# 4 The social construction of value

A comparative SKAD analysis of public discourses on waste in France and Germany

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#### Introduction

In December 1971, a letter to the German weekly DER SPIEGEL stated that as in former times when people had to be taught about basic ethical rules and personal hygiene, the moment had arrived when they had to be educated in the control of their waste-production (DER SPIEGEL, No. 51, 13.12.1971). This somehow signalled the beginning of a long struggle concerning ecological citizenship, responsible consumption, ecological modernisation, waste reduction, separation, recycling and waste-related policies, which has continued ever since. Right now, we are still producing rubbish, litter, garbage, waste, trash and detritus not only in household consumption, but in resource extraction and the production and distribution of goods. And don't forget journalistic and academic processes of waste production, where the leitmotifs "bring new facts" and "innovate" serve to devalue yesterday's truths. It cannot be avoided: all that is solid thereby melts into the air, or ends up in a disposal. The social destruction of values is a well-established historical process inherent to the core dynamics of (plural, entangled) modern societies. It might be considered the hidden driver of capitalist economics, cultural enlightenment, acceleration and "progress". The discursive construction of value in waste policies and ecological discourses in general is one counterattack to this storm which blows us into the future (to paraphrase Walter Benjamin's interpretation of Paul Klee's "Angel of history", which, to be honest, had a much more terrible background and reference):

A Klee painting named "Angelus Novus" shows an angel looking as though he is about to move away from something he is fixedly contemplating. His eyes are staring, his mouth is open, his wings are spread. This is how one pictures the angel of history. His face is turned toward the past. Where we perceive a chain of events, he sees one single catastrophe which keeps piling wreckage upon wreckage and hurls it in front of his feet. The angel would like to stay, awaken the dead, and make whole what has been smashed. But a storm is blowing

from Paradise; it has got caught in his wings with such violence that the angel can no longer close them. This storm irresistibly propels him into the future to which his back is turned, while the pile of debris before him grows skyward. This storm is what we call progress.

(Benjamin, [1940] 1969: 257–258)

The present contribution resumes a sociology of knowledge approach to discourse (SKAD) study of public debates and policies on household waste in France and Germany conducted by the author (Keller, [1998] 2009). During a three-year period, it dealt with twenty-five years of public debate on disciplining household waste production. As such, that research can be considered the starting point of what is now established as the sociology of knowledge approach to discourse (e.g. Keller, 2011, 2012, 2019).

The study of waste discourses and policies originally started with a frame analytical approach informed by social movement research, especially Gamson and Modigliani (1989) and related texts and arguments, but for several reasons (see Ulrich and Keller, 2014) I soon moved away from that towards an interpretive approach based on the sociology of knowledge and Michel Foucault (Keller, 2018). The research covered public discourses about waste problems, "good" waste policies, problems of waste management technology, the value of goods and nature, the scarcity of raw materials and the dynamics of consumer society and solutions to linked problems in France and Germany. Its primary concern was the interpretive schemes and meaning-making processes of involved speakers and in institutional structures, that is orders of discourse, apparent in those countries between 1970 and 1995 (Keller, [1998] 2009). As do the other examples presented in this book, it represents one way of making use of SKAD. It is not the only, or necessarily the best way of doing it. Other research interests and questions need designs of their own, proceedings adapted to their proper purpose. That research was part of a larger research network interested in ecological communication and discourses in Germany and several European countries (France, Ireland, Italy and Spain). As SKAD theory and methodology are presented in some detail in earlier chapters in this book, the following text focuses on the concrete way of doing a SKAD analysis: (1) starting with questions, (2) setting the scene, (3) collecting data, (4) analysing the data and (5) telling a story.

# Starting with questions

As has been explained in the initial chapters of this book, SKAD establishes a research programme which is interested in the social relations of knowledge and the social politics of knowledge as they are manifest in the discursive construction, transformation, stabilisation and destruction of realities. It therefore supplies research with a theory of its object

(discourses) and the conditions for existence of such an object. It further provides a reflexive methodology of interpretation which accounts for its basic condition of producing a discourse about discourses. And it offers various methods or strategies for sampling and analysing data and telling a story about the object of inquiry (Becker and Keller, 2016). Therefore the core questions of a SKAD project are directed towards the specific object of inquiry: what kind of discursive processes and spheres can be observed? Who is speaking and who is not? What kinds of argument and legitimation are in play? What kinds of phenomena are established through discursive meaning making? How do they relate to each other? How do they emerge, stabilise and change over time? Are there competing problematisations? What is the role of actors and events in such processes of discursive structuration? What resources are in play? What effects can be observed? And so on.

