National specificity and convergence in the European anti-GM movement: the cases of Austria, Germany, France, Spain and the UK

Franz Seifert*

Independent scientist, Vienna, Austria

(Received 13 September 2018; final version received 2 May 2020)

Are protest movements nationally specific or does EU policy integration cause national movements to converge? Drawing on data from a protest event analysis that covers a period from 1995 to 2009, the study compares anti-GM movements in Austria, France, Germany, Spain and the UK. Focusing on the variables of movement intensity, targets, action repertoires, composition and temporal dynamics, the comparison carves out both commonalities and national specificities and examines theoretical causal mechanisms. The analysis confirms that each national movement presents a specific picture while convergence remains relatively insignificant and limited to a few aspects. In addition to examining the convergence thesis the study provides a descriptive analysis of national variants of the European anti-GM movement.

Keywords: biotechnology; protest movements; European Union; Austria; France; Germany; United Kingdom

Introduction

Research on the national differences between protest movements has advanced our understanding of how political contexts affect their dynamics (e.g. Kriesi 1995). Research in the 1990s took a turn to explore the effects of globalization and transnationalization on said movements. Along with intensifying global socioeconomic interaction, the global rise of liberal market regimes, the ascent of supranational organizations such as the European Union (EU) and the emergence of anti-globalization movements, interest shifted to the analysis of movement activity in trans-, supra- and international spheres. Among the theoretical expectations that sprang out of these discussions two are of particular relevance for this article: the convergence and the Europeanization of protest movements. Linking both concepts this article examines the former – movement convergence.

Movement convergence means the increase of crossnational similarities among national protest movements. Giugni (1998) expects convergence to increase due to three broad social processes: globalization, structural affinity, and diffusion. Globalization produces trans- or supranational structures and, in turn, trans- and supranational opportunities for mobilization. Structural affinity – the legal and institutional harmonization of states, thus, structural convergence of national contexts – has the same effect, as does diffusion – the exchange of actors and ideas across borders. The notion of movement...
Europeanization raises the question of how the EU polity impacts movements by exploring the hypothesis that with the shift of decision making to the EU, movements direct their claims to the EU level where new sets of constraints and opportunities shape their appearances, strategies and outcomes (Tarrow 1995; Marks and McAdam 1996; della Porta and Caiani 2009; recently Roose, Kanellopoulos, and Sommer 2017; Caiani and Graziano 2018).

While movement Europeanization has become a fertile research strand, Giugni’s suggestion has received surprisingly little traction. Koopmans, for example compared anti-gulf war protests in three European countries and found them to be of predominantly national character (1999, see also 2004). This study further examines movement convergence. It does so, however, with qualifications and a regionally restricted scope. The convergence hypothesis is tested by analysing a Europeanized movement in a selection of EU countries. The focus on European integration rather than globalization and on a Europeanized rather than globalized movement limits the study’s scope in terms of its original formulation but draws on the argument that the same mechanisms underlying convergence–transnational opportunities, structural affinity, and diffusion also operate in EU states – European integration also creates supranational threats and opportunities which, arguably, make national movements respond in similar ways; it also harmonizes member states’ laws, institutions and policies and thus creates structural affinity; and the transboundary movement of activists, ideas and tactics can be assumed to increase.1

The reason for selecting a Europeanized movement is that movements specifically challenging EU regulations, policies and decisions should be expected to show similar crossnational patterns in terms of composition, strategies and timing as they respond to and interact with the same supranational issues and decision processes. Yet, even as regards the limited European focus, not much research has tackled the convergence thesis. Carmin and Hicks (2002) touched on aspects thereof examining how supranational change and trigger events shaped environmental movements in East European countries, and Hicks (2004) analysed how EU accession impacted these movements. Similarly, Börzel and Buzogány (2010) identified patterns of convergence among Europeanizing movement actors in Central and Eastern European accession countries, and Roose, Kanellopoulos, and Sommer (2017) found a weak tendency towards synchronizing public debates in anti-austerity protests in Greece and Germany.

So far, however, no study explicitly refers to and systematically examines Giugni’s convergence thesis, and no study compares entire movements in several EU member countries with a common cause in an integrated EU policy field, practically for the movement’s full duration. This study fills this gap by comparing anti-GM movements in five EU countries. Comparing how anti-GM movements in these countries unfolded in either specific or similar ways it asks two complementary questions: How do national factors explain specificities? How do supranational factors, diffusion, and structural affinity explain convergence?

A comparison of European anti-GM movements is specifically suited to tackle these questions. Seifert (2017) has established the highly Europeanized character of the anti-GM movement entailing multi-level processes in national, sub-, supra- and transnational arenas with nation states figuring as key arenas of Europeanized activism. The fact that the movement emerged in national arenas across EU member states offers an opportunity for a broad comparative analysis. GM technology also constitutes an integrated policy field that went through periods of supranational crisis and responsiveness which suggests the occurrence of transnational opportunities for both the mobilization and demobilization of national anti-GM movements. For example, GM food labelling and the authorization
of GM crops for cultivation in agriculture are regulated by the EU. As these became contentious, one expects mobilizations to ensue at about the same time across countries. Similarly, responses to public opposition were of EU wide scope, such as the EU moratorium on GM crop authorizations (1999–2004), or the suppression of GM foods in European consumer markets. Seifert (2006a) demonstrated that public controversies about GM technology occurred almost synchronously across the EU and were accompanied by supranational responses equivalent to those theoretically expected from an integrated European public. One expects simultaneous movement mobilization or demobilization to follow such supranational responses.

The countries selected for comparison are Austria, France, Germany, Spain and the UK (also Seifert 2017). Anti-GM protest activity in these countries is analysed through a documentation of protest events (PE) occurring from 1995 to 2009. As the GM-controversy subsided in the 2010s, this sample covers practically the entire period of movement activity. While the sample reveals variations and similarities, a selection had to be made encompassing the national variation characteristic for EU member countries as well as diversity in regard to the concerned policy domain: Austria steadfastly advocates a ‘GM-free’ status; France played a leading role in the EU-wide moratorium on GM crop authorizations; Germany, took a more liberal view on GM technology in the 1990s but later swung to a precautionary stance; the UK consistently defended a liberal position in the EU but domestically agri-food GM technology came to a halt in the mid 2000s; Spain is the only EU country where cultivation of GM crops has been taking place since the late 1990s. In all of these countries, anti-GM movements occurred and had varying impacts on government policies.

Beyond the analysis, the comparison contributes to general research on the anti-GM movement in the EU, and environmental and anti-technology movements more generally, which is lacking a broad comparative study. Most studies focus on single countries (e.g. McCauley 2011; Schurman 2004) or movement Europeanization (Ansell, Maxwell, and Sicurelli 2006; McCauley 2011; Seifert 2017). Available comparisons focus on pairs of countries in order to carve out interactions or specificities (e.g. Seifert 2009, 2013; Doherty and Hayes 2012, 2014). After two decades of controversy, there is no study that compares national anti-GM movements in a larger sample of member countries that virtually covers the controversy’s entire duration.

The article proceeds as follows. The following chapter specifies hypotheses and predictions, the next data and methods. The empirical part begins with an overview of the conflict over agri-food GM-technology in the EU and identifies supranational influences on national movements. The fourth chapter compares protest dynamics in the national sample along the dimensions: intensity, targets, action repertoires, dynamics, and actor constellation. The discussion carves out national specificities and convergences and suggests explanatory mechanisms along rival theoretical views.

