

# Climate Change and Media in Portugal: Preliminary Results

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## Introduction

Global climate change is one of the most pressing and challenging environmental problems of our time. It has been the focus of one of the most impressively coordinated international scientific efforts in recent memory. Moreover, the communication and sociological literature feature a growing variety of by-lines devoted to social research on climate change (Trumbo and Shanahan, 2000). The media has been responsible for both its dissemination and miscommunication, and has had a strong influence on public opinion and policy. This research examines media coverage on climate change in Portugal. Past studies (de Almeida *et al.*, 1998) have shown that the Portuguese public does not regard this environmental problem as one of the most serious. Could this be due to lack of media coverage? This is one of the questions this study tries to address.

## Why are the social sciences relevant?

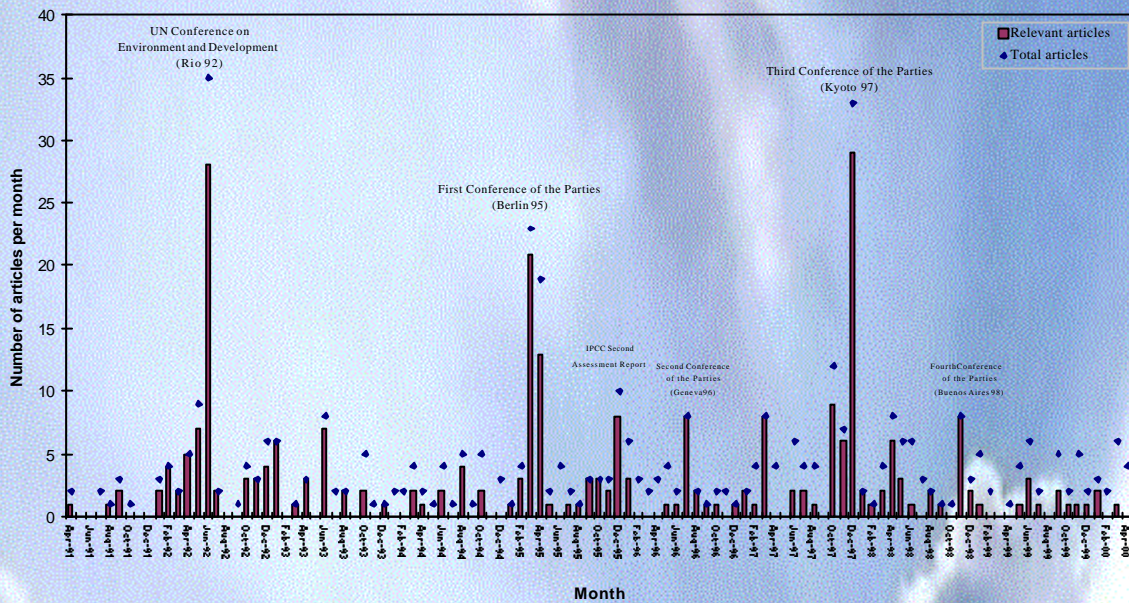
Knowledge about the physical nature of global climatic changes is not sufficient to move from comprehension to a solution of the problem. Climate policies as a form of managed climate change have to draw extensively on social science expertise (von Storch and Stehr, 1997). Furthermore, the social sciences remind us to question the assumptions and propositions that those who are already committed to a course of action may take for granted (Rayner and Malone, 1998). We believe the social sciences are particularly relevant in the case of climate change because there have been very few studies that have taken up this approach in Portugal. They can shed light on many unanswered questions. For instance, the perception of the Portuguese public as well as the media on this global environmental problem.

## Why study the media?

The media has become the most common source of scientific information for the general public. The media were the sole source of information on climate change for most New Zealanders (Bell, 1994), and in the United States the media were also identified as the primary sources of climate change knowledge (Wilson, 1995). Many studies have analysed media coverage of global climate change (e.g. Mazur, 1998; Nissani, 1999; Shanahan, 2000; Trumbo, 1996; Ungar, 1992; Ungar 1995), most of them in the United States. Less attention has been paid to other countries media coverage of climate change, with some exceptions (e.g. Bell, 1994; Brossard *et al.*, 2000).

## Methodology

This study was based on the Portuguese national newspaper "Público", between April 1991-2000. We chose this newspaper because it is similar to other studied newspapers (such as *The New York Times* and *Le Monde*), has regular articles on environmental issues, and has the biggest and most balanced national coverage. The words *climate change* (alterações climáticas) were searched within the SONAR database, which contains integral daily editions of this newspaper. There are 431 articles that contain *climate change* in nine years. Each text was analysed individually and classified according to four categories, as follows. The first category defines the scope of the news, whether it reports an international or national event. To the international news in which Portugal is mentioned and to the European news, a middle value was attributed. The second category defines the relevance of the article with respect to the theme, i.e., if *climate change* is only briefly mentioned or if it is the core issue of the article. The third category describes the article content, i.e., if it is more science or policy oriented. The fourth category classifies the article according to the information it gives about the negative impacts of climate change; if these negative impacts are mentioned they were classified as *alarmist*, otherwise as *neutral*. All the categories were considered nominal variables.



