

Engel, Christoph

**Working Paper**

## Causes and management of conflicts

Preprints aus der Max-Planck-Projektgruppe Recht der Gemeinschaftsgüter, No. 2002/16

**Provided in Cooperation with:**

Max Planck Institute for Research on Collective Goods

*Suggested Citation:* Engel, Christoph (2002) : Causes and management of conflicts, Preprints aus der Max-Planck-Projektgruppe Recht der Gemeinschaftsgüter, No. 2002/16, Max-Planck-Projektgruppe Recht der Gemeinschaftsgüter, Bonn

This Version is available at:

<https://hdl.handle.net/10419/85154>

**Standard-Nutzungsbedingungen:**

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

**Terms of use:**

*Documents in EconStor may be saved and copied for your personal and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.*



# **Gemeinschaftsgüter: Recht, Politik und Ökonomie**

Preprints  
aus der Max-Planck-Projektgruppe  
Recht der Gemeinschaftsgüter  
Bonn  
2002/16

## **Causes and Management of Conflicts**

von  
Christoph Engel

## Table of Contents

1. Causes of Conflict	2
a) Conflicts of Interests	2
b) Conflicts of Identity	5
c) Conflicts Resulting from Other Human Behavioural Programs	6
2. Conflict as a Normative Issue	8
3. Institutions Creating or Safeguarding Conflict	10
4. Institutions Reducing Conflict Risk	11
5. Institutions Managing Conflict	13
6. Second Order Conflict	14
7. Appropriate Level of Analysis	15
References	17

Reality is dirty. People murder and injure each other, they steal and lie, they rape and insult their neighbours. All this causes conflict. From the days of the Decalogue on, these have been core issues of morality. But despite millennia of preaching, conflict did not die out. A more indirect, institutional approach might therefore be better in place. And not all conflict is undesirable. Some degree, and some forms of conflict may, on the contrary, be characteristic for healthy social interaction.

Obviously, this is not a new topic. But the advancement of the social and behavioural sciences provides us with a rich array of conceptual tools for understanding institutional responses to conflict. Academic division of labour has thus borne fruit. But it comes at a price. The pertinent fields do not often speak to each other. And outside observers, like the lawyers, receive patently incompatible messages from them. This introduction to a conference on the causes and the management of conflicts purports to fill the lacuna by offering a systematic cut through the rich material. That way, it also hopes to show how the papers presented at that conference, and reproduced hereafter, are linked to the overall question.

Helpful comments by Claude Fluet, Werner Güth, Adrienne Héritier, Katharina Holzinger, Stefan Magen, Francesco Parisi and Urs Schweizer are gratefully acknowledged.

There are many options for defining conflict. The narrowest view would look for physical violence. A related approach would ask for conscious breaches of rules. The most lenient definition would be a mere absence of cooperation. This introduction adopts an intermediate position. Conflict is understood to be a situation where one person claims that another person did not behave as she might have been expected to do, and where the former person sees this as detrimental for herself.

An institutional approach to conflict pre-supposes understanding the causes of conflict (section 1) and normatively assessing the desirability or the damaging potential of conflict (section 2). Consequently, some institutions create or at least safeguard conflict (section 3). Others precautionarily reduce conflict risk (section 4). The bulk of institutional responses, however, is about managing conflict once it breaks out (section 5). Since these institutional interventions themselves are not neutral, there is a potential for second-order conflict (section 6). Finally one may question the proper level of analysis for conflict as a research topic (section 7).

## **1. Causes of Conflict**

In ideal types, conflicts of interest (section a) can be distinguished from conflicts of identity (section b). Yet another set of causes for conflict becomes visible, if one digs deeper and looks for behavioural dispositions, rather than for actual behaviour (section c). Obviously, in reality, many conflicts are mixed. To give only one example: If party A cheats on her contractual obligations towards party B, party B may also perceive this as an insult and become furious. The originating conflict is thus simultaneously one of interest, of identity, and of emotions.

### **a) Conflicts of Interests**

Economics is about incentives. Not surprisingly, the economic theory of conflicts is therefore basically a theory of conflicts of interest (AXELROD [1967]; HIRSHLEIFER [2001]). Interests clash since resources are more limited than desires. The ensuing conflict is particularly acute if resources serve to fulfil basic needs, but are strictly limited (MAXWELL and REUVENY [1998]). A salient case are conflicts over renewable resources (REUVENY and MAXWELL [2001]), like water, and conflicts originating from environmental scarcity (REUVENY [2002]). Another classic conflict of interests is about redistribution<sup>1</sup>. It is at the heart of classic class conflicts (cf. SOMANATHAN [2002]).

In the world of Adam Smith, the invisible hand of the market turns individual selfishness into social welfare (SMITH [1776, p. IV.ii.9]). Game theory has demonstrated that this is no more than a special case (VON NEUMANN and MORGENSTERN [1944]). Workable competition forces all actors to play a game against nature (SCHARPF [1997, p. 5]). This implies: outside workable

---

1 See the classic distinction of regulative, distributive and redistributive policies in political science by Lowi in World Politics [1964].

competition, conflicts can originate from strategic interaction (SCHELLING [1960]; in this volume FON and PARISI [2003]). A frequent case is opportunism (BRENNAN, GÜTH et al. [2003]; FLUET [2003]). The term refers to ex post behaviour of a party to a contract. While she has concluded the contract, she later on exploits the practical opportunity for breaching it (WILLIAMSON [1985, p. chapter 1.3]). Whenever there is an opportunity for strategic action, rational actors will take it, irrespective of ensuing social detriment. The assumption of welfare maximisation transforms what might have been a positive-sum game into a zero-sum game. Thus distributional conflict looms large. For in practical terms, there is almost ever more than one workable solution to true social problems. And these solutions systematically have different distribution effects. Regulative politics is therefore not only driven by a general interest in social betterment. The hidden agenda usually is a fight over distributional gain among organized groups (KNIGHT [1992]).

Real world conflicts often exhibit a higher degree of complexity (cf. SIMON [1962]). In a repeated game, the same parties anticipate playing the same (base) game again in the future. Conflict can then originate from the will of one of the parties to build a reputation of being a tough fighter. Given the conflict structure, this is a rational investment decision (TIROLE [1988, p. Chapter 9]). Issues can also be linked across individuals. A classic example is an externality. If two neighbours decide to play a round of soccer across the fence, many more neighbours suffer from the ensuing noise. Generally speaking, de-linking the issue may be technically impossible, prohibitively costly, or it may clash with other normative values to which all participants adhere<sup>2</sup>. Building consensus then becomes a public good for the group. If the linkage is tight, all participants must agree to one solution, or coordination fails altogether. In the terminology of public goods' theory, consensus then is a weakest-link good. Public goods' theory calls a less stringent form of linkage a weaker-link good (CORNES and SANDLER [1996, p. 186]). Weaker link goods lead to what now often is called the anti-commons problem (PARISI [2001])<sup>3</sup>. In a weakest-link situation, each participant has veto power<sup>4</sup>. In a weaker-link situation, a refusal to participate by one actor has considerable nuisance value. Natural issue linkage thus considerably increases the potential for conflict. It must be overcome by multi-party negotiations (MNOOKIN [2003])<sup>5</sup>.

Rational choice theory, if following the tradition of methodological individualism, is about individual actors. This pre-determines the rational choice perspective on group conflicts. In the purest strand of rational choice thinking, groups are no more than coalitions of individuals from a larger population. This is the viewpoint of non-cooperative game theory. It adds to the list of causes for conflict: individuals can and will strategically invest in building blocking coalitions

---

2 Not surprisingly, the three reasons are exactly those that are responsible for the inexistence of property rights, see Engel [2002a, p. 52]. For setting up property rights would be tantamount to de-linking the issue.