**Specificity vs. convergence: hypotheses and predictions**

The analysis is based on two rival views. One proposition is that even movements with a strong European dimension chiefly address national governments and publics, are shaped by national contexts and, by implication, evolve in nationally distinct ways. The alternative view expects major crossnational similarities to be detectable as a consequence of supranational threats and opportunities, diffusion, and structural affinity. While these views are complementary rather than mutually exclusive, juxtaposing them helps to assess their relative weight. Giugni (1998, 90–91) suggests a catalogue of movement features which, if observable, can be used for the comparison: movements’ issues, themes and goals; their
levels of mobilization; action repertoires; organizational structures; the timing of their pro-
tests; and their frames and discourses. The convergence thesis expects national movements
to resemble each other, the specificity thesis expects them to unfold distinctively with
respect to these variables.

More specifically, movements in national contexts are expected to be path dependent
which, for example, implies that they are influenced by preceding or parallel domestic
movements. Regarding protest timing, contingent events at country level should trigger
movement mobilization while positive responsiveness should bring protests down or to
an end as movement objectives are met. Hence, contingent events and path-dependence
should lead to distinct movement dynamics with no or little overlap between countries.

Another key influence on movement activity that varies from country to country is
public opinion. The relationship between movements and public opinion is complex:
movements seek to influence public opinion – with varying success; public opinion, in
turn, critically influences a movement’s evolution (for a review of the literature Vráblíková
2013). Without analysing these interdependencies in detail this study derives its expec-
tation from a general principle: public opinion that is favourable to a movement’s cause
constitutes a key resource for the movement because, first, it broadens its support base
and, thus, facilitates mobilization; second, as governments must respond to public
opinion to win re-election (not necessarily to protest activity), favourable public opinion
increases the likelihood of political responsiveness which, in turn, constitutes a further
incentive for movement mobilization. Therefore, the general expectation is that public
opinion favourable to the movement’s cause increases the likelihood of both mobilization
and political responsiveness.

Unlike the volatile variable public opinion, the more stable features of the political
context that shape patterns of activism in predictable ways are captured by the standard
concept of Political Opportunity Structure (POS), defined as ‘consistent, but not necess-
arily formal or permanent, dimensions of the political environment, that provide incentives
for people to undertake collective action by affecting their expectations for success and
failure’ (Tarrow 1998, 77). More specifically, these dimensions are the political system’s
openness/closure, the State’s capacity to act, its tendency to tolerate/repress protest, div-
isions of elites, their strategies of including/excluding contenders, and influential allies
(Tarrow 1998, 71–88). The selected countries differ in terms of POS. Austria has a non-
confrontational political culture and, when dealing with environmental protest, a tradition
of direct democracy and involvement of the influential tabloid press (Seifert 2009, 32–33).
Under these circumstances environmental movements mobilize easily and without need to
radicalize. France is a technocratic, unitary state with a strong executive and elitist political
culture, hence, the prototype of an exclusionary system that provokes disruptive protest
(Seifert 2009, 32; Kriesi 1995, 178). Yet, the anti-GM movement had points of access
through influential allies, such as the Green Party under the Jospin government (1997–
2002). With its centralized state, strong executive and weak direct democracy, the UK is
also an exclusive system (Doherty and Hayes 2012, 545–546). Formerly, Labour was an
ally of non-radical movements. When in government in the years of the GM controversy,
the Blair government was supportive of GM technology, however, promoted a new parti-
cipatory discourse. In sum, the UK’s POS point to confrontational protests with opportu-
nities for protesters arising due to new participatory discourses. Germany’s inaccessible
executive and weak direct democracy hinder activist efforts but its autonomous judiciary
and federal fragmentation provide points of access (Kriesi 1995, 171–178). Furthermore,
the German anti-GM movement had allies in the Greens in Schröder’s coalition govern-
ment. Hence, a movement combining conventional and confrontational methods is
expected. Spain’s POS are marked by a strong executive, an exclusive electoral system, and a tradition of rigorous policing (Seifert 2013, 227). Anti-GM mobilization is also frustrated by ‘the low level of public awareness in relation to environmental problems in Spain, a short tradition of participation and a high scientific and technical optimism’ (Binielis 2008, 43). Conversely, federal decentralization multiplies points of access. This leads to the expectation of a mitigated, geographically fragmented movement.

Conversely, the convergence thesis expects EU integration to have a synchronizing effect specifically on Europeanized movements. Supranational trigger events constitute a mechanism for synchronizing mobilizations (della Porta and Kriesi 1999, 8; Carmin and Hicks 2002). Regarding demobilization, it is expected that supranational responsiveness leads to a decrease in protests. Diffusion is another key factor expected to produce cross-national similarities. A large body of literature deals with the diffusion of protest repertoires and interpretive frames (for a review see Soule and Roggeband 2018). With respect to the mechanisms underlying diffusion research identified communication channels and activist networks that facilitate diffusion, such as media, organizational brokers, and international NGOs. Again, this study cannot analyse these multidimensional diffusion mechanisms in their entirety. However, it does shed light on a central component of diffusion processes in the European anti-GM movement – diffusion through transnational activist networks as they are embodied in Transnational Social Movement Organisations (TSMOs). While national Social Movement Organisations (SMOs) are rooted in local contexts, TSMOs’ transnational organization promotes diffusion, for example, as coordinated transnational campaigns. Thus, while a general, strong presence of TSMOs across national arenas indicates movement convergence, the specificity thesis expects TSMOs to be unequally distributed and diverse local groups to prevail in national arenas. Two TSMOs that figure prominently in the anti-GM movement are candidates for testing the convergence thesis – Greenpeace and the Friends of the Earth (FoE) network (Ansell, Maxwell, and Sicurelli 2006, 100–101). Both groups are expected to operate in each country in prominent positions but in different ways as is suggested by their different profiles. Greenpeace is a professional NGO with international top-down management that mostly steers individual campaigns. FoE is a network of autonomous national groups often allying with others (Doherty and Doyle 2014, 144–147). Greenpeace is therefore expected to show a more homogeneous and independent profile than the FoE network’s which depends on its national members and joint campaigns with other groups.

Materials and methods
Firstly, the analysis is based on the study of a range of documents and news media as well as materials from field research in the reference countries. Documents, online material and secondary literature shed light on the dynamics of movements and the contextual factors influencing their success or failure. Field materials such as materials from the movement scene, notes from participant observation and interviews made among activists in the five countries help understanding activists’ internal decision-making processes, their appraisal of action repertoires and contextual factors influencing success or failure (Seifert 2013, 217). Secondly, as the questions outlined above require a systematic and comprehensive comparison of anti-GM movements across national arenas, a protest event analysis (PEA) has been conducted which draws on PE data of anti-GM protests from the movement’s onset around 1995, to 2009 when agri-food GM technology’s commercial failure in the EU became manifest. The PEA identifies, among other things, place and time of PE, involved actors, action repertoires, addressees and scope of the action.
The PEA is an established and widely used method in movement research for drawing
cross national comparisons and newspaper data are, by far, the most frequently used data
source (for reviews see Koopmans and Rucht 2002; Hutter 2014). Newspapers, if properly
chosen, offer replicable, extensive and continuous records of events over long periods.
Alternative sources such as police records or activist newsletters hardly ever meet these
requirements, particularly not in long-term comparisons involving several countries. Yet,
just like any material, news data have limitations. Media do not provide a representative
sample of all events taking place but selectively cover protests, and ‘researchers continue
to disagree on how severe the selection bias is’ (Hutter 2014, 349). Spectacular, controver-
sial and mass protests are more likely to be reported than very small events, and movement
activities are more likely to be reported if the media consider the movement to be of general
political interest. While these biases have to be kept in mind when interpreting the data, it
has to be stressed that the PEA simply does not claim to mirror all movement actions that
actually take place but approximate movement activity as it presents itself to policymakers
and the wider public (Koopmans and Rucht 2002, 232). Furthermore, focussing on SMOs
and their actions, the method represents a movement’s ‘backbone’ rather than a movement
in its entirety which should also provide information about passive sympathizers, public
discourse or effects on policy. However, it gives a fairly accurate picture of a movement’s
intensity, dynamics, actors and repertoires.

