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Visualizing a global crisis. Constructing climate, future and present

Kurzfassung: Der Aufsatz berichtet über zwei empirische Studien, welche die Visualisierung des Klimawandels untersuchen. Die erste Studie besteht in einer quantitativen Auswertung der Abbildungen, die in 15 verschiedenen Ländern vor, während und nach der Kopenhagener Klimakonferenz, 2009, erschienen sind. Die Ergebnisse demonstrieren eine Vielfalt an visuellen Themen und Genres und eine globale Diversität, die sowohl mit Pressekonventionen als auch mit der Verfügbarkeit von Quellen zu tun hat. Darauf folgt die Analyse einer kleinen Anzahl von während desselben Zeitraums publizierten Cartoons, die einen globalen Konflikt ansprechen, meist indem sie den globalen Norden für den Klimawandel verantwortlich machen. Aufbauend auf Barthes und andere Forscher, die sich mit der Visualisierung in den Medien beschäftigt haben, werden die spezifischen Herausforderungen diskutiert, welche der Klimawandels als ein oft unsichtbares Phänomen mit sich bringt.

Abstract: This article examines the visualization of climate change through two empirical studies. First, a quantitative overview of the visuals emerging in newspapers in 15 different countries before, during and after the Copenhagen climate summit in 2009. The findings demonstrate a variety of visual topics as well as genres, and a global diversity having to do with press conventions as well as access to resources. Then follows an in-depth study of a small number of cartoons published in the same period addressing global conflict, most of them linked to framing the Global North as responsible for the development of climate change. Leaning on Barthes and supplemented by other scholars who have studied media visualization, the article discusses the particular challenges of climate change as an often unseen phenomenon.

„I would maintain that, in the case of climate change predictions, the lack of visible evidence of this problem made it difficult for the issue to be linked to an established set of symbolic imagery. This lack of visual evidence, related to the temporal aspect of climate change as a risk that develops over time, also contributed to the lack of international politics addressing the issue, as well as low public perception.“ (Julie Doyle 2007: 133)

1. Introduction

For many citizens global warming – or climate change – is still largely a phenomenon left to the imagination. It is the unseen and thus seemingly not yet proven. Although serious extreme weather experiences are increasingly linked to climate change, the ‘connecting of dots’ is not always easy. And to visualize future scenarios is always technically possible, but then it remains just a scenario, something that *might* happen. As Ulrich Beck writes:

„What differentiates the old nation-state security agenda of the first modernity from the new postnational security agenda of the second modernity is thus the *regime of non-knowing*, even worse, not just of known, but above all of unknown non-knowing – of unknown unknowns [...] and hence the collapse of ontological security.“ (Beck, 2009:40)

While such “non-knowing” is often related to terrorism threats, Beck also mentions environmental risks and climate change, since they “contradict the state guarantees of security; and they may even make its guarantees appear as threats to public safety and undermine the authority and legitimacy of states” (ibid. 41)

Thus the “non-knowing” poses a special challenge to journalism, a profession where most media and genres demand visualization of the phenomena they represent textually. Creativity is in high demand, not least around occasions such as the annual global summits on climate change (the COPs), where climate change tends to be more focused by national and international media than the rest of the year (Eide et al. 2010).

This article will present some quantitative results from a global research project on climate change journalism, and proceed with an in-depth analysis of a limited number of newspaper cartoons as an example of the challenges of visualization. These cartoons are all transnational, three with a clear focus on North-South relations, a vital topic in the COP negotiations and in the newspaper stories from the summits: and one addresses two events simultaneously.

Visuals and communicative potential

Mike Hulme writes how climate change, as other risks, operates outside the capacity of human perception, and hence “risks an air of reality until the moment they materialise as symptoms” (Hulme, 2009: 236). To make this further complicated, what materialises as symptoms (of climate change) is not always recognized by science as specifically connected to trends in climate change. Simultaneously media will be tempted to use for example visuals from floods and their victims to illus-

trate the "not-seen" phenomena. The dilemma remains: while it seems likely that an increasing number of serious floods may be due to climate change, we may not always know whether the particular victims of a particular flood are also victims of climate changes¹.

Hulme specifically mentions how predictions of global climate change are "the globally averaged near-surface air temperature", or what he calls "a disembodied global temperature" that cannot be seen nor photographed (ibid).

On the other hand, there is no shortage of examples trying to communicate climate change visually. Environmental NGOs have been particularly active, as Julie Doyle demonstrates in her study of Greenpeace and their "visual iconography". She writes that news media have an "event-based tactics" in their coverage of the environment, as for example in their aesthetic framing of the threatened landscape (Doyle, 2007: 133). Global Summits may be seen as generating such event-based press coverage. Doyle furthermore identifies five phases of Greenpeace's visualization of environment², which might as well be treated as different visual discourses, in the mainstream media occurring not in totally separate phases, but intermingling with each other throughout the recent history.

Visuals have an inherent transnational communicative potential, given that non-verbal language travels more easily across different language zones. On the other hand, as Hahn has iterated in a previous study: images travel while discourses do not (Hahn, 2008). While this is only half-true – some discourses do indeed travel – it points to the fact that the discursive situations in which for example cartoons and other images occur, do shift when images embark on their global journeys. Thus interpretations tend to vary, the images being read with different lenses in a variety of contexts. In the case of global warming, the "travelling images" often consist of "symbolic motives" of changes taking place; i.e. endangered indigenous people, endangered animals such as the polar bear, or (almost) flooded island states such as the Maldives or Tuvalu.

But a more immediate travel triggers emotions. The visual experience travels first and fast from the object to the optical nerve of the brain, and there the nervous impulses release a spontaneous emotional response to what we see; the other more slow process travels to the visual centre at the back of the brain, and it is when the nervous signals reach there, that we are made aware of what we see. But since the emotional response is already there, we may say that the visual functions as a shortcut to our feelings (Evensen & Simonsen, 2010: 33, B. Eide, 2005: 19), as with a polar bear stuck on a melting ice flake, since such an icon speaks to earlier narratives of threatened animals. On the other hand, when such an iconic image becomes habitual, the emotional effect may decrease and be replaced by irony or fatigue.

