology transfer, technology</i>)	On matters related to the financial mechanism , countries agreed to stage-by- stage funding modality for adaptation measures . The temporary arrangements between the Committee and the Global Environment Facility (GEF) was also adopted. On agreed full incremental costs, the Committee concluded that this issue was complex and that further discussion was needed. Delegates also concluded that the concept should be flexible and applied on a case-by-case basis. The Interim Secretariat was requested to prepare a paper on transfer of technology and delegations were invited to submit their views on this issue. On the subject of the Subsidiary Body for Scientific and Technological Advice (SBSTA) and the Subsidiary Body for Implementation (SBI), the provisional recommendation to the COP is that the SBSTA will be the link between the scientific and technical assessments and the information provided by international bodies and the policy-oriented needs of the COP. The SBI will develop recommendations to assist the COP in its assessment and review of the implementation of the Convention.
9	Volume 12 Number 01			With regard to procedural and legal matters, the Committee decided to continue its consideration of the draft Rules of Procedure at its eleventh session. On institutional matters, a contact group composed of five members of the Bureau, one from each of the five regional groups, was established to consider the various offers of governments and UN agencies to host the Permanent Secretariat for the Convention and make recommendations for the consideration of the Committee at its eleventh session.

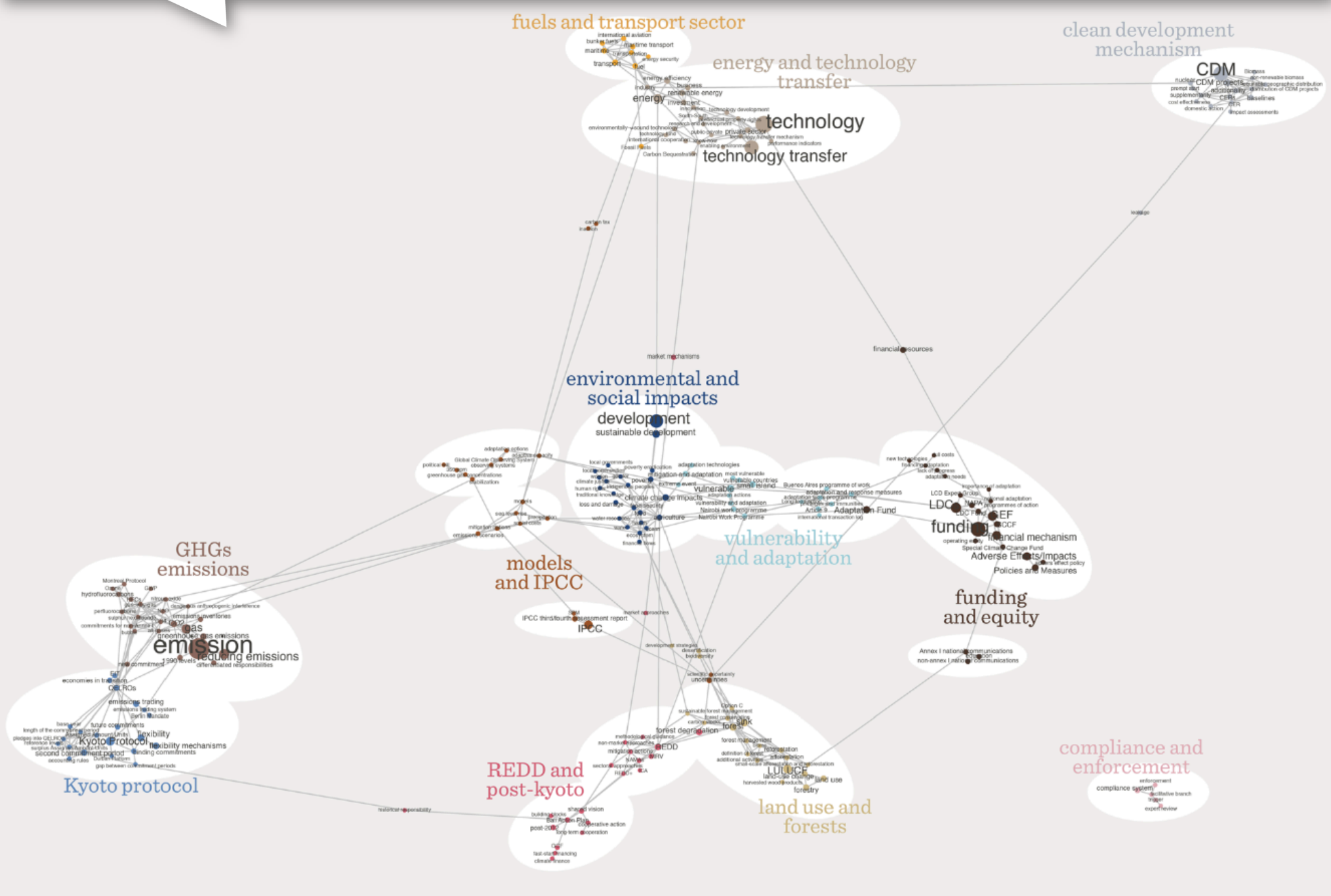
Term merging

<http://medialab.sciences-po.fr/publications/misunderstandings/table-2>

<i>main form</i>	<i>forms</i>	<i>frequency</i>
emission	emission emissions	990
technology	technology	816
funding	funds fund funding fundings	790
CDM	cdm clean development mechanism	681
technology transfer	technology transfer transfer of technology sharing technology transfer of technical transfer of technologies transfer technology transfer technologies technology and transfer technology information information and technology information technology information on technology	564
development	development	530
GEF	gef global environment facility	438
LDCs	ldcs ldc least developed countries	382
joint implementation	ji joint implementation aij jointly implemented implemented jointly	375
Kyoto Protocol	kyoto protocol kyoto protocols	335
Intergovernmental Panel on Climate Change	intergovernmental panel on climate change ipcc	318
LULUCF	lulucf lucf	297
reducing emissions	reducing emissions reducing greenhouse gas emissions reduction commitments reduction commitment emission reductions emission reduction emissions reductions emissions reduction reduction of emissions reductions of emissions reductions in emissions reduction in emissions	289
financial mechanism	financial mechanism financial mechanisms	267
gas	gas gases	241
Adverse Effects/Impacts	adverse effects adverse impacts adverse effect adverse impact	233
energy	energy	230
POLICIES AND MEASURES	policies and measures p&ms	196