For the present study, data were drawn from opinion-leading quality newspapers pub-
lished in in the respective national languages (avoiding bias in favour of English speaking
and big countries typical for international news wires): Kurier and Der Standard (Austria);
Le Monde (France); Süddeutsche Zeitung (Germany); El País (Spain); The Guardian (UK).
Sampling started with an online keyword research and scanned all articles published during
the relevant period (avoiding bias through newspaper indexing). The resulting database
consists of 1741 PE. In a few cases coverage was imprecise and numbers had to be esti-
mated. A wide de

di
nition of PE was chosen subsuming any activity anti-GM activists
engage in for their cause. For example, 76 types of action categories were identi
fi
ed
while coding. For better clarity of the analysis these are collapsed into broader categories.

Two qualifications must be made. The first concerns data availability. While journalistic
sources provide solid data on time, location, actors, targets and action repertoires, information
on cognitive and discursive dimensions of protest is often deficient. Journalists rarely offer
information on the strategies or campaigns PE are part of. The analysis therefore refrains
from using incomplete data from cognitive and discursive variables (Koopmans and Rucht
2002, 252). Second, the analysis also draws on the variable ‘state repression’ that does not rep-
resent protests in a narrow sense. The category comprises instances in which, for example, activ-
ists stand trial, are fined, arrested, interrogated, or serve jail sentences. However, as state
repression is often a response to confrontational activism, thus a measure of conflict intensity,
and sometimes part of a confrontational strategy, it is included in the analysis.

EU policy evolution
In the course of controversy from the mid 1990s to the late 2000s, GM technology has been
largely blocked in the EU. Few GM crops are grown on a negligible fraction of EU terrain
and GM food is hardly to be found on shelves. The following sketch of the history of this
impasse sheds light on the key role GM-aversive EU member states played in it and con-
textualizes national anti-GM movements so as to identify plausible supranational influ-
ences on them. It specifically suggests a periodization of the EU policy processes as it
presumably impacted national movements which broadly discerns three stages – a pre-
moratorium (1995–1999), a moratorium (1999–2004), and a post-moratorium phase (2005–2009). These stages correspond to the initial supranational escalation of the conflict, its temporary calming through a blockade of GM product authorizations and regulatory revision, and later re-escalation. The convergence thesis expects national anti-GM movements to emerge and form an EU-wide protest wave in the first stage. In the second, protests should calm down and rekindle in the third. The national specificity thesis predicts that movements follow their own dynamic.

In the first stage, also dubbed the ‘water-shed years’ (Gaskell and Bauer 2001, 4), the conflict erupted, seized a growing number of countries and, in 1999, resulted in a blockade of GM authorizations. The developments were triggered by the BSE crisis in early 1996 when the failure of governments and the European Commission (EC) to properly handle the issue led to a loss of public trust in food-authorities. In the same year, unlabelled GM materials from the US arrived in European ports while the EU GM labelling rules were not yet in place. Greenpeace seized the opportunity and embarked on an EU-wide campaign, dramatically blocking GM shipments and lobbying the food industry. The events resonated widely. In Austria it added to an already heated controversy, in France, the UK and Spain they were a wake up call to media, governments and activists. Over the next three years, controversies erupted in Ireland, Greece, Italy, France, Denmark, the UK, and the Netherlands. At the Council in June 1999, France, Greece, Denmark, Italy and Luxembourg (later joined by Austria and Belgium) declared to block future approvals until regulatory reform was completed. It followed the phase of the ‘political moratorium’ with the authorization process blocked and GM food and produce (except animal feed) barred from EU markets. The EC responded to consumer concerns and critical member states by establishing a rigorous labelling regime.

By 2004, the reform was complete and the moratorium lifted. In the ensuing third phase, however, the re-politicization of authorization process could not be prevented and conflicts between member states and the EC over GM authorizations and national bans resurfaged. Ultimately, the failure of agricultural GM technology in the EU became obvious when France (2008) and Germany (2009) imposed new bans on commercial GM corn cultivation. In the early 2010s, the EC dropped its futile resistance against national bans and established regulations granting member states the right to ‘opt out’ from EU-wide approvals (San-Epifanio 2017). With this, the anti-GM movement came to an end.

The comparative perspective

The first row of Table 1 shows the number of PE; the second protest frequency relative to population size; and the third the incidence of state repression. In a first approximation, counts per population size could serve as indicator of protest intensity. From this perspective, Austria appears as having the most intense movement, and Spain as the least intense movement. With regards to Austria, however, this impression is misleading. Another indicator of conflict intensity is state repression. The reasoning is that powerful,

Table 1. Protest events per country; proportional to population size; state repression.

|                  | UK | Spain | France | Germany | Austria |
|------------------|----|-------|--------|---------|---------|
| Protest events total | 426 | 128   | 513    | 547     | 127     |
| Protest events per Mill. inhabitants | 7.4  | 2.9   | 9.4    | 7.2     | 14.9    |
| State repression: cases / proportionally in percent | 31 | 10 | 99 | 43 | 0 |
|                  | 7.3 | 7.8   | 19.3   | 1.9     | 0.0     |
confrontational movements call the state into repressive action. On this dimension, France scores highest and Austria lowest.

Anti-GM movements fight agri-food GM technology in different ways, by pursuing different proximate goals and using different action repertoires. Table 2 presents action goals. It aggregates the found 39 goals into five categories: action aimed at tightening rules (e.g. for labelling or authorization procedures); influencing public debate (e.g. presenting studies or discrediting opponents); establishing bans; destroying GMO field releases (mostly direct action, field vandalism); or displaying solidarity with activists subjected to state repression.

|                     | UK  | Spain | France | Germany | Austria |
|---------------------|-----|-------|--------|---------|---------|
| Tighten regulation  | 14  | 3.3   | 22     | 17.2    | 85      | 15.5    | 17      | 13.4    |
| Influence public debate | 203 | 47.7  | 39     | 30.5    | 124     | 24.2    | 67      | 12.3    | 40      | 31.5    |
| Prohibition, ban    | 102 | 23.9  | 63     | 49.2    | 51      | 9.9     | 169     | 30.9    | 54      | 42.5    |
| GMO field release    | 106 | 24.9  | 2      | 1.6     | 198     | 38.6    | 211     | 38.6    | 16      | 12.6    |
| Solidarity with activist | 1  | 0.2   | 2      | 1.6     | 111     | 21.6    | 15      | 2.7     | 0       | 0.0     |
| TOTAL               | 426 | 100.0 | 128    | 100.1   | 513     | 100.0   | 547     | 100.0   | 127     | 100.0   |

Two groups of countries emerge – Austria and Spain on the one side, and the UK, France and Germany on the other. In the former group, conventional objectives and the quest for legal restrictions prevailed, while movements in the latter massively targeted GM field releases. France stands out with a conspicuously high incidence of solidarity with incriminated activists. In the UK, much movement activity aimed at influencing public debate.

|                     | UK  | Spain | France | Germany | Austria |
|---------------------|-----|-------|--------|---------|---------|
| Demonstrative       | 22  | 5.2   | 36     | 28.1    | 124     | 24.2    | 180     | 32.9    | 24      | 18.9    |
| Informational       | 296 | 69.5  | 88     | 68.8    | 201     | 39.2    | 229     | 41.9    | 87      | 68.5    |
| Political           | 15  | 3.5   | 3      | 2.3     | 13      | 2.5     | 4       | 0.7     | 12      | 9.5     |
| Juridical           | 13  | 3.1   | 0      | 0.0     | 42      | 8.2     | 43      | 7.9     | 4       | 3.2     |
| Direct action       | 80  | 18.8  | 1      | 0.8     | 133     | 25.9    | 91      | 16.6    | 0       | 0.0     |
| TOTAL               | 426 | 100.1 | 128    | 100.0   | 513     | 100.0   | 547     | 100.0   | 127     | 100.1   |

Table 3 presents the methods SMOs use. The table sorts 67 found types of action into five categories: demonstrative protests; informational action (e.g. black lists); action based on formal political instruments (e.g. taking part in or boycotting government dialogue); juridical action (e.g. law suits); and confrontational action (mostly destruction of GM field releases). Action repertoires correspond to the pattern found in Table 2. Austria and Spain have conventional profiles – informational methods prevail, confrontational protests
hardly occur. Indeed, Austria has the highest share of formal political action – a reflection of the politically crucial popular initiative. By contrast, high shares of direct action in the UK, Germany and France confirm the confrontational profiles.