Images and hope

In contrast to natural catastrophes, war and terror; bank collapses or future risks such as global climate change do not leave ruins or debris as a visible sign of the degree of crisis damage. Thus, the media needs visual constructions. One attempt was made by veteran climate journalist Fred Pearce (UK), who through a book on 'before' and 'now' visuals demonstrated the differences in a number of locations on a global scale. One example he highlights is the Aral sea, currently next to extinct³, but once one of the greatest fishing lakes in Russia (Pearce 2008). Pearce travelled to Muynak, "an old seaside resort on the shores of the Aral Sea" and witnessed a fish-processing factory now being 60 miles from the shore, but

„[...] I only really understood the scale of what had happened when I returned home from Muynak and looked at the pair of satellite images. [...] They show a whole sea reduced to a toxic sump by human action. It is an unprecedented man-made change to the shape of the world.“ (Pearce, 2008: 10, 54-55)

Pearce thus demonstrates how he needed to have the *evidence demonstrated* to really grasp the situation. Furthermore, though his coupling of images of melting glaciers and collapsing ice sheets as well as the ozone hole, indicates that one should fear for the future, in the book he also includes images of large solar power plants representing future hopes: "Nevertheless I hope that you will see in these images some signs of our virtue as well as of our sin; of reasons for hope as well as for despair" (ibid., 18). His is a concentrated effort of demonstrating at least the certainty of what once was. Or as Doyle iterates;

The visualization of climate change through photography thus calls attention to the problems associated with trying to communicate environmental issues that are both temporal (long term and developmental) and unseen (not always visible) through a medium that privileges the 'here and now' of the visual. (Doyle 2007: 129)

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1. The recently presented IPCC Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation (SREX), suggests some connections, though. See <http://www.ipcc-wg2.gov/SREX/> Accessed 24.11.2011
 2. The five phases identified are : Immanent and Inevitable Destruction from a Warming Planet ; Identifying Causes. Present Impacts and Future Solutions – dirty Oil versus Pristine Habitats ; Glacial Impacts and Renewable Solutions ; Dirty Oil, Dirty Politics ; The 'Here and Now' of Climate Change. (Doyle 2007)
 3. „US scientists call the emptying of the Aral Sea the greatest environmental disaster of the 20th century.“ Pearce 2008: 10)

Pearce's examples of images were published in a book. But how do newspapers in different corners of the planet Earth attempt to visualize the gradual degradation and the future dangers? In this article I can only give small suggestions of answers to this potentially huge question in the first part, while in the second part I shall demonstrate how global political conflicts may be visualized in cartoon images on climate change.

Research questions and methodology

The main research questions are:

- What is the variety of images of global climate change in print media during climate summit coverage, with particular focus on the COP15 in Copenhagen¹?
- To what extent do quality and popular newspapers differ in their visual framing of climate change?
- How may cartoons related to press coverage of climate change address special conflicts at a transnational level?

The two first questions will be treated helped by a quantitative analysis, while the other part of this article will analyse a small number of editorial cartoons. This analysis will be explorative and suggestive. The visuals and the cartoons that are particularly highlighted in the following will be analysed helped by framing analysis (Entman 1993, 2007; Reese 2007), since this theory seems particularly fit to explain how different media actors try to communicate their versions of a global crisis. Reese sees framing as "organizing principles that are socially shared and persistent over time that work symbolically to meaningfully structure the social world" (Reese 2007: 150). As we shall see below, a persistent frame in some cartoons may be the "South vs. North" frame, where the inherent message is that the Global-industrial North is largely to blame for the current alarming global situation.

Less media attention

The media coverage of climate change in general and climate summits in particular fluctuates largely, and has seen a top in 2009 (cf. Figure 1), both due to the prominence of the COP15, the release of the IPCC 4th assessment reports and the so-called "climategate", i.e. the leak of e-mail-correspondence between prominent climate scientists from CRU, East Anglia University. An important contributor to the decrease in coverage is the financial crisis, which partly overshadows the climate crisis in the coverage of global issues.

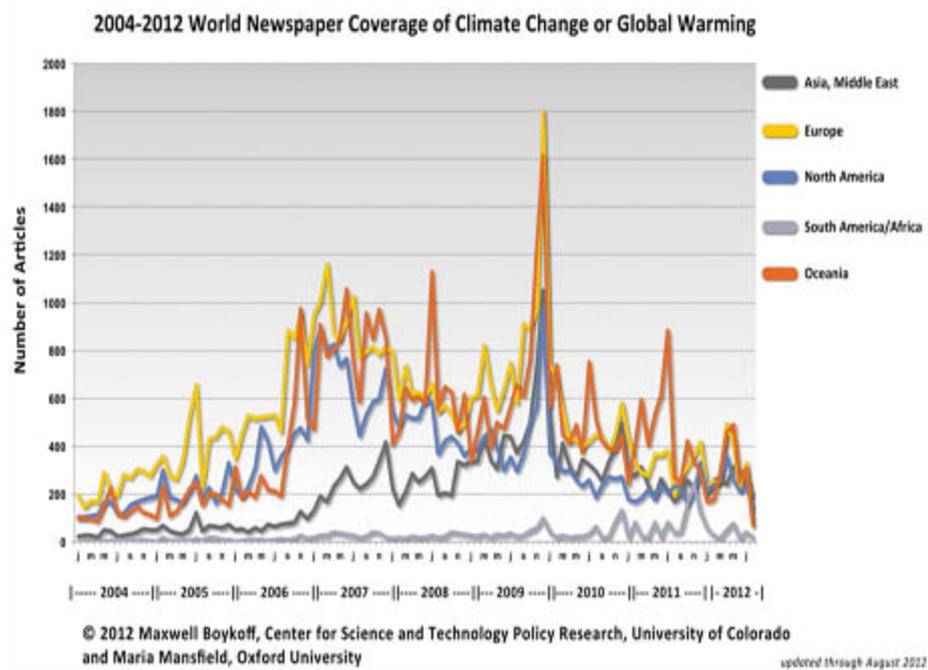


Figure 1: Trends in world newspaper coverage of climate change / global warming

1. The MediaClimate project has also mapped the coverage of the Bali (COP13) and the Durban (COP17) Summits, but the material, including visuals, appears to be much more limited. Thus the analysis concentrates on COP15.

The quantitative material includes a mapping of all images published in two newspapers (one more elite-leaning, one more popular) in 15 of the participating countries in the MediaClimate network, and also registering the category to which they belong. This material allows us to see not only how much these countries' newspapers relied on pictures relative to the number of articles, but in addition to which extent images not directly related to the summit, were published, for example images of nature and of industrial degradation of urban areas. The latter could be an indication of some media seeing the COP15 as an opportunity to expand their coverage of this global issue.

