

Eco-Demos: Using Public Demonstrations to Influence and Manage Environmental Choices and Politics

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Abstract

This paper shows how members of NGOs, scientists, journalists, industrialists, political and administrative authorities use different forms of public demonstrations to influence and manage environmental choices and politics. The analysis is based on three case-studies on protests and on scientific demonstrations made public in France and in England. It focuses on demonstrations of the danger of nuclear waste, anti-road protests and demonstrations in the field of waste management. The paper highlights the roles played by these 'eco-demos' and reflects more generally on the social uses and politics of public demonstrations.

Keywords: Public demonstration, politics, protest, environment, waste management

Eco-Demos: Using Public Demonstrations to Influence and Manage Environmental Choices and Politics

Claude Rosental¹

In his famous book *Democracy in America*, Tocqueville claimed that “the world is not led by long and learned demonstrations”². If Tocqueville is right, what kinds of demonstrations, if any, are used to lead the world? Here, I would like to address this issue by looking more particularly at the ways various kinds of actors use different forms of public demonstrations to influence and manage environmental choices and politics – i.e. “eco-demos”.

The actors involved include members of NGOs, scientists, journalists, industrialists, political and administrative authorities. They use all kinds of demonstrative discourses or acts, including street protests and scientific demonstrations made public, in order to produce various forms of collective mobilizations.

My analysis will be based on three case-studies. The first case focuses on the demonstrations of the danger of nuclear waste in La Hague, France. The second one is based on anti-road protests that took place in England. The third one revolves around demonstrations in the field of waste management in France.

I will analyze these cases successively, and then reflect on the role of eco-demos and on the social uses and politics of public demonstrations.

1. Demonstrating the Danger of Nuclear Waste

My first case is based on a study that focuses on how the danger of nuclear waste processed by a specialized plant and stored in La Hague in France has been progressively

¹ © Copyright Claude Rosental, 2011, All Rights Reserved. Author’s address: Institut Marcel Mauss - CEMS, CNRS-EHESS, 190 Avenue de France 75013 Paris, France. Email: clauder.rosental@ehess.fr. I would like to thank Juliette Beziat for her comments on a previous version of this paper.

² Tocqueville, A. de (1981). *De la démocratie en Amérique*, Vol. II. Paris: Garnier-Flammarion, p. 55.

perceived as a reality by epidemiologists, doctors, journalists and the public³. This perception was the result of a series of key demonstrations I will analyze here.

For many years, the danger of nuclear waste near La Hague has remained quite invisible to the public. This situation has progressively changed, and several public demonstrations have contributed to this evolution. The following three examples will illustrate this.

In 1995, an independent laboratory measuring the levels of radioactivity in West of France announced during a press conference that a site in La Hague that was supposed to store short life radioactive waste kept in fact hundred kilograms of long term radioactive waste, namely plutonium. This piece of information was published by various newspapers. The manager of the plant responded to the denunciation, saying that plutonium was diluted across the entire site and that it was no news. He argued that this piece of information was already present in a report that was made available to the public.

This report weighted in fact 7 kilograms and required a strong motivation to be accessed. Besides, the piece of information could only be found in one of the report's numerous tables that were opaque to non-specialists. One of these tables showed an activity of 'Pu 39' of 211 914 Giga Becquerel on site. An expert translation had therefore to be made in order to notice that 100 kg of plutonium were in fact present on site.

It might certainly be argued that this piece of information was not hidden in some sense. But in order to make it visible to the public, expert investigations and a strong motivation to extract and present data in a relevant format were required. In order to demonstrate the danger of nuclear waste on the La Hague site to journalists and to the public, scientific results had to be framed in a specific way. Journalists could be instrumentalized to make the danger of nuclear waste visible as long as they were provided with relevant demonstrative input.

³ See Lemieux, C. (2008). « Rendre visibles les dangers du nucléaire. Une contribution à la sociologie de la mobilisation ». In B. Lahire & C. Rosental (Eds.), *La Cognition au prisme des sciences sociales*. Paris: Éditions des Archives Contemporaines, pp. 131-159.