Co-occurrence

<http://medialab.sciences-po.fr/publications/misunderstandings/figure-1>

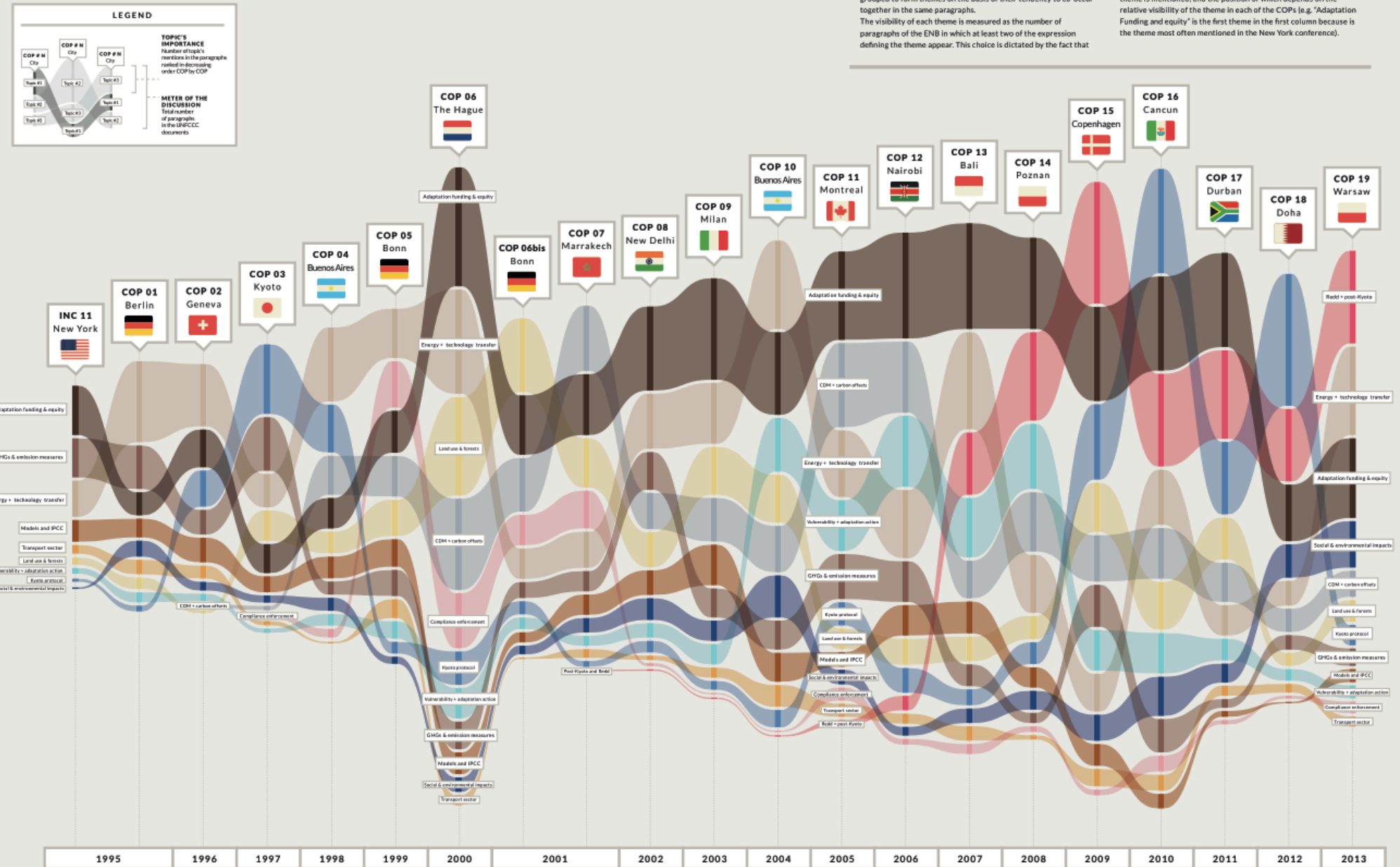


Time analysis

<http://medialab.sciences-po.fr/publications/misunderstandings/figure-7>

20 years of negotiations on adaptation at UNFCCC COPs

Evolution of the different themes discussed during each COPs in ENB negotiation reports



Narration

<http://climaps.eu/#!/narrative/mitigation-and-adaptation-in-the-unfccc-debates>

Mitigation And Adaptation In The UNFCCC Debates

An analysis of the UNFCCC's discussions provided by the Earth Negotiations Bulletin

Climate Change Adaptation appears to occupy the center of the climate negotiations. There are claims in the literature on climate diplomacy about an 'adaptation turn' in the last years of the negotiation. We challenge those and find adaptation to have been present and highly visible from the very beginning, particularly the specific question of adaptation finance. In the larger debate on climate change, the notion of 'adaptation' is often opposed (or at least contrasted) to that of 'mitigation'. Such a contrast is not without reason. The two notions refer to vastly different ways to deal with global warming. 'Mitigation' refers to the efforts to lessen the impacts of climate change by acting on its causes and therefore reducing the emissions of greenhouse gases (GHG). 'Adaptation', on the contrary, refers to the efforts to prepare our societies to cope with the effects of climate change. Though the two approaches are not mutually exclusive (there is no contradiction between striving to avoid the dangers and preparing to deal with those that cannot be avoided), they have often been opposed by the actors in the climate change debate. In this narrative we explore the status of mitigation and adaptation in the UNFCCC debate.