Apart from categorizing the images as will be done in the quantitative study, the images may be distinguished in a less complicated manner, by *genre*. In the material of images we find four main genres: photographs, cartoons, graphs/figures, and tables, and in some cases, an attempt at integrating two or more of them. Each of the genres, then, may be divided into sub-categories, as for example with photographs by themes, as will be demonstrated below. Linked to the quantitative presentation, examples of different genres of visual presentations will be demonstrated, from a selection of newspapers that printed the global editorial initiated by *The Guardian* on December 7th 2009, urging global leaders to find solutions to global warming (Eide, 2012)¹.

Cartoonists base their works on visual metaphors and cultural allusions. They rely on caricature, and caricature in its turn uses exaggeration and individualization. (Kenney et al 1996). Barthes, in his *The Rhetoric of the Image*, is concerned with the way in which text and images work together. He identifies two ways: anchoring and relay. *Anchoring* he relates mostly to (press) photo captions, while *relay* is more often connected to cartoons and comic strips (Barthes 1999 [1964] pp. 37-38):

„Here text (most often a snatch of dialogue) and image stand in a complementary relationship; the words, in the same way as the images, are fragments of a more general syntagm and the unity of the message is realized at a higher level, that of the story, the anecdote, the diegesis² (which is ample confirmation that the diegesis must be treated as an autonomous system)“ (ibid. 38).

In both cases, the text “*directs* the reader through the signifieds of the image, causing him to avoid some and receive others; by means of an often subtle *dispatching*, it remote-controls him towards a meaning chosen in advance“ (ibid 37-8). As we shall see, from the cartoons below, this is often the case, while the context – an on-going climate summit and the placement of the cartoon relative to other newspaper coverage – also plays an important role in this remote-controlling.

Elisabeth El Refaie is critical both of Barthes and others who by their linguistic approach (here: anchoring) “give the verbal message a clear preference over the visual and effectively deny the possibility of an image having its own, independent structure and meaning“. She adheres more to Kress & Van Leeuwen who assume that “verbal and visuals ‘intermesh and interact at all times“ (Refaie 2003: 86). Refaie’s comment is timely. However since images are often polysemic, it does not seem wrong to imply that textual elements, be they included in the actual image or set as captions, tend to “anchor“ the images, i.e. direct the reader in a specific interpretative direction for specific editorial purposes, when an image appears in a journalistic context, for example on the opinion pages or as an editorial comment.

In the qualitative part, the analysis will focus particularly on three newspaper cartoons connected to the “Blame the rich“ discourse, where the rich part of the world is represented as being responsible for today’s threatening situation.

What this article will not include, is the possible audience *effects* of visualization of global warming. This is a challenging area of research, and some research findings indicate that while certain visualizations (of landscape changes) may have considerable effect on an audience’s popular perceptions, it may not have the same impact on people’s behaviour (Shepard 2005). A recent experience from Bergen, where climate researchers were interacting with a group of 6th grade school students, they found that when asked who were the prime victims of climate change, the main response was “the polar bear“.³ From our knowledge of the frequency with which the polar bear has been used as a metaphor for climate change, this may come as no surprise.

2. Images; numbers and genres, COP 15

Below, as shown in Figure 2, there is an overview of the amount of illustrations in two newspapers in 15 countries. That Denmark, as the host country of COP15, by far has the largest proportion of images comes as no surprise. Danish journalists and photojournalists were present at the venue in large numbers, and have ample opportunities to be creative about the proceedings as well as publish other related stories.

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1. This selection is done for practical purposes, since it is difficult to get hold of individual illustrations from the original MediaClimate material. In some cases it overlaps, though
 2. Diegesis : the *narrative*, what is *told* as a contrast to what is *shown*.
 3. As communicated to this writer from Professor Kjersti Fløttum on 22.09.2012 at a research seminar, University of Bergen

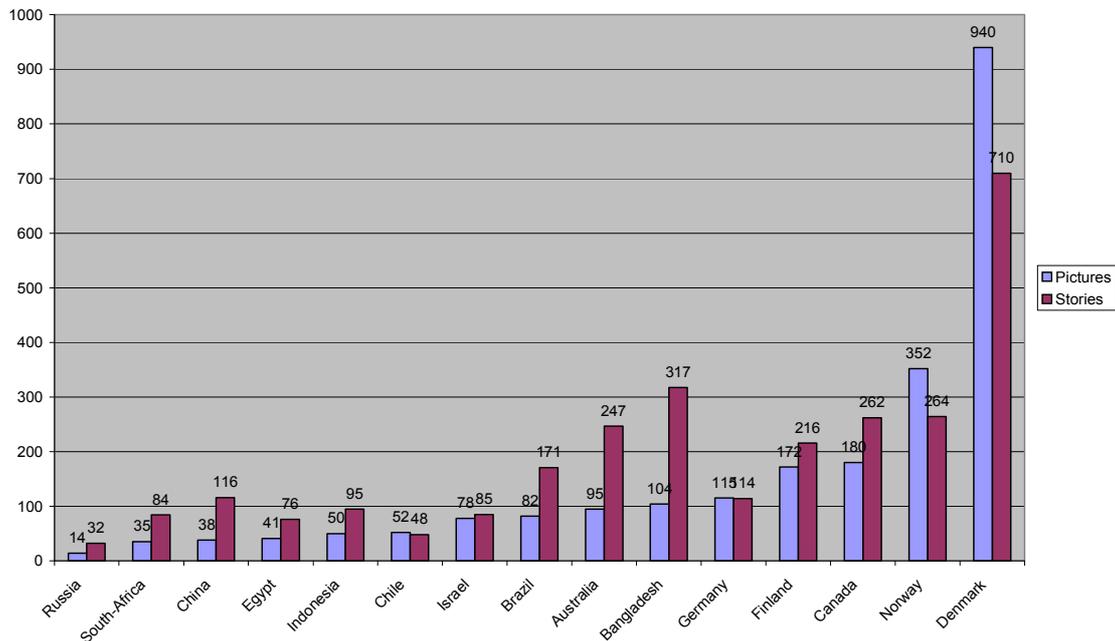


Figure 2: Images and stories, 15 countries from the MediaClimate network

There is of course a correlation between the number of stories connected to the Summit, and the number of pictures. Russia and Chile are among the countries with the lowest coverage, while Norway and Bangladesh were among those with the highest level of stories. There are, however, countries which have substantially more illustrations than stories (Denmark, Norway) and others who (presumably for lack of resources) have substantially less images than stories (Bangladesh, Brazil, Egypt, Indonesia and South Africa). The discrepancy between Australia's numbers cannot, however, be explained in the same manner. For Norway and Denmark the larger proportion of images than articles, one part of the explanation could be that they have the highest number of by-line pictures (Norway and Denmark both 20 per cent of the total). China, for example has no by-line pictures at all, the same holds for Bangladesh and South Africa.