That's what an epidemiologist named Jean-François Viel learned when he tried to demonstrate himself the risks of leukemia near the nuclear plant in La Hague. I am using his case as my second example. Pr. Viel had the intuition since the end of the 1980s that the risks of leukemia were particularly high near the La Hague plant. In 1990, he looked at mortality rates of the local population and didn't notice any impact of the plant on health. In 1994, he looked at the rates of sicknesses among the local population and noticed a slight correlation with the proximity of the plant in the available figures. The publication of his results was echoed by the press. They didn't have a major impact on the perception of the danger of the plant since Pr. Viel had drawn very careful conclusions.

Then Pr. Viel learned about a new method of statistical analysis at a conference. This method could be used to produce a map of epidemiological risks. When applied to his set of data, this method led him to produce a 3D diagram that spectacularly highlighted the risks of leukemia near the plant in La Hague. This diagram showed indeed the relationships between the risk of leukemia and residency. The risk reached a peak at the location of the La Hague plant.

Some statistical uncertainty was in fact attached to the diagram. The diagram alone didn't contain this piece of information. As a result, the exact level of danger displayed on the diagram was in fact particularly difficult to grasp for non specialists.

But Pr. Viel realized the usefulness of his diagram. It could indeed be used by journalists as a clear demonstration for the public of the danger of nuclear waste in La Hague, whereas many previous scientific studies couldn't be used for that purpose. Viel used this demonstrative device in an article that he published in a popular scientific journal. His article was echoed by various major newspapers in France. Viel's demonstration generated contradictory interpretations. But it was successful overall in generating major debates around the danger of nuclear waste in La Hague.

Indeed, although various members of the scientific community validated certain versions of Viel's study, some doctors contested its value. They based their argument on Viel's use of probabilistic models, and on the distinction between the correlations displayed on the diagram and the lack of causal models explaining how an excess of leukemia could be produced by the plant. Journalists of the local press who consulted these doctors were actually

reluctant to provide an echo to Viel's study. But the demonstrative device Viel used was so powerful, and as a result, the large echo he got from other newspapers was such, that the local press couldn't avoid giving a large publicity to the "event".

Viel learned from this experience that he should be more careful about the interpretative flexibility to which his claims could be subjected in the media. As a result, in a study he later published, he made sure his demonstration could be summarized in a more simple and straightforward way by non-specialists. The summary he proposed to the journalists evoked a clear relationship between cases of leukemia and the weekly consumption of local fishes and seafood near La Hague. This summary revealed to be a key factor in the success met by his demonstration in the media.

The power of demonstrative adequacy can be illustrated by a third example. In 1996, Greenpeace organized a press conference to present the results of a study of an independent laboratory. This study showed an abnormal rate of iodine 129 in the terrestrial moss near the La Hague plant. This demonstration of the danger of nuclear waste based on a simple statement was by itself a success in the media.

But Greenpeace has been accustomed to use other types of public demonstrations to show the danger of nuclear waste. They don't always consist in traditional protests. Not far from La Hague, Greenpeace mobilized divers to take seaweeds in Cherbourg in order to measure radioactivity levels. This activity attracted a lot of media coverage by TV channels.

Moves and images of dinghies and of divers are particularly suited for TV cameras and for photographs. Cooperation between journalists and demonstrators depends on the right choice of demonstrative formats. Journalists depend on demonstrative intelligence of third parties in order to be able to work - that is to deliver 'news'.

That's actually why journalists may in fact be tempted to organize or at least influence the production of public demonstrations. A member of Greenpeace reported for example that a journalist of a French newspaper proposed him to subsidize a public demonstration in the Casquets ocean trench – located not far from La Hague. Between 1950 and 1963, 17000 tons of radioactive wastes were indeed sent by the UK to the Casquets ocean trench near Cherbourg. The journalist suggested to the member of Greenpeace to send a dinghy and a

diver to the trench at the expense of the newspaper so that a picture could be taken and serve as the cover page of one issue of the newspaper. This offer was rejected by the member of Greenpeace. But it clearly illustrates the attention and value attached by journalists to relevant forms of public demonstrations.

2. Anti-Road Protests

Here is a second case that illustrates the ways public demonstrations are used to influence and manage environmental choices and politics. This case is based on the anti-road protests that took place in 1995 and 1996 against the building of the Newbury bypass in southern England. The story of these protests has been reported among others in a book written by Jim Hindle⁴.

