

Co-producing online MAPS and offline ISSUES

## EMAPS

Discourses on Ageing

Sea level rise

Migrants & Words

Framing Climate Change Adaptation

DISCOURSES  
ON  
AGEING

D E N -  
S I T Y  
G N +



EMAPS

# EMAPS

**SPEED UP WORKSHOP**  
**22|24 MAGGIO 2012**

AULA ROSSA | DIPARTIMENTO INDACO  
VIA DURANDO 38/A  
POLITECNICO DI MILANO





# AGEING ON WIKIPEDIA | Mapping relationships between articles

## In this map

Wikidata entities are highlighted with a background color. The size of the circle represents the number of relationships between articles.

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## Succession is the central concept

The graph illustrates the central concept of succession. The most prominent feature is the large cluster of articles related to succession, which is highlighted in red. This cluster is connected to other articles, such as 'Succession' and 'Succession'.

## Biological function

The graph illustrates the biological function of succession. The most prominent feature is the large cluster of articles related to biological function, which is highlighted in green. This cluster is connected to other articles, such as 'Biological function' and 'Biological function'.

## The vertical field of life sciences

The graph illustrates the vertical field of life sciences. The most prominent feature is the large cluster of articles related to life sciences, which is highlighted in blue. This cluster is connected to other articles, such as 'Life sciences' and 'Life sciences'.

## Ageing as a biological phenomenon

The graph illustrates ageing as a biological phenomenon. The most prominent feature is the large cluster of articles related to ageing, which is highlighted in orange. This cluster is connected to other articles, such as 'Ageing' and 'Ageing'.

## When is it a biological process?

The graph illustrates when ageing is a biological process. The most prominent feature is the large cluster of articles related to biological processes, which is highlighted in yellow. This cluster is connected to other articles, such as 'Biological processes' and 'Biological processes'.

## The role of DNA

The graph illustrates the role of DNA in ageing. The most prominent feature is the large cluster of articles related to DNA, which is highlighted in purple. This cluster is connected to other articles, such as 'DNA' and 'DNA'.

## Ageing

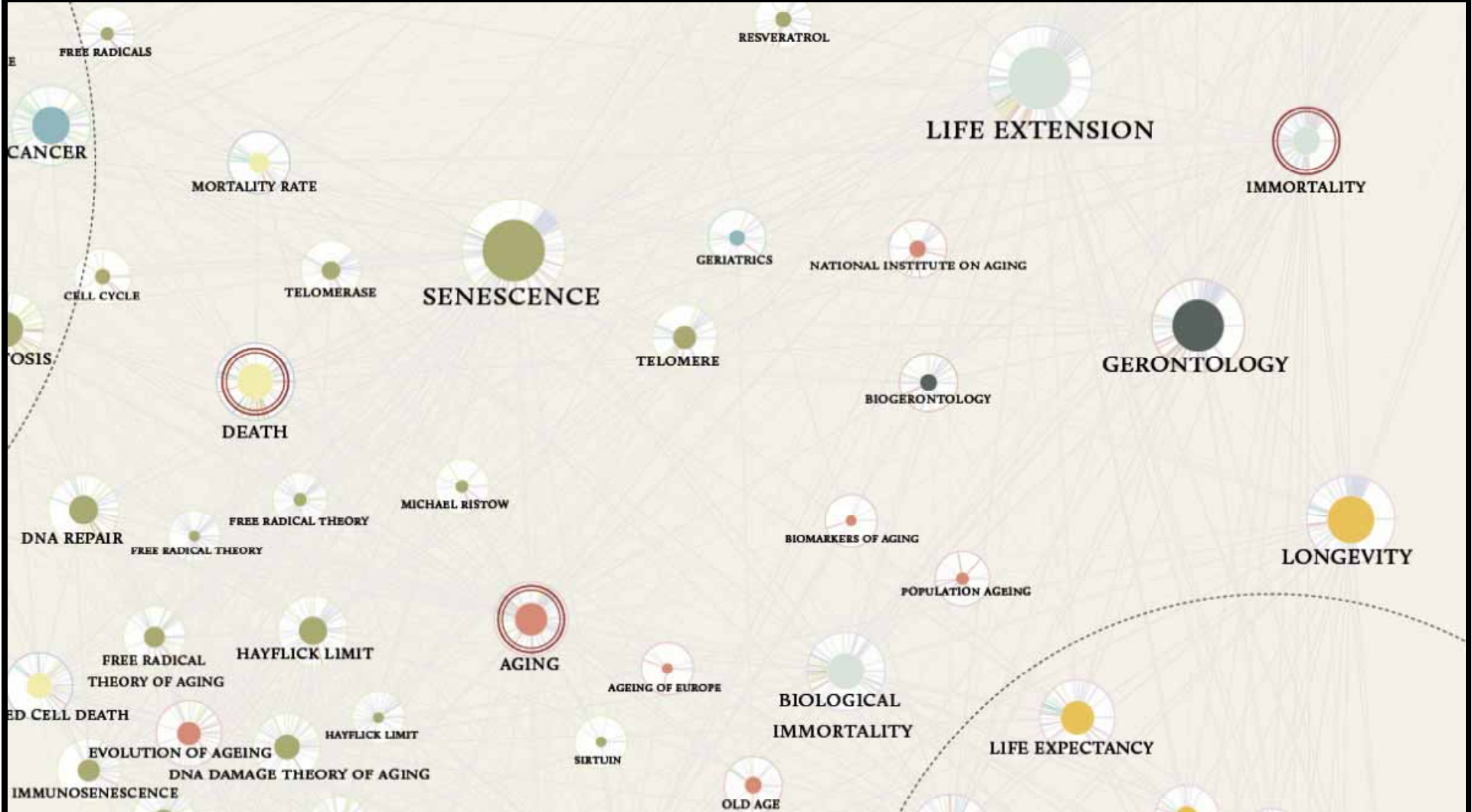
The graph illustrates the concept of ageing. The most prominent feature is the large cluster of articles related to ageing, which is highlighted in red. This cluster is connected to other articles, such as 'Ageing' and 'Ageing'.