The images were grouped in specific categories, such as person photo (most usually a talking head); illustrative graphs or maps; by-line pictures; urban or industrial symbols (such as factories often with black smoke emerging from large chimneys); nature and nature's symbols (for example glaciers, coral reefs, polar bears, other endangered species, etc.); general pictures from Copenhagen (city); security arrangements (police, etc.); protests elsewhere (demonstrations against climate change outside of Copenhagen); protest or demonstrations in Copenhagen (where a very large rally took place on 11th December); pictures from the Summit itself; and "Other" (those images who could not be grouped in any of the above categories).

The largest category of images is by far pictures (often small) of persons, i.e. often, but not only "talking heads" (Figure 3). This is, however, a broad category which may contain political leaders and celebrities – as well as singular victims of global climate change, although the latter are more often represented in groups where potential and actual victims are situated in their (threatened) natural environment. In addition it includes individuals both at the summit and elsewhere.

Although the coding will not reveal exactly how many images that are directly linked to the COP15, at least one fourth of them are¹, excluding the person pictures. Worth noting is that the Indonesian newspapers (especially elite *Kompas*, but also popular *Warta Kota*) carry by far the largest proportion of cartoons, having a strong tradition for this genre. They are followed by Australia and Russia, but the Russian numbers are very small. Popular *Bild Zeitung* has the largest proportion of portraits (photos of individuals) followed by elite *Sydney Morning Herald*. Popular *Prothom Alo* in Bangladesh has the largest proportion of pictures from nature; in fact the two Bangladeshi papers in general use images from nature more than most other nations' newspapers. China is following closely behind. From the overview we may conclude that the protests in Copenhagen, the largest one gathering approximately 100 000 participants, did not go unnoticed. But whether it was the numbers and the serious demands put forward, or the police vs. demonstrator drama that caught more of the attention, is hard to tell without a more detailed study.

1. The categories Copenhagen in general, security measures, protest and other summit pictures

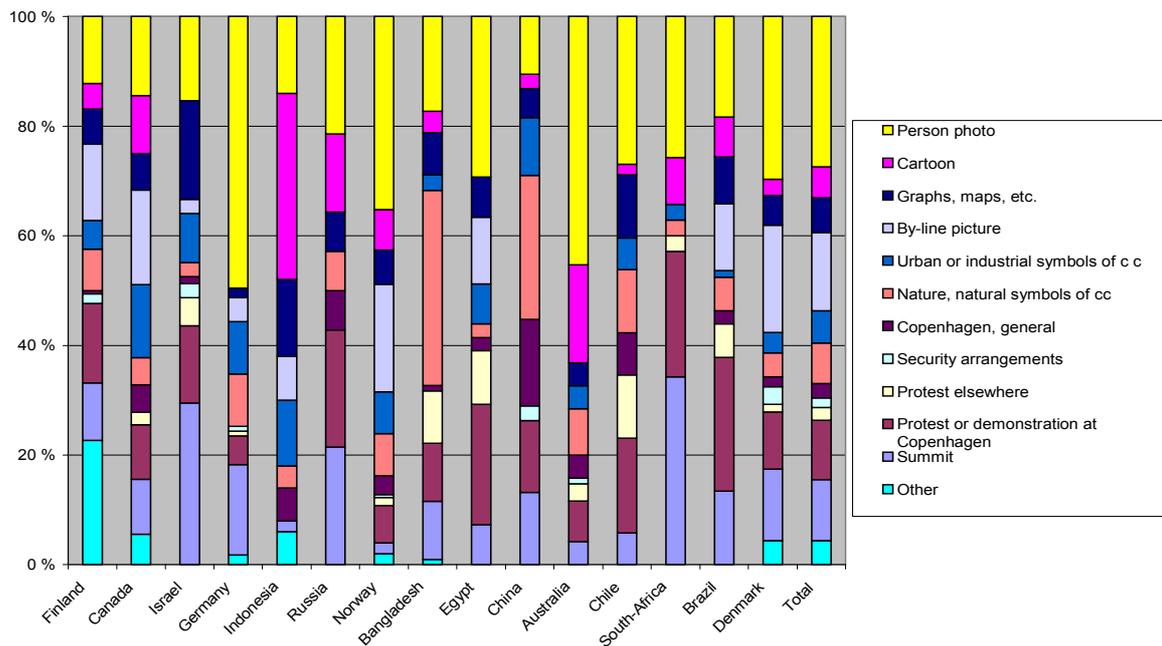


Figure 3: Categories of images, 15 countries, COP15¹

From a comparison between the various newspapers, we find that the elite ones seem to be slightly more concerned with explanatory graphs, maps etc., which may be due to their larger emphasis on science journalism and factual information. On the other hand, the popular ones have a higher proportion of photos of individuals. The latter also seem to be focusing more on degradation of nature, while the elite ones are more concerned with illustrations of urban problems related to climate change. This difference may have to do with the elite newspapers' audiences, largely being the urban middle classes. The smallest categories in total are "security arrangements" and "protests elsewhere". The first one is no surprise, it is much less visual than photos from the actual demonstrations themselves; the second one indicates that although a good proportion of coverage was done by home desk reporters, one to a large extent concentrated on the goings-on in Copenhagen when it came to illustrations.

Faces of opinion, faces of activism

As an illustration of some of the options available for visual selection, let us look at how different newspapers presented the global initiative of *The Guardian*, which entailed publishing of the same editorial urging political leaders to act during COP15². This researcher is aware that not all the newspapers mentioned below, belong to the study of the MediaClimate group. Still, for exemplifying purposes, they are relevant.

Some newspapers, notably Danish *Politiken*, chose to relate the publication of this editorial to human beings in a limited poll of sorts, the faces of the respondents placed on the front page; or to do as French *Libération*, print faces of the ones who had long warned of an occurring global crisis, i.e. some selected activists. The activists are represented here as good-natured people, although perhaps, as also in the Austrian *Standard*, a bit odd, by way of activist makeup and other visual effects (both Figure 4).