The Newbury bypass was a nine mile road project involving the clearance of 360 acres of land, a third of it being composed of woodland. This project caused some of the largest anti-road protests in Europe. Around 7000 people demonstrated on site at some point, and approximately 1000 people got arrested.

Several types of demonstrations were used during the protests. During the second half of 1995, some protestors used the strategy of ‘tree sitting’: they started to build tree houses and live in them. They gathered in camps. Some hoped this would stop the clearance work that started during the summer of 1995. The main goal was to use human shields to stop the felling of trees by bulldozers.

A second strategy consisted in building a network of tunnels in order to stop builders driving heavy vehicles on site. The purpose was to dissuade drivers from moving, as they took the risk otherwise of provoking the collapse of tunnels and of burying protestors in them.

Both actions represented attempts to concretely freeze the progress of the clearance work. But at the same time, they contributed to make the opposition to the bypass visible to the builders, the authorities, the press and the public. Demonstrative strategies were actually

⁴ Hindle, J. (2008). *Nine Miles: Two Winters of Anti-Road Protest*. Brighton: Underhill Books. See also Barry, A. (2001). *Political Machines: Governing a Technological Society*. London: Athlone Press, pp. 175-196.

very much oriented towards the media, in order to rally the public to the environmental cause. Other strategies were actually used towards this latter goal.

One of them consisted in trying to get media reports on the eviction of camps and on the conflicts between protesters and the police or security guards. Private security firms were indeed mobilized in addition to police forces in the struggle against protesters. In particular, climbers were hired by a private firm to evict protesters from the trees.

Other demonstrative strategies included a march that gathered 5000 people, the organization by Friends of the Earth and the Green Party of a public meeting in Newbury, and specific ways of interacting with police authorities and security guards. Protestors were collectively privileging passivity, calm and humor to anger, in accordance with common practices of non-violent civil disobedience and advice of experienced members from the environmental organizations. For example, some protestors tickled climbers who were trying to evict them or dressed up as cows.

There was indeed a quantitatively important presence of media representatives on site, composed of newspapers and TV journalists, as well as freelance photographers. For the latter, images and films of public demonstrations had a commercial value. Being able to record events when they occurred and to send them immediately to the media could be very rewarding to them. Another tactic consisted in storing or capitalizing images until an event occurred, in order to be ready to sell images on the camps' everyday life when needed.

Hence, journalists and protesters were dependent of one another. Journalists needed the performance of public demonstrations in order to do their job if they were employees of newspapers or TV channels, or in order to make a living if they were working freelance and had thereby a strong capitalist relationship to such events. Protesters needed the attendance of journalists to their performances in order to deliver messages to the public and attempt to gain political battles, but also in order to limit the occurrence of incidents with security forces or exploit them via the media. Security forces tended indeed to act off cameras as much as possible, as violent acts against the protesters were unpopular.

Both media and protestors were also dependent of well-organized environmental organizations such as Friends of the Earth which delivered regular press releases and had

developed strong experience and skills in this field of activity. Press releases helped protestors advertize their actions while journalists were warned of present and future ‘events’ and fed with well-calibrated news and points of views. Symmetrically, environmental organizations benefited from fresh local public demonstrations that were well covered by the media. These helped them conduct their own battle that was conducted on a more global scale.

In this respect, it should be noted that the protests didn’t succeed in stopping the building of the bypass. Protesters were evicted in April 1996 and the bypass was achieved by the end of 1998. It is now part of the A34 highway. But the Newbury battle was not simply a local struggle. Some of the protesters and of the organizations that were mobilized in Newbury wanted to contribute more largely to increase the attention of the public, of political authorities and of building companies to environmental issues connected to road-building. Newbury was not a defeat for them in this respect. Losing the Newbury battle didn’t mean losing the war for them, quite the contrary. Losing this battle helped them weakening the enemies on the long run, if not winning the war. In the case of the Newbury bypass and of later road projects, these demonstrations were part of events that in fact led building companies to take local environmental parameters into account in the design and advertisement of road projects.