These are very general questions, which can be addressed to rather different issues. But concrete research needs some more concrete questions, too, in order to choose and work upon its subject. In the present case, my research interests were based on several elements:

- the just-mentioned research context of studying ecological communication in European countries, which is based on the observation of sharply contrasting environmental protest movements and their impacts in different European countries;
- my language skills in French coupled with my interest in French sociology and "French ways of life" led me to argue against social science research which assumed, at the time given, that "different national mentalities" in both countries a "Cartesian mentality" in France and a "Romantic spirit" in Germany accounted for the differences;
- an interest in the social processes that create, evaluate and destroy the value of ideas, men, practices, objects and "nature", combined with a certain scepticism towards public, state and organisational rituals of ecological performance;
- an interest in the sociological debates on "Risk Society" (Beck, 1992) and "reflexive modernization" (Beck, Giddens and Lash, 1994) and their empirical evidence.

The assumption that environmental debates and ecological conflicts are the ways in which ecological issues are performed as and through discourses does not ignore the role of "real problems" or "real facts and events". Instead it fully acknowledges that the reality of a problem is constituted via discursive meaning making and how such meaning making reacts to the worldly given, which by itself can be considered the effect of previous discursive meaning making, human action and non-human involvements, institutions and materiality. Such an approach rejects the pure influence of "the given" factual problems, political systems, national

and cultural traditions as explanatory factors for differences in ecological mobilisation and communication. It accordingly enquires into the discursive performances which establish and sometimes transform such "givens" through time, space and social settings.

The basic research design was developed in late 1992 and early 1993. Following on from the events of the 1980s, there was at that time considerable evidence of the rather different ways that ecological concerns and risk issues were resonating in France and Germany. Germany was experiencing an extremely high degree of environmental-movement mobilisation against the risks of nuclear energy usage, dying forests, air pollution and whatever. France, in contrast, had seen far less of this kind of mobilisation, except for some intensive protests against nuclear energy plants in the 1970s. I spent the first half of 1986 in France, where I learned, via the French press and government releases after the Chernobyl catastrophe, that the Germans once again had been taken over by their irrational "Angst" and that, no matter what had happened, there were no effects of radiation in France (decades later, the French government had to acknowledge that it simply lied about that).

If we do not take for granted that such differences are due to some "factual evidence", then the collective definition of the situation, that is, the impact of discourses, comes into play. A comparative study of those two countries as sites or arenas for discursive production must not be regarded as a return to methodological nationalism. On the contrary, there are still good arguments for such comparative work. First, even taking into account a wider European Union framework for environmental regulation, both countries have been (and still are) the political sites for decision making about waste policies concerning their territory and resource management (incoming and outgoing flows and the regulation of pollution and of technical devices in waste treatment and so forth). Second, according to Foucault, we can understand a state or a nation as a permanent performative outcome of discursive meaning making, institutionalised practices and their integration and transformation via contestation, conflict, or adaptation to new situations.

Concerning waste in both countries, especially household waste, there was a common point of departure, without which such a study could not have been developed: these countries are not only neighbours, they are similar in terms of wealth, population, industrial structures and consumption schemes. In both France and Germany, waste had become an issue, a problem to deal with, simply as a result of the fact of growing wealth and changing patterns of consumption after World War II, and more precisely, since the early 1960s, with the arrival of supermarkets, plastics, one-way usage packaging and discussions about planned obsolescence. In both countries since the mid-sixties, local administrations have had to seek new and larger sites of waste disposal. Both countries since the 1970s have enacted several federal laws and other regulations in order to "govern"

waste making. When my research started in 1993, household waste was, as a result of then-current law making, a hot topic on the public and political agendas in France and in Germany. At that time the research addressed the following core questions:

- Are there any differences between public discourses and policies on household waste issues? How are waste problems constructed in discursive processes, with what resources and what effects and by which actors and responsibilities? Which interpretive schemes appear and how do they perform the discursive construction of household waste in order to present it as a matter of urgency that must be dealt with, or as simply another example of "fake news"?
- How can any differences (or similarities) be accounted for?
- How can such results be interpreted against the theories of reflexive modernisation and risk society, or other current theoretical debates in sociology?