In *Libération*, the young activists are placed under the actual editorial text, and the focus is on "Notre generation face au jugement de l'histoire" – presenting "our generation" (possibly meaning the generation in power positions around the world) and the possible judgement of history if "we" do not act to stop the climate changes. A less gloomy headline is chosen by the Austrian newspaper, *Der Standard*: "Hope of luck at the climate summit" ("Hoffnung und Erfolg beim Klima-

1. Source: Maxwell Boykoff, Center for Science and Technology Policy Research, University of Colorado, and Maria Mansfield, Oxford University. http://sciencepolicy.colorado.edu/media_coverage/ Accessed 25.09.2012
 2. The Global Editorial is based on an initiative from UK newspaper *The Guardian*, who persuaded 56 newspapers in 45 countries to print the same text, in 20 different languages, at 7 December during the COP15, warning global leaders of dire consequences if they did not decide to act. The text was published on 7 Dec 2009 in all the joining newspapers. See <http://www.guardian.co.uk/commentisfree/2009/dec/06/copenhagen-editorial>

gipfel“). The accompanying image where a young man blows a whistle – and thus being associated with the courageous whistle blower tradition and the slogan “Climate Justice Now” carries a distinct appeal, and the text in the picture plays a role of anchoring the image to a wish for justice.



Figure 4: *Libération*, France, and *Der Standard*, Austria 7.12.2011

Urban-industrial degradation



Figure 5: *Toronto Star*, and *Joonang Daily* 7.12. 2009

A typical example of how the industrial-urban symbol is represented as a threat may be seen from the front page of *Toronto Star*. Besides the logo of the *Guardian* initiative, the symbol of the industrial chimney is the prominent illustration. The same

kind of illustration linked to the same event may be seen from South Korean *Joonang Daily* (both Figure 5). Thick, impenetrable smoke from a black chimney – projected here against a clear blue cloudless sky – functions as a powerful example of a dystopic future. Thus climate change is framed as a result of polluting industries that have not had the sense to curb or cleanse their emissions.

The anchoring of the picture in the Korean newspaper is very distinct, by the slogan “Stop, CO2” being included in the picture, as well as a quote from the editorial itself. The actual number of the industrial chimneys (nine) and the dark grey colour of the smoke (even more dominant than in the *Toronto Star* picture) strengthen the message by making the hazard occur as more massive. And the photograph of the emissions has a background which may be seen as a sundown, thus signalling that “we” are late in trying to stop this, well in line with the globally shared editorial text. Ironically, what seems to be an ad for an airline company is visible on the same page, against an image of bright sunshine and no smoke.

Activists in action

Three countries from the ‘Global South’ have the largest proportions of images from *protests or demonstrations in Copenhagen* (Brazil, 24%, South Africa 23%, Egypt 22%). Knowing that many protests were directed against the politics of leading countries in the ‘global North’, this may come as no surprise, but another reason may be that these photos probably were easily available from the large news agencies. When it comes to the category *protest elsewhere* Chile, Bangladesh and Egypt has the highest proportion (12, 10, and 10 % respectively); although the numbers are for two of these countries rather small.

A picture featuring demonstrations can be seen on the front page of *Business Day*, South Africa, beside the headline “It’s time to do the right thing” (Figure 6). Here, people play with a balloon-shaped globe and other balloons, and thus the image of protesters is one of peaceful demonstrators, while other later images frame the demonstrations more as clashes with the police, although this was a less significant part of the event.



Figure 6: *Business Day*, South Africa, and *Vecer*, Slovenia 7.12.2009

One newspaper that tried to combine several categories of images in their presentation of the global editorial was *Vecer* from Slovenia (Figure 6). To the left, we see the traditional, threatening industrial smoke from three outlets, and to the right a very obvious (but still here symbolic) human footprint, and on top right a picture of seemingly untouched nature. Read together this tells the story of human beings (“our” generation?) who by their ecological footprints threaten nature by way of modern-industrial technologies.

The symbol that most of the joining papers published on 7 December was the logo of the initiative itself, shaped like a globe, containing the names of all the 56 newspapers. But in general, various images of the Planet Earth were popular, as

can be seen as such different newspapers as *Süddeutsche Zeitung* from Germany, *Zero Hora*, Brazil and tabloid *Dagbladet* from Norway (Figure 7).



Figure 7: *Süddeutsche Zeitung*, Germany, *Dagbladet*, Norway and *Zero Hora*, Brazil, 7. Dec 2009

Concluding remarks

One cannot draw too many conclusions from the statistics and their exemplifications, nor from the front pages shown here, but the extent of visualization in a nation's newspapers may tell about resources, newspaper conventions, as well as priorities. And the differences between popular and elite newspapers demonstrating the higher priority of *individuals* by the popular papers, indicates the higher emphasis of individualization in the popular press. This is in line with the tabloid perspective and its higher focus on consumer journalism, in climate journalism focusing on what "you can do" or on celebrities engaging in the issue. The high proportion of person photos (excluding by-line pictures) also speaks to the fact that climate conferences are covered much as a political game between important leaders, who are available for interviews and comments to their respective national media (Eide, et.al. 2010).

3. South meets North: Transnational Summit Cartoons

For the qualitative part of the endeavour, a small group of cartoons from the "Global South" are analysed, all of them addressing in different ways the South-North divide, being an important part of the climate justice dimension. Among the strong arguments from the G77 group at the climate summits has been that the Global North must take a much larger part of the responsibility for the global climate change, due to their historical role as emitters. While it is today true that large nations such as India and China have large, threatening levels of climate gas emissions, their historical role is considerably less, and in addition their per capital emissions are also much smaller than the ones of many industrialized countries.

The editorial cartoons play a specific role in a newspaper as a "visual comment" of sorts. It may be linked to the editorial text as an illustration, but may also stand as an independent entity commenting on a news item. With Bounegru & Forceville we may talk of textual and extratextual context (2011: 211). The former, as I interpret it, will describe the cartoon's placement in the actual newspaper and its eventual relations to other textual elements, for example an editorial, while the latter has to do with the discursive situation it relates to, in this study, the COP15 and particular characteristics of the negotiations and the surrounding events. For a transnational endeavour, it is necessary to think of a variety of geopolitical contexts as well. A polar bear as metonym for a threatened species or as a metaphor for climate change will appeal more to readers situated close to the Arctic, while human beings wading through high waters may function as a metonym for larger groups of endangered people (in the Global South, but increasingly also in parts of Europe), as well as metaphors for the consequences of global warming. But let us simultaneously be aware, that "a representation seldom is a metaphor; rather, it contains elements that invite or force the viewer-reader to *construe* a metaphor" (ibid. 224).