- Succession
- Biological function
- Ageing
- Life sciences
- Ageing as a biological phenomenon
- When is it a biological process?
- The role of DNA
- Ageing



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100% | 100% | 100%



E

CANCER

OSIS

DNA REPAIR

ED CELL DEATH

IMMUNOSENESCENCE

FREE RADICALS

MORTALITY RATE

CELL CYCLE

TELOMERASE

DEATH

FREE RADICAL THEORY

FREE RADICAL THEORY OF AGING

HAYFLICK LIMIT

EVOLUTION OF AGEING  
DNA DAMAGE THEORY OF AGING

HAYFLICK LIMIT

MICHAEL RISTOW

AGING

AGEING OF EUROPE

SIRTUIN

RESVERATROL

GERIATRICS

NATIONAL INSTITUTE ON AGING

TELOMERE

BIOGERONTOLOGY

BIOMARKERS OF AGING

POPULATION AGEING

BIOLOGICAL IMMORTALITY

OLD AGE

LIFE EXTENSION

IMMORTALITY

GERONTOLOGY

LONGEVITY

LIFE EXPECTANCY





the

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## A Better Life – what older people with high support needs value

Findings  
Informing change

November 2011

Finding the best way to develop and fund support for the increasing numbers of older people in society is a political priority. Understanding, measuring, improving and monitoring their overall quality of life (not just the quality of their care) will be the main challenge. This study presents the views of older people with high physical and mental support needs who have described what they want and value in their lives, and proposes a model to assist policy-making, research and practice.

### Key points

- The views of older people with high support needs have rarely been sought. Reasons for this include their invisibility, communication issues and the lack of a collective voice.
- Participants in the study wanted and valued different things in their lives, but all expressed common human needs for social, psychological and physical well-being.
- People valued their close emotional relationships, though some expressed concerns about 'imposing' on family and friends. Many had made new friends as a result of their increasing support needs.
- Having control over their lives was important but meant different things to different people. Adjusting well to change was also central to psychological well-being, and this might require support.
- Participants valued getting out and about, keeping mentally and physically active and having contact with nature.
- Care, support and other people's time were key factors that enabled or prevented people doing things that mattered to them.
- Participants faced various challenges and difficulties, some a result of illness, disability and ageing but many because of lack of access to information, money, technology, equipment and transport.
- The study proposes a model (see p. 3) of what older people with high support needs value in their lives.