**Temporal evolution**

Figures depicting fluctuations of protest frequency, action repertoires and state repression illustrate commonalities and differences of national movements over 15 years. In combination these variables convey a complex picture of a movement’s evolution. The country-by-country presentation starts with the movements with conventional profiles.

**Austria**

The Austrian dynamic is characterized by a rapid mobilization in 1996. Although concurrent with the BSE crisis, the trigger was an experimental GMO release that turned into a scandal. An alliance of environmental NGOs and Austria’s most influential tabloid branded the fact that the trial was conducted without official authorization. In 1997, a popular initiative calling for a ban on agri-food GM technology scored a record outcome of 1.2 Million supporters. The movement receded over subsequent years which is intermitted only by small peaks in 2001 and around 2004 and 2005 reflecting debates about the coexistence of GM and non-GM agriculture (Seifert 2006b).

![Figure 1. Movement evolution Austria.](image)

**Spain**

Spain resembles Austria only in the relatively small number of PE. The evolution of Spain’s movement took an entirely different course. After a short upswing in 1999, the movement shortly receded in the early 2000s and then struggled on for years. Spain’s movement never succeeded in sensitizing the public or impacting policy (Binimelis 2008, 443). Considering this and the near absence of confrontational protest, it is remarkable that state repression occurred (Seifert 2013, 232–233).
United Kingdom

The UK is among the large countries with confrontational movements. After 1996, controversy intensified as prominent voices, such as the Prince of Wales, raised concerns and radical activists set about vandalizing GM field trials. The major trigger came in 1999 when an international declaration of solidarity for food-expert Arpad Pusztai, who had been dismissed from his position for airing doubts about GM-food safety, prompted a media storm (Gaskell et al. 2002, 295; Joly and Marris 2003, 197). Meanwhile, anonymous field raids intensified (Doherty and Hayes 2012, 545). After an interim low, protest activity peaked in 2003 as activists sought to influence the nationwide public discussion GM Nation? Later, the movement ebbed as it had lost its targets – retailers had banned GM food and open GM field experiments had been abandoned.

Figure 2. Movement evolution Spain.

Figure 3. Movement evolution UK.
France

Despite its late mobilization, the French anti-GM movement became by far the most intense, confrontational and enduring one in Europe. Until 1998, GM technology was not an issue in the generally technophile French public (Boy et al. 1998, 51). Attempts made by Greenpeace to sensitize the public had modest success. Yet, unsettled by BSE and other food crises, Jospin’s government grappled with formulating a consistent biotech policy. In 1998, it radically departed from the traditional technocratic style by conducting a consensus conference that was to serve as basis for decision-making (Joly and Marris 2003, 200–201). But deliberation could not prevent the mobilization against GM technology triggered by actors which up to that point had been largely unknown to the French public.

Everything changed with the rise to prominence of José Bové, the leader of the small farmer union Confédération Paysanne. In 1999, Bové served three weeks in jail for damages caused to a McDonald’s restaurant in WTO protests, which sent a wave of solidarity through France and over night turned him into a political celebrity. Bové and the Confédération had already embarked on a campaign against agricultural GM technology which now received full media attention. Specifically, their method of the open field destruction shaped the debate (Bonneuil, Joly, and Marris 2008). Open are different from anonymous field destructions which were commonly used in the UK and Germany. By attacking GM fields openly, French activists took responsibility and used the ensuing public trials to convey their criticism to a broad audience, thus turning legal trials against themselves into media trials against GM technology. Legal procedures generated further protests, often in solidarity with activists, mostly Bové threatened by or serving prison sentences. Activists staged 114 protests of solidarity (22 per cent of the entire protest activity) 94 of which focused on Bové and 85 occurred in 2002 and 2003 when debate turned around his imminent jail sentence. In summer 2003, Bové figured prominently in a rally that brought 200,000 sympathizers to the Larzac plateau in the southern Massif Central. On this occasion, Bové called on his followers to join the faucheurs volontaires, an activist network dedicated to open field destructions. While the number of GM field trials decreased, the amount of field destructions increased. Contrary to the UK, where targets for field vandalism simply disappeared, direct action in France went on at high levels over the entire 2000s. Some actions provoked dramatic confrontations with police.
forces, and after 2005, the \textit{faucheurs} clashed with pro-GM farmers when they began targeting commercial GM fields. In January 2008 president Sarkozy prohibited Monsanto’s GM corn, thus, commercial GM cultivation in France. Destructions of GM field trials went on in 2008 and 2009 until open experimentation stopped.

\section*{Germany}

Unlike in the other countries, Germany’s anti-GM movement long preceded the European protest wave (Gill 1996). German activists, for example, engaged in direct action already in the early 1990s. But towards the mid-1990s, the controversy declined. After an activity peak in 1999, effective mobilization did not set in before 2004. As the EU moratorium came to an end, a mass demonstration in Stuttgart reignited the German movement. Its growth also entailed a rise in GM field vandalism and, consequently, state repression. In 2008 and 2009, an important regional campaign in the Free State Bavaria pushed for a moratorium on commercial GM cultivation putting pressure on Minister-President Seehofer. In 2009, under pressure from Bavaria, the Federal government practically banned commercial GM-cultivation.\footnote{2}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure5.png}
\caption{Movement evolution Germany.}
\end{figure}

\section*{Actor constellations}

\begin{table}
\centering
\caption{Actor constellations}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline
Actor & Austria & Spain & Germany & France & Italy & UK & Sweden \\
\hline
Greenpeace & Greenpeace & Greenpeace & Greenpeace & Greenpeace & Greenpeace & Greenpeace & Greenpeace \\
\hline
Global 2000 & Global 2000 & Global 2000 & Global 2000 & Global 2000 & Global 2000 & Global 2000 & Global 2000 \\
\hline
FoE & FoE & FoE & FoE & FoE & FoE & FoE & FoE \\
\hline
\end{tabular}
\end{table}

\begin{table}
\centering
\caption{Actor constellations}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline
Actor & Austria & Spain & Germany & France & Italy & UK & Sweden \\
\hline
Greenpeace & Greenpeace & Greenpeace & Greenpeace & Greenpeace & Greenpeace & Greenpeace & Greenpeace \\
\hline
Global 2000 & Global 2000 & Global 2000 & Global 2000 & Global 2000 & Global 2000 & Global 2000 & Global 2000 \\
\hline
FoE & FoE & FoE & FoE & FoE & FoE & FoE & FoE \\
\hline
\end{tabular}
\end{table}

Table 4 draws a picture of actor constellations by ranking the three most prominent movement actors in each country according to their shares in PE. The presentation does not stand for authority over other movement actors but conveys a notion of the most active, visible and influential players in the field. In Austria Greenpeace and Global 2000, the Austrian member FoE organization, were clearly in the leading position. As few other groups were involved (37), the short and effective Austrian mobilization is basically owed to these groups.