Some of the cartoons published at the Copenhagen summit seemed to move steadily towards non-progress or abject failure of the conference, accompanied by articles illustrated by wordplay (from "Hopenhagen" to "Brokenhagen"). They would thus represent a gloomy present, or dystopic future scenarios.

Suffering Latin America

The phenomenon of dystopia may be illustrated by a cartoon from *La Tercera*, Chile (artist: Hernan Vidal, *Hervi*). From the textual context it seems to be independent of an individual article, but simultaneously related to the COP15 and the general coverage of the summit.



Figure 8: Hervi (Eduardo Hernán Vidal Martínez, *La Tercera* (4.12.2009) The Spanish text may be translated into "Just talk and no action". Reprinted courtesy of the artist.

The cartoon (cf. Figure 8) depicts the continent to which Chile belongs, as in distress (crying and/or sweating), and somewhere in the Northern Hemisphere (we can distinguish the name Copenhagen as a banner at the centre of the "talking bubbles") there seems to be loud talking (signified by the bold emphasis on CO₂) about carbon emissions. These signifiers, helped by actual knowledge, points to a first signified being that the Northern centre is the Copenhagen summit, and a further signified may be the well-established South vs North critique.

From this cartoon the COP15 may be read as having little positive impact on the realities on the ground in Latin America and the rest of the global South. The Southern discourse (from for example the G77) which was prevalent both at the Bali (COP13) and Copenhagen summits, directed the main blame towards the global North, headed by the U.S. as historically responsible for the global warming. Here it is represented by the Latin American continent (together with the rest of the Southern hemisphere) sweating (and thus alluding to global warming)¹, while the "Global North" may be seen as a fuming talk shop. One further interpretation may have to do with the open mouth of South America, displaying solid teeth – a signal that the country might 'bite back', thus fitting into a post-colonial, critical assessment of the North-South relations (see for example "The Empire writes back", Ashcroft et.al. 1989). Or yet another interpretation where the textual anchoring plays a role, may be that the open mouth, together with the particular representation of the Latin American gaze produced by the visible eye, may be that of annoyance, letting out a frustrated sigh directed towards the bad environmental practices of the COP15 – and / or of the Global North in general. The cartoon may thus be seen as an example of a "Blaming the Global North" framing in line with an appeal for "Climate Justice", indicating the historical responsibility of the large industrialized powers. The remoteness which is clearly underlined by this cartoon – from the negotiation centre in the North – to the suffering victim of the South – is clearly underlined by the distance between the two, but the cartoon is as clearly "seen from below", by the Summit part being drawn in the periphery of the picture.

'Africa' at the White Man's Table

Another variety is a more clear-cut political cartoon trying to visualize the summit 'essence' (Figure 9). It may be seen as an expression of a frequently occurring frame: *Northern double standards*. The cartoon is collected from elite newspaper

1. Of course, while COP15 went on in Copenhagen, Latin America had its midsummer

Kompas in Indonesia (see below). The signifier is a collection of human beings gathered around a table, most of them white suit-clad men. One skinny black woman is also present, dressed traditionally, carrying a crying baby strapped to her back. The white men are sitting on chairs, while the woman sits on a simple stool. The map of Africa is on the table, and most of the men have their hands visibly placed on the same table (ready-to-grab?) while the woman's hands rest in her lap.

The contrast in clothing and seating signifies a binary relation between privileged white elite men and a deprived black grass roots subject-victim, and connotes to colonial history and rule as well as to late modern unequal relationships. The map of Africa being put on the table may remind the reader of "the scramble for Africa", the period when European powers colonized most of the continent. This also indicates that without an extra-textual context, this cartoon could be connoted to several "South-North-discourses" that criticize exploitation and (eventually) neo-colonialism in general. As Roland Barthes iterates; "all images are polysemous, they imply, underlying their signifiers, a 'floating chain' of signifieds, the reader able to choose some and ignore others" (Barthes 1999 [1964]: 37). This cartoon is *anchored* by the surrounding text representing the 2009 climate summit, as seen by an Indonesian daily, and readers are thus helped to choose from a narrower spectrum. But how to interpret the visual difference manifested by the woman having a bigger plate than the suit-clad men? Is it to signify the immense needs of the African subcontinent faced with global climate negotiations, and the need for this continent to develop and thus have a larger chunk of the future climate adaptation funds? Is the fact that the plate is larger, due to the mother carrying a child – or does it symbolize that she ("being Africa") will have a much smaller amount of food than the joint amount of the white men's plates, just signifying further injustice? It may also refer to the frequently recurring food crises for example at the Horn of Africa. The woman and child being depicted as very skinny in contrast to the well-fed men points in the same direction.

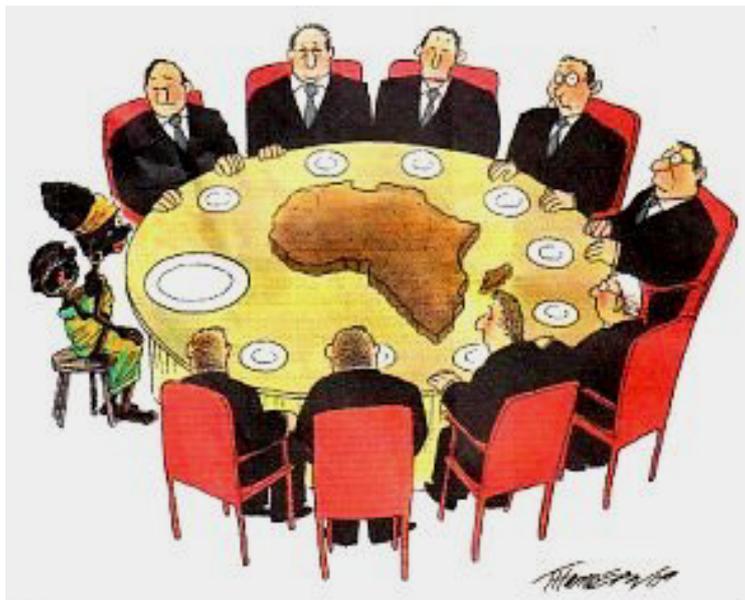


Figure 9: Thomdean, *Kompas* 9 December 2009. Reprinted courtesy of the artist.

An alternative is to see this cartoon as a critique of how business-like men in the North decide the fate of Africa as a whole, and Africa being represented with the woman-child dyad as a metonym for the continent's tolling people, since it has long been suggested and partly recognized that the majority of African farmers are women (Timberlake 1985). The way in which most of the men have their hands placed on the table, unlike the poor woman (with her baby crying) resting her hands on her lap, may symbolize that she has less access to the African resource pool than all the potential 'hands-on' exploiters.