### Setting the scene

In preparing and doing the research, I read a considerable amount of academic literature on waste, capitalism, consumption and the social meaning of things (objects), such as Thompson's theory of rubbish published in 1979 (Thompson, 2017). Moreover, I read about political institutions, structures and processes, mass media arenas, mass media communication, public relations and environmental issues in the countries I was interested in. I added technological instruction books to that, and even fiction, for there is lot of literary fiction dealing with waste. I went to sites of waste performances, such as expositions, conferences and industrial fairs, and I talked to a variety of rather different experts. I was nosing around in both countries to get a feeling for my object of inquiry. Some basic insights came out of this investigation, which constitute the early chapters of the book, preparing the analysis as well as its later presentation: first, modern affluent societies with capitalist market economies are based on a permanent drive, or staging, to innovate and to replace, both in the realm of ideas and in the realm of objects. The life cycle and replacement routines of nowadays smartphone production are a case in point. They are built up on mountains of waste, and their fuel is simply this: to transform objects into waste in order to replace them with new ones. Throughout history, societies of economic scarcity, resulting from less developed technologies and modes of production or from war, have developed sophisticated practices of waste separation and recycling, mostly by man- and woman-power. Modern capitalist societies use cheap resources and a cheap workforce. Therefore, as long as resources are cheap, recycling lacks a given inherent economic driver. Out of sight, out of mind, is the corresponding social regime of practices. Buying new is cheaper and more convenient.

Waste discourses are attempts to change the definition of this situation, to construct values to oppose the social destruction of values. Second, I learned from media and communication studies about the production of news in the mass media, especially about gate keeping, news values and selection, public agenda setting and public relations. If discourse analysts are going to deal with mass media texts, digital data and audio-visuals, then they should know about the production of such data. And they can "learn" from German media studies in the 1980s and early 1990s, that conservative analysts claimed there was too much reporting on environmental damage in Germany, given that we had such a high standard of living, whilst left-wing inspired studies argued that there was too little, as the real situation was much worse than the "ideologically biased" mass media systems reported. A third element concerned the development of modern technical infrastructures of waste treatment in both countries. Modern city governing of waste collection and transportation in France and Germany was established basically in the 1850s. It implied a destruction of the existing practices of recycling and the social groups making their living from it. New knowledge concerning hygiene, city planning and increasing city populations led to new classifications, norms of behaviour and technical standards in waste treatment. As new incineration technologies developed and were promoted from the late nineteenth century on, profound conflicts developed between "burners", "recyclers" and "friends of disposal sites". After a few failed trials of mostly war-scarcity-driven recycling economies, on-site waste disposal and (to a lesser degree) incineration became the dominant technologies in use in the first half of the twentieth century. Their domination continued after World War II, with different economic structures and technical coverage in Germany and France (middle-sized business in the former, a few big companies in the latter). During the golden 1960s, economic growth, increasing wealth in French and German households and new economic strategies for selling goods led to the above-mentioned problems of waste disposal in local communities - here and there, they had to look for new sites, and they confronted citizens complaining about negative side effects: rats, smells, water pollution, aesthetics. Following that, various laws or minor legislation passed in both countries' national assemblies; new devices or dispositifs (to use a Foucauldian and SKAD term) of waste treatment were developed and a new figure and role model for current governmentality appeared prominently on the stage: the ecological citizen. And certainly, there was now a new villain too: the one who ignores his duties as fellow citizen. Interestingly, as my research showed, such figures entered the drama of waste discipline only after the failure of more structural regulation and agreement on national levels.

### Collecting data

As already mentioned above, the empirical study was informed by various strategies to get a "feeling" for the issues at stake. This implied participation and observation in different French and German sites where waste technology presentation occurred, as well as in public-political conferences and artistic performances. But it was not designed as ethnography. Instead, empirical data collected and used for analysis were basically texts - all kind of texts: leaflets, 1,000-page long scientific reports, brochures, transcriptions of political debates in the national assemblies and working groups, articles in general newspapers and weekly periodicals, special interest media produced by NGO-activists or business organisations, press releases, non-fiction books and expert interviews. Because in those days I worked in a mainly pre-digital world, I had to do archive work in libraries and darkened storage rooms in strange buildings. Such archive work should not be abandoned – there is a tendency nowadays to work just on digital data which is easily at hand and to avoid other strategies of data collection. I did some brainstorming about the arena of concern and its principal actors (most of whom you would know from public discourses and careful information extraction), mapped it and wrote to them in order to get their statements. I asked different kinds of experts for interviews - from environmental movement organisations to academic economists, business organisations and high state officials. I conducted fifteen interviews in France and four in Germany. I was able to make additional use of eight interviews in France and eleven in Germany which I obtained from colleagues working on similar topics. I learned from all that about what was happening in my field of concern, and whose contributions I needed to consider. And I asked press services for help, for example the French ministry of environmental affairs and the French state waste information system run by an organisation named ADEME. Regarding the German case, I specifically asked the press and archive services of the German Federal Government for help. Such organisations hold comprehensive press archives on political issues and were able to organise press samples for scientific or other purposes. I gave them key words for query (such as "household waste", "waste", "recycling", "deposit", "incineration", "waste & regulation") and they provided me with documents. Using such different providers, I was able to cross-check by comparing material they provided me with. And I spent weeks and weeks in public libraries, running through the weekly DER SPIEGEL from early 1950s to today, in order not to miss some important event. Data collection was informed by several concerns:

 I was interested in the national levels of household waste conflicts (which in fact only cover a minor amount of today's waste production) and corresponding political debates, not in local Not In My Backyard

- issues or other short news coverage, nor in cultural essays (such as "waste is a metaphor for the universe") and summer time page fillers (like the regularly recurring news about "poor Egyptian children making their living on Cairo's disposal sites").
- I decided to concentrate on a time span from the late 1960s (in fact starting with 1970) to 1995. The former corresponded to the emergence of waste as a "national policy issue" in both countries resulting from economic growth and changing patterns of production, distribution and consumption. This implied that I should start at a particular moment in the post-war history of waste treatment, with already existing infrastructures, technologies, administrative responsibilities and business structures. In both countries, national regulation efforts started around 1969/1970 and accordingly entered mass media agendas. 1995 was a crucial year for a definite settlement of waste policies at least it was presented as *definitive* by both governments who had just passed their newest waste and recycling legislations, and promised that now at last, all waste problems had been definitely mastered, and we would enter the time of circular economies ("Kreislaufwirtschaft").
- I included documents concerning all kinds of involved stakeholders, except for films, TV news and other audio-visual data (there was no digital world yet). For press coverage, I focused on "serious" mainstream daily and weekly media texts from the right (conservative) via the centre to the left (progressive). But note that this was just a way to organise data collection. As I will discuss later, I didn't assume that a newspaper considered to be "left leaning" (in the sense of European political spheres) would publish "left leaning" articles or different positions per se. If you learn from media and communication studies that up to 80 per cent of newspaper articles consist of only slightly modified press releases and organisations' public agenda setting (including government and administrations as major players, but also economic actors or Non-Governmental Organisations like, in my case, Greenpeace) then you no longer wonder why such texts so often look so similar, aside from investigative journalism.
- One major point has to be added. If you do a software-based keyword search in order to get frequencies of word usage, for example of a particular term throughout a given time period, you will end up with a series of ups and downs, with high peaks and drop-offs in coverage. You can use this information for the selection of points of entry. But in fact, mass media coverage of debated or conflictual issues simply follows events it is high when laws are debated in the congress, or when there is a manifestation, a catastrophe, or some other event "worthy of reporting"; and it is low when nothing much happens. In my case this implied that I ignore the highs and lows and follow political regulation debates. These became my main entry points in order to sample data: two weeks before and after a national parliamentary

debate, a high impact manifestation of anti-waste movements, or a pertinent legislative procedure proved to be a useful formula. Such newspaper and weekly coverage became the main data for my analysis.

The core German sample then contained around 700 articles out of general public media from 1970-1972 (first federal state law on waste management), 1975 (governmental programme on waste economies), 1985–1986 (remaking of waste management law), 1989–1995 (regulation of one-way packaging systems law for circular economy); with an additional 40 articles originating in the ecological movement context, and 30 from the economic and engineering press. The French sample (620 articles) was constructed around the period from 1972-1975 (the first of the newer French waste management law decisions), 1989/1990 (French national plan for the environment) and 1992 (French one-way package legislation and waste management law). For each country, the complete lists of ministerial reports, scientific reports and other general political reports on household waste problems were added.

