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DIVIDE AND CONQUER

Eric A. Posner,[1] Kathryn E. Spier,[2] & Adrian Vermeule[3]

ABSTRACT

The maxim "divide and conquer" (*divide et impera*) is invoked frequently in law, history, and politics, but often in a loose or undertheorized way. We suggest that the maxim is a placeholder for a complex of ideas related by a family resemblance, but differing in their details, mechanisms and implications. We provide an analytic taxonomy of divide and conquer mechanisms in the settings of a Stag Hunt Game and an indefinitely-repeated Prisoners' Dilemma. A number of applications are considered, including labor law, bankruptcy, constitutional design and the separation of powers, imperialism and race relations, international law, litigation and settlement, and antitrust law. Conditions under which divide and conquer strategies reduce or enhance social welfare, and techniques that policy makers can use to combat divide and conquer tactics, are also discussed.

1. INTRODUCTION

The maxim "divide and conquer" (*divide et impera*) is frequently invoked in legal theory and the social sciences.[4] However, no single theoretical

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4   The origins of the phrase are obscure. *The Oxford Dictionary of Proverbs* (2009) says that "divide and rule" (another common translation of "divide et impera") is a "common maxim" in English, dating back at least to the sixteenth century, but identifies no single originator.

construct can capture the ideas underlying divide and conquer. Instead, the maxim is a placeholder for a complex of ideas related by a family resemblance, but differing in their details, mechanisms, and implications. Economists typically interpret divide and conquer in terms of a specific class of theoretical models whose main feature, roughly speaking, is that a single actor exploits coordination problems among a group by making discriminatory offers or discriminatory threats. Political scientists, historians, and lawyers, however, sometimes use the term in the economists' sense, sometimes in other senses. We will attempt to synthesize this messy domain by offering an analytic taxonomy of divide and conquer mechanisms, by eliciting the normative implications of those mechanisms for law and policy, and by exploring applications in law, history and politics.

2   We begin by presenting two famous games, the Stag Hunt Game and an indefinitely-repeated Prisoners' Dilemma. These two games both illustrate a tension between the social desirability of cooperation and the private incentives for safety and short-run gains. Next, we describe the role of third parties who are not themselves players of these games but who will be harmed if the players cooperate. In particular, we explore a variety of divide-and-conquer strategies—including the sabotage of communication channels, the payment of bribes, and the imposition of penalties—that effectively prevent cooperation among the players of the Stag Hunt and Prisoners' Dilemma games. We also explore a mirror-image tactic—"combine and conquer"—and identify the welfare implications of these tactics. We then describe the use of these strategies in a diverse set of applications, including labor law, constitutional design and the separation of powers, imperialism and race relations, international law, litigation and settlement, and antitrust law. In the labor law section, we try to be comprehensive; in the other sections, we focus on only a one or a couple of strategies. We also consider the conditions under which divide-and-conquer strategies reduce or enhance social welfare, and the techniques that law can use to combat divide-and-conquer tactics where it is beneficial to do so.

3   The paper is organized as follows. Section 2 clarifies some conceptual issues. Section 3 gives an overview of the Stag Hunt and the indefinitely-repeated Prisoners' Dilemma games, provides a taxonomy of divide-and-conquer strategies, and discusses the main implications for social welfare. Section 4 presents the applications, and Section 5 concludes.

2. Conceptual Issues

We will stipulate that the following two conditions are essential to any   4
divide and conquer mechanism: (1) A unitary actor bargains with or com-
petes against a set of multiple actors. (2) The unitary actor follows an
intentional strategy of exploiting problems of coordination or collective
action among the multiple actors. Here, we will offer some general com-
ments to clarify and justify the two conditions.

The motivation for condition (1) is that divide and conquer is not a   5
well-defined idea where a unitary actor faces another unitary actor, or
where a set of multiple actors faces another such set. However, the stipula-
tion that a "unitary actor" is necessary does not literally require that the
actor be a single natural person. Any group that has itself overcome its inter-
nal collective action problems, at least to the point where it is capable of pur-
suing a unified strategy vis-à-vis an external competitor, can be treated as a
unitary actor for present purposes.[5] In an analysis of class conflicts in the
Roman republic, the historian Sallust argued that "the nobles had the
more powerful organization, while the strength of the commons was less
effective because it was incompact and divided among many" (1921, 225).
The nobility, on this account, successfully opposed the Gracchi and other
populists "through the knights [*equites*], whom the hope of an alliance
with the senate had estranged from the commons" (1921, 225). The senatorial
class had sufficient cohesion to act as a unit, and used a type of discriminatory
offer[6] to divide the *equites* from the commons. As we will see in Section 3,
such offers are one important class of divide and conquer strategy.

Under condition (2), divide and conquer does not apply to situations   6
where a unitary actor passively benefits from internal conflict within an
opposing group or between two opposing groups, but does not itself gen-
erate that conflict through an intentional strategy. Such cases are usually dis-
cussed under the rubric *tertius gaudens* ("the third rejoices"); an example is
the proverb that "when thieves fall out, honest men come into their own"
(Elster 2009, citing Simmel 1908). In Theodor Mommsen's account (1996),
Roman imperial strategy in Germany during the reign of Tiberius had
two distinct phases. In the first phase, the imperial commander Germanicus

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5   Similarly, the set of multiple actors may have originally had a unitary quality prior to being
     divided.

6   The translator of the Loeb edition clarifies that an "alliance" should be understood to mean
     "a share in [the nobles'] privileges"—that is, the nobles offered the knights a bribe.

"interfered in the internal affairs of the Germans" by fomenting conflict between nationalist tribal leaders and other leaders allied with Rome. Mommsen comments that this was "[q]uite the old system, in other words: the exploitation of foreign discord" (1996, 136). In a second phase, however, Tiberius withdrew the Roman armies to a defensive posture and "left the Germans to their own internal discord. . . . The tribes fell apart and no longer posed a threat to the Roman Empire" (1996, 137–38). The first phase—the Romans' deliberate strategy of creating discord among the Germanic tribes—illustrates *divide et impera*. The second phase—spontaneous infighting between the tribes, to Rome's benefit—illustrates *tertius gaudens*.