The cartoon has no explicit textual element, except for the signature of the artist. If it had not been for the "anchoring" to the Climate Summit context, the cartoon could have been read as a more general critique of the marginalization of Africa. But read in a climate context, it symbolizes the lack of bargaining power of women in general, and the African women in particular, when it comes to decision making on climate change. Furthermore the vulnerability of poor women is highlighted as a main concern for people who negotiate climate change.

Yet another interpretation is possible: The cartoon is by way of its one representative, simplifying "Africa" into the traditional woman and the crying, supposedly malnourished child, i.e. framing Africa in the usual victim position. Africa's 54 nations represent a vast variety, from very modern cities to "underdeveloped" areas, and South Africa is one of the world's major polluters as well as a fast-growing economic power. But the simplification could also be ascribed to a framing of the

“brutal North”, represented by stereotyped Northern men at the table, seeing the victims, and still largely ignoring them and their needs.

Industrial, Neocolonial Bangladesh

Another critical South-North framing is found in the cartoon below from *Prothom Alo* (Figure 10), a popular Bengali language newspaper in Bangladesh. Again we see a victim-subject, this time a man, from the “Global South”. By way of textual anchoring, he is understood as belonging to Bangladesh. In the background industrial buildings are looming, emitting their black fumes, another example of the visual framing (industry-as-threat-to-environment) mentioned in the first part of this article. The same kind of fume is emerging from the mouth of the Bengali man. The difference between this cartoon and the one from *Kompas* is that there are more linguistic expressions in *Prothom Alo*'s cartoon. The cartoonist shows distinctly “who is who” in the picture by labels placed within the image: “Bangladesh” vs. “Industrial Developed Country”, the latter inscribed on the hat of one of three men, the former on the T-shirt of the brown bare-headed man, who looks scared and hungry (having polluting fume in his mouth instead of food). As in the case of the personalized Latin America above, he is perspiring. The three suit-clad men are complementing him for doing a “good job”, and the two faces visible are smiling. The third man’s face is invisible, only the hat and parts of the coat are showing. This may signify how exploitation from faraway owners is rendered untouchable for the workers at the polluting industries of the South. They are content with their profits, while the Bengali man/Bangladesh takes the burden of pollution – with a blown-up belly signifying malnourishment and the fume indicating that he is the one who has to endure the industrial pollution. On yet another, more abstract but climate justice-relevant level, this indicates a conflict regarding the way in which each country’s emissions should be counted. Should Bengali export-driven industry be counted mainly as the CO₂ emissions of Bangladesh, or as emissions assigned to the countries of owners and / or indeed consumers of cheap goods (textiles) from Bangladesh?



Figure 10: Sishir, printed in *Prothom Alo*, 11 Dec. 2009 Reprinted courtesy of the artist.

Thus, the latter image is an example of how the technique of language is developed to “fix the floating chain of signifieds in such a way as to counter the terror of uncertain signs; the linguistic message is one of these techniques.” (Barthes *ibid*). In a Barthesian sense, the textual elements do at least partly answer the question of “what is it?” (*ibid.*). But some of the interpretations above can only be made through contextualization with the placement of the cartoon linked to the COP15 coverage. On the other hand, we may see the cartoon itself as an attempt to contextualize the summit: the cartoonist demonstrating the more general North-South relations as they emerge in his country. As the previous cartoon, but unlike the first one from Chile, this can also be read as a more general post-colonial critique of neo-colonial, capitalist relations.

One part of the cartoon is easily ignored. Barely visible behind the largest Northern smiling face, there is a mostly hidden face of a man with a turban. His complexion seems somewhat fairer than the man named “Bangladesh”. This could be a symbolic figure signifying the “local overseer”, the white industrialist’s Bengali partner or representing neighbouring India, or indeed an accomplice of Western exploitation, and a part of the (post)colonial hierarchy, as an *elite subaltern* (Spivak 1988) or an ‘in-between’ co-opted figure – or even representing India as Bangladesh’s big brother.

The only quote – or ‘line’ in the cartoon is *Good job*, here depicted as an appraisal of the poor man’s labour from the rich men’s world. Being content with low industrial wage levels in the Asian part of the world, the industrial owners and bosses have all reasons to express their gratitude, is one reading of this part. Not only do they get rid of dirty pollution in their homeland, but simultaneously they profit from cheap labour in a country with less rigid regulations. And the almost invisible turban-clad overseer provides law and order, so that the procurements will be fixed on time.

The two Obamas

The last transnational cartoon of this sample (Figure 11) was printed in Norway, one of the richest countries in the Northern hemisphere, occurred in the then largest newspaper in the country, *Verdens Gang*, a popular tabloid¹. This happened three days ahead of the official opening of the COP15 and six days before President Obama was due in Oslo to receive his Nobel Peace Award. The 2010 decision of the Nobel committee harvested substantial critique, both because many thought it was too early for the newly elected president to be awarded, and due to his engagement in on-going wars in Afghanistan and Iraq. Shortly after the Nobel ceremony, Obama was due to visit Copenhagen, and his arrival was expected to generate some positive results from the negotiations. This did not happen. The cartoon shows two Obamas; one naked figure, taking the place and position of the “Little Mermaid”, one of the most popular tourist attractions in Copenhagen. Obama is depicted as not fully human, since he shares the characteristic fish-tail with the Mermaid. The other Obama is armed and dressed in military garb while hiding among the mountains of Afghanistan.

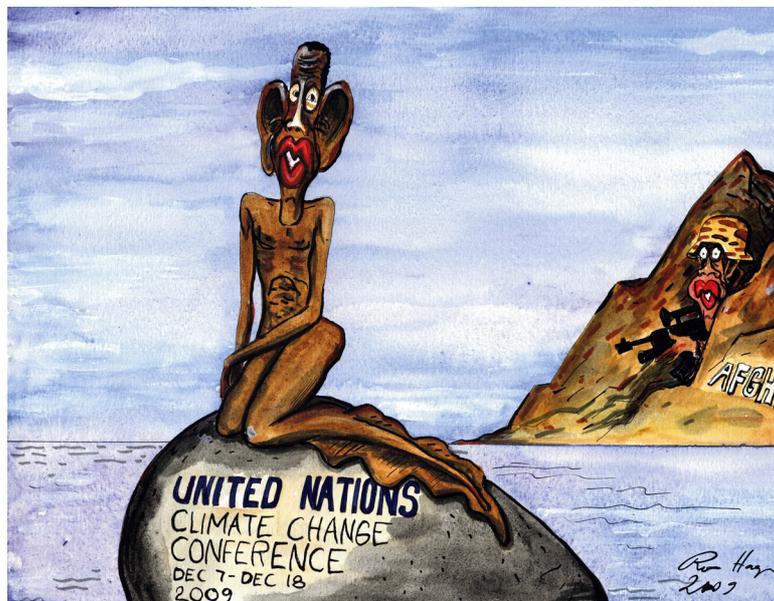


Figure 11: Roar Hagen, *VG* 4 December 2009. Reprinted courtesy of the artist

The textual elements make it impossible to miss the point – we may imagine that readers with general knowledge of Copenhagen and the war in Afghanistan would have been able to grasp the message even without them.