**The research**  
By Jeanne Katz, Caroline Holland,  
Shelia Peace and Emily Taylor,  
The Open University  
(edited by Imogen Flood)

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## A Better Life – what older people with high support

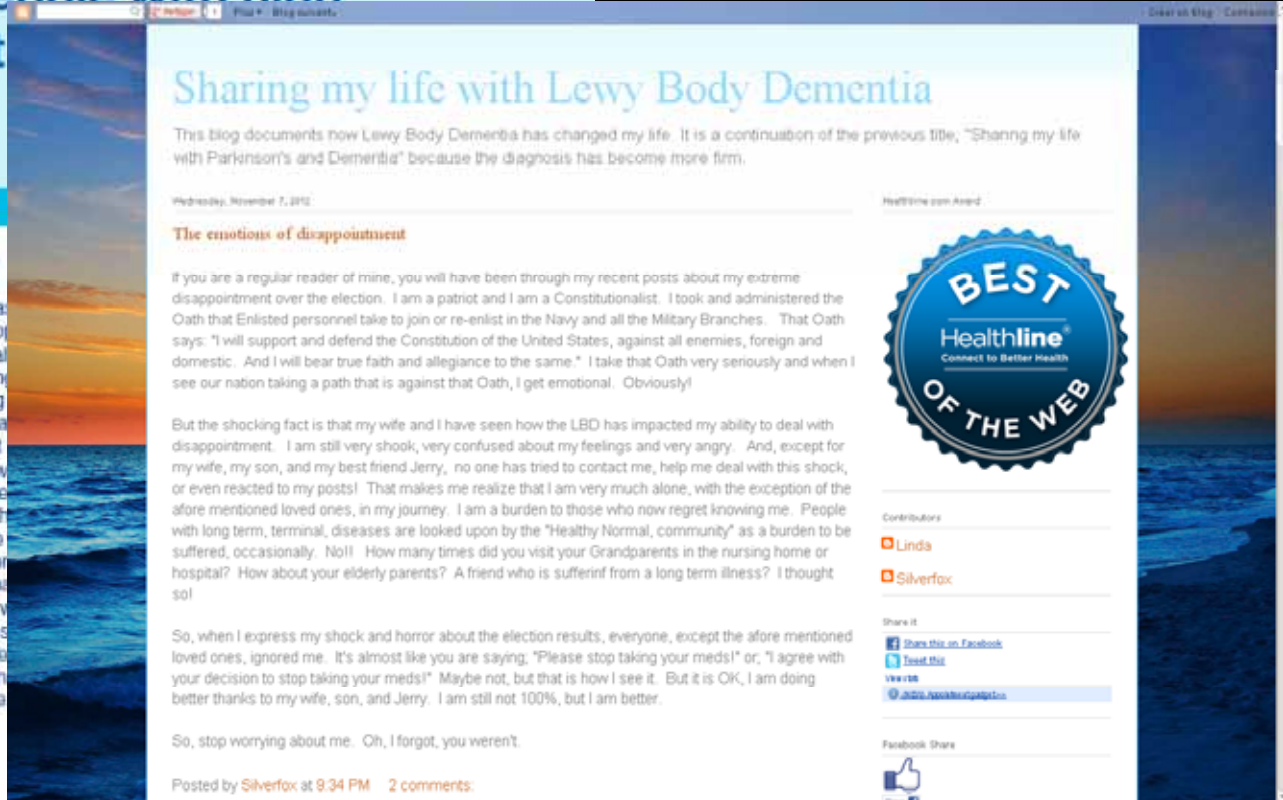
November 2011

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 JOSEPH ROWNTREE  
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**Sharing my life with Lewy Body Dementia**

This blog documents how Lewy Body Dementia has changed my life. It is a continuation of the previous title, "Sharing my life with Parkinson's and Dementia" because the diagnosis has become more firm.

Wednesday, November 7, 2012

**The emotions of disappointment**

If you are a regular reader of mine, you will have been through my recent posts about my extreme disappointment over the election. I am a patriot and I am a Constitutionalist. I took and administered the Oath that Enlisted personnel take to join or re-enlist in the Navy and all the Military Branches. That Oath says: "I will support and defend the Constitution of the United States, against all enemies, foreign and domestic. And I will bear true faith and allegiance to the same." I take that Oath very seriously and when I see our nation taking a path that is against that Oath, I get emotional. Obviously!

But the shocking fact is that my wife and I have seen how the LBD has impacted my ability to deal with disappointment. I am still very shook, very confused about my feelings and very angry. And, except for my wife, my son, and my best friend Jerry, no one has tried to contact me, help me deal with this shock, or even reacted to my posts! That makes me realize that I am very much alone, with the exception of the afore mentioned loved ones, in my journey. I am a burden to those who now regret knowing me. People with long term, terminal, diseases are looked upon by the "Healthy Normal, community" as a burden to be suffered, occasionally. No!! How many times did you visit your Grandparents in the nursing home or hospital? How about your elderly parents? A friend who is suffering from a long term illness? I thought so!