7   The boundary between *tertius gaudens* and divide and conquer can be elusive. When viewed through the haze of legal and social conflict, it is often difficult to discern whether the beneficiary of dissension within or between opposing groups has itself intentionally fomented that dissension. One problem is evidentiary; writers frequently attribute a divide and conquer strategy to the beneficiary just because there is a beneficiary, without concrete evidence of intentional strategy on the beneficiary's part. It has been argued that Tocqueville slipped into this error by attributing to the French monarchy an intentional strategy to divide the French nobility from the third estate, through discriminatory tax exemptions in favor of the former. Although in the medium run the monarchy did benefit from the resulting divisions between nobles and bourgeoisie,[7] the exemption was originally created simply because the monarchy originally lacked the political power to force taxation on the nobles, not as part of a deliberate divide and conquer strategy (Elster 2009). As far as possible, we attempt to avoid this evidentiary slippage in the applications we will discuss.

8   Another set of problems is both conceptual and taxonomic. There is a class of cases, intermediate between divide and conquer and *tertius gaudens,* in which one party declines to act *because* he knows that by so doing he will benefit from divisions between or among his adversaries, yet without taking any intentional action to create or exacerbate the division. In Mommsen's account, Tiberius adopted a defensive stance in Germany partly because he realized that an aggressive Roman policy encouraged the German tribes to unify against a common enemy,

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7   In the long run, however, the monarchy was harmed by the weakness of the nobles, who could not come to the monarch's aid against the revolutionary bourgeoisie, or so Tocqueville argued (Elster 2009).

whereas if left unmolested the tribes would fall to fighting among themselves.

Finally, there is yet another important class of cases in which a divide and conquer strategy is used in an indirect and long-run form, as when a constitutional designer creates structural conditions that make it difficult, in future periods, to organize groups whose activities will reduce overall welfare. In such cases, later generations that do not have to cope with such groups benefit from the constitutional designers' intentional strategy, but do not themselves divide and conquer any opposition; if the designer's plan has worked well, the opposition may not even exist. As we will subsequently discuss, Madison invoked divide and conquer to argue that the new American republic should be cast on a large scale, in order that minorities in later generations might benefit from the difficulty of organizing an oppressive majority faction.

In what follows, we will focus on the pure cases of intentional divide and conquer tactics, including intentional but indirect examples such as constitutional design. In particular applications, however, the evidence is too crude to allow us to make subtle distinctions between the pure cases and the intermediate or hybrid cases mentioned above. Where that is so, we will attempt to clearly indicate the limits of the evidence.

3. STRATEGIES AND MECHANISMS

This section highlights two famous game-theoretic environments. The first environment is the Stag Hunt game, also known as an Assurance game. The second environment involves the infinite repetition of the Prisoners' Dilemma. Although these games have very different structures, they both give rise to multiple Pareto-rankable equilibria. In some equilibria, the players of the games cooperate with each other and achieve jointly desirable outcomes. In other equilibria, the players pursue their individual objectives and receive lower payoffs as a consequence. We then describe how unitary actors, who are not themselves players of these games but whose payoffs hinge on the actions of the other players, may adopt a variety of divide-and-conquer strategies to prevent the cooperative equilibrium.

3.1. The Stag Hunt Game

The Stag Hunt game, which was first described by Jean-Jacques Rousseau in the eighteenth century, has become a well-known metaphor for the risks and

benefits of social cooperation.[8] In the game, a player individually decides whether to hunt rabbits or hunt a stag without knowing the choices of the other players. Rabbit hunting is a relatively low payoff strategy, but a player can catch a rabbit by himself. Stag hunting is more lucrative, but requires the cooperation of others. The catch is that a *unilateral* attempt to hunt a stag on the part of either player results in the worst possible outcome for that player, so each desires to cooperate if and only if the other will cooperate as well. The two players are thus *conditional cooperators* (Fishbacher, Gachter, & Fehr 2001).

13   A Stag Hunt game with two players is depicted in Figure 1:[9]

Figure 1.   The Stag Hunt.

14   It is easy to see that there are two pure-strategy Nash equilibria, one where the players hunt the stag together, and another where they independently hunt rabbits.[10] If Player 1, for example, expects that Player 2 will hunt the stag, then Player 1 will do the same since the payoff of hunting the stag in this scenario, 10, exceeds his payoff from hunting rabbits, 6. But if Player 1 expects that Player 2 will hunt rabbits instead, then Player 1 will hunt rabbits as well. Hunting the stag in this case would be fruitless for Player 1, giving a payoff of 0, while hunting the rabbit ensures a payoff of 6. Note that there is no inherent conflict of interest between the two players of this game. They both agree that hunting the stag is in their mutual interest since the individual payoff from killing the stag, 10, exceeds the individual payoff from hunting rabbits, 6.

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8   Cranston's translation of Rousseau (1985) reads: "If it was a matter of hunting deer, everyone well realized that he must remain at his post; but if a rabbit happened to pass within reach of one of them, we cannot doubt that he would have gone off in pursuit of it without scruple and, having caught his own prey, he would have cared very little about having caused his companions to lose theirs."

9   Player 1's payoffs are depicted in the lower left and Player 2's payoffs are in the upper right.

10   There is also a mixed strategy equilibrium where the players both randomize between hunting stag with probability .6 and hunting rabbits with probability .4.

Without further refinements of the Nash equilibrium concept, however, one cannot predict which of the Nash equilibria will prevail. One refinement of the Nash equilibrium concept—Pareto optimality—predicts that the players will rationally coordinate on hunting the stag. Hunting the stag will make both players better off relative to hunting rabbits, the argument goes, so rational actors should never play the Pareto-dominated equilibrium of rabbit hunting. Other refinements, including Harsanyi and Selten's (1988) concept of risk dominance,[11] challenge this view. While (10,10) certainly Pareto dominates (6,6), the latter outcome is "safer" for the two players. If Player 1, for example, put equal weight on the chances that Player 2 would hunt the stag or hunt rabbits, then Player 1 would rationally decide to play it safe and hunt rabbits.[12] So the desire for safety can, in theory and in practice, lead the players away from the socially desirable outcome.