THE RISE OF ADAPTATION RELATED ISSUES

According to some actors of the climate debate, the shift from mitigation to adaptation contains two risks. From a political point of view, the focus on adaptation risks diverting attention away from efforts to mitigate - as if the adjusting to climate hazards would make the fight against them any less urgent. From a conceptual point of view, the shift from mitigation to adaptation is a shift from a relatively simple approach (based on the identification of harmful gases and the determination of emission thresholds) to a much more complex approach that requires us to take into consideration a multitude of social and natural factors (and is therefore is more prone to failure).

Below we compare the discourses on mitigation and adaptation in the United Nations Framework Convention on Climate Change (UNFCCC). Adopted at the Earth Summit in 1992 and ratified by 195 countries, the UNFCCC focuses primarily on mitigation. Its official aim is to stabilize "greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system" (UNFCCC 1992). However over the years, adaptation has assumed an increasingly important place in the international negotiations for three connected reasons: the failure to impose significant GHG reductions; the growing visibility of climate change impacts; and the efforts of developing countries to obtain funds to cope with climate change.

1. Can the shift from mitigation to adaptation be observed in the UNFCCC negotiations?
2. How have debates on adaptation influenced and displaced the debates on mitigation?
3. How did the discussion of adaptation related issues evolve in UNFCCC negotiations?
4. Which countries promote adaptation related issues the most?

By analysing the reports on the UNFCCC's discussions provided by Volume 12 of the Earth Negotiations Bulletin (ENB), we produced four maps to answer to these questions:

1. one showing the clustering of the expressions co-appearing in the same paragraphs of the ENB (Figure 1);
2. another presenting the visibility of each cluster of expressions in the different Conferences of Parties (COPs) to the UNFCCC (Figure 2);
3. a third presenting the visibility of different countries in the UNFCCC discussions (Figure 3);
4. and a fourth showing which negotiating countries are more connected to each issue (Figure 4).

THE 'PLACE' OF ADAPTATION



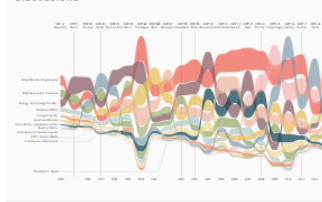
Looking at figure 1, the difference between mitigation and adaptation is evident. Terms related to the efforts to mitigate climate change organize 7 of the 12 clusters of the networks, grouped in three main semantic arenas, widely scattered across the graph ('emission reductions'; 'carbon sinks'; 'energy, technology transfer and clean development projects').

Compared to the mitigation clusters, adaptation clusters are fewer and more compact. The 3 clusters dedicated to adaptation ('environmental and social impacts'; 'vulnerability and adaptation' activity and 'adaptation' funding and equity) are tightly grouped at the center of the map. This shows the difference in status of adaptation in the UNFCCC negotiations. Where mitigation is the primary objective of the conference, and thus formulated in numerous ways, adaptation, impacts and vulnerability seem more limited in their articulation, but also more commonly connected to other issues (which accounts for their centrality in the map).

The figure also reflects the different types of contextualization of climate change mitigation and adaptation. The success of mitigation policies can be easily monitored by the GHG emissions indicator. Thus, climate change mitigation can be promoted through the global climate regime with a clear set of instruments and mechanisms. In contrast, the debate on climate change adaptation at the global level is mainly restricted to the question of funding. When it comes to the question of which countries or regions are most vulnerable or which adaptation measure is most efficient, this has to be answered in contrast with the environmental and socio-economic impacts and the adaptive capacity of every single country or region (see also "Who deserves to be funded?").