So, when I express my shock and horror about the election results, everyone, except the afore mentioned loved ones, ignored me. It's almost like you are saying, "Please stop taking your meds!" or, "I agree with your decision to stop taking your meds!" Maybe not, but that is how I see it. But it is OK, I am doing better thanks to my wife, son, and Jerry. I am still not 100%, but I am better.

So, stop worrying about me. Oh, I forgot, you weren't.

Posted by Silverfox at 9:34 PM 2 comments:

**BEST OF THE WEB**  
Healthline  
Connect to Better Health

Contributors:  
Linda  
Silverfox

Share it:  
Share this on Facebook  
Tweet this  
via RSS  
via Email

Facebook Share

support needs value in their lives.



# SEA LEVEL RISE



380  
Quality

Export

Facebook

Twitter

SCANDALE CLIMAT · LES QUESTIONS DES FRANÇAIS A CLAUDE ALLEGRE

01:32 / 18:00

# A Semi-Empirical Approach to Projecting Future Sea-Level Rise

Stefan Rahmstorf

A semi-empirical relation is presented that connects global sea-level rise to global mean surface temperature. It is proposed that, for time scales relevant to anthropogenic warming, the rate of sea-level rise is roughly proportional to the magnitude of warming above the temperatures of the pre-Industrial Age. This holds to good approximation for temperature and sea-level changes during the 20th century, with a proportionality constant of 3.4 millimeters/year per °C. When applied to future warming scenarios of the Intergovernmental Panel on Climate Change, this relationship results in a projected sea-level rise in 2100 of 0.5 to 1.4 meters above the 1990 level.

Understanding global sea-level changes is a difficult physical problem, because complex mechanisms with different time scales play a role (*1*), including thermal expansion of water due to the uptake and penetration of heat into the oceans, input of water into the ocean from glaciers and ice sheets, and changed water storage on land. Ice sheets have the largest potential effect, because their complete melting would result in a global sea-level rise of about 70 m. Yet their dynamics are poorly understood, and the key processes that control the response of ice flow to a warming climate are not included in current ice sheet models [for example,

published physically based projections of ice loss from glaciers and ice caps fringing Greenland and Antarctica.

For this reason, our capability for calculating future sea-level changes in response to a given surface warming scenario with present physics-based models is very limited, and models are not able to fully reproduce the sea-level rise of recent decades. Rates of sea-level rise calculated with climate and ice sheet models are generally lower than observed rates. Since 1990, observed sea level has followed the uppermost uncertainty limit of the Intergovernmental Panel on Climate Change (IPCC) Third Assessment Report (TAR),

tion of the sea-level response from first principles is so complex that semi-empirical relationships perform better. Likewise, with current and future sea-level rise, the driver is known [global warming (*1*)], but the computation of the link between the driver and the response from first principles remains elusive. Here, we will explore a semi-empirical method for estimating sea-level rise.

As a driver, we will use the global average near-surface air temperature, which is the standard diagnostic used to describe global warming. Figure 1 shows a schematic response to a step-function increase in temperature, after climate and sea level parameters were at equilibrium. We expect sea level to rise as the ocean takes up heat and ice starts to melt, until (asymptotically) a new equilibrium sea level is reached. Paleoclimatic data suggest that changes in the final equilibrium level may be very large: Sea level at the Last Glacial Maximum, about 20,000 years ago, was 120 m lower than the current level, whereas global mean temperature was 4° to 7°C lower (*5, 6*). Three million years ago, during the Pliocene, the average climate was about 2° to 3°C warmer and sea level was



## Comment on “A Semi-Empirical Approach to Projecting Future Sea-Level Rise”

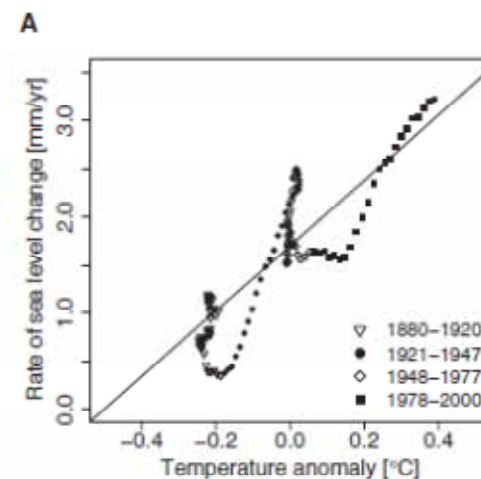
Simon Holgate,<sup>1\*</sup> Svetlana Jevrejeva,<sup>1</sup> Philip Woodworth,<sup>1</sup> Simon Brewer<sup>2</sup>

Rahmstorf (Reports, 19 January 2007, p. 368) presented an approach for predicting sea-level rise based on a proposed linear relationship between global mean surface temperature and the rate of global mean sea-level change. We find no such linear relationship. Although we agree that there is considerable uncertainty in the prediction of future sea-level rise, this approach does not meaningfully contribute to quantifying that uncertainty.