It should not be very surprising that coordination on stag hunting—the players' preferred equilibrium in the Stag Hunt game—is facilitated in practice when the players can communicate with each other. In a well-known experimental study, Cooper et al. (1992) explored the effect of pre-play communication by allowing subjects to signal their intentions via computer terminal prior to the actual play of the Stag Hunt game. In this study, two-way pre-play communication practically guaranteed that the subjects later played the Pareto-dominant equilibrium.[13] Absent communication between the players, however, Harsanyi and Selten's (1988) concept risk dominance was a better predictor of actual human behavior.[14]

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11   *See* Harsanyi & Selten (1988) for the axiomatic foundations of risk dominance.

12   If Player 1 puts equal weight on the two actions of Player 2, Player 1's payoff from hunting the stag is $(1/2)(10) + (1/2)(0) = 5$. Hunting the rabbit gives a payoff of $(1/2)(6) + (1/2)(6) = 6$. So Player 1 would hunt the rabbit.

13   *See* Ochs (1995) for a survey of the experimental literature on stag hunt games. Farrell (1987) provides a theoretical rationale for these findings. He essentially argued that if the players' pre-play announcements themselves form a Nash equilibrium, then this equilibrium becomes a focal point in the later play of the game. *See* Aumann (1990) and Farrell and Rabin (1996) for theoretical work on communication in coordination games. *See* Landeo and Spier (2009) for experimental evidence on the effects of communication on facilitating coordination in Stag Hunt games with endogenous payoffs.

14   In Blume & Ortmann (2007), communication proves less effective when the safe alternative for the two players improves. They also find that communication facilitates coordination even in the case of more than two players.

3.2. The Repeated Prisoners' Dilemma

17   Another game in which the players can jointly gain from cooperation is the Prisoners' Dilemma. The story is familiar. Two prisoners have been apprehended for a crime, and are being held in separate cells. The prosecutor approaches them individually and makes each the following offer. "If neither of you confess to this crime, we'll put you away for five years. On the other hand, if you confess to this crime, and your accomplice does not, you will get off light: just one year in prison. But if you both confess, you will receive ten years." In this setting, a prisoner has a private incentive to confess, regardless of the strategy chosen by the other prisoner. In other words, confessing is a so-called dominant strategy for both players and is the unique Nash equilibrium of the one-shot Prisoners' Dilemma.

18   Many of the real-world applications of the Prisoners' Dilemma involve repetition over time.[15] Consider, for example, price competition in the airline industry. Suppose that two airlines are providing service on a given route, and that they have excess capacity on their flights. The price game that they subsequently play is a manifestation of the Prisoners' Dilemma: each competitor has a unilateral incentive to cut price to fill seats and steal market share from the other, but they are jointly better off keeping their prices high. Cooperation is facilitated when the competitors interact over time and can change their prices rapidly. Since any defection from the cooperative outcome—price cutting in this case—will be met with retaliation in the long run, the competitors can prevent short-run opportunistic behavior.[16] More generally, if the players of the Prisoners' Dilemma game interact frequently with each other and can readily observe each others' past actions, full cooperation may emerge.[17]

19   To illustrate these ideas, we will consider the example shown in Figure 2. In this example, the players are receiving positive payoffs, rather than

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15   *See* Axelrod & Hamilton (1981) for a pioneering example.

16   Experimental data support these theoretical findings. Pedro Dal Bo (2005) finds that the higher the probability of continuation, the higher the levels of cooperation. While in the one-shot Prisoners' Dilemma games the cooperation rate is 9 percent, for a probability of continuation of $\frac{3}{4}$, it is 38 percent. In addition, Dal Bo compares the results from indefinitely-repeated games with the results from finitely repeated games. He finds that the level of cooperation in the final round of the finitely-repeated games is similar to the level of cooperation in one-shot games. In addition, these levels of cooperation are lower than those observed in indefinitely repeated games, providing evidence that subjects cooperate less when there is no future.

17   If the players repeat this game indefinitely, or the players do not know when the game will end, additional equilibria arise by virtue of the folk theorem.

Figure 2. The Prisoners' Dilemma.

Player 2

		Quiet	Confess
		10	16
Player 1	Quiet	10	0
		0	6
	Confess	16	6

negative jail terms. Note also that the payoffs differ from those in the Stag Hunt game in one important respect: If a player confesses and the other player stays quiet, the one who confesses receives a payoff of 16 (while in the Stag Hunt game he received 6). This implies that each player has a dominant strategy to confess, regardless of the strategy chosen by the other player.

Cooperation in the indefinitely-repeated Prisoners' Dilemma is most easily formalized when players adopt so-called trigger strategies, where defection by one player is met by the reversion to the Nash equilibrium of (confess, confess) in the next period and in every period after that. Suppose that the players both discount time with discount rate r. A long-run cooperative equilibrium where both players stay quiet exists when a player's private gain from cheating and confessing, $16 - 10 = 6$, is smaller than the long-run loss of reverting to the non-cooperative outcome:[18]

$$6 < (4 + r)^{-1} 4 + (1 + r)^{-2} 4 + (1 + r)^{-3} 4 + \ldots = (1/r) 4.$$

Rearranging terms, cooperation may be sustained in the long run when $r < .67$. Intuitively, when the discount rate is small the players place higher value on the future, and have both a private and social interest in sustaining cooperation.

3.3. Divide and Conquer Strategies

We will now extend the analysis to consider a variety of ways that a unitary actor can effectively influence the outcomes of the Stag Hunt and repeated Prisoners' Dilemma games. We are imagining a situation in which the unitary actor will be adversely affected if the players of the Stag Hunt and Prisoners' Dilemma games cooperate with each other. The unitary actor is, in

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18   The loss in each round is $10 - 6 = 4$.

essence, a first mover in the larger strategic environment. If cooperation appears likely, the unitary actor will attempt to create and exploit divisions between the game's players. If cooperation is unlikely to begin with, then the unitary actor does not need to take any further actions.