In Spain, Greenpeace was also in a leading role but its prominence is less pronounced and the general picture more complex. Greenpeace was active in the early phase in 1996 when shiploads of GM stock arrived in Spain, but then dropped the issue and did not step up its campaign before 2002. Spain’s fragmented movement landscape is reflected by the great number of involved groups (53) which rarely emerged in unified, national mobilizations. Only once, in April 2009, a nation-wide anti-GM demonstration took place rallying
4000 activists in Saragossa. Generally, activity was concentrated in Madrid, the Basque country and Catalonia. This is also reflected in the prominence of Catalanian groups such as Transgènics Fora and Som lo que sembrem who campaigned for a regional ban on GM technology in Catalonia.

In the UK, anonymous actors carried out most protest actions – mostly covert GM field raids. Typically, activists were loosely connected in anarchistic networks that had emerged in preceding controversies (Doherty and Hayes 2012, 550). In exceptional cases activists rejected covert action. In 1999, for example, Greenpeace activists – among them the NGO’s director Lord Melchett – spectacularly invaded a GM field in Norfolk provoking much media coverage and legal proceedings (Doherty and Hayes 2014, 11). Generally, however, anonymous, uncoordinated direct action prevailed. The other major actors were FoE UK and Greenpeace who typically engaged in conventional lobbying campaigns. The single GM field raid was untypical for Greenpeace.

France’s movement had two lead actors – the Confédération and, after 2003, the faucheurs, both under Bové’s leadership. Open field destructions were the regular form of direct action. Anonymous direct action was rare (4.6 per cent). The Confédération and the faucheurs attracted support by numerous civil society actors. The think tank Attac, for example, took part in actions on the side of the Confédération 22 times; representatives of Les Verts, France’s Green Party, engaged in actions led by the faucheurs in 27 cases. Greenpeace France, while still a leading actor, holds the third position, shows a relatively conventional action profile, and rarely acted in alliance with the Confédération or the faucheurs.

In Germany once more Greenpeace is leading. It is followed by BUND – Germany’s longest standing anti-GM organization. BUND acted as a supporter rather than as an initiator of protests, which mirrors the organization’s general focus on conventional practices such as producing and disseminating expert knowledge. The high share of anonymous actors reflects the high incidence of covert GM fields destructions.

**Discussion: specificity and convergence**

Which specificities can be identified and how can they be explained? As Tables 2 and 3 illustrate, certain protest types are very unequally distributed or even limited to particular countries. Formal political methods are mostly absent, except in Austria, and displays of
solidarity are typical for France. The difference between ‘conventional’ movements (Austria and Spain) and direct action movements (UK, France and Germany) has been mentioned, but even within these groups countries diverge. Austria and Spain exemplify two entirely different evolutions. The Austrian movement’s early success was due to two NGOs in alliance with an influential tabloid, negative public opinion and a highly responsive government. The Spanish movement, by contrast, fought an uphill struggle through the years and in some years virtually disappeared, without making an impact. The two countries’ conventional profiles have different reasons. After the first unauthorized GM field trial in Austria had unleashed a wave of protest, no further field experimentation took place and potential direct action had no targets. Conversely, commercial GM cultivation in Spain would have provided countless targets for direct action which, however, rarely occurred. A number of reasons such as low public support and harsh state repression account for this. In particular, direct activism was frustrated by the fact that GM technology had soon widely spread among Spain’s farmers. Directly targeting GM fields would therefore have provoked conflict with many farmers (Seifert 2013, 232–233).

The movements with confrontational profiles also represent distinct dynamics. Both in Germany and the UK anonymous GM field vandalism was pronounced but came in different waves. In the UK, direct action peaked with the general mobilization in the late 1990s. In Germany, it already occurred in the early 1990s but climaxed much later in campaigns against the imminent GM crop commercialization. In the UK, direct action receded in the early 2000s as biotech companies abandoned field experimentation. Most releases fell prey to vandalism. In 2005, field testing came to an end. In Germany, by contrast, field testing went on and offered scores of targets to direct action. After 2007, field experimentation also decreased and, in 2013, dropped to zero. The rise in state repression in the late 2000s is due to the appearance of Gendreck weg! – a new actor who adopted the French method of open field destructions. The actions provoked a great deal of follow up events, basically state repression and counter repression (Seifert 2013, 227–231).

France stands out. Not only the manner in which field destructions were carried out is specific, but also its lead actors’ status within the movement. While environmental NGOs such as Greenpeace were leading elsewhere, Bové’s Confédération and faucheurs held this position in France. His activist genius mobilized anti-GM actors in France for whom he acted as a voice, strategist and ideologist. He was personally involved in a great number of protests. 177 protest actions (34.5 per cent of the entire protest activity) turned around him, often displays of solidarity. In sum, the French movement’s special character results from its confrontational character, its principled debate, unique personalization and central actors – farmer and grass roots organizations rather than environmental NGOs.

How can these national profiles be explained? Mostly through national contextual factors. To begin with, public opinion is an important volatile contextual factor. Figures 1–5 chart the evolution of public opinion in addition to PE. The graph is based on Eurobarometer data on support for GM food – share of respondents who agree that GM food should be encouraged – measured in four equal intervalls from 1996 to 2010 (Gaskell et al. 2010, 40). Importantly, even in 1996, at the onset of controversy, public attitudes towards GM technology varied widely. With only 22 per cent support for GM food, the Austrian public opinion was, by far, the most GM aversive in the EU. This offers itself as an explanation for Austria’s early and rapid mobilization: as activists had the public on their side, it was easy to achieve rapid mobilization and success in the popular initiative in 1997. Spain, by contrast, showed the highest support rates in the EU in 1996 (66 per cent) that remained high despite some decrease towards the end the 2000s. Unsurprisingly,
without public support, Spanish activism remained isolated and came to nothing. In France and the UK, a remarkable drop of public support in the late 1990s corresponds with the rise of radical activism, which is in line with expectations. The drop is sharper in France where support rates even decreased further towards the end of the 2000s, suggesting that Bové’s persistent radical activism resonated with public opinion. Contrastingly, with regards to Germany, analysts noted that ‘compared to the situation in other European countries, where the acceptance of biotechnology and its applications suffered a substantial decrease, amongst the German public the perception of biotechnology was remarkably stable between 1996 and 1999’ (Hampel et al. 2002, 202). Figure 5, however, shows that a marked drop occurred in the mid 2000s. As expected, activism also intensified about that time. Finally, as expected, in Austria, France and Germany decisive government decisions to ban commercial GM crop cultivation were made at times when anti-GM mobilizations went along with very low or decreasing public support for GM food.

Contextual factors that are effective in the short term are events that trigger mobilizations. Such events can be identified in Austria – the illegal GM field release in 1996 –, in the UK – the media storm around Pusztai in 1999 –, and in France – Bové’s jail time after the ‘MacDo’ incident in 1999. Government responsiveness is another factor expected to directly affect movements’ up- and downswings. In France, the state sponsored consensus conference in 1998 raised public awareness in the time preceding the dramatic mobilization. In the UK, the state sponsored GM Nation? debates caused a new rise in activism. More obvious is the effect of government responsiveness on downswings which often occur as movements meet their objectives. In Austria, for example, protest activity receded after the popular initiative as a consequence of which the government adopted a GM-free policy. While this led to prolonged tensions between Austria and the EU, the movement had achieved what was possible domestically and stopped campaigning. The decisions to suspend the authorization of commercial GM crops in France (2008) and Germany (2009) also came as major victories to activists and brought an end to confrontational campaigns. In the UK, movement activity, direct action in particular, ebbed away already in the mid-2000s as GM field trials came to a standstill.