Above: Number of relevant and total articles in *Público* that contain the words "climate change" from April 1991 to April 2000. Important events are highlighted.

Right: Crosstabulation of the results of three time periods into scope of the news (i.e., national, European or international), neutral/alarming article versus relevance (irrelevant, some relevance and relevant) and content of the article (science, mixed or policy)

		1 <sup>st</sup> Period (April 1991-April 1994)							2 <sup>nd</sup> Period (April 1994-April 1997)							3 <sup>rd</sup> Period (April 1997-April 2000)						
		Relevance			Content				Relevance			Content				Relevance			Content			
		Irrelevant	Some relevance	Relevant	Science	Mixed	Policy	Total	Irrelevant	Some relevance	Relevant	Science	Mixed	Policy	Total	Irrelevant	Some relevance	Relevant	Science	Mixed	Policy	Total
National	Neutral	3	3	6	4	1	7	12	17	6	10	11	2	23	11	4	3	7	7	4	18	
	Alarming	1		1	1		1	2	3	2	2	4	3	7			6	3	1	2	6	
	Total	4	3	7	5	1	8	14	20	2	8	14	2	30	11	4	9	10	8	6	24	
European	Neutral	1	4	33	1	37	38	3	3	19	5	20	25	5	5	12	3	3	16	16	22	
	Alarming	1	2		3		3	1	2	8	2	6	3	11	1	6	2	3	2	7	7	
	Total	1	5	33	4	37	41	4	5	27	2	11	23	36	5	6	18	5	6	18	29	
International	Neutral	9	7	31	8	3	36	47	7	9	19	14	10	11	35	17	15	29	11	32	61	
	Alarming	2	2	15	10	6	3	19	3	3	41	17	28	4	47	1	12	35	16	17	48	
	Total	11	9	46	18	9	39	66	10	12	60	31	38	15	82	18	27	64	27	49	109	

## Discussion

The figure above appears to show that Portuguese media coverage on climate change follows a cycle. Downs (1972) explained the fluctuation of reporting of environmental issues with an "issue attention cycle" model, which is divided into five stages: pre-problem; alarmed discovery; euphoric enthusiasm; realising the cost; gradual decline of interest; and post-problem. Our records do not go as far back as to identify the "pre-problem" stage, but the "alarmed discovery" stage is very clear during the second period. Examples at the national level include: "Three years of drought? The misinterpretation of the Portuguese report, prepared by the Meteorological Institute for the next climate change meeting in Berlin, has generated confusion within the media. Several newspapers and radios reported, ..., that it was predicted that Portugal would have another three years of drought. Besides the questionable ability of predicting such situations for such time periods ...". The Portuguese media cycle for climate change cannot be fully explained by Downs framework, but the "realising the cost stage" appears to have just begun, with headlines such as "The future is not passing through Portugal" (that argued that Portugal could have to pay 400 billion escudos to reach its Kyoto commitments) becoming more frequent. The graph shows that the Portuguese media gives much importance to the international conferences on climate change. The three maximums coincide with: July 1992 - U.N. Conference on Environment and Development in Rio de Janeiro, where the U.N. Framework Convention on Climate Change (FCCC) was adopted; March/April 1995 - First Conference of the Parties to the FCCC in Berlin; December 1997 - Third Conference of the Parties to the FCCC in Kyoto, where the Kyoto Protocol was adopted.

It is interesting to look at the articles written at the time of the Kyoto Conference. Most of them describe the dynamics of the conference, in particular the clash between the European Union and the United States. However, there are glimpses of criticism towards the Portuguese position to increase greenhouse gas emissions within the EU internal burden sharing. Table 1 was divided into 3 periods that surround the maximum points of the figure. The first period is characterised by the prevalence of Rio-related articles (with a few aftermath highs due to its ratification), with more than half the articles being of an international scope and more than two thirds of the articles considered relevant. The second period was more alarmist and prone to confusion. Two thirds of the national articles were irrelevant, focusing mostly on Alqueva and Foz Coa projects. It was noticeable that the public started blaming climate change for certain negative outcomes, such as: "Picking medicinal plants, a traditional activity at Alqueva and Candeiros forest is in deep crisis. Abrupt climate change and the lack of criteria in harvesting are decreasing the number of species.". "The Cherry Producers Association also confirms the detrimental effect of climate change in all the fields of the region". The high number of mixed articles is due to the fact that climate change starts being mentioned in many different arenas, other than science and policy (e.g. Foz Coa). The third period is clearly centred on the Kyoto Conference. Most articles are policy-oriented, relevant and international. National articles remain, however, mostly irrelevant. These preliminary results have shown that Portuguese media focus on climate change is mostly centred on international climate events, with few national scientific or relevant articles. Further research is needed to compare these results with the US and French media to produce cross-national results; include other national newspapers and other media sources.

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