3.3.1. Destroying Communication Channels

23 As described above, the players of the Stag Hunt game have a joint incentive to cooperate with each other and hunt the stag rather than hunt rabbits. A unitary actor who wants to prevent players from cooperating with each other may benefit by sabotaging the communication channels between the two players. As described earlier, when communication is completely prevented, the players of the Stag Hunt are likely to play it safe and hunt rabbits. Although this type of divide-and-conquer strategy will be most effective (from the unitary actor's perspective) when neither side can send messages to the other, even preventing just one side from communicating with the other may be a successful strategy.[19]

24   These insights are relevant for the Prisoners' Dilemma as well. It is well understood that repetition is of limited value when the players cannot observe the actions that have been chosen by the other players in previous rounds. Suppose that there is a lag of, say, 2 rounds before a defection by Player 1 would be noticed by Player 2. This would imply that Player 1 could get away with confessing for 2 periods before retaliation occurs. Extending the formal logic from the last section, Player 1 would cooperate only when his short-run benefit from confessing for two rounds exceeds the long-run loss of reversion to the uncooperative Nash equilibrium, or

$$6 + (1 + r)^{-1}(6) < (1 + r)^{-2}4 + (1 + r)^{-3}4 + \ldots$$

25 It is not hard to show that this will be true only when the discount rate is $r < .29$. In other words, the discount rate must be even smaller than before to compensate for the adverse incentive effects of the detection lag, making cooperation more difficult to sustain. The problem will, of course, be exacerbated even further when the detection is even less perfect than this.[20]

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19 Indeed, Cooper et al. (1992) find in their experimental setting that one-way communication can be less useful in eliciting coordination than two-way communication.

20 Similar results hold when instead of a detection lag, a defection will go unobserved with positive probability in each round.

Figure 3. The Payment of Bribes.

The Stag Hunt

The Prisoners' Dilemma

3.3.2. The Payment of Bribes

The unitary actor may be able to prevent the cooperation of the players 26 through the payment of bribes.[21] Imagine, as shown in Figure 3, that the unitary actor promises to pay X_1 to Player 1 if he doesn't cooperate with Player 2.[22] Note that in the figure this bribe to Player 1 is paid regardless of whether Player 2 cooperates. Similarly, the unitary actor promises to pay X_2 to Player 2 for non-cooperation.

Nondiscriminatory bribes. First, imagine that the unitary actor *does not* 27 *discriminate* between the two players and sets $X_1 = X_2 = 5$. In the Stag Hunt game, these bribes would guarantee that the players would hunt rabbits: hunting rabbits becomes a dominant strategy for both players and is therefore the unique Nash equilibrium of the one-shot Stag Hunt game. In the Prisoners' Dilemma game, these bribes strengthen the unilateral incentive to confess. The players' equilibrium payoffs from confessing, (11,11), are higher than their payoffs would be if they both remained silent, (10,10). Importantly, the players can do no better for themselves through the infinite repetition of this game. A player can always guarantee himself a payoff of at least 11 by confessing, and there does not exist another outcome that delivers higher payoffs to both players.[23] In both cases, non-discriminatory

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21 We are implicitly assuming that the multiple players of these games are not able to bribe each other or to write binding contracts with each other limiting their actions. This assumption would be valid if the multiple players are dispersed and disorganized, or if they lack a credible mechanism to enforce their contracts.

22 Non-cooperation corresponds to hunting rabbits in the Stag Hunt game and confessing in the Prisoners' Dilemma.

23 More generally, the unitary actor can prevent cooperation and induce confessions by offering nondiscriminatory bribes $X_1 = X_2 > 4$.

bribes are expensive, requiring the unitary actor to spend a total of $5 + 5 = 10$ to prevent cooperation.[24]

28   *Discriminatory bribes.* The unitary actor can prevent cooperation in a more cost-effective manner by *discriminating* between the two players. Suppose that the unitary actor sets $X_1 = 5$ and $X_2 = 0$. In the Stag Hunt game, Player 1 would then have a dominant strategy to hunt rabbits. Player 2, knowing this, will hunt rabbits as well, so hunting rabbits is the unique Nash equilibrium of the game.[25] Interestingly, the unitary actor's power may be enhanced even further if he can credibly approach the two players *in sequence,* making take-it-or-leave-it offers to each.[26] If Player 1 hasn't accepted a bribe yet, the unitary actor can assure himself that the two parties will hunt rabbits by paying Player 2 a bribe $X_2 = 5$ to hunt rabbits. Knowing that Player 2 has signed the contract to hunt rabbits, Player 1 will hunt rabbits too. Now suppose that the unitary actor can approach Player 1 first. Player 1 realizes that if he rejects a bribe, he can only expect to receive a payoff of 6 from hunting rabbits in the future. The unitary

24   The unitary actor may be able to accomplish the same outcome without such high bribes, however. Suppose that $X_1 = X_2 = 3$ in the Stag Hunt game, so each player receives $6 + 3 = 9$ from non-cooperation. Although the new game between Player 1 and Player 2 has exactly the same two pure-strategy Nash equilibria as before (hunting stags and hunting rabbits), and (10,10) Pareto dominates (9,9), it surely more likely that the players will hunt rabbits when these bribes are offered. Since a payoff of 9 is only slightly less than a payoff of 10, even a small amount of doubt on the part of a player would lead him to play it safe.

25   Indeed, this type of divide-and-conquer strategy is the unique coalition-proof Nash equilibrium of the game (Segal & Whinston 2000). These results have been verified in the laboratory (Landeo & Spier 2008). This refinement requires that the equilibrium be immune to self-enforcing coalition deviations (Bernheim, Peleg, & Whinston 1987).

26   The unitary actor may in fact *lose power* when the bargaining power is shifted to the two players. Suppose that the two players approach the unitary actor in sequence and present take-it-or-leave-it demands to the unitary actor. As before, these demands are bribes that the unitary actor would pay to the offeror for hunting rabbits. Suppose further that the unitary actor derives an incremental value of 10 if the players hunt rabbits, and will receive nothing if they hunt the stag. We can easily construct the equilibrium demands using backward induction. If no deal has been struck between the unitary actor and Player 1, then Player 2 will offer $X_2 = 9$ in exchange for hunting rabbits. The unitary actor will accept, and will get an incremental payoff of $10 - 9 = 1$. Working backwards, Player 1 will anticipate this outcome and offer an even smaller bribe, $X_1 = 8$, for hunting rabbits. The unitary actor accepts this offer, and no further negotiations with Player 2 are necessary. Since Player 1 has a dominant strategy to hunt rabbits with the bribe of 8, Player 2 will hunt rabbits as well. Note that Player 1 is capturing surplus at the expense of Player 2 (Stremitzer 2008). Note that this outcome does not rely upon the offeror being bound to hunt rabbits. This result is very sensitive to the timing of the offers. If the players made simultaneous offers instead, then they would both offer very small amounts and the unitary actor would do extremely well (Che & Spier 2008).