Rahmstorf (*J*) proposed a relationship between global mean surface temperatures (2, 3) and the rate of global mean sea-level change (4). The approach assumes that “the rate of sea-level rise is roughly proportional to the magnitude of warming above the temperatures of the pre-Industrial Age” (*J*). On this basis, sea level is predicted to rise 0.5 to 1.4 m above the 1990 level by 2100. These estimates are considerably higher than those published in the Third Assessment Report of the Intergovernmental Panel on Climate Change (5) and therefore require closer inspection.

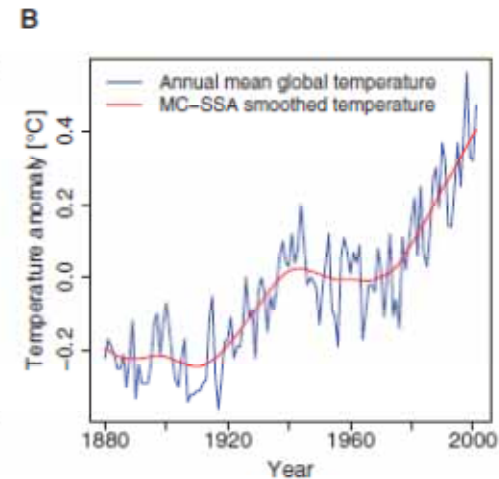
The calculation of the linear relationship between temperature and the rate of sea-level change (*J*) did not explore whether the calculated proportionality constant of 3.4 mm/year per °C applies to the time scales of most relevance to anthropogenic warming (i.e., decades to centuries). Figure 1A replicates figure 2 in (*J*). As in (*J*), both the temperature and sea-level time series are smoothed with the Monte Carlo singular spectrum analysis method (MC-SSA) (6) to remove energy with periods of less than 15 years. How-

$T = 0$ ). This shows that the mean rate obtained from this model over the past century agrees well with other estimates of sea-level rise over the past



100 years [e.g., (4, 7)]. However, the issue is whether this model can provide information at shorter periods than the century scale and be used to predict global sea levels some decades into the future.

A reasonable test of the strength of a model is its ability to predict observations that are not already included in its formulation. To illustrate the nonlinearity of the temperature/sea-level change relationship, we calculated linear coefficients for the first half of the observational record and then proceeded to predict the remaining observations. We also used the second half of the data set to hindcast sea levels during the earlier part of the record. To make this testing sensitive to changes on time scales of decades, which are of most interest for prediction, we detrended both the smoothed surface temperatures and the smoothed sea levels for the first and second halves of the data before calculating the annual rates of sea-level change (detrending improves the results but does not change their character). We then calcu-



**Fig. 1.** (A) The relationship of the rate of global mean sea-level rise (4) to global mean surface temperature (2, 3) with the data divided into four epochs, each showing a different relationship between the variables. This figure is similar to figure 2 in (*J*) but without the binning into 5-year averages so as to better illustrate the data clustering. (B) The global mean surface temperature record (2, 3), annual data

## CLIMATE CHANGE

## The Limits of Consensus

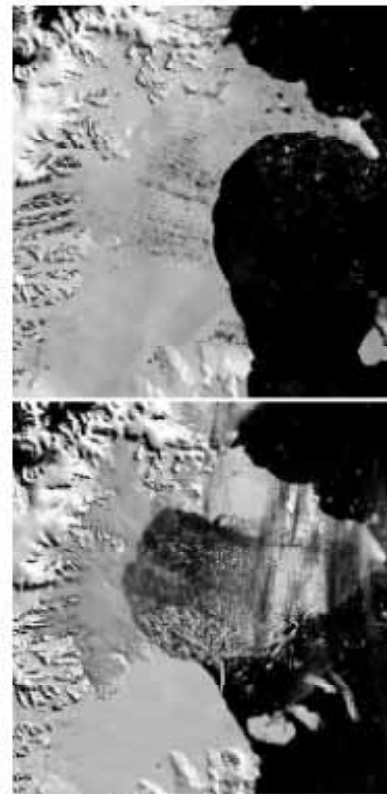
Michael Oppenheimer,<sup>1,2\*</sup> Brian C. O'Neill,<sup>3,4</sup> Mort Webster,<sup>5</sup> Shardul Agrawala<sup>1,6</sup>