3 In a weakest-link situation, the anti-commons problem is overcome. Each participant has veto-power. But by exercising it, he would hurt himself. For this would mean that he himself also derives no utility from the good. Put differently, exercising the veto is not sub-game perfect. Francesco Parisi pointed me to this.

4 The concept of veto-players has become crucial in rational choice analysis by political scientists, see Immergut [1992]; Tsebelis [2002].

5 It should be noted, however, that the weakest link property can be good news for cooperation. If the level of the public good is determined by the minimal individual contribution, strict equilibria multiply. I owe this insight to Werner Güth.

(SEBENIUS [1995]). A more liberal strand of rational choice theory prevalent in political sciences allows for collective and corporate actors (SCHARPF [1997, p. 54-58]). This is for instance helpful for understanding conflict between organized workers and their employers (POSNER [2003]). If one talks about collective or corporate actors, one imputes preferences to these entities. They differ from individuals in that their counterparts potentially can observe the contents and the formation of these preferences. Not so rarely, they do even have opportunities for influencing preference formation from outside. If so, two games are linked: the game in which the collective or corporate actor is engaged; and the game at the interior of this actor, usually interpreted as a principal-agent problem. Conflicts at the higher level can precisely originate from this linkage. Seemingly irrational behaviour of the collective or corporate actor can be driven by the underlying, internal game. The logic of membership and the logic of influence can fall apart (SCHMITTER and STREECK [1999]).

Yet another cause of conflict becomes visible, when group composition is no longer assumed to be fixed. Conflict can result from the fact that outsiders invade a homogeneous population (ARCE and SANDLER [2003]). A functional equivalent would be a stable population, but some individuals changing their preferences. Logically, conflict can also result, if a population is composed of different types of individuals in the first place, struggling with each other<sup>6</sup>.

Rational choice models are made for a fairly certain world. They can only cope with risk and uncertainty (KNIGHT [1921]) and with incomplete information (HARSANYI [1967-1968]). In the first case, even the probabilities are known. In the second case, at least the solution space is predetermined (SPIECKER GEN. DÖHMANN [2001]; more generally ENGEL, HALFMANN et al. [2002]). The third category allows for institutional uncertainty, given a certain spectrum of player types. Nonetheless, even within this narrow conceptual space, further causes for conflict become visible (cf. THOMPSON [2000]). Conflict can originate from divergent risk preferences (SINN [1989]; HEY [1999]), different beliefs or different ways of updating them, after new bits of information have been revealed (more from MARTIGNON and BLACKMOND LASKEY [1999])<sup>7</sup>. Above, repeated games have been depicted as a form of linking issues over time. An alternative interpretation has repeated games as one way of modelling the dynamics of conflict. More precisely, repeated games are the dynamic corollary of standard conflicts of strategic interaction. The more complex conflicts also have their dynamic corollaries. At the group level, this leads to evolutionary game theory (ARCE and SANDLER [2003]; BRENNAN, GÜTH et al. [2003]), and to group dynamics more generally being the cause of conflict (SUNSTEIN [2002]). Uncertainty and updating beliefs also has its dynamic dimension in herding and informational cascades (BANERJEE [1992]; BIKHCHANDANI, HIRSHLEIFER et al. [1998]; KURAN [1998]; in this volume POSNER [2003]), which may lead to conflict.

---

6 This is how Brennan, Güth und Kliemt in *Journal of Institutional and Theoretical Economics* [2003] could be read as a paper on the causes of conflict.

7 Of course, beliefs need not be analysed in a rational choice framework. Specifically, rational choice does not say where beliefs come from in the first place. It takes them as given, no less than it does with preferences. Competing, cognitive or sociological, approaches purport to explain the contents of beliefs.

In one of these ways, a dynamic dimension can be added to standard economic thinking. But it does not become evolutionary this way. Nature still is assumed to be static, or at least predictable. Evolutionary thinking, on the contrary, stresses the unpredictable ways in which nature evolves. It normally also gives human actors the ability to react creatively (VON HAYEK [1945]; NELSON and WINTER [1982]; NELSON [1995]; WITT [2001]). In this perspective, additional causes of conflict become visible. Individuals can speculate on evolution paths, or they can even try to create path dependence (cf. DAVID [1994]) in the interest of safeguarding distributional gains. Those who believe themselves less able to gain from evolution can try to impose conflict in the interest of preserving the status quo ante. The current, violent resistance to globalisation in many industrialized countries illustrates the point.

## **b) Conflicts of Identity**

Individual behaviour is socially embedded (GRANOVETTER [1985]). Many causes of conflict only become visible, once this social embeddedness is taken into account. Individuals do not only care for utility. They also care for identity. They do not exclusively define themselves as isolated beings, but also with respect to social expectations. They are not only individuals, they are also persons (JAKOBS [1999]). They are not exclusively guided by a logic of consequentialism. They also follow a logic of appropriateness (MARCH and OLSEN [1989]; MARCH and OLSEN [1998]). Gaining social esteem is therefore a powerful motivator. Being threatened with losing honour is even more likely to generate conflict (SMYTH [1994]; in this volume O'NEILL [2003]; SCHULZ [2003]); (cf. also HOOD, ROTHSTEIN et al. [2001]).

Social interaction needs communication. People do not only care for what they get. They also care for what is being said (FISCHER and FORESTER [1993]; MÜLLER [1994]; RISSE [2000]). They do not only bargain, they do also argue (SARETZKI [1995]). The English language makes the potential for conflict even linguistically obvious. "Having an argument" with somebody is not the description of peaceful discourse. Conflict can in other words be over symbols (SCHULZ [2003]).

In order to be effective, communication needs a language. The language of normative discourse is values<sup>8</sup>. It relies on fundamental normative convictions. They have their equivalent in fundamentally different models of physical and human nature (THOMPSON, ELLIS et al. [1990]). There is no theoretical or empirical way of proving that one of these views got it right (ENGEL [2001]). Consequently, conflicts over values are frequent (MILLER [1992]). At closer sight, they are conflicts over how to construct reality (HEGMANN [1997]). Since these normative systems are internally coherent, they are also characterized by preferred styles of interaction. While individualists prefer to trade in the market, hierarchists trust government and technocrats, and egalitarians prefer to rely on trust and honour. Egalitarians are therefore likely to react much more vigorously against what they perceive to be threats to their honour (O'NEILL [2003]).

---

8 On the social function of values see National Research Council [2002, p. 46-73] or in German Engel in Archiv für Presserecht [2002b].

Once one acknowledges that persons partly define themselves socially, a richer understanding of group conflict is provided (TAKACS [2001]). When groups fight, group members fight over identity. When they violate group norms, group members potentially violate the identity of all other group members (SCHULZ [2003]). The simple presence or visibility of non-members can be enough to generate conflict (cf. HOPKINS and MURDOCH [1999]).

Hard-nosed constructivists deny the existence of reality, or at least the ability of us humans to ever see it. For them, all practically relevant reality is the outcome of a contingent, social process of construction. One need not be that radical for detecting another, partly or even wholly fictitious source of conflict. Although there is neither clash of interests nor ideas,<sup>9</sup> the parties have considerable leeway to defining their interaction as conflictual. The risk of such artificial, constructed conflict is not so rarely increased by the very institutions introduced to manage conflict once it breaks out. For these institutions must formally define those social situations that come under their framework. Filing suit in court is an illustrative instance. The opening of a court procedure creates a conflict, even if there was none in the first place (cf. FARNSWORTH [2003]).

### **c) Conflicts Resulting from Other Human Behavioural Programs**

In theoretical jargon, the economic model, and the rational choice model more generally, are usually said to be an exercise in micro-level analysis. The adjective micro points to the fact that this analysis starts from individuals. While the terms macro and meso analysis have other connotations, looking at identity and social construction is certainly done at a more aggregate level<sup>10</sup>. Presented this way, it becomes logical to look for analytic levels below the micro-level, and to explore whether they can help see additional causes of conflict.