The cartoon frames president Obama – the Nobel laureate and potential ‘saviour’ of the COP15 – as a man with two conflicting selves. Read in the Nobel context, one is the undeserving warrior being awarded. Read in the COP15 context, the other is defenceless, naked, and as such with little to offer – not least due to the composition of the U.S. congress stopping any mitigation efforts of substance. Obama is depicted as skinny, almost like the African woman in the Indonesian cartoon, which adds to the cartoon’s signal of powerlessness. The facial expression is the same in both Obamas, and as in many other cartoons, the ears are substantially enlarged.

The positioning of the two figures may indicate a particular relation: the one has the other at shooting range, and the Obama-warrior is seemingly hunting the other one. This critical interpretation may be more unlikely in a newspaper which has been supportive of Norway’s participation in the US-led war in Afghanistan. But it may also just be seen as a way of framing Obama the warrior as the stronger element, while he does not carry much strength as a climate negotiator. One

1. In 2010, the subscription newspaper *Aftenposten* surpassed *VG* in circulation and became the largest circulated newspaper in Norway.

is tempted also to see the fish tail as a way in which Obama's radius is frozen – how would he be able to walk (or bring the world) ahead?

Later in the same newspaper, another image was printed of a polar bear, stranded on the Mermaid spot. Images of polar bears stranded on ice floes have become iconic of climate change (O'Neill & Nicholson-Cole 2009), maybe so frequently that the drawn and photographic images of this threatened species has lost some of its rhetorical strength. On the other hand, O'Neill and Nicholson-Cole characterize this iconization as part of an alarmist apocalyptic repertoire, implying that climate change is now beyond human control (see also Ereat & Segnit 2006). But the polar bears are more particular to the Northern discourses than they are to audiences in many of the countries in the Global South and thus less relevant for this study.

Concluding Remarks

The four cartoons analysed above may be grouped in two categories. The Indonesian and Bangladeshi ones need to be solidly placed in a climate summit context if they are to be read as comments to the summit negotiations, and one can imagine them as being comments to many other stories about North – South relations. They can thus also be seen as alluding to a wider conflict in the late-modern world; one of global justice (where climate justice is just one element), and global justice is being framed as depending primarily on a halt in the exploitative ways of the Northern (capitalist) actors.

The two other cartoons are more specifically linked to the summit, the Chilean one "speaking" on behalf of a continent, an exploited part of the world, while the Norwegian cartoon focuses on the world's most powerful politician, his limitations and dilemmas. It is well known that President Obama reacted with unease when he first learned about the award, and it is also well known that his Nobel laureate acceptance speech partly was a defence for the US war efforts in Afghanistan.¹ All four attack powers-that-be; the three generated in the Global South more as a systemic critique, while the Norwegian one raises critique on a more personal (Obama) and partly local, domesticated (critique of the Nobel award) level.

All cartoons can be read having Entman's definition of framing in mind, as "culling a few elements of perceived reality" and having a narrative that "highlights connections among them to promote a particular interpretation" (Entman 2007: 336). In three of the cartoons the particular interpretation is a "South blaming North" frame. What cannot fully be there, though, since we are treating images here, and not written stories, are Entman's four functions, including not only problem definition, causality and moral judgement (these elements may be read as present in three of the cartoons. Problem: The exploitative North; Causality: Some people in the North get rich / pollute at the cost of others; Moral judgement: The Global North is to blame); while the fourth; i.e. remedy promotion is not so easily traced.

Conclusion: Easy Communication?

While captions linked to photographic images may have a more direct role as *directing* the reader to what (s)he is supposed to see, the textual interplay in cartoons is more complicated, as the text is oftentimes more integrated in the image itself. The subtlety of the image may be undermined, though, by an all-too-obvious textual guidance given by the integrated wording, thus making for "lazier" information (Barthes, 1999: 37).

In the Bangladeshi and Indonesian examples, as partly in the Chilean one, the cartoonists seem to be playing with established anti-colonial stereotypes of the exploitative (and destructive) rich and the victim poor in the global South. In the Norwegian cartoons a more precise political critique is raised, closely linked to President Obama's two (partly conflicting) roles on the global scene.

While images in general may do little more than "capture the moment", focus on current catastrophes, or at best apply the "before and now"-narrative, editorial cartoons may constitute a critical counter-discourse to prevailing global orders or to national mismanagement of the environment.

Another aspect largely ignored in this article, is the gender roles communicated by climate change images. Participant observation at the Durban Climate Summit in December 2011 – particularly in the grand assembly hall and in the exhibition hall, revealed that while most of the negotiators were men, women were frequently pictured in exhibition material, as current or potential victims. While the women voices are by far outnumbered by the men in the general summit coverage monitored (Eide, Kunelius & Kumpy 2010), they are prominently present (although without a voice) in the material promoted by a variety of parties to the conference, at exhibition stands representing both nations, NGO's and transnational organizations.²

1. The full speech: http://www.msnbc.msn.com/id/34360743/ns/politics-white_house/t/full-text-obamas-nobel-peace-prize-speech/ Accessed 26 September 2012.
2. This paragraph is based on my own field work at the Durban Summit (2011), where I was able to be part of the delegation with access to the conference venues, as well as an observer of what went on outside the official conference.

Is the visualization of climate change largely communicating an "alarmist" view of climate change, rendering the audiences across the world in a state of fear and numbness? Further research is needed to explore this question, but as Risbey states, there is a need to differentiate between "alarmist" and "alarming", the latter term recognising "the possibility of large climate change and the means of preventing it" (Risbey 2007: 34); inviting human action as an urgent means of modifying climate change. In this perspective visualization may to some extent work, on one hand to challenge people in power when they do not initiate action or act in a counter-productive way; on the other to document the casualties of climate change for nature and humanity.

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