That’s why even after protesters were evicted, Friends of the Earth organized an artistic event in Newbury called “Art Bypass”. This type of event represented a way to capitalize on the Newbury struggle and continue the environmental fight against highway projects on a larger scale. A Press release by Friends of the Earth on July 25, 1996 described Art Bypass as⁵:

“A mile-long string of outdoor environmental art roadworks’ including: sculpture, performance and film [...] Art Bypass will take us on an interactive journey exploring the lows of a typical mile of motorway including road rage, the service station, the family row, the breakdown, an accident, a traffic jam as well as honouring the nine miles of ancient Southern English landscape lately cleared to make way for the controversial Newbury bypass [...] Because Art Bypass is highlighting the negative impacts of the car culture, we are asking

⁵ http://www.foe.co.uk/resource/press_releases/19960725182402.html

people to leave their cars at home and travel to the event by public transport. There will be no parking available at the site.”

This action is worth noticing as Friends of the Earth and many environmental organizations are used to rely mainly in their struggle on scientific demonstrations, if not protests. The La Hague case actually clearly illustrates this.

But in all cases, one of the main points about the use of public demonstrations is to attract public attention to certain phenomena and attempt to attach new meanings or new points of view to them. It is also to create a space for political action aside from political centers such as government offices or Parliaments. Science, art and bodies may all be involved for that purpose.

3. Public Demonstrations of Waste Management

The last case I will evoke here stems from a sociological study a set of colleagues and I conducted in the 1990's on the French system of waste management⁶. At the demand of the French Environment and Energy Management Agency (Ademe), we looked at the existing infrastructure and innovation projects in the field of waste management. We were interested in understanding the social dynamics that animated this field.

On this occasion, one could observe how various demonstrative strategies were used by different actors to promote their own methods or projects of waste management. Actors included industrialists managing refuse incinerators, managers of factories employing workers to selectively sort out household waste, representatives of associations collecting and recycling specific used goods such as ink cartridges, and executives of local or regional services in charge of collecting, recycling and valorizing various kinds of waste.

The demonstrations these actors produced consisted as much about showing as about omitting. They relied very much on locally solving and displacing environmental problems, and on concentrating or diluting pollution. The following examples will illustrate this point.

⁶ Barbier, R., Charvolin, F., Hennion, A., Jacq, F., de Laat, B., Larédo, P., Latour, B., Mallard, A., Méadel, C., Mustar, P., Rosental, C. (1994). *Il y a du neuf dans les poubelles... Caractérisation de onze opérations innovantes de gestion des déchets*. Paris: Report for the Ademe. Rosental, C. (1993). *Collecte et traitement des déchets dans la région grenobloise*, Paris: CSI, Ecole des Mines de Paris.

Promoting the building of new refuse incinerators and the renovation of older ones among local authorities and the public was very much based on adverting the use of air filters. These air filters were intended to clean the smokes of incinerators produced by the burning of household waste. Such filters were supposed to limit air pollution, especially for the neighborhood of the incinerator. It might seem pollution was about to vanish this way.

But what didn't appear so clearly in such demonstrations was that using air filters meant producing industrial class 2 waste. Used air filters concentrated pollution and had to be sent to industrial dumps especially designed for toxic waste. Instead of diluting pollution in the air, the devices led in fact to concentrate pollution in dumps, with the risk that this pollution could be later on diluted, if the dump didn't play its assigned role in an efficient way. Pollution was just displaced this way.

Another technical solution that was advertized in order to fight air pollution consisted of washing the smokes of the incinerators with water. But the matching demonstrations didn't highlight the fact that this process led to water pollution. This process led to diluted water pollution if the water used to wash the smokes was released without further treatment, or to concentrated pollution again if water filters were used and had to be sent eventually to industrial dumps. Pollution was again displaced, although this displacement wasn't given much visibility.

Demonstrating the advantages of selectively sorting out and recycling household waste to the public and to local authorities relied on similar dynamics. These demonstrations were produced by local or regional services in charge of waste management, in order to convince and mobilize the population to sort out its waste. Or they were produced by industrialists who proposed to collect household waste and selectively sort them out in factories, generally thanks to public subsidies. The intended goal was to recycle paper, plastic and glass, among other materials.

What these demonstrations didn't generally underline is that used paper was sometimes sent abroad for recycling purposes. Moreover, used paper was sometimes burnt in incinerators eventually. Indeed, it was not always worth recycling used paper for industrialists. It all depended on the price of this raw material on the financial market, and on

the amount of public subsidies that was fluctuating depending on local and national policies. It also depended on the evolving cost of the recycling process. The efforts and financial resources of citizens who had sorted their used paper and subsidized the recycling processes via their taxes could be ruined depending on these parameters. Besides, the industrial processes mobilized to recycle used paper were not ecologically neutral. The impact on health of the use of recycled paper was not advertized either.