# **Analysing data**

I made a threefold use of collected data. First, the data supplied me with information about the various actors involved who speak, are addressed, or decide issues about waste, thus making it a matter of concern. It provided me with the material necessary to map the scenes and their changes over time.<sup>3</sup> The data likewise told me about upcoming events in the waste domain (such as scandals, laws and other legal regulation, manifestations and critical events). The data made me aware of the rather similar textual production in different social arenas (public, political, scientific) and document types. Most certainly, genre matters. A newspaper commentary differs from a scientific report. But both of them might perform the same "statement" (in Foucault's sense) by using the very same interpretive scheme. Second, the data allowed me to develop a permanent contextualisation of what was going on, an account of the unfolding scene and its different shapes along the twenty-five year period covered. And third, I used a particular selection of data as the basis for detailed, finely-tuned analysis of waste statement production.

The comprehensive original samples came into existence following a couple of theoretical criteria outlined above. But a total of 1,320 newspaper articles and a mountain of additional documents from each country could not be analysed according to strategies of interpretive research in sociology. I therefore proceeded with further selections in order to establish a final core data sample for sequential analysis. Accordingly I used the following guidelines:

- Look for coverage of all the core events identified in waste management policies in each country, from two weeks before to two weeks after the event.
- Make sure that the sample includes texts from the whole range of serious newspapers and weeklies.
- Look for similar genres of texts and for references to events (using comprehensive reporting in preference to short news items focused on the same issue).

The final sample then contained forty articles from the mass media of each country and a complementary sample of documents from related spheres (such as governmental reports, statements by business organisations, NGOs and scientific advisory boards). I read them very carefully again, and I made short descriptions of their content. I added a deconstructive reading which accounted for textual structure, fragmentation and oppositions in the given document (which often was an arena of discourse in itself rather than just a performance of only one discourse), speakers that appeared, subjects introduced, the positioning of actors, the presence of arguments and rhetorical devices and the obvious elements of phenomenal structures (What causes the problem? What kind of problem? What solutions? What obstacles?, and so forth). I identified core paragraphs of interest, that is those textual sequences which referred to the core issue that was presented, excluding the usual media strategies designed to attract readers' attention (such as the "people from the street have lived through this or that" short story which is often used as an opener). Using sequential analysis, I reconstructed interpretive schemes as core statement practices. Sequential analysis meant that I analysed such paragraphs on a line-by-line basis, according to the idea that there are marked turning points in textual reporting, where new content sequences start (which can be a new paragraph, or somewhere in the middle of a paragraph and so on – such turning points do not simply follow formal structures). In a process of coding I created categories out of this material which later became the labels for the ever-repeating interpretive schemes I identified. In fact, the reconstruction of phenomenal structures and interpretive schemes reveals their deep entanglement. Interpretive schemes fill up the dimensions which make the structural pattern of a given phenomenal structure. Or it can be put the other way round: they perform the dimensions which can then be identified as part of such a structure. All such elements taken together were summed up in the concept of interpretive repertoire. A final step beyond the analysis of singular fragments of data then was the reconstruction of story lines which made up a "story to tell" between all the different statement elements and across time. Again I have to add an important point: in order to do such a deep sequential analysis, you need questions. Texts don't explain just themselves; rather, they respond to your questions and research interests. Different questions lead to different codes and categories.

Here is one example (a quote) of a core interpretive scheme taken from the German debates. I identified it as part of a particular discursive structuration which I labelled "cultural critique":

Branded as the most modern waste incineration device in Germany, if not in the world, a plant in Augsburg costing more than 900 million marks underwent a 'warm start-up' in the autumn of last year. Last week the trial run came to an abrupt end. In connection with this, words were used that newspaper readers know only in reference to nuclear reactors: cracks in a steam pressure-pipe, leaks in water pipes, quick shutdown. And of course: the legally permitted pollution output into the environment was not exceeded. One should not forget: all technology is subject to breakdowns – and the more complex it is, the greater the likelihood of breakdowns – a truism.

(Süddeutsche Zeitung, 5.5.1994, my translation)

I used the category "(technological) risk" scheme to name such statements. They are widely used in technical controversies and state an inherent and uncontrollable tendency of complex technologies to fail at some point and thereby to create damage, pollution and the like. This is easy to see: imagine for yourself a talk or text about genetically modified organisms, nano-technologies, nuclear energy, or fracking – using such a risk frame is very common today. Sometimes, the term "risk" even shows up in the data. Of course, one might choose a slightly different word to label this statement, so long as it holds for the same idea. "Technological risk" entered German waste debates in the early 1980s with reference to carcinogenic air pollution from incineration plants or water pollution caused by disposal sites. Before that time, waste had been considered an issue of resource management (avoid plastics and one-way packages) and finding landfills. But when risk statements started appearing, such matters became a real public concern. The text presented above shows only one way of manifesting such a statement. It is also performed, for example, as visual graphs (showing incinerations sites all over Germany, imitating campaigns from the anti-nuclear movement) or as sidelong reports on the dangers of pollution presented by scientific expert councils. The risk scheme was part of the opposing counter-discourse, widely present in German public debates at that time. It was performed in combination with other patterns, such as the "scarcity of nature (as resource and receptive container)" scheme, a "society controls economy" scheme, an "ethics of responsibility against profit making interests" and a few more.