actor can successfully offer Player 1 a bribe of $X_1 = 1$, locking him into rabbit hunting. After Player 1 is on board, there is no reason to offer any further bribes to Player 2.[27]

Similarly, the discriminatory offers $X_1 = 5$ and $X_2 = 0$ break the cooperative equilibrium in the indefinitely-repeated Prisoners' Dilemma. The reason is simple: Player 1 can guarantee himself a payoff of at least 11 in every round by confessing and taking the bribe. He would not be satisfied remaining silent and receiving a payoff of 10 in each and every round when he can get a minimum of 11 by confessing. For this reason, there cannot exist an equilibrium outcome where the two players cooperate and remain silent in each and every round.[28] Again, the unitary actor is able to prevent cooperation between the players at a lower cost than when discrimination is not possible.

Conditional bribes. The unitary actor can potentially prevent cooperation at an even lower cost when the bribes can be made conditional on the actions of both players. In the context of the Stag Hunt game, suppose that the unitary actor offers a bribe of X_1 to Player 1 with the condition that the bribe will be paid only if Player 1 hunts rabbits and, in addition, that Player 2 hunts the stag alone. The bribe to Player 2, X_2, is offered on similar terms. Under these terms, no bribes are paid when both players hunt rabbits. Conditional bribes of $X_1 = X_2 = 5$ transform the Stag Hunt game into a Prisoners' Dilemma. If Player 1 believes that Player 2 will hunt stag, then Player 1 will hunt rabbit (since 11 is greater than 10). If Player 1 believes that Player 2 will hunt rabbits then Player 1 will hunt rabbits as well since 6 is larger than 0. To put it somewhat differently, when $X_1 = X_2 = 5$ then hunting rabbits is a dominant strategy for both players. Since no bribes are actually paid in equilibrium, the unitary actor is able to achieve his preferred outcome at zero cost.[29]

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27 *See* Segal & Whinston (2000) and Che & Spier (2008). This latter argument does rely on the contracts being binding on the players. Player 2 cannot accept a bribe and then later renege on his commitment to hunt rabbits. This assumption may not always be reasonable in applied settings. Note, however, that an ongoing relationship between Player 2 and the unitary actor (which might be common in real-world settings) might ensure Player 2's commitment.

28 Both parties confessing is certainly an equilibrium of the indefinitely-repeated game. There also exist other equilibria that rely on the players alternating between staying quiet and confessing.

29 The basic idea here can be extended to multiple-player games. *See* the analysis of vote-buying in Section 4.3, based on Dal Bo (2007).

31   Similarly, conditional bribes increase the short run incentive of players to confess in the repeated Prisoners' Dilemma, and can be effective in preventing long run cooperation. Indeed, it has been shown that the mere threat to divide-and-conquer through bribes can be profitably used to coerce the two players to confess. The unitary actor may be able to convince Player 2 to confess in each and every round of the game by threatening to reward Player 1 with the regular payment of a suitably high bribe. This can be quite effective: Player 2 realizes that if he challenges the unitary actor's authority by remaining quiet, there will be no hope of cooperating in the future with Player 1 (who will be compensated for uncooperative behavior). Similarly, the unitary actor credibly threatens to reward Player 1 if Player 2 were to challenge his authority by remaining quiet in any round. It is important to recognize that the actual use of this divide-and-conquer strategy by the unitary actor remains off the equilibrium path, and hence will not be observed, but will nonetheless fundamentally shape equilibrium behavior.[30]

3.3.3. The Imposition of Penalties

32   This analysis of bribes implies a straightforward analysis of threats to impose penalties or punishments. Unless actors are loss-averse (meaning they value avoiding losses, from an arbitrary reference point, more than they value equivalent gains), then a promise to pay a bribe of $X under contingency Y is equivalent to a threat to impose a penalty of $X if Y does not occur. Threats are the mirror image of bribes, and the diagrams given above could all be rewritten in terms of threats without changing the substance of our analysis. The unitary actor can use either bribes or threats to change the payoffs of the players; in the applications that follow, we will treat bribes and threats as mirror-image tactics.

33   Bribes and threats are not identical, of course. From the perspective of the unitary actor, the cost of bribing someone might be higher or lower than the cost of threatening someone. Depending on the setting, threats might be more risky or even illegal, and might be costly in the sense of requiring time and other resources even if not cash outlays. From the perspective of the players, the prospect of bribes might make them more likely to engage in the relevant activity in the first place (because they might receive

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30 *See* the theoretical work of Acemoglu, Robinson, & Verdier (2004).

bribes even if not the gains from cooperation); the prospect of threats will have the opposite effect. We will largely ignore these considerations below.

3.3.4. Sowing the Seeds of Distrust

The unitary actor may succeed in preventing the players from cooperating with each other by convincing one (or both) players that the other player is untrustworthy and prone to uncooperative behavior. According to Machiavelli, one way in which a military commander can "divide the forces of his enemy" is to "mak[e] him [the enemy] suspect his own men in whom he confides. … You know that Hannibal, having burned all the fields around Rome, allowed only those of Fabius Maximus [the opposing general] to be saved. You know that Coriolanus, coming with an army to Rome, conserved the possessions of the nobles, and those of the plebs he burned and sacked" (1520 [2003], book VI). In both examples, the idea was presumably not only to stir up resentment between the favored and the disfavored, but also to instill in the disfavored a suspicion that the favored had covertly struck a deal with the invader.

One way to formalize the general strategy of inducing distrust is to introduce asymmetric information about the players' payoffs. Consider the Stag Hunt game where Player 1 has private information about an additional personal benefit, "B_1," that he will receive from hunting rabbits. The game is shown in Figure 4 below:

Figure 4. The Stag Hunt with Distrust.