~Figure 1. Network of terms co-occurring in the same paragraphs of the Earth Negotiations Bulletin, Volume 12. Node position is determined by a force vector algorithm (Jacomy et al., forthcoming) bringing together terms directly or indirectly linked, and keeping away terms with fewer co-occurrences. Node size is proportional to their frequency in the corpus. Node color is determined by the clustering algorithm. The names of the clusters have been attributed manually. A high-resolution and zoomable version of this image can be found here <http://medialab.sciences-po.fr/publications/misunderstandings/> (Venturini et al. 2014). Annex I explains in more detail how this map has been built.

RISE AND FALL OF ISSUES IN THE UNFCCC DISCUSSIONS



Looking at Figure 2, one will immediately notice that there is (with the exception of COP6 in the Hague) a general increase of the overall number of appearances of issues until COP16 in Cancun. This reflects the increase of the total number of participants during the COPs. Adaptation and mitigation issues are both visible in the UNFCCC negotiations. However mitigation has been from the very beginning a top priority on the negotiations' agenda. In the first phase of the negotiations little attention was dedicated to the actions of developing countries to cope with the impacts of climate change. Except that the most vulnerable members succeeded in putting the issue of financing adaptation activities on the agenda from the first COP (see also figure 4).

Adaptation, however, assumed greater importance in the second phase of the negotiations. With all parties facing difficulties in achieving their mitigation objectives, debates on what shall be done regarding vulnerability, climate change impacts and adaptation, as well as how to finance these actions became more relevant.

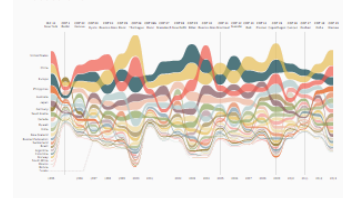
Reading the two maps (Figures 1 and 2) together, it is possible to remark that (as expected) mitigation plays a prominent role in climate diplomacy. Mitigation constitutes the bulk of UNFCCC's discussions. Its different sub-issues (measuring GHGs, technology transfer, clean development mechanism, carbon sinks in land and forests) are spread throughout all the negotiations. Mitigation articulates the space of the debate and defines its rhythm (with the fluctuation of the debates about a binding protocol).

Adaptation, on the other hand, appears as a specific topic of the negotiation: a tightly connected group of issues located in a precise position in the map. Yet, and this was not obvious before our analysis, adaptation appears to occupy the center of the climate negotiations and has been present and highly visible from the very beginning (especially with the topic of adaptation funding). These findings challenge some of the claims in the literature about climate diplomacy about an 'adaptation turn' in the past few years of the negotiation.

When comparing the two maps another interesting explanation emerges. What has always been present and visible in the negotiations is not the entire discussion about adaptation, but the specific question of adaptation finance. Interestingly, this question appears to be the most marginal of the adaptation-related topics, with a position that is not structurally different from that of the topics of mitigation. An 'adaptation turn', however, can be recognized in the rise of the question of vulnerability (from COP9 to COP14) and in the more recent ascent of the question of the climate impacts (from COP15). These are the two clusters that occupy the center of Figure

~Figure 2. Stream graph of the absolute and relative visibility of issues during UNFCCC negotiations, 1995-2013. The size of each flow is proportional to the number of paragraphs in which two terms defining the issue are present. Flows are sorted according to the number of occurrences: for each COP, the highest flow corresponds to the most visible issue while the lowest corresponds to the least visible. Data source: [ISD, Earth Negotiations Bulletin, volume 12](http://isd.earthnegotiationsbulletin.org/).

COUNTRIES' VISIBILITY IN THE UNFCCC DISCUSSIONS



The diagram shows a remarkable stability. Most countries maintain their relative rank throughout the 19 COPs. The 10 most active countries are represented by a rather stable, small group, which includes the United States, China, Europe, Australia, and Japan. The three leaders of the negotiations - China, the United States, and Europe - are ubiquitous.