The Intergovernmental Panel on Climate Change (IPCC) has just delivered its Fourth Assessment Report (AR4) since 1990. The IPCC was a bold innovation when it was established, and its accomplishments are singular (1, 2). It was the conclusion in the IPCC First Assessment Report that the world is likely to see “a rate of increase of global mean temperature during the next century ... that is greater than seen over the past 10,000 years” (3) that proved influential in catalyzing the negotiation of the United Nations Framework Convention on Climate Change. The conclusions of the Second Assessment with regard to the human influence on climate (4) marked a paradigm shift in the policy debate that contributed to the negotiation of the Kyoto Protocol. IPCC conclusions from the Third, and now the Fourth, assessments have further solidified consensus behind the role of humans in changing the earth's climate.

The emphasis on consensus in IPCC reports, however, has put the spotlight on expected outcomes, which then become anchored via numerical estimates in the minds of policy-makers. With the general credibility of the science of climate change established, it is now equally important that policy-makers understand the more extreme possibilities that consensus may exclude or downplay (5).

For example, the Working Group I (WGI) “Summary for Policy-makers” (SPM) of AR4 anticipates a rise in sea level of between 18 and 59 cm by the year 2100 (6), a “model-based range” composed largely of thermal expansion of oceans, melting of nonpolar glaciers, and the gradual response of ice sheets. The range does not include the

potential for increasing contributions from rapid dynamic processes in the Greenland and West Antarctic ice sheets (WAIS), which have already had a significant effect on sea level over the past 15 years and could eventually raise sea level by many meters. **Lacking such processes, models cannot fully explain observations of recent sea-level rise, and accordingly, projections based on such models may seriously underestimate potential future increases.** Although the AR4 SPM recognizes the possibility of a



Not captured by ice-sheet models. (Top) The Larsen

The establishment of consensus by the IPCC is no longer as critical to governments as a full exploration of uncertainty.

larger ice-sheet contribution, its main quantitative results indicate the opposite: Uncertainty in sea-level rise is smaller, and its upper bound is lower, for the 21st century than was indicated in the Third Assessment Report (7). On the related question of sea-level rise beyond the 21st century, whereas the Third Assessment's SPM provided a numerical estimate of a potential contribution from WAIS, the AR4 WGI SPM doesn't mention WAIS at all. This omission presumably reflects a lack of consensus arising from the inadequacy of ice-sheet models for WAIS made so apparent by recent observations.

**Nevertheless, alternatives to model-based approaches, such as empirical analysis and expert elicitation, were available for exploring uncertainty in 21st-century (8) and long-term sea-level rise (9), respectively.** Such information certainly would have been useful to policy-makers, particularly for WAIS, which contains enough ice to raise sea level by about 5 m.

Setting aside or minimizing the importance of key structural uncertainties in underlying processes is a frequent outcome of the drive for consensus (5, 10). For example, ranges of projected warming and atmospheric composition in AR4 include an amplifying effect of interactions between climate and the carbon cycle. However, **the estimated uncertainty in this effect is based largely on models that omit a number of poorly understood processes (11), such as feedbacks on carbon contained in permafrost; changes in marine ecosystem structure; and responses to land-use history, nutrient limitation, and air-pollution effects.** These models also share similar assumptions about the temperature sensitivity of carbon fluxes from soils based on experimental results that cannot be reliably scaled to the ecosystem level (12). A fuller accounting of uncertainty would be more





MIGRANTS  
&  
WORDS

Des Migrants et des Mots  
Une analyse numérique  
des débats médiatiques  
sur les migrations et  
l'environnement