There are many lower levels of analysis, running from social psychology through mental processes down to the neuro-physiological level. In the end, all life is biological (ANDERSON [1990, p. 17-23]). It would, however, not make much sense to explain all social phenomena by which parts of the brain are engaged, and which electric or chemical impulses they exchange for the purpose. Going just one level below rationality, however, may be quite a useful exercise in explaining or changing social behaviour. At this level, one does not look at behaviour, but at dispositions making the individual behave in one way or in another. One might dub this pico-level analysis (cf. AINSLIE [1992]). This is also the best way to understand what social psychology, experimental economics and behavioural law and economics are heading for<sup>11</sup>.

---

9 The distinction between interests and ideas has separately been developed by Vanberg und Buchanan in *Journal of Theoretical Politics* [1989] and by Yee in *International Organization* [1996].

10 This is not to say that identity and social construction could not be mapped onto the individual. Once determined, one can even translate them into either preferences or restrictions, and thus allow for rational choice analysis. But it is not possible to explain the formation of an identity and the process of social construction at the micro level.

11 There is considerable controversy among them, with some claiming that “bounded rationality” should not be confounded with the aforementioned approach, for an overview see Simon [1982].



Not so rarely, they oversell their approach by claiming to be "realistic". There are many reasons why this cannot be true. First of all, hypotheses from rational choice analyses can be tested empirically. This can be done by quantitative or qualitative analyses (KING, KEOHANE et al. [1994]). Moreover, philosophy rightly tells us that we are unable to see reality unless we start looking at it with a hypothesis in mind. Without theory no reality (ALBERT [1978]). Finally, and most importantly, the chosen level of analysis determines which elements of reality we are able to see<sup>12</sup>. The analyst thus has to make a choice. But it may well be that, given a specific research interest, one approach is able to see more than another. Even if none of them just sees reality, one may thus be more relevant than another. And science is a cooperative endeavour. If one scientist opts for the pico-level, his peer is not hindered from opting for the micro-level, and another may engage in constructivist reasoning. One and the same person may even do analysis at several of these levels. Before society takes normative action, it usually will even want to explore several of these analytic levels. The only thing that should not be done is mixing them within one and the same argument.

What has the pico-level to offer for understanding conflict? First of all, it allows to reformulate causes of conflict already known from more aggregate levels of analyses. Rational choice analysis in this perspective appears as an analysis into one class of motivating forces. The individual search for identity can be translated into motivation by a search for self-esteem. Constructivism can be brought into context with cognition and so forth. More interesting, at least in this context, are causes for conflict that can only or at least best be seen at the pico-level (DEUTSCH [1973]). First of all, there are more motivating forces than interest and self-esteem. In particular, the role of emotions for creating conflict should not be overlooked. Spite is among them (FALK, FEHR et al. [2003]), as are greed, envy or reactance. Spotlight analysis is not likely to get the emotions right. The emotional history of behaviour plays an important role<sup>13</sup>.

A second important addendum to the list of causes of conflict can be gained by a closer look at cognition (BRYANT [1984]; cf. GARFINKEL and SKAPERDAS [2000]). Whether they engage in conflict depends on how the conflicting parties perceive reality (FIETKAU [1995]). Misperception is not so rarely driven by interest. This is what is meant by the term self-serving bias (FARNSWORTH [2003]).

The rational choice model rests on the distinction between preferences and restrictions. It puts institutions on the restrictions' side. Accordingly "preferences for institutions" are a non-issue for rational choice analysis. Rational choice analysis can only capture the anticipated impact of procedure on outcome. Yet empirically people care for the institutional framework, irrespective of outcome (FREY and OBERHOLZER-GEE [1999]). The mere fact that they feel subjected to an unfair procedure can generate conflict, even if the chosen procedure leads to a fairer outcome

---

12 Interestingly, this insight drives Anderson [1990, p. 17-23], as a cognitive scientist, to engage in introducing a rationality level into psychological theory building (but the rationality assumptions are much weaker than in rational choice theory).

13 Farnsworth [2000] uses this approach in a complementary paper to the one printed in this volume. He explains by the emotional history of the parties why they often do not settle, albeit it would be in their mutual interest to do so.

(BAZERMAN and NEALE [1995]; in this volume FALK, FEHR et al. [2003]). At the pico-level one may look for explanations. An attractive candidate is the idea that our mind is not a general purpose computer. Among the domain-specific mental apparatuses, there is one for situations of exchange. It is geared towards cheater detection, and reacts emotionally (COSMIDES and TOOBY [1992]).

## **2. Conflict as a Normative Issue**

In a normative perspective, at first blush conflict seems obviously undesirable. The cost of conflict is epitomized by physical violence, sabotage and the violation of property rights (in this volume MNOOKIN [2003]; POSNER [2003]). The opportunity cost of economic activity in the shadow of conflict (ANDERTON, ANDERTON et al. [1999]) can be even larger. Conflict can destroy any gains from trade or from the division of labour (POSNER [2003]). If ex post conflict is anticipated, individuals can shy away from potentially beneficial social contact altogether (FLUET [2003]). A particularly frequent case is the so-called hold-up problem, which may prevent mutually beneficial investments (SCHWEIZER [1999, p. chapter VI]). Moreover, conflict can lead to an externality. This is the case, if the cost of conflict is not entirely borne by those who engage in it (FALK, FEHR et al. [2003]).

The latter observation also explains why conflict is not only an individual, but also a social concern. In a rational choice perspective, a more rigorous way of addressing the normative question goes back to the Coasean insight (COASE [1960]). Provided property rights are well defined, allocative efficiency should result from bargaining. Property rights are obviously not well defined if the cost of conflict is partly or fully borne by outsiders. But what about insiders? Conflict is normally not symmetric. Take the case of opportunism. One party to a contract breaches it and thereby starts conflict. Does the innocent party not deserve central intervention on her behalf? A good Coasean should answer the question in the negative. Provided the other party could anticipate the opportunity for breach, she should have contracted around the risk. For not prohibiting conflict legally is tantamount to implicitly defining a property right for the intruder.

We know from Coase, that the initial definition of property rights is only irrelevant if and when the transaction cost for trading them is sufficiently small. Even in the bilateral case, this condition may not hold. Otherwise the services of law-firms writing customized contracts would not be that expensive. Moreover, the definition of outside effects is not straightforward. Even if the direct effects of conflict are limited to the parties, outsiders can suffer indirectly. In a Coasean world, only self-enforcing contracts would be concluded (cf. FURUBOTN and RICHTER [1997, p. IV.4.2]). A third objection stretches beyond rational choice analysis. In reality, many individuals are willing to conclude contracts that are visible not self-enforcing. They are willing to take a certain risk of opportunism, since they trust their counterpart (ENGEL [1999]). Such individual trust is supported and facilitated by what sociologists call generalized trust in a society (BORN SCHIER [2001]); (cf. also COLEMAN [1990, p. chapter 8]). The higher the degree of actual conflict, the more this generalized trust is in danger.

In the tradition of Thomas Hobbes, a more radical way of asking the normative question would be more appropriate: why is the social contract incomplete? For this is what his thinking is all about. Violence is the prime social concern. All are better off, if they entirely transmit their original liberty on an absolute, sovereign ruler (HOBBS [1651]). In this perspective, no justification of conflict is conceivable<sup>14</sup>. Since the order of social needs is strictly lexicographic, there can be no competing normative concerns, whatever the technology needed for fully preventing conflict. A lexicographic ordering of social preferences means, that second order preferences do only come, after first order preferences have been fulfilled. Consequently, by definition the cost of imposing peace cannot be prohibitive. At closer sight, even the technical inability to preclude conflict is inconceivable. For the whole normative argument rests on the equation of sovereign powers and peace.

Hobbes has been influential in introducing the contractual argument into state philosophy. But later thinkers have quickly done away with the strictures of the Hobbesian approach (KOLLER [1987]; KERSTING [1994]). Sovereignty need no longer be absolute. The social needs and preferences are no longer lexicographic. The cost of preventing conflict can become a normative issue.