A different scheme may illustrate the French hegemonic discourse, the only one present in the public space (the mass media). I named it "sociotechnical control and civilisational mastery":

Finally clean waste. No more yellowish trails of smoke, which came out of the old chimneys. Long live the ultramodern incineration plant, which remediates without contaminating and which has the advantage of converting the content of a trash bag into a source of energy. Industrial reliability, environment protection, a high level of utilization regarding the retrieval of energy, this bet has been won by the engineers and architects who were able to work together in such a way that the performance merges with the beauty of shape and pattern.

(*Humanité*, 4.7.1990, my translation)

Here again, we see a pattern that showed up in very different ways, and it was part of a larger arrangement which constituted a particular discursive structuration of statements, performed predominantly by French state officials and related actors.

I used other concepts from SKAD methodology as well in order to account for the statement dimension of discourses: phenomenal structure, story line and interpretive repertoire. For reasons of space, I cannot provide details on all of them here. However, based on my empirical data, as a result of such reconstructions I established specific phenomenal structures: two competing ones in the German case and one dominant structure in the French case. I did this in a rather static way in order to account for their appearance in the early to mid-1990s, close to the final data present in my sample. Today I would do it in a much more procedural and dynamic way. In fact, phenomenal structures change over time, due to discursive events and practice, and discourse analysis should account for such transformations. In the French case, I identified only one phenomenal structure in public debates, with slight variations. In the early 1990s, it looked as follows:

Table 4.1 Example: phenomenal structure, French hegemonic discourse "sociotechnological modernisation"

Dimensions	Realisation
Causation	<ul> <li>Waste as "sanitary issue"; discrepancy between amount produced and disposal or recycling infrastructure</li> <li>Wealth growth, economic and technical advances, consumption needs of the consumers → rise in waste produced</li> <li>Waste as a problem of deficient waste disposal at landfills</li> <li>Waste as a problem of a lack of citizen responsibility and discipline</li> <li>Waste as a problem of national payments balance/usage of raw materials</li> <li>Waste as a problem of international competitive conditions</li> <li>→ waste as a "quasi-natural" by-product of progress and wealth</li> </ul>

Dimensions	Realisation
Responsibilities	<ul> <li>Politics/government/national administration (must develop and enforce a waste policy framework programme in coordination with the economy)</li> <li>Regional corporations, economy (individual responsibility for the implementation of the political specifications)</li> <li>Citizens/Society (giving up irrational fears and selfish denials; taking over responsibility for waste; acceptance of the technologies)</li> </ul>
Need for action/problem-solving	<ul> <li>Low problem level; technical mastery of the waste issue is possible through recycling and elimination → nature is governable</li> <li>Large-scale technological expansion and optimisation of the disposal and recycling infrastructure → interpretative pattern of socio-technical mastery</li> <li>Obtaining acceptance of removal infrastructure through the use of communication und participation</li> <li>Comprehensive mobilisation of citizens' responsibility (local authorities, economy, consumers) for the national interest in resource importation reduction</li> </ul>
Self-positioning of speakers	<ul> <li>Representatives of scientific-technical, economic and pragmatic reason, of civil (socio-cultural/socio-technical) progress</li> <li>Government as the administrator of the collective interest</li> <li>→ French state as representing civilisation, its modernity and progress in behaviour and technology, as incorporating pragmatic reasoning</li> </ul>
Othering	<ul> <li>French civil actors (regional corporations, economy, citizens) show a <i>lack of consciousness for their responsibility as citizens of France</i></li> <li>Irrationalism and fundamentalism of German waste politics, disguise for economic protectionism</li> </ul>
Thing culture	<ul> <li>Not a topic of the waste discussion; follows seemingly "sacrosanct" modernisation dynamics and market rationalities</li> <li>Material model of affluence; freedom of needs (production and consumption)</li> </ul>
Values	<ul> <li>Government secures collective interests (affluence, progress, modernity)</li> <li>(Actual and moral) cleanliness of the public space</li> <li>Nature as (scarce national) resource, whose usage can be optimised</li> <li>Society as it is right here and now as realisation of "good life"</li> </ul>

Please note two points here: the dimensions in the left column are not pre-established and then used for whatever discourses are to be analysed. I identified them as core dimensions in *my* work, in the discourse I was analysing, and with regard to the questions I was interested in. On the right, you see some typical arguments that refer to those dimensions. The words in italics point to the more general interpretive patterns I reconstructed out of the data, those elements which make up the basic statements of this particular discursive production.