Countries also tend to be more active when host the negotiations: Germany's first in Berlin 1995, Japan is fourth in Kyoto 1997, India is fourth in New Delhi 2002; Canada is fifth in Montreal 2005. There are several exceptions. First, the Philippines and Bolivia, two countries from the southern hemisphere, have taken on very active roles, perhaps disproportionate with their size. Bolivia - very discreet during the first 15 COPs - has stood out from COP16 (Cancun) onwards and has been one of the leading voices around 'loss and damages'. Bolivia often comments on issues related to the historical responsibility of developed countries and their compliance with their commitments to reduce GHGs emissions.

The Philippines' trajectory is also interesting: quite conspicuous in the early negotiations (fourth rank at the ENCI1 in New York and sixth rank at the COP1 in Berlin), the country steps aside during the next conferences to stand out again in Doha (COP18) and Warsaw (COP19). If the Philippines mainly speaks out on equity and 'common but differentiated responsibilities' - principle 7 of the Rio Declaration on Environment and Development - and on funding and adaptation funds, Doha and Warsaw conferences have witnessed many references to the two 'unprecedented' typhoons that devastated the Philippines (Bopha/ Haiyan) at that time.

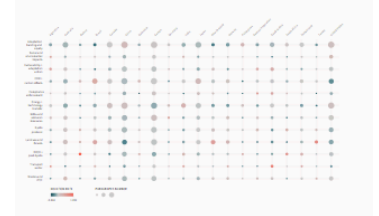
~Figure 3. Stream graph of the absolute and relative visibility of the countries of the UNFCCC negotiations, 1995-2013. The size of each country flow is proportional to the number of paragraphs in which the name of the country appears. Flows are sorted according to the number of occurrences: for each COP, the highest flow corresponds to the most visible issue while the lowest corresponds to the least visible. Data source: [ISD, Earth Negotiations Bulletin, volume 12](http://isd.earthnegotiationsbulletin.org/).

~Figure 4. Countries issues contingency matrix, 1995-2013. Each case of the matrix contains a bubble whose size is proportional to the number of paragraphs in which the name of one country and two terms defining an issue are present together. The colour of the bubble displays the deviation of each country on each issue, that is to say whether it discussed about it more (red) or less (blue) than statistically expected. Data source: [ISD, Earth Negotiations Bulletin, volume 12](http://isd.earthnegotiationsbulletin.org/).

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The visibility of some countries increases in a punctuated fashion at specific COPs. Mexico, for example, shows a rather low profile during most negotiations, but ranks fifth during COP16 (Cancun), organized in Mexico. Tuvalu's trajectory bears mentioning as well: from the Kyoto conference onwards, this small Pacific island has ranked among the 21 most visible member countries. Yet, Tuvalu also reached rank 13 in Poznan (COP14), rank 19 in Copenhagen (COP15), and rank 12 in Cancun (COP16). During these conferences, Tuvalu mainly addressed the issue of a successor to the Kyoto Protocol - the island even supports its own protocol proposition.

WHO IS DISCUSSING ABOUT WHAT



Reading figures 3 and 4 together, no clear pattern exists to support the hypothesis that certain states or groups of states may be particularly active on adaptation related issues. It is possible, on the other hand, to highlight a marked difference between different adaptation related issues. While the debates about 'vulnerability and adaptation action' and 'social and environmental impact' interest the same countries, the debate about 'adaptation funding and equity' seems to happen in a separate discussion space (there is almost no matching of countries with relatively high numbers of interventions between the two issues).

Concerning 'adaptation funding and equity' countries with a relatively high number of interventions are Canada, Germany, China, Philippines, Europe, United States, South Africa, Switzerland and Japan with relatively low interventions. The other adaptation related issues 'vulnerability and adaptation actions' and 'environmental and social impacts' show a different pattern with relatively high number of interventions from Argentina and Colombia and relatively low number of interventions from Japan, Canada, South Arabia and Tuvalu. This is surprising as Tuvalu is a very active member of the Small Island States (AOSIS) grouping which are regarded to be most vulnerable to climate change and especially sea level rise. However, regarding the relatively high number of interventions of Tuvalu in the land use and forests theme one might assume that aspects of Tuvalu's adaptation related issues were also discussed under this topic (this needs to be confirmed by further analysis).