Even with this softer concept of a social contract, the normative question is still thwarted. Conflict is assumed to be always bad. Actually, there are instances where conflict is socially beneficial. The most obvious instance goes to the heart of economic policy. Competition is nothing else than conflict. Conflict can also be a necessary complement to economic institutions. For instance, in English law collective agreements between Unions and employers are not legally binding. Strike is therefore used as a tool to enforce them<sup>15</sup>. Experimental economics has pointed to the strong punishing sentiments (FEHR [2000]); (cf. also FRANK [1988]). They help overcome otherwise unsolvable public goods problems. A common enemy is an important social glue<sup>16</sup>. Other advantages of conflict are evolutionary. A certain degree of conflict serves as beneficial friction (AAKERMAN [1993]; GRABHER [1994]; OKRUCH [2001])<sup>17</sup>. It makes the risk of overfitting less likely (MARTIGNON and HOFFRAGE [1999, p. 128 f.]). The system remains robust to changes in the environment. Conflict may also generate variety and thereby help evolutionary progress. It leads to "creative destruction" (SCHUMPETER [1942, p. 134]). Hobbes was not sanguine about the side effects of the medicine he prescribed: individual liberty would go away entirely (HOBBS [1651]). Put differently, a certain risk of conflict is the price for freedom. Finally, constructivists rightly point to the fact that it is categorically impossible to overcome fundamental normative relativity. The only goal in reach of humans is an eternal struggle between competing ways of life (THOMPSON, ELLIS et al. [1990]). Put differently, preventing conflict would be

---

14 Hobbes would, however, define conflict more narrowly than this paper. Arguably, he is only concerned about conflict leading to physical violence. But this is less of a restriction than it might seem at first blush. For Hobbes does not only want to ban actual violence. He wants a society where violence is no longer an option for individuals. He thus wants to ban any risk of violence – and hence any conflict that might ever lead to it. Moreover, this is not a paper about interpreting Hobbes. It uses Hobbes to make the more general point: why is society willing to accept an incomplete social contract?

15 Christine Windbichler pointed to this fact at the conference.

16 This is how the ingroup/outgroup effects described above can be beneficial.

17 Katharina Holzinger pointed me to the following, graphic saying by Helmut Weidner: "Konflikt ist die Hefe im trägen Sozialteig".

tantamount to narrowing all social choice down to one way of life. Such a single minded position is bound to be false, and insupportable to all those not adhering to that way of life. Yet another way of making the point is: by banning conflict, politics would be abolished. Any central intervention could be entrusted to a technocratic ruler.

The proper normative goal is thus not one of maximizing, but of optimising peace, or the absence of conflict more generally. In economic language, one might interpret conflict as a type of transaction cost. One might look out for the efficient degree of conflict. This is, however, an inappropriately narrow conceptualisation. Conflicts do not only differ in degree, but much more in kind. And there is more at stake than allocative efficiency. What society is called upon to do is a weighing exercise. Type of conflict by type of conflict it has to find out: what is the expected damage? How likely is this damage? Who are going to be the victims? What is the expected benefit from the conflict risk, or from the actual conflict? A particularly troublesome feature of many conflicts are chance victims. Society may nonetheless want the conflict risk to persist, much like it allows cars to kill people in the general interest in mobility. But it must search for schemes of compensating chance victims. And society may legitimately decide that some goods, and human life in particular, are inalienable (RADIN [1987]). In that event, conflict damaging these goods will be prevented, even if it would be beneficial in an utilitarian perspective.

Not so rarely, at the end of this weighing exercise society will be almost indifferent. In that case, it will certainly not proactively try to prevent conflict. A likely reaction distinguishes between prevention and management. Since actual conflict is much more likely to hit outsiders than mere conflict risk, it might make sense to just offer institutions for management.

### **3. Institutions Creating or Safeguarding Conflict**

Not so rarely, the law creates conflict where there was none in the first place (SCHULZ [2003]). The phenomenon largely escapes attention, since these conflicts are usually taken for granted. That they are demonstrates how effective the supporting institutions actually are. Two are most prominent: antitrust law safeguards and even fosters conflict in the market place. The rich institutional framework for elections and opposition rights do the same for party competition. In essence, they take risk abatement technologies away from the parties. Competitors are prevented from stifling competition in the market place by coordinating behaviour, abusing dominant positions or merging. Likewise, the ruling party or coalition is prevented from stifling political competition by measures like censorship, financing election campaigns out of the state budget or capturing the judiciary<sup>18</sup>.

---

18 A very interesting, albeit remote example is provided by Geertz in Daedalus [1972], as interpreted by Turner [2001, p. 41]. The Balinese society, by social norms, bans open conflict almost entirely. But it allows for violent cock-fighting, and induces fighters to wager both honour and huge sums of money on the occasion. This can be interpreted as the institutionalisation of conflict, with the rather unusual feature of being an outlet for the natural urge for conflict, not a way of taming this desire.

## 4. Institutions Reducing Conflict Risk

Conflict can be socially beneficial, but it often is not. Moreover, society might not want to impose the cost of socially beneficial or neutral conflict on chance victims. Society might even want to be paternalistic. In any of these cases, there are two strategies. One strategy waits until actual conflict breaks out and tries to manage it. The alternative strategy is precautionary. It anticipates future conflict and tries to reduce this risk. As with any risk, it can do that in two ways: it can reduce the probability of actual conflict, or its expected damage.

The elegance of the Hobbesian approach is that it — for the purposes of policy making within rules — virtually defines conflict away. The same assumption underlies the idea that reciprocity might be imposed (FON and PARISI [2003]). Short of these radical solutions, the business of institutional design becomes more difficult and risky. Since there are so many and so different causes of conflict, there can be no all purpose technology for reducing conflict risk. Those designing the institution must correctly predict the character of the conflict. If they get it wrong, the institutional effort may be futile. It can even be counterproductive. For instance, some critics of redistribution claim that it increases the risk of class conflict, rather than decreasing it. They claim class conflict is not so much driven by real dearth or paucity, but by envy. The better they are off individually, the more they feel the remaining differences, is the claim. If that were true, what looks like a conflict of interests actually is a conflict originating at the pico-level.

A related problem comes up, once a conflict potentially has more than one cause. The institutional designer can then be faced with a trade-off. If he successfully does something about one of the causes, he may simultaneously exacerbate another potential cause. A case in point is transparency. Knowing the stances of all participants can make aggressors shy away from triggering actual conflict. There was a period in history, when troops were just counted, instead of actual fighting. But warfare has never exclusively been driven by interest. There are many examples in history when soldiers facing defeat fought even more fiercely. One may explain that by identity. If the conflict is about national honour, the willingness to compromise fades away, once face-saving comes out of reach. Or one can explain it at the pico-level. Psychologists point to what they call the loss frame. Risk preferences typically are context dependent and asymmetric. People typically are loss-averse while in possession of a good. But if they are about to lose a good, they generally become risk loving. They are willing to take more risky gambles, rather than accepting a (mean preserving) sure loss (KAHNEMAN and TVERSKY [2000]). Generals close to defeat might be liable to the same mistake.

Given the rich variety of potential causes of conflict, it is impossible to develop here an exhaustive list of institutions reducing conflict risk. Each cause must be taken up in turn. If a conflict is one of interest, conflict risk is reduced, if the aggressor has less to gain or more to lose. If, more specifically, the conflict originates in strategic interaction, the character of the game could be changed. This can mean changing the pay-offs, or changing the amount of common knowledge. If conflict originates from issues being linked over time, context or actors, de-linking can be a strategy. If conflict originates from group composition or interaction, changing these can be of

help. If conflict originates in identity, redefining identity could be a way out. If it originates from bias in cognition or motivation, debiasing might be an option (SUNSTEIN [2000, p. 3 and *passim*]).