In working through these detailed analytical steps, I again followed the ideas of theoretical sampling, here applied to the sequences of data to be considered. Maximal and minimal contrasting proved to be particularly helpful in this analysis. During this ongoing process, I established (via reflection and decision) relations between dimensions of phenomenal structures and corresponding interpretive schemes. I followed, according to my interest in the relations of knowledge and the politics of knowledge, the genres and spheres of argumentation which were used to account for such dimensions (such as risk evaluation, proof of evidence of security standards, moral appeals and so forth). I looked for the entanglement between document production in other places (as in governmental advisory boards, expert reports, etc.) and mass media reporting. I discovered how environmental movement actors established "counter-knowledge" about recycling, for example by proving with empirical evidence that recycling refrigerators is both possible and rather cheap (something industry had denied before). I did mappings of actors present in both public arenas and fixed them in their particular place in the discursive space of meaning making. I reconstructed discursive structuration in France and Germany as ideal-types in the sense of Max Weber, which means that concrete documents contain only elements of it, in a more or less pure way (sometimes very pure, sometimes mixed up with other things, or just in particular variations). I identified two competing discourses in the German case and one hegemonic discourse in the French case, with an excluded and marginalised counter-discourse outside the media sphere. Such discourses changed over the course of the twenty-five years under scrutiny; new elements (such as risk evaluation) were added in statement production over time and in relation to major discursive events; speakers appeared and disappeared and so on.

# Telling a story

For reasons of space, I present only a few findings here. First, I would like to differentiate between the core discourse analysis and its results that is the reconstruction of discursive structuration, its patterns for statement production, its speakers, its dynamics, resources and effects. And second, I will give a more theoretically informed interpretation of what has happened in these waste conflicts, with reference to theories of risk society

and reflexive modernisation and the initial interest in German-French differences.

For the German part I identified a highly conflictual competition between two discourses which I labelled "structural-conservative" (because it insisted on the established capitalist market economy as a core principle) and "cultural critique" (because it argued for new social structuration on the basis of a different cultural setting of needs and consumption). I identified six main interpretive schemes for each of those discourses (for example, structural-conservative discourse: core scheme: autonomy of the economic sphere is the higher good; linked schemes: problem naturalisation (more goods, more waste: it's unavoidable), ongoing progress and modernity (no need for change, we are on the best way forward), technological and administrative control (engineering and administrative skills combined with safe technology is the solution at hand), nature is a cornucopia with never-ending resources (there is no scarcity of resources), we follow an ethics of responsibility (not an ethics of good intentions which doesn't take care of its consequences). This discourse told a story of ongoing process, economic growth, welfare and technological control. It was contested by a counter discourse which insisted on the social control of economy, the scarcity of nature as a resource, the principal risks of technology (from the mid-1980s on) and the need for a huge cultural turn against economic profit making through externalisation of costs. Concrete law making and waste policies could be seen as an effect of this conflictual constellation; the more conservative discourse was forced to move along and to shift some of its basic assumptions in order to get legislation passed and protest subsided. On the French side, I identified a single hegemonic discourse of civilisational mastery, which promoted recycling for reasons of national interests concerning import reduction and ritualistically repeated again and again that French state authority and French experts were in control of whatever might happen – the only worry was that French civil society actors might ignore what the good state provided and what state reason claimed. I already mentioned another marginal counterdiscourse similar to its German counterpart. Whilst German discourses focused on the pros and cons of an announced catastrophic collapse of its modes of consumption with unavoidable pollution and risk, the hegemonic French discourse performed the ritual of regularly repeating the state's civilisational mastery over nature and risk.