Path dependent trajectories also unfold within national contexts. As expected, movements are influenced by previous movements in the same country. In the UK, the direct action networks that massively attacked GM fields in the late 1990s spun off from ‘the small locally based groups of mainly young anarchistic activists who had carried out the wave of direct action against road building in the preceding six years’ (Doherty and Hayes 2012, 550). Path dependence also involves parallel movements. For example, the French movement around Bové merged anti-GM protests with the upcoming movement against neoliberal globalization and the radical left. By contrast, the anti-GM movement in Austria was primarily concerned with keeping the technology out of Austria without propagating any wider political critique (Seifert 2009). Doherty and Hayes (2012, 2014) also emphasize the influence of national activist traditions on French and British GM field vandalism: ‘In France, activists stage action as a demonstration of serious, responsible, collective Republican citizenship; in the United Kingdom, activists combine a sceptical view of legality developing from anarchist individualism with an explicitly non-threatening, playful, ethos’ (Doherty and Hayes 2014, 11). Spain also illustrates path dependence. The early introduction of commercial GM crops in 1998 (when all other governments hesitated) restricted the movement’s further development (Binimelis 2008, 443). The use of GM seeds soon became entrenched in Spain’s agriculture so that anti-GM campaigns had to founder on a majority of farmers using GM seed (Seifert 2013, 233).
Path dependence in Germany is less obvious. The fact that the German anti-GM movement dates back to the mid-1980s raises the question of why German movement actors did not mobilize more successfully in the mid and late 1990s. One possible explanation is that the early controversy resulted in strict regulation which desensitized the public to subsequent attempts to mobilize (Gill 1996). Cooper (2009) also shows that Germany’s SPD-Green coalition (1998–2002; 2002–2005) government in tandem with quick responses of the food industry led to a comparatively restrictive GMO policy which supposedly appeased both public opinion and anti-GM activists in the early years. As Figure 5 shows, however, the public mood turned against GM-technology in the mid-2000s. The resulting anti-GM climate coupled with a new activist focus on campaigns against commercial GM crops after the lifting of the EU moratorium led to the observed late mobilization.

Finally, regarding more stable contextual features, movements are shaped by countries’ POS. In Austria, such features, which had also had major impact on preceding environmental controversies, are the popular initiative and the involvement of the tabloid press (Seifert 2009). The confrontational anti-GM movements in the UK and France show protest patterns that are typically provoked by these countries’ ‘strong, centralised, exclusionary’ systems (Doherty and Hayes 2012, 546). Regarding Germany and Spain, both systems are decentralized polities. Accordingly, anti-GM movements lobby regions – Catalonia and Bavaria. Finally, as regards Spain, structural features have to be mentioned that frustrate rather than enable movements, such as the low profile of environmental issues and generally positive attitudes regarding technological innovation (Binimelis 2008, 443).

Convergence
Despite their differences, the examined movements also have much in common. They share the same ultimate goal – banning agri-food GM technology – and, in many respects, they converge in the ways they go about it. Movements widely overlap with regard to action repertoires, immediate objectives, methods and strategies. In all countries SMOs spread information and engaged in demonstrations to influence public opinion and pressure governments. Everywhere, these conventional activities took up great, albeit varying portions of anti-GM protests. By no means is direct action the defining feature in all movements. This is only the case in France. In Germany and the UK, by contrast, direct action is only one among other, conventional movement activities. In Austria and Spain, it is virtually absent.

With regard to timing, convergence is less obvious but can be identified in three features. First, all movements except in Germany, emerged in the mid-1990s in the wake of the BSE crisis. Second, all movements exhibited at least one activity peak before or in the year 2000. Thereafter, movements evolved in different fashions, with Austria ebbing away, just as the UK after a final surge in 2003, Spain continuing its uphill struggle, and France and Germany climaxing in the course of the 2000s. However, third, all movements calmed down by the end of the decade. In the 2010s, no further mobilization has occurred in the EU.

Summarizing, the fact that initial mobilizations occurred in the pre- or early moratorium phase is partly in line with expectations. The expected calming down of protests during the moratorium is confirmed for Austria, Germany, Spain and the UK, but not for France. The expected resurgence of protests in the post-moratorium phase is only shown clearly in Germany and rudimentarily in Spain. In France, protest intensity
oscillates at high levels during both moratorium and post-moratorium phases, whereas elsewhere it does not occur.

As regards diffusion, it has been noted that this study focuses on only one aspect, albeit a crucial one. TSMOs, indeed, play a key role, for example, by coordinating transnational campaigns. The diffusion/convergence thesis predicts that, due to their transnational operation radius, TSMOs are generally prominent actors across national arenas. While Table 4 indicates that the two TSMOs, Greenpeace and the FoE network, were active in most national arenas, Table 5 refines the picture by revealing differences in TSMOs’ relative weight in national movements. Indeed, Greenpeace held prominent positions in each country but less so in the UK. Chapters of the FoE network were prominent in the UK, Germany and Austria. In Austria Greenpeace and Global 2000 cooperated more often than anywhere else and together ‘ran the show’, accounting for 78.7% of all protests. In Germany, Greenpeace and the FoE organization BUND also cooperated extensively and together were involved in 46.4% of all protests. In France and Spain the local FoE organizations were marginal, and in France and the UK local actors – often involved in field vandalism – prevailed. In sum, TSMO constellations in national arenas, indeed, show convergence but their relative weight markedly varies across national arenas.

The expectation that the two TSMOs’ different organizational and strategic profiles reflect in their transnational activity patterns is confirmed. Greenpeace typically ran campaigns around GM-food and feed thus pressuring retail sector and food industries. Conversely, the FoE network was the key organizer of the EU-wide GM-free regions campaign (Parks 2015). While Greenpeace ran individual campaigns, the FoE network often allied with other groups. Regarding action repertoires, the two TSMOs share a tendency toward conventional methods. Even though Greenpeace frequently conducted its well-known media-effective stunts, both TSMOs consistently avoided getting involved in GM field vandalism.3

Explanatory propositions for convergences are: transnational opportunities; structural affinity; and diffusion. The inconsistency of the evidence for convergence complicates the analysis along these lines. While some patterns can be identified, the strong influence of the national context requires reservations. The first mechanism – transnational opportunities – assumes that national movements respond to such opportunities in a synchronous and similar fashion. The temporal evolution gives mixed support to the prediction that initial mobilizations take place in the pre-moratorium phase. On the one hand, national mobilizations occur at distinct moments, mostly years after 1996, and never as an immediate response to supranational events such as BSE. On the other, even if the BSE crisis did not trigger national mobilizations, it affected national movements indirectly and in the long term, by alarming publics and governments regarding food and labelling policies and thus providing the ground for later mobilizations.

The moratorium phase also provides some evidence for the expected calming down of protests, notwithstanding French exceptionalism. In the post-moratorium phase movements had widely diversified, each undergoing its distinct process, only Germany and France responding to the supranational threat of commercial GM crop cultivation with late mobilizations and at different points in time. Hence, supranational threats and opportunities do have an effect on movements but do not necessarily make them converge. Instead, national publics, governments and movements react in their own, non-linear ways.