The same dynamics applied to plastic materials. By contrast, glass could be easily recycled. Recycling glass appeared generally worth the efforts from a global environmental point of view. But the fact that the recycling process was largely profitable and that private companies versus the public sector were often in charge of it wasn't clearly advertized. In fact, private companies tended to benefit from the profits, at the expense of citizens who sorted out their waste for free.

Also, demonstrations of the advantages of the selective sorting out of waste didn't highlight the major difficulties met by people in the implementation of sorting instructions. Often, oral and written instructions don't suffice to obtain appropriate behavior. Categories such as "paper" and "plastic", and more subtle subcategories used for recycling purposes are subject to interpretative flexibility within households. As a result, supposedly selected waste collected among the population can be so heterogeneous that it can't be used for recycling purposes. Then this waste has to be burnt eventually in incinerators without much publicity.

Such examples illustrate how public demonstrations are used to both display and omit environmental issues and to influence the local solving and displacement of environmental problems. On the basis of the cases I have presented, and on the results of previous studies I have conducted on the roles of public demonstrations in different social spaces, I would like now to reflect more largely on the social uses and politics of public demonstrations.

4. Reflecting on the Social Uses and Politics of Public Demonstrations

The cases I have just presented show how various forms of public demonstrations such as scientific demonstrations made public or collective protests may be used to influence and manage environmental choices and politics. These demonstrations may involve science, as

much as art and bodies. They may be based on showing as much as on omitting. They may be used to attract attention to certain phenomena and attach various meanings to them.

The cases I took for object also unveil how public demonstrations may require, in order to efficient, a certain cooperation between the media and demonstrators, based on the appropriate choice of demonstrative formats – what I called ‘demonstrative intelligence’. Public demonstrations may be subject to various forms of capitalization on different scales. They may be used by demonstrators for their own goals, but also by third parties for other goals. In all cases, one of the distinctive features of public demonstrations lies in the fact that they can be used to create spaces for political action aside from political centers. In fact, public demonstrations allow various forms of participation, intervention and mobilization of actors who would be more distant from the management of public affairs otherwise.

Hence, if “the world is not led by long and learned demonstrations” as Tocqueville claims, various forms of public demonstrations may nevertheless be used to lead it, and in particular to influence and manage environmental choices and politics. It seems in fact that demo-cracies have developed on a large scale.

I use the term ‘demo-cracies’ in order to underline the fact that public demonstrations are widely used to manage public affairs in different units of social life. This reality may be grasped for example by considering the impact of the Power point demonstration Collin Powell gave at the United Nations on February 5, 2003, to put the United States at war against Iraq. This reality may also be grasped by looking at the iconic dimension of Bill Gates’ famous demos.

Due to the wide uses of public demonstrations of science and technology, a large demo-cracy may have in fact developed in the industrial world. Demonstrations of science and technology may be no less, or even more, important for collective mobilizations than mass media themselves and street protests of social movements, especially as they can be widely conveyed by electronic networks. They may be important sources of contests and deliberation in the contemporary period. In particular, antagonist demonstrations of science and technology may play a large role in the competition for resources and in the political game. Further investigations would be certainly needed in order to support these claims and to explore the demo-cratic landscape.

In the past years, I have started to explore this landscape while observing actors of the Silicon Valley and of the European Commission at work⁷. On the basis of my studies, it already seems that demo-cracy isn't identical to an ideal democracy, and that its existence remains relatively unnoticed. Demo-cracy appears to benefit partly to the crowds, if only in allowing them some specific forms of access to the closed world of science *via* the media. But it seems to give power not so much to the ancient *demos* or people - like in an ideal democracy, by definition - than to the skillful demonstrators and to the institutions that rely on them.

European demo-cracy in particular may appear relatively invisible to most citizens. It is nevertheless very effective in giving significant power to efficient demos, talented demonstrators and the organizations that employ them. As I have shown it in previous works, EC officials have indeed used public demonstrations as tools to regulate European public affairs in recent years⁸. They have mobilized public demonstrations as methods and tactics to define and implement European Research and Development (R&D) policies, and especially as tools to make scientific and technological achievements visible to economic and political authorities and to the public, as well as tools to impact on European R&D arbitrations. In other words, EC officials have placed public demonstrations at the heart of the art and science of running European affairs and of making and enacting collective decisions in the field of science and technology.