Tommaso Venturini,  
François Gemenne, Marta  
Severo

Culture & Conflits, 2013



PAYSAGES  
EN MIGRATIONS

Les carnets du paysage

n° 23

ACTES SUD ET L'ÉCOLE NATIONALE SUPÉRIEURE DE PAYSAGE

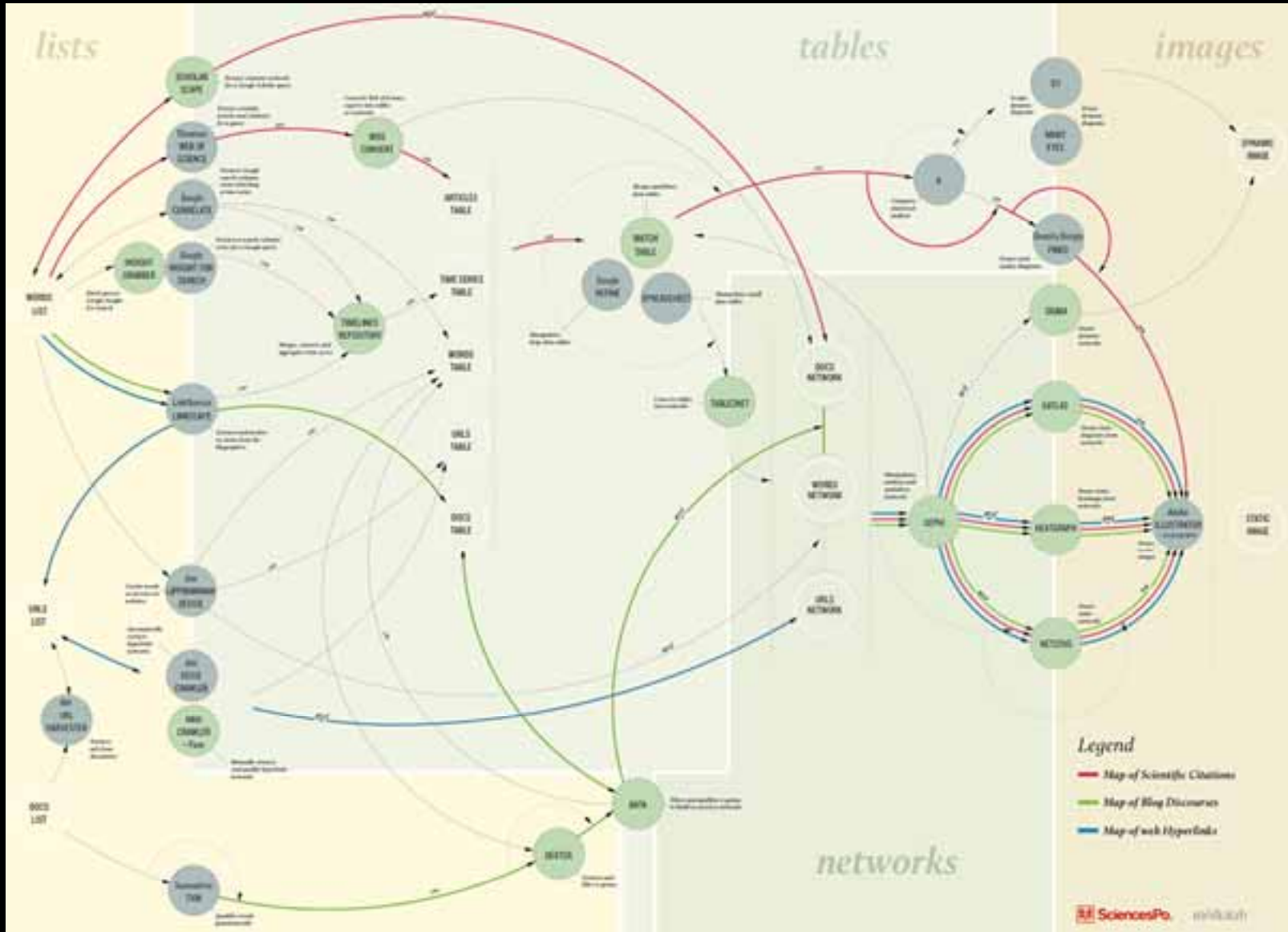
Le point de départ est l'interrogation du moteur de recherche Google.com (dans la version la plus 'standard' possible<sup>4</sup>) avec les requêtes présentées dans le tableau suivant :

Requête	Nombre de pages moissonnées
"Climate refugee"	84 pages
"Environmental migrant"	76 pages
"Climate migrant"	69 pages
"Environmental Refugee"	72 pages
"Eco-migrant"	80 pages
"Ecological migrant"	64 pages
"Ecological refugee"	65 pages
"Climate-induced migrant"	12 pages
"Climate-induced refugee"	16 pages
"Environmentally-induced migrant"	62 pages
"Environmental displacee"	86 pages
"Environmentally displaced person"	48 pages

"Eco-refugee"	79 pages
"Ecologically displaced person"	90 pages

*Tableau 1. Résultats considérés pour chaque requête*





The **community** we want to reach bears the issues which we will map, re-interpretes them and (hopefully) uses them.