Narration

Original Research Article



Three maps and three misunderstandings: A digital mapping of climate diplomacy

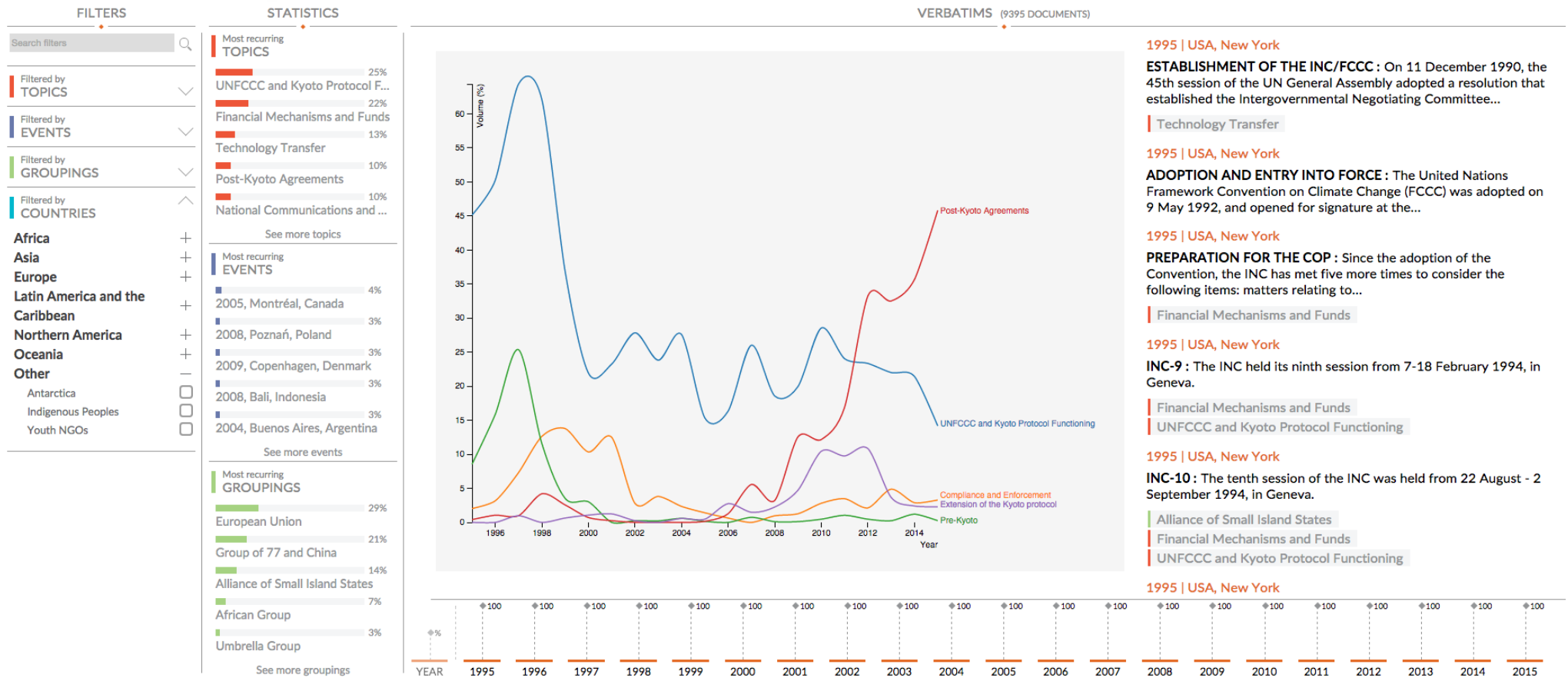
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Three Maps and Three Misunderstandings : A Digital Mapping of Climate Diplomacy.
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And back from the start





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