The fact that "demonstration activities" are at the heart of the chapter devoted to science and technology in the recent European constitution project highlights this reality.

⁷ Rosental, C. (2002). De la démo-cratie en Amérique. Formes actuelles de la démonstration en intelligence artificielle. *Actes de la recherche en sciences sociales*, 141-142, pp. 110-120. Rosental, C. (2004). Fuzzyfying the World. Social Practices of Showing the Properties of Fuzzy Logic. In M. N. Wise (Ed.), *Growing Explanations: Historical Perspectives on Recent Science*. Durham: Duke University Press, pp. 159-178. Rosental, C. (2005). Making Science and Technology Results Public. A Sociology of Demos. In B. Latour & P. Weibel (Eds.), *Making Things Public. Atmospheres of Democracy*. Cambridge, MA: MIT Press, pp. 346-349. Rosental, C. (2007). *Les capitalistes de la science. Enquête sur les démonstrateurs de la Silicon Valley et de la NASA*. Paris: CNRS Editions. Rosental, C. (2009). Anthropologie de la démonstration. *Revue d'Anthropologie des Connaissances*, 3, pp. 233-252. Rosental, C. (2011). De la démo-cratie. Mener l'Europe à l'aide de démonstrations publiques. In S. Houdart & O. Thiery (Eds.), *Humains, non-humains. Comment repeupler les sciences sociales*. Paris: La découverte, pp. 121-131.

⁸ See in particular Rosental (2011).

Demonstrations have become a constitutional topic for Europe. Indeed, the European constitution project indicates that⁹:

“The Union shall carry out the following activities, complementing the activities carried out in the Member States: (a) implementation of research, technological development and demonstration programmes, by promoting cooperation with and between undertakings, research centres and universities; (b) promotion of cooperation in the field of the Union's research, technological development and demonstration with third countries and international organisations; (c) dissemination and optimisation of the results of activities in the Union's research, technological development and demonstration...”

This statement illustrates how an elaborate know-how in managing European R&D programs thanks to public demonstrations has contributed to shape the details of a political project at a European level. It helps understanding how European politics and policies of science and technology have been defined in recent years in management terms and how demonstration activities has become part of the toolbox of European public management.

Before concluding, I should add that various observations I have made in the past years suggest that public demonstrations shouldn't be reduced to tools allowing certain people to manipulate or mystify the masses. Indeed, public demonstrations may fail to produce intended effects. They may be subject to variable interpretations, be attributed different meanings, and produce mitigated and heterogeneous reactions. One given demonstration may even be judged to have “failed” or “succeeded” by different members of the same audience. Audiences are not necessarily composed of credulous victims or enthusiastic idiots: spectators may remain skeptic and keep their critical sense. Also, counter-demonstrations may be produced by third parties to counter-balance any demonstration.

There might be some asymmetry between the ignorance of the audience and the expertise of demonstrators, or between the possible weakness of the audience - linked in particular to the limited time devoted to the attendance or assessment of demonstrations - and the possible strength of the demonstrators - linked among other things to their long preparation of demonstrations, offering assets to demonstrators to guide and anticipate

⁹ See Treaty Establishing a Constitution for Europe (2004), *Official Journal of the European Union* 47, 16 December, pp. 109-110.

reactions, and manage their interaction with the audience. But very diverse configurations may be observed in this regard.

Hence, and to conclude, I would like to insist on the fact that the uses of public demonstrations shouldn't be condemned altogether. It seems more important to be aware of their large anthropological stakes. We may in fact compare public demonstrations to Marcel Mauss' total social facts, and be sensitive to the ways they impact on the transactions, material and symbolic goods, and fate of groups¹⁰. Preparing and performing public demonstrations may mobilize or generate as many exchanges, resources, tensions, (re)distributions of alliances and intense moments of social life as does for example the preparation and celebration of another grand anthropological event in many societies called wedding.

¹⁰ Mauss, M. (1954). *The Gift: Forms and Functions of Exchange in Archaic Societies*. Translated by I. Cunnison. Glencoe (Ill): The Free Press.