Player 2 knows the distribution of Player 1's private benefit: with probability θ Player 1's benefit is positive and with probability $1-\theta$ this private benefit is zero.[31]

Regardless of the values of B_1 and θ, there exists a pure-strategy Nash equilibrium where both players hunt rabbits. As before, if Player 2 believes

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31 A positive benefit may arise for any number of reasons. Perhaps Player 1 has a strong preference for rabbit meat over venison.

that Player 1 will hunt rabbits he will do the same, and similarly for Player 1. However, when B_1 and θ are high enough then hunting rabbits becomes the *unique equilibrium of the* game. Suppose that $B_1 > 4$ and $\theta > .40$ and that these values are common knowledge. Player 2, being rational, realizes that Player 1 will hunt rabbits *at least* 40 percent of the time, since hunting rabbits is a dominant strategy for Player 1 when $B_1 > 4$. Therefore the highest payoff that Player 2 can hope to get by hunting the stag *is less than* $(.60)(10) + (.40)(0) = 6$. With these parameter values, it cannot be rational for Player 2 to hunt the stag. Knowing this, Player 1 will never hunt the stag either (even if his private benefit is zero).

38   The unitary actor may be able to divide and conquer the players of this game by credibly signaling to Player 2 that the probability θ that Player 1 has a preference for rabbit hunting and that Player 1's benefit of non-cooperation, B_1, are sufficiently large.[32] In such cases, the divide and conquer tactic operates not by altering the players' incentives, but by affecting their beliefs.

3.3.5. Limiting the Frequency or Duration of Interaction

39   The unitary actor may also be able to prevent cooperation between the players by limiting the duration and frequency of their interactions. First, the unitary actor may attempt to manipulate the strategic environment by creating a finite horizon for the two parties. If the two players knew that they would be playing a Prisoners' Dilemma for two rounds only, say, then the cooperative equilibrium would cease to exist. In short, tit-for-tat strategies are (in theory) ineffective when the Prisoners' Dilemma game has a last period. To see why, suppose that the players have arrived in the second round. Both players are fully aware that this is the last round that they will play. Each of the two players has a dominant strategy to confess at that point, regardless of what has happened in the first round. Now suppose that the players are in the first round, contemplating the strategies that are available to them. Being forward looking and rational, the players realize that they will both confess in the second round, regardless of what transpires in the first round. It follows that they will confess in the first round as well since there is no future reward for cooperating.

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32   The information would need to be credible, of course. This third party has a natural incentive to lie and exaggerate the magnitude of the parameters, and if the players know this, they will ignore any noncredible statements intended to arouse distrust.

Second, the unitary actor can also potentially prevent cooperation in the   40
Prisoners' Dilemma by manipulating the parties to interact with each other
less frequently. Suppose that the parties play the Prisoners' Dilemma in
every other period instead of in every period. Cooperation will be possible
only when

$$6 < (1 + r)^{-2}4 + (1 + r)^{-4}4 + (1 + r)^{-6}4 \ldots$$

This is possible only when the discount rate is sufficiently small, $r < .29$.   41
Recall that when they played this game earlier, the discount rate could
be significantly higher, $r < .67$.

3.3.6. "Combine and Conquer"

Differences among the players of the Stag Hunt and Prisoners' Dilemma   42
games—including differences in their time horizons and their economic
stakes—may impede their ability to cooperate with each other over
time. In practice, players with similar characteristics find it easier to coor-
dinate on behaviors that are in their mutual interest, and can more easily
detect deviations by others.

This phenomenon has been observed in markets where competitors   43
attempt to coordinate their pricing decisions without explicitly communi-
cating with one another. (Explicit communication would run afoul of the
U.S. antitrust laws.) In the airline industry, for example, asymmetries
abound. Some airlines may be in sound financial shape, for example,
while others may be experiencing financial distress. Some airlines are posi-
tioned as high-end carriers, while others offer lower service levels. While
some airline have high cost structures (due, perhaps, to a broader hub-
and-spoke system), others may enjoy lower costs. Making things even
more complicated, airlines may experience different dynamic shocks to
their demand curves and production technologies. These factors tend
to make it difficult for the airlines to agree—tacitly or otherwise—on
which prices are appropriate for the market conditions, and to ascertain
whether a price cut by a rival is a reflection of changing market conditions
or whether it constitutes cheating.[33]

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33 *See* the discussion in Besanko et al. (2006); Carlton & Perloff (2004). These asymmetries, and
   the price wars that consequently erupt, may serve the interests of society more broadly. Con-
   sumers often benefit from heightened competition in markets, and the law seeks to encourage
   such competition.

44   Unitary actors sometimes take intentional actions to weaken groups by intermixing players with dissimilar interests and stakes. Early in the twentieth century, some American employers voluntarily integrated their workforces in the hope that racial antagonisms among subgroups would prevent workers as whole from concerting their efforts through bargaining or strikes (Roemer 1979). In 1937, "the foreman of the Griffen Ranch [said that] 'Last year our Hindu workers struck. So this year we mixed half Mexicans in with them, and we aren't having any labor trouble (Roemer 1979, 696, n. 1).'" We will refer to this type of strategy as "combine and conquer."

3.4. The Choice among Strategies

45 It might be asked what determines the unitary actor's choice among strategies. Why would unitary actors ever use nondiscriminatory bribes when discriminatory bribes are cheaper, and discriminatory bribes when conditional bribes are cheaper still? Or why bribe at all when one can disrupt communications? The answer is that the choice of strategies will be determined by technological and institutional constraints, whose nature depends upon the context. Conditional bribes may require sophisticated contracts, which in turn will require enforcement mechanisms. Discriminatory bribes may provoke suspicion and the formation of coalitions. Law may rule out some strategies. Rather than trying to generalize about the costs and benefits of different strategies, we will examine how they work in specific settings.

3.5. Normative Implications

46 To elicit the normative implications of our analysis, we must distinguish the optimal outcome for the two players (excluding the unitary actor), the optimal outcome for the two players plus the unitary actor, and the optimal outcome for society as a whole (which includes a broader set of stakeholders).

47 *For two players only.* In the Stag Hunt game, the optimal outcome is for each player to hunt a stag. The total payoff, 20, is higher than it is for any other combination of moves. Similarly, in the indefinitely-repeated Prisoners' Dilemma, the optimal outcome is for each player to stay quiet. If the social goal is to maximize payoffs for the two players, then the unitary actor's tactics are unambiguously bad because they prevent the two players from receiving the highest payoffs.