The risk of conflict is a product of two elements: probability and expected damage. Reducing the latter is often much easier than reducing the former. There are two basic reasons for this. The damages resulting from conflict, which one might call the patterns of conflict, exhibit much less variety than its causes. And it is much easier to tell one pattern of conflict from another, than distinguishing different causes. Moreover, society may want to make conflict less detrimental, even when it does not want to stem it altogether. This is all the more so, if socially beneficial or indifferent conflict potentially damages outsiders and chance victims.

A further qualification is in place. If society is able to reduce potential damage to zero, it need no longer worry about causes of conflict. This is basically what Hobbes had proposed. Conversely, if society finds the Hobbesian approach undesirable, reducing the damage potential of conflict is less than bringing it down to zero. This is precisely what is meant by the institutionalisation of conflict<sup>19</sup>. Conflict is "patterned" (EGEBERG [2002]). There are many ways of institutionalising conflict. Disputes are submitted to court (FARNSWORTH [2003]). Social norms impose the formalities of duel on an honour based society (O'NEILL [2003]). Quarrelling scientists are invited to formalized conferences<sup>20</sup>. Individuals are obliged to hire a professional lawyer, hoping for a cooler temper of the latter<sup>21</sup>. Workers are allowed to strike, but forced to go through a long series of procedural steps before and while they do (POSNER [2003]). Anti-dumping claims are taken care of by government. But government will only hear them, if a whole industry stands behind the claim. The political system remains open to radical political views. But those supporting them can only get access to social control by winning an election.

The borderline between reducing probability and reducing damage potential is not always clear cut. The formal condition for going to strike could also be interpreted as a way of concentrating individual conflicts. If the probability measure is the number of conflicts, this would be a way of reducing probability. Likewise, institutions can strive for making the incidents of conflict more predictable (cf. HEINER [1983]).

Not so rarely, the institutional designer even faces a trade-off: reducing damage potential increases conflict probability. If there is an established court system, people are more likely to engage in dispute. If there is a right to strike, workers may feel it's time for a next round. If divorce is easy, married people quicker think their spouses to be unbearable.

---

19 Georg Elwert pointed to this option, referring to work by Ralf Dahrendorf.

20 Gerd Gigerenzer pointed to this origin of scientific conferences.

21 Ward Farnsworth brought this up.

## 5. Institutions Managing Conflict

Once conflict has broken out, the task of institutions becomes easier. But the uncertainty does not fade away altogether. If conflict is a process, it can be quite complicated to predict at the outset how it will play itself out (cf. ARCE and SANDLER [2003]). The uncertainty about causes is even more likely to remain pronounced. Outsiders to the conflict will usually only be able to observe action, not intention. Even if they can speak to the conflicting parties, their explanations and the actual causes of conflict may fall apart. The higher the uncertainty about how the conflict will develop, the more institutions for the management of conflict will have to resemble those for conflict prevention. The more certain those handling these institutions feel about the character of the conflict, the more they can customize their reaction however.

A classic institutional response to conflict is third party settlement (BRENNAN, GÜTH et al. [2003]; FLUET [2003]). If the third party intervention is not imposed, but chosen by the conflicting parties, they face a principle-agent-problem. If there is a labour market for adjudicators, however, it might partly help the parties overcome this problem (GERSBACH [2003]). From an efficiency point of view, the third party's decision process must be constrained by rules. These rules must force the adjudicator to approach each case with neutral normative priors (FLUET [2003]). In legal reality, third party intervention is often not voluntary. Such mandatory settlement can be justified by a risk of externalities on outsiders, or by paternalism. The latter is characteristic for criminal law, where the victim plays at best a supplementary role (SCHULZ [2003]). If the conflict is over identity, third parties can help de-escalate it (O'NEILL [2003]). Sometimes, group effects are so strong that individuals from different groups would not even be able to talk to each other without jeopardizing their within-group reputation. In that case, neutral or superior outsiders help negotiations getting off the ground (FOERSTE [2000]). And if conflict originates in one or both parties being biased, the third party might help debias them (FARNSWORTH [2003]).

A second regulatory option is changing the character of the conflict. This can work either way. Elections are a way of transforming a conflict of ideas into one of interests. Whatever ideology the parties adhere to, they now have to fight for a measurable good: votes. The other way round, adding an ideas dimension can be the way out of otherwise insolvable conflicts of interest (SCHULZ [2003]). The classic strategy is inducing the parties to engage in deliberation, rather than mere bargaining (JOERGES and NEYER [1997]; RISSE [2000]). This is what mediators routinely engage in (FIETKAU and WEIDNER [1998]).

A further variable with which institutional intervention can play is enlarging or reducing the conflict space. The former is done in a package deal. One party agrees to give in. But it gets something in return that was not part of the conflict at the beginning. Extending the time horizon of the issue is another way of getting to the same result. An outcome that seems unattractive or even unbearable in the short run may become much more attractive or at least tolerable in the long run. Another example is the inflation of honorary titles characteristic for traditional socie-

ties. It helps overcome distributional conflict at a fairly low price<sup>22</sup>. Compensation is the crudest form of extending the conflict space. One of the conflicting parties is paid out. Narrowing down the conflict space is what has been dubbed an "incompletely theorized argument" (SUNSTEIN [1995]; cf. also ENGEL [2001]). Not so rarely, the parties are able and willing to agree on a decision, but they quarrel over reasoning. In that situation, just taking the decision may be the solution. A related strategy is usually adopted by the courts. They cannot avoid coining new law or authoritatively interpreting the existing. But they generally try to make their reasoning as little abstract as possible. Newly democratized countries sometimes de-escalate transition conflict by distinguishing between the authoritative declaration of responsibility and punishment. They deliberately forgo the latter for crimes committed under the previous regime (SCHULZ [2003]).

Multiparty conflict is particularly difficult to manage. Majority voting can become cyclic (ARROW [1963]). Participants can strategically build coalitions. Group dynamics can play themselves out. Institutional responses are too rich to be sketched out here (see MNOOKIN [2003]). An application of the just mentioned strategies for bilateral conflict must suffice. Third parties can in particular try to make negotiations more predictable by imposing procedural rules, like setting the agenda, take outside options away from parties and impose voting rules. A change in the character of the conflict is behind what has been called "sufficient consensus" in the constitutional negotiations in South Africa and in Northern Ireland (MNOOKIN [2003, p. IV]). This strategy could not work, were not all participants willing to acknowledge the principal legitimacy of the process, and of its potential outcome. Bargaining is thus grounded in foundations of a growing identity. Finally, procedural rules are able to narrow the conflict space down. The narrowing is particularly pronounced, if these rules transform multilateral into bilateral conflict. This can for instance be done by imposing an organization requirement on negotiators. Only if they come as a corporate actor are they allowed to speak and act at the negotiation table.

## 6. Second Order Conflict

There is no free lunch. This also holds true for institutions meant to prevent or manage conflict. More specifically, these very institutions can generate new conflict. There are several reasons for this. Rational choice demonstrates the ability to use conflict prevention or conflict management mechanisms strategically. This is done, if people are taken to court, although there is no actual conflict. The claimant may hope to use the nuisance value of court procedure as a bargaining chip. It is particularly pronounced if the mere opening of court procedure hampers reputation. This is what frivolous court suits are about.

Even if the claimant acts in good faith, the court system can create conflict, rather than manage it. This is the case, if parties no longer shy away from engaging in open conflict, since the potential damage is small enough. Conflict is also likely, if the prevention or management technology

---

22 Georg Elwert pointed to this.



distributes cost and benefit unevenly. Since practically no institution is without distribution effect (KNIGHT [1992]), this is rather likely.