**Young Foundation** reaches out the community of users, disseminates the maps and collects feedback

**Paris and Amsterdam,** with the help of **Dortmund** for data collection, produce datasets from issues + tools chosen

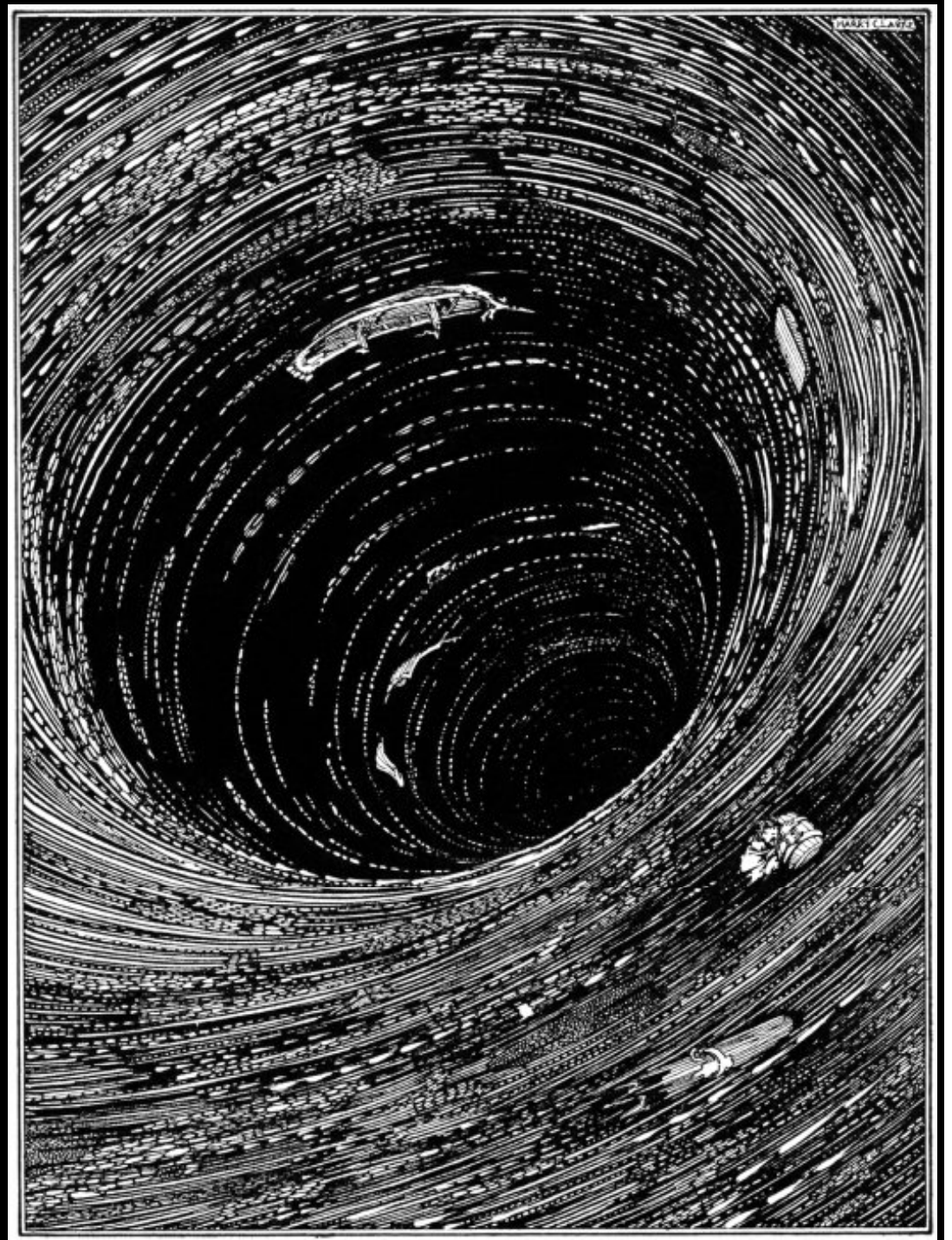


**Milano team** designs the maps

**Barcelona** are involved for data modelling prior to visualisation



FRAMING  
CLIMATE CHANGE  
ADAPTATION



Resilience  
Adaptive management  
Climate smart development  
Adaptive capacity  
Social learning

Emergence in  
international  
negotiations