In addition to this reconstruction of meaning making through statement production, I did mappings of speakers in the arena of public waste discourses in order to represent the situation around 1990. Their position on the map refers to the strength or clarity of their promoting discursive statements in relation to the general discursive patterns identified (the more to the left or right of the column, the "purer" the position).<sup>4</sup>

A model of the "public spheres of waste discourses" established for both countries accounted for the ways of addressing other actors and the public in this particular, contested-issue arena. In France mass media reporting was interpreted as setting a stage so that the French state officials could address, critique and appeal to French civil society (including business actors and municipalities) to follow the state's instructions and to believe in the state's rituals of performance. Besides this I could observe a wellestablished practice of consulting and close relations between the state administration and business actors as well as environmental NGOs, which identified themselves as the "state's little helpers". In Germany, the mass media arena looked more like a battlefield where two discourses met and fought against each other. State officials were divided, for example due to the complicated German political arrangements between the federal state level and the German Länder. The political culture of waste issues was conflictual both in the public sphere and in the huge amount of produced scientific expertise, and the media were just the playground. Besides this, both formal and informal practices of consultation could be observed, with a particular bias favouring economic actors with direct access to governmental institutions; actors of the counter-discourse had much less chance to get direct access. The political outcome of this was different in both countries: the conflictual and much more dynamic development in Germany led to higher technical standards in waste treatment plants and sites, as well as a quota for household waste recycling. But the French public "rituals of household waste mastery" were accompanied by rather strict policies concentrating on other organisational sites of waste production (for example industrial and commercial sites) and therefore nevertheless resulted in high recycling performances as well (compared to Germany), but not in the domain of household waste.

The second part of accounting for my results referred to theoretical debates and reflections. Again, I will point to only a few issues. I identified a process of individualisation of ecological responsibilities throughout these debates: the ecologically aware citizen became a dominant subject position, charged with solving the problems of waste through responsible consumption and disciplined waste separation, in place of more structural solutions. I identified risk schemes as a major driver in the German debate, which did not show up in France. Therefore, I argued that the French development corresponded to what Ulrich Beck called "linear modernisation", and the German debates could be considered a case in point of "reflexive modernisation" during the very same period. And, to name just one last argument, I concluded, against theories of cultural mentalities and so forth, that current discursive performance and institutional structuration account for the major observable differences. These performances pointed to questions regarding a collective shame shared by everyone and a joint responsibility as drivers, in the German case, and to a public ritual of state performance and civilisation, in the French case. A quote from an Austrian newspaper, Die Presse, covering a waste management technologies trade fair in Vienna, nicely illustrates this kind of cultural difference:

Munich openly embraces all that trash and presents containers packed full of the corpus delicti. The annual amount of refuse produced by one family decorates the fair stand. Paris, however, feels that it is 'clean' and is committed to technological achievements. In addition to a prototype of the 'Dogofant', a motorcycle which collects dog excrements, the French present their newest incineration plant – and an antique desk.

(*Die Presse*, 5.10.1989; my translation)

That is, discourses are the means of establishing such differences, making them durable, moving them and melting them down again. In connection with an insight of Joseph Gusfield, who stated that institutions and structures can be seen as processes frozen in time, I would add discursive processes, frozen in time, and thawed, from time to time:

At any moment the "structure" itself may be fought over as groups attempt to affect the definitions of problems and authority to affect them. [...] Structure is process frozen in time as orderliness. It is a conceptual tool with which we try to make that process understandable. What is important to my thought here is that all is not situational; ideas and events are contained in an imprecise and changing container.

(Gusfield, 1981: 5–7)

#### Notes

- 1 Germany: NGOs such as Greenpeace, BUND, Robin Wood, The Better Waste Policy; the Ministry for Environmental Affairs; political parties CDU, SPD and the Greens; the Association of German Industrials, the Association of Waste Business Companies, the Federal Expert Council on Environmental Issues and others; France: NGOs including France Nature Environment, Friends of the Earth, Greenpeace; parties such as the Greens; the Ministry of Environmental Affairs; the Association of French Majors; ADEME; the Association of Waste Economy Businesses, etc.
- 2 More details (such as names) on the chosen newspapers and weeklies from the "serious" national press arena (not including yellow press) are given in the book (see Keller, [1998] 2009).
- 3 I learned from this sampling for example that Greenpeace France had translated from German Greenpeace some expertise on waste issues and promoted a waste policy very similar to its German counterpart, but unlike German Greenpeace, without any presence in French mass media coverage.
- 4 Please see the contribution by Luther and Schünemann (Chapter 15) for some of my maps presenting the public sphere of waste discourses and the arenas/ landscapes of discursive positioning.

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