Further causes of second order conflict lie outside the explanatory power of rational choice analysis. Empirically, people have strong preferences for institutions. They prefer one technology for conflict management over another (FREY and OBERHOLZER-GEE [1999]). If the legislator disregards these preferences, people might not subdue to the institution, but try to bypass or overthrow it. Lynching is a particularly drastic illustration, being a rejection of court procedure<sup>23</sup>. Irrational or even violent reactions are also likely if institutions leave too little room for fierce conflict to express itself. This is what revolutions are made of.

## 7. Appropriate Level of Analysis

A last set of remarks is methodological. The foregoing has demonstrated that different methodologies are able to generate insights into the causes of conflict. Institutional intervention can be built on these explanations. There is a natural proximity between specific methods and specific causes of conflict. At first blush, a conflict of interests lends itself to rational choice analysis, a conflict of ideas to constructivist analysis, a conflict on cognitive or emotional grounds to psychological research. But this coupling between cause and method is only loose. A conflict of ideas can analytically be transformed into one over social control. This is why the intrusion of fundamentalists into a non-fundamentalist population can be analysed in terms of evolutionary game theory (ARCE and SANDLER [2003]). Likewise, duelling over honour can also be modelled as a game (O'NEILL [2003]). Conversely, constructivist analysis can uncover the ideological roots of what seemingly is a pure conflict of interests. Only if all participants take a lot of decisions for granted can they play the market game as assumed by competition policy and anti-trust law (THOMPSON [forthcoming]).

This introduction, as well as the papers collected in this issue, demonstrate that conflict can fruitfully be analysed with the rigorous methodology of the social sciences. But they pay a price for the sharpness of their intellectual tools. They are much better at generating insights and hypotheses than at actually preventing or managing conflict. The eternal trade-off between parsimony and fit plays itself out (HARLESS and CAMERER [1994, p. 1285]). Being closer to fit than to parsimony is characteristic for the applied disciplines, and for law in particular. While legal academia is free to choose between an internal and an external view of law (HART [1961]), a practising lawyer is not. And if the law wants to maintain a disciplinary boundary to the social sciences, it must at least define itself by developing concepts with their use by practising lawyers in mind (ENGEL [1998]). If it does, the interest in actual conflict becomes the defining feature of law as a field. The practising lawyer must either handle or prevent actual conflict. The legal system is geared towards the ability to react to the richness and to the intricacies of the causes of conflict. A legal methodology may largely profit from insight generated by the social sciences. But its

---

23     Werner Güth pointed me to the example.

own business is different. It must bring this knowledge, and whatever else it can muster up, to bear in the unruly world out there.

## References

- AAKERMAN, NORDAL [1993], *The Necessity of Friction. Nineteen Essays on a Vital Force*, Heidelberg, New York: Physica-Verlag, Springer-Verlag.
- AINSLIE, GEORGE [1992], *Picoeconomics. The Strategic Interaction of Successive Motivational States Within the Person*, Cambridge England ; New York, NY: Cambridge University Press.
- ALBERT, HANS [1978], *Traktat über rationale Praxis*, Tübingen: Mohr.
- ANDERSON, JOHN R. [1990], *The Adaptive Character of Thought*, Hillsdale, N.J.: L. Erlbaum Associates.
- ANDERTON, CHARLES H., ROXANE A. ANDERTON, et al. [1999], "Economic Activity in the Shadow of Conflict," *Economic Inquiry*, 37, 166-179.
- ARCE, DANIEL G. und TODD SANDLER [2003], "An Evolutionary Game Approach to Fundamentalism and Conflict," *Journal of Institutional and Theoretical Economics*, 159, \*\*\*.
- ARROW, KENNETH JOSEPH [1963], *Social Choice and Individual Values*, New York,: Wiley.
- AXELROD, ROBERT [1967], "Conflict of Interest. An Axiomatic Approach," *Journal of Conflict Resolution*, 11, 87-99.
- BANERJEE, ABHIJIT V. [1992], "A Simple Model of Herd Behavior," *Quarterly Journal of Economics*, 107, 797-817.
- BAZERMAN, MAX H. und MARGARET A. NEALE [1995]. The Role of Fairness Considerations and Relationships in a Judgmental Perspective of Negotiation. *Barriers to Conflict Resolution*. Kenneth Joseph Arrow, Robert H. Mnookin, Lee Ross, Amos Tversky und Robert B. Wilson. New York, Norton, 86-107.
- BIKHCHANDANI, SUSHIL, DAVID HIRSHLEIFER, et al. [1998], "Learning from the Behavior of Others. Conformity, Fads, and Informational Cascades," *Journal of Economic Perspectives*, 12(3), 151-170.
- BORNSCHIER, VOLKER [2001], "Gesellschaftlicher Zusammenhalt und Befähigung zu Sozialkapitalbildung. Determinanten des generalisierten Vertrauens im explorativen Vergleich demokratischer Marktgesellschaften," *Schweizerische Zeitschrift für Soziologie*, 27, 441-473.
- BRENNAN, GEOFFREY, WERNER GÜTH, et al. [2003], "Trust in the Shadow of the Courts," *Journal of Institutional and Theoretical Economics*, 159, \*\*\*.
- BRYANT, J [1984], "Modeling Alternative Realities in Conflict and Negotiation," *Journal of the Operational Research Society*, 35, 985-993.

- COASE, RONALD [1960], "The Problem of Social Cost," *Journal of Law and Economics*, 3, 1-44.
- COLEMAN, JAMES SAMUEL [1990], *Foundations of Social Theory*, Cambridge, Mass.: Belknap Press of Harvard University Press.
- CORNES, RICHARD und TODD SANDLER [1996], *The Theory of Externalities, Public Goods and Club Goods*, Cambridge: Cambridge University Press.
- COSMIDES, LEDA und JOHN TOOBY [1992]. Cognitive Adaptations for Social Exchange. *The Adapted Mind. Evolutionary Psychology and the Generation of Culture*. J Barkow, L Cosmides und J Tooby. New York, Oxford University Press, 163-228.
- DAVID, PAUL A. [1994], "Why Are Institutions the 'Carriers of History'?", *Structural Change and Economic Dynamics*, 5, 205-220.
- DEUTSCH, MORTON [1973], *The Resolution of Conflict. Constructive and Destructive Processes*, New Haven,: Yale University Press.
- EGEBERG, MORTEN [2002]. An Organisational Approach to European Integration. What Organisation Tells us about System Transformation, Committee Governance and Commission Decision Making. ARENA Working Papers WP 02/19. <http://www.arena.uio.no/>
- ENGEL, CHRISTOPH [1998]. Rechtswissenschaft als angewandte Sozialwissenschaft. Die Aufgabe der Rechtswissenschaft nach der Öffnung der Rechtsordnung für sozialwissenschaftliche Theorie. *Methodische Zugänge zu einem Recht der Gemeinschaftsgüter*. Christoph Engel. Baden-Baden, Nomos, 11-40.
- ENGEL, CHRISTOPH [1999]. Vertrauen – ein Versuch. Preprints aus der Max-Planck-Projektgruppe Recht der Gemeinschaftsgüter Bonn 1999/12
- ENGEL, CHRISTOPH [2001], "Offene Gemeinwohldefinitionen," *Rechtstheorie*, 32, 23-52.
- ENGEL, CHRISTOPH [2002a]. Die soziale Funktion des Eigentums. *Bericht zur Lage des Eigentums*. Otto Depenheuer, Christoph Engel und Thomas von Danwitz. Berlin, Springer, 1-107.
- ENGEL, CHRISTOPH [2002b], "Globale Netze und Lokale Werte," *Archiv für Presserecht*, 119-128.
- ENGEL, CHRISTOPH, JOST HALFMANN, et al., Eds. [2002]. *Wissen, Nichtwissen, Unsicheres Wissen*, Baden-Baden: Nomos.
- FALK, ARMIN, ERNST FEHR, et al. [2003], "Reasons for Conflict. Lessons from Bargaining Experiments," *Journal of Institutional and Theoretical Economics*, 159, \*\*\*.
- FARNSWORTH, WARD [2000]. Do Parties to Nuisance Cases Bargain After Judgement? A Glimpse into the Cathedral. *Behavioral Law and Economics*. Cass R. Sunstein. Cambridge, Cambridge University Press, 302-322.