The picture is similar for the second mechanism – structural affinity – the legal and institutional harmonization of states. In the case at hand, this means the harmonization of EU rules for the GM authorization and labelling. These regulations were in place through all phases, intermittently by revision in the moratorium phase, but governments
Table 5. Involvement of TSMOs in national arenas.

| NGOs involved in protests          | UK   |     | Spain |     | France |     | Germany |     | Austria |     | Total |     |
|-----------------------------------|------|-----|-------|-----|--------|-----|---------|-----|---------|-----|-------|-----|
|                                   | N    | %   | N     | %   | N      | %   | N       | %   | N       | %   | N     | %   |
| Greenpeace                        | 34   | 8.0 | 37    | 28.9| 89     | 17.4| 178     | 32.5| 70      | 55.1| 408   | 23.4|
| FoE Network*                     | 45   | 10.6| 6     | 4.7 | 4      | 0.8 | 107     | 19.6| 53      | 41.7| 215   | 12.4|
| Both Greenpeace and FoE          | 13   | 3.1 | 1     | 0.8 | 2      | 0.4 | 31      | 5.7 | 23      | 18.1| 70    | 4.0 |
| Neither involved                  | 360  | 84.5| 86    | 67.2| 422    | 82.3| 293     | 53.6| 27      | 21.3| 1188  | 68.2|
| TOTAL                             | 426  | 100.0| 128  | 100.0| 513    | 100.1| 547     | 100.0| 127     | 100.0| 1741  | 100.0|

*The following national groups constitute the FoE network: Austria Global 2000; France Amis de la terre; Germany BUND; Spain Amigos de la Tierra; UK FoE UK.*
dealt with them in different ways which created different domestic situations to which, in turn, movements responded. Austria, for example, was the first to prohibit GM crops that had been authorized in the EU. France and Germany avoided to licence commercial GM crops before and during the moratorium. Therefore, in Germany, major mobilizations followed in the post-moratorium phase when commercial GM cultivation set in. By contrast, in France, Bové’s movement pursuing an open direct action strategy targeting GM field trials and public debate escalated already in the moratorium phase. Spain, in turn, implemented EU authorizations without delay starting commercial cultivation early which set the stage for all later developments. In sum, while structural affinity exists it does not necessarily result in convergence. Instead, harmonized regulations shape national contexts depending on decision processes and movement strategies.

Regarding the third mechanism – diffusion – the study does not claim to deliver a complete analysis which would require the examination of all possible diffusion channels, specifically diffusion through mass media. However, as far as the investigated aspect is concerned – TSMOs as indicators for diffusion processes – the findings signal a complex picture. The two principal TSMOs in the anti-GM field take campaigns, ideas and strategies across boundaries. They operate in all countries and, in certain respects, converge among each other. For example, both TSMOs avoid direct action such as GM field vandalism. However, their positions and roles in the reference countries also vary. Only Greenpeace is prominent in all countries, often leading and typically focusing on media effective campaigns. The FoE network’s role is more varied depending on local groups’ profiles and alliances. This indicates that diffusion through transnational organizations indeed takes place but largely depends on their organizational structure and contextual circumstances, and it appears limited to non-confrontational action repertoires. Transnational diffusion of confrontational action repertoires seems to be far less likely. In general, GM field vandalism is conducted by activist networks that are rooted in national contexts.4

Conclusion

Are the dynamics of national anti-GM movements mostly structured by the national context or does this Europeanized movement show signs of convergence? The answer to the first question must be in the affirmative. National anti-GM movements are very specific, with their own actors, discourses, evolution, contextual causality and internal logic. Austria features a non-confrontational but highly effective movement operating in consonance with public opinion that receded after winning over government. In Spain protests were weak and largely ineffective due to a lack of supportive public opinion and the early adoption of GM crops. The movement in the UK was fervent but short-lived as it soon ‘consumed’ its targets. Germany’s movement did not gain momentum before 2004 when public opinion turned against GM food and succeeded through mobilizing Bavaria. France presents us with the most intense and persistent movement with many unique features. Most of these specificities can be explained by national factors – contingencies, path dependencies, contextual factors. Even transnational opportunities that are expected to bring about convergence, just as structural affinity and diffusion through TSMOs, are intricately interwoven with national contexts and often reinforce rather than level national specificities. In sum, these results are consistent with the orthodox view that places the nation state at the centre of movement activity.

Then again, things look different depending on whether we look at them from close up or from a distance. Upon closer inspection there is little evidence for convergence: immediate trigger events occur in national environments; movements interact with responsive or
unresponsive national governments and publics, etc. From close up, even a Europeanized movement appears as a collection of distinct national movements. From a distance, a bigger picture comes into sight. Viewed from afar, it is not wrong to speak of a ‘European anti-GM wave’ that began in 1996, led to mobilizations against agri-food GM-technology in various countries some of which pushed governments to adopt GM-aversive policies, undermined permissive EU policies on agri-food GM technology in turn, and faded after GM food, GM field testing and GM crops had been practically blocked in the entire EU. There is evidence for supranational movement structuration. The BSE crisis and the advent of GM maize and soya in 1996 triggered protests, even if indirectly and in the long term; and the EU moratorium calmed down protest activity, albeit not everywhere. There is also evidence for transnational diffusion through TSMOs, even though TSMO behaviour is structured by national contexts. Considering this, movement convergence in the course of European integration remains a prospect, albeit a remote one.

As to what may be expected in this field in the future this study makes one thing clear: the movement has mobilizing power, endurance and political effectiveness when coinciding with supportive public opinion. Even after the conflict subsided and protest activity ebbed away, the movement has not lost its potential to obstruct and block agri-food GM technology in case new GM crops and food products appear on the horizon. It is an open question as to how long European industries and decision makers will refrain from introducing new GM products into the European market. If controversy flares up again, however, resistance is virtually certain. As this study suggests, the composition, strategies and mobilization patterns of such a hypothetical protest movement will mainly be shaped by national arenas.

Acknowledgements
My thanks to Martin Bauer, Ronald Herring, Dieter Rucht, Graeme Hayes, Brian Doherty, Michal Sedláčko, Camilo Fautz, Marcelo Jenny and anonymous reviewers for helpful comments.

Funding
Funding for research and writing of this study has been provided by the Austrian Science Fund: [grant numbers P 21812-G17, P 29114-G16].

Notes
1. Giugni suggests that ‘the creation of centers of power in the European Union is a good example’ for the emergence of ‘transnational opportunities for mobilization’ (1998: 93).
2. For Seehofer’s key role in the process see Cooper 2009: 551-553.
3. The invasion of a GM field in Norfolk Greenpeace activists and Sir Melchett in 1999 is an exceptional case.
4. Seifert (2013), for example, showed that activists very rarely copied the strategy of the open field destruction from French activists even though it was key for this movement’s outstanding publicity and political success. The exceptional case of the German direct activist group Gendreck weg! proves the rule.

Notes on contributor
Dr. Franz Seifert is social researcher and university lecturer based in Vienna who works about conflicts and the governance of new technologies.
Ansell, Chris, Rahsaan Maxwell, and Daniela Sicurelli. 2006. “Protesting Food: NGOs and Political Mobilization in Europe.” In What’s the Beef? The Contested Governance of European Food Safety, edited by Christopher Ansell, and David Vogel, 97–122. Berkeley: MIT Press.

Binimelis, Rosa. 2008. “Coexistence of Plants and Coexistence of Farmers: Is an Individual Choice Possible?” Journal of Agricultural and Environmental Ethics 21: 437–457.

Bonneuil, Christophe, Pierre-Benoit Joly, and Claire Marris. 2008. “Disentrenching Experiment: The Construction of GM—Crop Field Trials as a Social Problem.” Science, Technology & Human Values 33 (2): 201–229.

Boy, Daniel, Suzanne de Cheveigné, Jean-Christophe Galloux, Anne Berthomier, and Hélène Gaumont Prat. 1998. “France.” In Biotechnology in the Public Sphere. A European Sourcebook, edited by John Durant, Martin W. Bauer, and George Gaskell, 51–62. London: Science Museum.

Börzel, Tanja, and Aaron Buzogány. 2010. “Environmental Organisations and the Europeanisation of Public Policy in Central and Eastern Europe: the Case of Biodiversity Governance.” Environmental Politics 19 (5): 708–735.

ciai, Manuela, and Paolo Graziano. 2018. “Europeanisation and Social Movements: The Case of the Stop TTIP Campaign.” European Journal of Political Research 57 (4): 1031–1055.

Carmin, JoAnn, and Barbara Hicks. 2002. “International Triggering Events, Transnational Networks, And The Development of Czech And Polish Environmental Movements.” Mobilization: An International Quarterly 7 (3): 305–324.