For the two players plus the unitary actor. We have not made assumptions 48
about the payoffs for the unitary actor but we can certainly do so. Consider
first the Stag Hunt game. If the unitary actor causes both players to hunt
rabbits, then those players collectively obtain 12 rather than 20. Thus, the
divide and conquer tactics are socially optimal if the unitary actor gains
more than 8 from the players' failure to coordinate. If the unitary actor
causes only one player to hunt rabbits, the players collectively obtain 6.
Accordingly, the divide and conquer tactics are socially optimal only if
the gain to the unitary actor exceeds 14. A similar point can be made
about divide and conquer tactics in the Prisoners' Dilemma.

Whether divide and conquer tactics are bad for the main actors, then, 49
depends on context. Suppose, for example, that the unitary actor is an
employer and the other players are workers. If unionization would raise
the employer's costs significantly, then divide and conquer tactics would
be socially justified. If they would not, then divide and conquer tactics
would not be socially justified. As we will see, labor law does not make
this distinction. Labor law bans certain harsh divide-and-conquer tactics
(like bribes) and the ban does not depend on whether unionization raises
costs or not.

For society as a whole. The activities of the two players and of the uni- 50
tary actor can also produce harms and benefits for society as a whole.
When firms have market power, they can use divide and conquer tactics
to restrict entry and keep prices high for consumers. When firms do
not have market power, divide-and-conquer tactics should reduce costs
and hence prices for consumers. And as we will discuss, if an executive
uses divide-and-conquer tactics to control legislators, the results can
be either beneficial or harmful for the wider society, depending upon
the context.

The law. As a result, law and public policy should not reflect general 51
approval or disapproval of divide and conquer tactics. Instead, law should
try to rule out divide and conquer tactics where they reduce total payoffs
for society as a whole, yet should allow them where they enhance welfare.
In what follows, we attempt to illustrate, through a series of examples, the
ways that the law pursues one approach or the other.

Where it is beneficial to do so, law can suppress divide and conquer tac- 52
tics through a nondiscrimination rule, which prevents the unitary actor
from splitting similar groups through dissimilar treatment. Indeed, as
Section 4 illustrates, we observe laws or norms against "discrimination"

in labor law, international law, and important areas of constitutional law. In all these cases, the nondiscrimination rule can be justified[34] as a device for discouraging divide and conquer tactics on the part of dominant players who have incentives to act contrary to the public interest. On the other hand, it may be socially desirable for the unitary actor to treat other players differently. For example, people may cooperate better in two small groups where preferences are similar, than in one large group where preferences are different. As we will see, labor law permits or requires unitary actors to divide people into groups and deal with them separately. A divide-and-conquer strategy that converts the large group into two uniform subgroups may increase efficiency and enhance social welfare. In such cases, the law needs to distinguish between good divisions and bad divisions. When such fine distinctions are not possible, a ban on discrimination will have both good and bad effects and may do more harm than good overall.

53   The law should also be alert to the flip-side of divide and conquer, namely the "combine and conquer" strategy described earlier. Recall that the unitary actor may be able to weaken the opposition by combining groups with dissimilar interests or commitments into a single legal unit whose internal dissensions will render it ineffective. The use of combine and conquer tactics can be either welfare-reducing or welfare-enhancing depending upon the circumstances. As we will see, James Madison advocated a type of combine and conquer strategy in constitutional design.

4. APPLICATIONS

54   We turn to applications. Our aim is not to be comprehensive, an impossible task given that divide and conquer explanations are invoked across all fields and subfields of law, history, and the social sciences. Rather, we will select cases that allow us to illustrate the divide and conquer mechanisms set out in Section 3, and to explore the normative implications of those mechanisms. Throughout, we attempt to identify the conditions under which divide and conquer (and its flip-side, combine and conquer) promote or decrease welfare.

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34   Whether the anti-discrimination rule can be *explained* on such grounds is a different question, on which we express no view.

4.1. Labor Law

Divide and conquer tactics have a long history in labor relations. Before the   **55**
modern legal regime began in the 1930s, workers attempted to organize by
forming a union and committing not to make separate agreements with the
employer. The idea was to force the employer to bargain with the union rep-
resentative rather than with workers individually, and also to prevent the
employer from hiring replacement workers from outside the union.[35]
Employers resisted, and unions reacted by calling strikes, which would
deprive the employer of all its workers en masse, and would also, through
the picket line, prevent the employer from hiring replacements. Employers
tried to preempt union organization by firing and intimidating organizers,
and by bribing workers not to join unions[36]—classic divide and conquer
tactics—and workers responded with sabotage and other forms of violence
and resistance (Oversight Hearings Subcommittee of Labor-Management
Relations Committee on Education and Labor 1979).

The National Labor Relations Act sought to minimize the violence and   **56**
disruption of union organizing drives by setting up a formal election pro-
cedure administered by the National Labor Relations Board.[37] Typically,
an existing union would seek to organize a workplace by persuading and
educating workers and trying to convince them to vote for union represen-
tation. Under the NLRA, once a threshold level of interest has been satis-
fied, a formal election process is held. Employers may not interfere with the
union's organizing efforts, but have the right to launch their own campaigns
in which they try to persuade workers that a union would not serve their
interest. Crucially, employers may not use bribes and threats: they may
not reward workers (with promotions, bonuses, and the like) who resist
unionization and they may not fire, demote, or otherwise punish workers
who support unionization. Workers cast ballots for or against representa-
tion, and the union prevails if a majority of ballots favor representation.

The workers face a problem of collective action. In the absence of the   **57**
employer's interference, the worker's problem could be modeled in at

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35 For a lucid introduction to these issues, *see* Weiler (1990).

36 Employers would ask workers to enter "yellow dog contracts," which made employment con-
ditional on the worker refraining from joining a union. *See* Epstein (1983), for a discussion
and defense.

37 *Wagner Act, National Labor Relations Act,* Pub. L. No. 74–198, 49 Stat. 449 (1935) (codified as
amended at 29 U.S.C. §§ 151–169).

least two ways. On the Stag Hunt interpretation, each worker gains by organizing as long as other workers organize. If a worker does not organize, she receives a lower payoff. If the worker attempts to organize while other workers do not organize, she receives the lowest payoff. On the Prisoners' Dilemma interpretation, again each worker gains as long as other workers organize, and does less well if no workers organize; the difference here is that a worker does best if she does not organize while others do organize. Both models seem realistic; each could capture incentives in somewhat different settings. In one workplace, a worker who fails to cooperate with other workers may not share in the benefits of collective bargaining (for example, a higher wage) and thus be worse off (Stag Hunt); in another workplace, a worker who free-rides may nonetheless benefit from the collective bargaining, for example, safety procedures are improved (Prisoner's Dilemma).