- FARNSWORTH, WARD [2003], "The Legal Regulation of Self-Serving Bias," *Journal of Institutional and Theoretical Economics*, 159, \*\*\*.
- FEHR, ERNST [2000], "Cooperation and Punishment in Public Goods Experiments," *American Economic Review*, 90, 980-994.
- FIETKAU, HANS-JOACHIM [1995]. Konfliktwahrnehmung und Heuristiken der Problemlösung. *Alternative Konfliktregelungsverfahren bei der Planung und Implementation großtechnischer Anlagen*. Katharina Holzinger und Helmut Weidner. Berlin, WZB, 143-151.
- FIETKAU, HANS-JOACHIM und HELMUT WEIDNER, Eds. [1998]. *Umweltverhandeln*, Berlin: edition sigma.
- FISCHER, FRANK und JOHN FORESTER [1993], *The Argumentative Turn in Policy Analysis and Planning*, Durham, N.C.: Duke University Press.
- FLUET, CLAUDE [2003], "Enforcing Contracts: Should Courts Seek the Truth?," *Journal of Institutional and Theoretical Economics*, 159, \*\*\*.
- FOERSTE, KARLA [2000], "Eine Methode der Streitvermeidung. Die "dritte Partei" bei Begründung und Durchsetzung von Verträgen im traditionellen China," *RabelsZ*, 64, 123-142.
- FON, VINCY und FRANCESCO PARISI [2003], "Reciprocity-Induced Cooperation," *Journal of Institutional and Theoretical Economics*, 159, \*\*\*.
- FRANK, ROBERT H. [1988], *Passions within Reason. The Strategic Role of the Emotions*, New York: Norton.
- FREY, BRUNO und FELIX OBERHOLZER-GEE [1999]. Natural Environment. Fair Siting Procedures. *Economics as a Science of Human Behaviour*. Bruno Frey. Boston, 23-48.
- FURUBOTN, EIRIK GRUNDTVIG und RUDOLF RICHTER [1997], *Institutions and Economic Theory. The Contribution of the New Institutional Economics*, Ann Arbor: University of Michigan Press.
- GARFINKEL, MICHELLE R. und STERGIOS SKAPERDAS [2000], "Conflict without Misperception or Incomplete Information," *Journal of Conflict Resolution*, 44, 793-807.
- GEERTZ, CLIFFORD [1972], "Deep Play. Notes on the Balinese Cockfighting," *Daedalus*, 101, 1-37.
- GERSBACH, HANS [2003], "Trust in the Shadow of the Courts," *Journal of Institutional and Theoretical Economics*, 159, \*\*\*.
- GRABHER, GERNOT [1994], *Lob der Verschwendung. Redundanz in der Regionalentwicklung. Ein sozioökonomisches Plädoyer*, Berlin: Edition Sigma.

- GRANOVETTER, MARC [1985], "Economic Action and Social Structure. The Problem of Embeddedness," *American Journal of Sociology*, 91, 481-510.
- HARLESS, DAVID W. und COLIN F. CAMERER [1994], "The Predictive Utility of Generalized Expected Utility Theories," *Econometrica*, 62, 1251-1289.
- HARSANYI, JOHN [1967-1968], "Games with Incomplete Information Played by "Bayesian" Players," *Management Science*, 14, 159-182, 320-224, 486-502.
- HART, HERBERT LIONEL ADOLPHUS [1961], *The Concept of Law*, Oxford: Clarendon Press.
- HEGMANN, HORST [1997], "Differing World-Views and Collective Action. The Case of Research," *Constitutional Political Economy*, 8, 179-194.
- HEINER, RONALD A. [1983], "The Origin of Predictable Behaviour," *American Economic Review*, 73, 560-595.
- HEY, JOHN D. [1999]. Estimating (Risk) Preference Functionals Using Experimental Methods. *Uncertain Decisions. Bridging Theory and Experiments*. Luigi Luini. Dordrecht, Kluwer, 109-128.
- HIRSHLEIFER, JACK [2001], *The Dark Side of the Force. Economic Foundations of Conflict Theory*, Cambridge, UK ; New York: Cambridge University Press.
- HOBBS, THOMAS [1651], *Leviathan, or, The matter, forme, & power of a common-wealth ecclesiasticall and civill*, London,: Printed for Andrew Ckooke i.e. Crooke at the Green Dragon in St. Pauls Church-yard.
- HOOD, CHRISTOPHER, HENRY ROTHSTEIN, et al. [2001], *The Government of Risk. Understanding Risk Regulation Regimes*, Oxford ; New York: Oxford University Press.
- HOPKINS, NICK und NEIL MURDOCH [1999], "The Role of the 'Other' in National Identity. Exploring the Context-Dependence of the National Ingroup Stereotype," *Journal of Community & Applied Social Psychology*, 9, 321-338.
- IMMERGUT, ELLEN M. [1992], *Health Politics. Interests and Institutions in Western Europe*, Cambridge England ; New York, NY: Cambridge University Press.
- JAKOBS, GÜNTHER [1999], *Norm, Person, Gesellschaft. Vorüberlegungen zu einer Rechtsphilosophie*, Berlin: Duncker & Humblot.
- JOERGES, CHRISTIAN und JÜRGEN NEYER [1997], "Transforming Strategic Interaction into Deliberative Problem-Solving. European Comitology in the Foodstuffs Sector," *Journal of European Public Policy*, 4, 609-625.

- KAHNEMAN, DANIEL und AMOS TVERSKY [2000]. Prospect Theory. An Analysis of Decision under Risk. *Choices, Values, and Frames*. Daniel Kahneman und Amos Tversky. Cambridge, Cambridge University Press, 17-43.
- KERSTING, WOLFGANG [1994], *Die politische Philosophie des Gesellschaftsvertrags*, Darmstadt: Wissenschaftliche Buchgesellschaft.
- KING, GARY, ROBERT O. KEOHANE, et al. [1994], *Designing Social Inquiry. Scientific Inference in Qualitative Research*, Princeton, N.J.: Princeton University Press.
- KNIGHT, FRANK HYNEMAN [1921], *Risk, Uncertainty and Profit*, Boston, New York,: Houghton Mifflin Company.
- KNIGHT, JACK [1992], *Institutions and Social Conflict*, Cambridge England ; New York, N.Y.: Cambridge University Press.
- KOLLER, PETER [1987], *Neue Theorien des Sozialkontrakts*, Berlin: Duncker & Humblot.
- KURAN, TIMOR [1998], "Ethnic Norms and their Transformation through Reputational Cascades," *Journal of Legal Studies*, 27, 623-658.
- LOWI, THEODORE J. [1964], "American Business, Public Policy, Case-Studies and Political Theory," *World Politics*, 16, 677-715.
- MARCH, JAMES G. und JOHAN P. OLSEN [1989], *Rediscovering Institutions. The Organizational Basis of Politics*, New York: Free Press.
- MARCH, JAMES G. und JOHAN P. OLSEN [1998], "The Institutional Dynamics of International Political Orders," *International Organization*, 52, 943-969.
- MARTIGNON, LAURA und KATHRYN BLACKMOND LASKEY [1999]. Bayesian Benchmarks for Fast and Frugal Heuristics. *Simple Heuristics That Make Us Smart*. Gerd Gigerenzer und Peter M. Todd. New York, Oxford University Press, 169-190.
- MARTIGNON, LAURA und ULRICH HOFFRAGE [1999].: Why Does One-reason Decision Making Work. A Case Study in Ecological Rationality. *Simple Heuristics That Make Us Smart*. Gerd Gigerenzer und Peter M. Todd. New York, 119-140.
- MAXWELL, JOHN W. und RAFAEL REUVENY [1998]. Resource Scarcity and Conflict. An Economic Analysis. Fondazione Eni Enrico Mattei Note di Lavoro 74/98
- MILLER, RICHARD W. [1992], *Moral Differences. Truth, Justice, and Conscience in a World of Conflict*, Princeton, N.J.: Princeton University Press.