Cooper, Alice. 2009. “Political Indigestion: Germany Confronts Genetically Modified Foods.” German Politics 18 (4): 536–558.

della Porta, Donatella, and Hanspeter Kriesi. 1999. “Social Movements in a Globalizing World: an Introduction.” In Social Movements in a Globalising World, edited by Donatella della Porta, Hanspeter Kriesi, and Dieter Rucht, 3–22. London: Macmillan.

della Porta, Donatella, and Manuela Caiani. 2009. Social Movements and Europeanization. Oxford: Oxford University Press.

Doherty, Brian, and Graeme Hayes. 2012. “Tactics, Traditions and Opportunities: British and French Crop–Trashing Actions in Comparative Perspective.” European Journal of Political Research 51 (4): 540–562.

Doherty, Brian, and Timothy Doyle. 2014. Environmentalism, Resistance and Solidarity. The Politics of Friends of the Earth International. Basingstoke: Palgrave, Macmillan.

Doherty, Brian, and Graeme Hayes. 2014. “Having Your Day in Court: Judicial Opportunity and Tactical Choice in Anti-GMO Campaigns in France and the United Kingdom.” Comparative Political Studies 47 (1): 3–29.

Gaskell, George, and Martin W. Bauer. 2001. Biotechnology 1996-2000. The Years of Controversy. London: Science Museum.

Gaskell, George, Martin W. Bauer, Nick Allum, Nicola Lindsey, John Durant, and Julia Luegigger. 2002. “United Kingdom: Spilling the Beans on Genes.” In Biotechnology. 1996 - 2000. The Years of Controversy, edited by George Gaskell, and Martin W. Bauer, 292–306. London: Science Museum.

Gaskell, George, Sally Stares, Agnes Allansdottir, Nick Allum, Paula Castro, Yilmaz Esmer, Claude Fischerl, et al. 2010. Europeans and Biotechnology in 2010: Winds of Change? A Report to the European Commission’s Directorate-General for Research. Brussels: European Commission.

Gill, Bernhard. 1996. “Germany: Splicing Genes, Splitting Society.” Science and Public Policy 23 (3): 175–179.

Giugni, Marco G. 1998. “The Other Side of the Coin: Explaining Crossnational Similarities Between Social Movements.” Mobilization 3 (1): 88–105.

Soule, Sarah A., and Conny Roggeband. 2018. “Diffusion Processes Within and Across Movements.” In The Wiley Blackwell Companion to Social Movements Pages, edited by David A. Snow, Sarah A. Soule, Hanspeter Kriesi, and Holly J. McCammon, 236–250. Hoboken, NJ: Wiley Blackwell.

Hampel, Jürgen, Uwe Pfenning, Matthias Kohring, Alexander Görke, and Georg Ruhmann. 2002. “Biotechnology Boom and Market Failure: two Sides of the German Coin.” In Biotechnology. 1996 - 2000. The Years of Controversy, edited by George Gaskell, and Martin W. Bauer, 191–202. London: Science Museum.
Hicks, Barbara. 2004. “Setting Agendas and Shaping Activism: EU Influence on Central and Eastern European Environmental Movements.” Environmental Politics 13 (1): 216–233.

Hutter, Swen. 2014. “Protest Event Analysis and Its Offspring.” In Methodological Practices in Social Movement Research, edited by Donatella Della Porta, 335–367. Oxford: Oxford University Press.

Joly, Pierre-Benoît, and Claire Marris. 2003. “La Participation Contre la Mobilisation? Une Analyse Comparée du Debat sur les OGM en France et au Royaume-Uni.” Revue Internationale de Politique Comparée 10 (2): 195–206.

Koopmans, Ruud. 1999. “Globalization or Still National Politics? A Comparison of Protest Against the Gulf War in Germany, France, and the Netherlands.” In Social Movements in a Globalising World, edited by Donatella della Porta, Hanspeter Kriesi, and Dieter Rucht, 57–70. Houndsmills, Basingstoke: Macmillan.

Koopmans, Ruud. 2004. “Protest in Time and Space: The Evolution of Waves of Contention.” In The Blackwell Companion to Social Movements, edited by David A. Snow, Sarah Soule, and Hans-Peter Kriesi, 19–66. Oxford: Blackwell Publishing.

Koopmans, Ruud, and Dieter Rucht. 2002. “Protest Event Analysis.” In Methods of Social Movement Research, edited by Bert Klandermans, and Suzanne Staggenborg, 231–259. Minneapolis: University of Minnesota Press.

Kriesi, Hanspeter. 1995. “The Political Opportunity Structure of New Social Movements: Its Impact on Their Mobilization.” In The Politics of Social Protest. Comparative Perspectives on States and Social Movements, edited by J. Craig Jenkins, and Bert Klandermans, 167–198. London: University College London Press.

Marks, Gary, and Doug McAdam. 1996. “Social Movements and the Changing Structure of Political Opportunity in the European Union.” West European Politics 19 (2): 249–278.

McCauley, Darren. 2011. “Bottom-Up Europeanization Exposed: Social Movement Theory and Non-State Actors in France.” Journal of Common Market Studies 49: 1019–1042.

Parks, Louisia. 2015. “Social Movement Campaigns on EU Policy.” In The Corridors and in the Streets. Palgrave: Macmillan.

Roese, Jochen, Kostas Kanellopoulos, and Moritz Sommer. 2017. “National Anti-Austerity Protests in a European Crisis: Comparing the Europeanizing Impact of Protest in Greece and Germany During the Eurozone Crisis.” Journal of Civil Society 13 (3): 284–306.

San-Epifanio, Leire Escajedo. 2017. Towards a new Regulatory Framework for GM Crops in the European Union. Scientific, Ethical, Social and Legal Issues and the Challenges Ahead. Wageningen: Wageningen Academic Publishers.

Schermer, Rachel. 2004. “Fighting ‘Frankenfoods’: Industry Opportunity Structures and the Efficacy of the Anti-Biotech Movement in Western Europe.” Social Problems 51 (2): 243–268.

Seifert, Franz. 2006a. Synchronised national publics as functional equivalent of an integrated European public. The case of biotechnology, in: European Integration online Papers 10 (2006) (8) (http://eiop.or.at/eiop/index.php/eiop/article/view/2006_008a/26).

Seifert, Franz. 2006b. “Regional GM Opposition as Multilevel Challenge? The Case of Upper Austria.” Tailoring Biotechnologies 2 (3): 11–36.

Seifert, Franz. 2009. “Consensual NIMBYs, Contentious NIABYs: Explaining Contrasting Forms of Farmers GMO Opposition in Austria and France.” Sociologia Ruralis 49 (1): 20–40.

Seifert, Franz. 2013. “Transnational Diffusion of a High-Cost Protest Method. Open Field Destructions in France, Germany and Spain.” Interface 5 (2): 213–239. (http://www.interfacejournal.net/wordpress/wp-content/uploads/2013/11/Interface-5-2-Seifert.pdf).

Seifert, Franz. 2017. “Measuring the Europeanization of the Anti-GM Movement: Evidence From Five EU Countries.” Mobilization 22 (3): 363–383.

Tarrow, Sidney. 1995. “The Europeanization of Conflict: Reflections From a Social Movement Perspective.” West European Politics 18 (2): 223–251.

Tarrow, Sidney. 1998. Power in Movement. Social Movements and Contentious Politics. Cambridge: Cambridge University Press.

Vráblíková, Kateřina. 2013. “Public Opinion and Social Movements.” In The Wiley-Blackwell Encyclopedia of Social and Political Movements, edited by David A. Snow, Donatella della Porta, Bert Klandermans, and Doug McAdam, 1022–1025. Malden: Wiley.