- MNOOKIN, ROBERT H. [2003], "Strategic Barriers to Dispute Resolution. A Comparison of Bilateral and Multilateral Negotiations," *Journal of Institutional and Theoretical Economics*, 159, \*\*\*.
- MÜLLER, HARALD [1994], "Internationale Beziehungen als kommunikatives Handeln. Zur Kritik der utilitaristischen Handlungstheorien," *Zeitschrift für internationale Beziehungen*, 1, 15-44.
- NATIONAL RESEARCH COUNCIL [2002], *Global Networks and Local Values*, Washington: National Academy of Sciences.
- NELSON, RICHARD R. [1995], "Recent Evolutionary Theorizing about Economic Change," *Journal of Economic Literature*, 33, 48-90.
- NELSON, RICHARD R. und SIDNEY G. WINTER [1982], *An Evolutionary Theory of Economic Change*, Cambridge, MA.: Harvard University Press.
- OKRUCH, STEFAN [2001]. Evolutorische Wirtschaftspolitik. Von der positiven zur normativen Theorie. *Handbuch zur Evolutorischen Ökonomik*. Carsten Hermann-Pillath und Marco Lehmann-Waffenschmidt. Heidelberg, Springer, (im Erscheinen).
- O'NEILL, BARRY [2003], "Mediating Conflicts over Honour. Lessons from the Era of Dueling," *Journal of Institutional and Theoretical Economics*, 159, \*\*\*.
- PARISI, FRANCESCO [2001]. Entropy in Property. George Mason University Law and Economics Working Paper 01-14
- POSNER, ERIC A. [2003], "Four Economic Perspectives on American Labor Law and the Problem of Social Conflict," *Journal of Institutional and Theoretical Economics*, 159, \*\*\*.
- RADIN, MARGARET JANE [1987], "Market-Inalienability," *Harvard Law Review*, 100, 1849-1937.
- REUVENY, RAFAEL [2002], "Economic Growth, Environmental Scarcity, and Conflict," *Global Environmental Politics*, 2, 83-110.
- REUVENY, RAFAEL und JOHN W. MAXWELL [2001], "Conflict and Renewable Resources," *Journal of Conflict Resolution*, 45, 719-742.
- RISSE, THOMAS [2000], "'Let's Argue!'. Communicative Action in World Politics," *International Organization*, 54, 1-39.
- SARETZKI, THOMAS [1995]. "Arguing" oder "Bargaining". Selbstbindung der Politik durch öffentliche Diskurse. *Macht der Öffentlichkeit – Öffentlichkeit der Macht*. Gerhard Göhler. Baden-Baden, Nomos, 277-311.
- SCHARPF, FRITZ WILHELM [1997], *Games Real Actors Play. Actor-centered Institutionalism in Policy Research*, Boulder, Colo.: Westview Press.



- SCHELLING, THOMAS C. [1960], *The Strategy of Conflict*, Cambridge,: Harvard University Press.
- SCHMITTER, PHILIPPE C. und WOLFGANG STREECK [1999]. The Organization of Business Interests. Studying the Associative Action of Business in Advanced Industrial Societies. Max-Planck-Institut für Gesellschaftsforschung Discussion Paper 99/1
- SCHULZ, JOACHIM [2003], "Criminal Law and Conflicts of Honour," *Journal of Institutional and Theoretical Economics*, 159, \*\*\*.
- SCHUMPETER, JOSEPH ALOIS [1942], *Capitalism, Socialism, and Democracy*, New York, London,: Harper & Brothers.
- SCHWEIZER, URS [1999], *Vertragstheorie*, Tübingen: Mohr.
- SEBENIUS, JAMES K. [1995]. Dealing with Blocking Coalitions and Related Barriers to Agreement. Lessons from Negotiations on the Oceans, the Ozone, and the Climate. *Barriers to Conflict Resolution*. Kenneth Joseph Arrow, Robert H. Mnookin, Lee Ross, Amos Tversky und Robert B. Wilson. New York, Norton, 150-183.
- SIMON, HERBERT ALEXANDER [1962], "The Architecture of Complexity," *Proceedings of the American Philosophical Society*, 106(467-482).
- SIMON, HERBERT ALEXANDER [1982], *Models of Bounded Rationality*, Cambridge, Mass.: MIT Press.
- SINN, HANS-WERNER [1989], *Economic Decisions under Uncertainty*, Heidelberg New York: Physica ; Springer.
- SMITH, ADAM [1776], *An Inquiry into the Nature and Causes of the Wealth of Nations*, London: Printed for W. Strahan; and T. Cadell ...
- SMYTH, LEO E. [1994], "Intractable Conflicts and the Role of Identity," *Negotiation Journal*, 10, 311-322.
- SOMANATHAN, E. [2002], "Can Growth Ease Class Conflict?," *Economics and Politics*, 14, 65-81.
- SPIECKER GEN. DÖHMANN, INDRA [2001]. Staatliche Entscheidungen unter Unsicherheit. Juristische und ökonomische Vorgaben. *Gentechnik im nicht-menschlichen Bereich – was kann und was sollte das Recht regeln?* Joachim Lege. Berlin, Arno Spitz, 51-88.
- SUNSTEIN, CASS R. [1995], "Incompletely Theorized Agreements," *Harvard Law Review*, 108, 1733-1772.
- SUNSTEIN, CASS R. [2000]. Introduction. *Behavioral Law and Economics*. Cass R. Sunstein. Cambridge, Cambridge University Press, 1-10.

- SUNSTEIN, CASS R. [2002], "The Law of Group Polarization," *Journal of Political Philosophy*, 10, 175-195.
- TAKACS, KAROLY [2001], "Structural Embeddedness and Intergroup Conflict," *Journal of Conflict Resolution*, 45, 743-769.
- THOMPSON, DALE B. [2000], "Political Obstacles to the Implementation of Emissions Markets. Lessons from RECLAIM," *Natural Resources Journal*, 40, 645-697.
- THOMPSON, M., RICHARD ELLIS, et al. [1990], *Cultural Theory*, Boulder, Colo.: Westview Press.
- THOMPSON, MICHAEL [forthcoming], *The Limits of Markets*.
- TIROLE, JEAN [1988], *The Theory of Industrial Organization*, Cambridge, Mass.: MIT Press.
- TSEBELIS, GEORGE [2002], *Veto Players. How Political Institutions Work*, Princeton, N.J.: Princeton University Press.
- TURNER, MARK [2001], *Cognitive Dimensions of Social Science*, New York: Oxford University Press.
- VANBERG, VICTOR und JAMES M. BUCHANAN [1989], "Interests and Theories in Constitutional Choice," *Journal of Theoretical Politics*, 1, 49-62.
- VON HAYEK, FRIEDRICH-AUGUST [1945], "The Use of Knowledge in Society," *American Economic Review*, 35, 519-530.
- VON NEUMANN, JOHN und OSKAR MORGENSTERN [1944], *Theory of Games and Economic Behavior*, Princeton: Princeton university press.
- WILLIAMSON, OLIVER E. [1985], *The Economic Institutions of Capitalism. Firms, Markets, Relational Contracting*, New York London: Free Press ; Collier Macmillan.
- WITT, ULRICH [2001]. Evolutionary Economics. An Interpretative Survey. *Evolutionary Economics. Program and Scope*. H Dopfer. Boston, Kluwer.
- YEE, ALBERT S. [1996], "The Causal Effects of Ideas on Policies," *International Organization*, 50, 66-108.