58   Employers' divide and conquer strategies run the gamut. First, they may try to disrupt communications among workers. One such tactic involved the creation of "rotating employee committees." Managers would meet with groups of workers on a regular basis to hear their complaints about working conditions. Crucially, the membership of the committees would "rotate," that is, change continually. The theory was that "by continually changing the makeup of the employee committee, management could keep abreast of complaints and rumors circulating in various departments without creating a bond among participants or inadvertently developing leaders" (Oversight Hearings 1979, 40). Workers who do not repeatedly interact with each other will have trouble communicating with each other if their workplace does not otherwise provide opportunities for congregation. Our example above of an employer hiring workers with different ethnic and linguistic backgrounds provides another illustration of this tactic: workers who do not speak the same language have difficulty communicating.

59   Second, employers use bribes and penalties. Employers can try to divide workers by offering rewards and punishments, including time off, bonuses, and other rewards for anti-union workers, and harassment of pro-union workers (Levitt 1993, 28, 105, 215–17).[38] As noted above, this activity is

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38 *See* Oversight Hearings (1979), at 36–37 (listing numerous examples). An empirical study of 261 NLRB certification election campaigns found that more that more than 75 percent of managers engaged in tactics such as discharging workers for union activity, adjusting wages, and promising improvements in wages, benefits, and working conditions if workers voted against unionization; these variables were positively correlated with management success in the campaign at a statistically significant level (except for discharges) (Bronfenbrenner 1994).

illegal under the NLRA, but it is pursued nonetheless. In one case, management made clear that good jobs in a new facility would be made available to anti-union workers and not to pro-union workers (Levitt 1993, 221). In more bare-knuckled campaigns, management has spread false rumors about union organizers (for example, that they have committed crimes), spied on them, released personal information about them, and falsely accused them of violating work rules and discipline them (Oversight Hearings 1979).

Employers also sometimes raise wages for all workers prior to the union   60
election, in the hope that workers will believe that collective bargaining is unnecessary, but this tactic is far more costly than dividing and conquering. From the employer's perspective, it makes more sense to bribe only a bare majority of the workers, and better yet, to price discriminate, giving smaller bribes to workers less inclined to organize and larger bribes to those more inclined to organize. In one account (Levitt 1993), one of the key functions of supervisors is to identify the pro-union workers, the anti-union workers, and the wavering workers, and to report that information to management (which is legal). With this information in hand, management can target the wavering workers—who will be more willing to vote against the union in response to bribes and threats (which are illegal but may be hard to detect).[39] In this way, the cost of resisting unionization is minimized.

Third, employers may try to limit the frequency of interaction among   61
workers. The rotating employee committee, discussed above, can have this function. Preventing workers from interacting with each other not only reduces opportunities for communication, it also reduces opportunities for sanctioning workers who cheated in earlier rounds of plays. By interfering with repeated interactions, employers would try to undermine the strategic basis for cooperation.[40]

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39 Describing one campaign, Levitt (1992, 28) says:
   We continued to monitor worker allegiance through supervisor interviews and deep in the campaign formed a Vote No committee of pro-company employees charged with rewarding workers deemed to be "loyal" to management. Those workers found themselves showered with extra time off, special favors, and other bonuses. Meanwhile the pro-union workers came to work each day to face ever-tighter scrutiny from their bosses and were forced to battle scurrilous rumors.

40 Employers' resistance to "closed shops" (which are illegal) and "union shops" (which are illegal in certain states), which are mechanisms for restricting employment to union members, may also reflect an effort to disrupt communications by introducing into the workforce people not committed to unionization.

62   Fourth, employers may sow the seeds of distrust. Employers sometimes provide false information about the motives of unions and union organizers (Levitt 1993). When a campaign begins, the problem for workers is that they do not know whether union organization, which almost always involves outsiders coming in to help them organize, will serve their interests. Union organizers argue that organization allows workers to obtain higher pay and more generous benefits. Employers argue that union dues exceed the benefits from organization, and that unions introduce rigid workplace rules that are unfair and bureaucratic. (Of course, this information could well be true.) When employers float rumors, misrepresent the motives of unions, and so forth, they introduce noise, which may interfere with organization efforts by obscuring the difference between "cheating" and "cooperation" among workers.

63   Fifth, employers engage in combine and conquer. The NLRA divides a workplace into communities of interest. The theory is that workers with distinct interests should bargain in separate units. An airline, for example, will deal with separate mechanics', pilots', and flight attendants' unions. According to one account (Levitt 1993), management tends to prefer larger bargaining units with more diverse workers who can be played off each other. So in one campaign, the employer tried to ensure that pro-management lab technicians and clerical assistants would be lumped together with the production workers. The different interests among the groups would make it more difficult for the workers to cooperate (Levitt 1993, 251–252). Recall also our earlier example of employers hiring workers of different ethnic and linguistic backgrounds. Not only does this tactic hinder communication among workers, it also increases the cost of cooperation if workers of different backgrounds have different interests.

64   The law addresses these tactics in a number of ways. Employers' communications with workers are regulated; they may urge workers to vote against the union but cannot issue threats or promises or use deception. Management may not bribe workers to vote against the union or punish them for supporting the union. The within-unit nondiscrimination rule formally prohibits divide-and-conquer tactics but management appears to be able to execute those tactics to some extent because of the difficulties of detection and weak sanctions. Finally, the division of workers into separate bargaining units can also be understood as a way to enhance cooperation among workers by ensuring that workers interact with workers who have similar interests.

One of the most effective rules is the requirement of a secret ballot. This makes it impossible for the employer to verify the workers' votes and thus undermines the credibility of the workers' acceptance of the offer; anticipating this, the employer will not make the offer in the first place. (Even without this legal barrier, however, one might wonder whether employees would trust an employer who offers a contract that involves no payment in equilibrium. An employer who makes such an offer might seem inherently untrustworthy.) At the same time, because the ballot is kept secret not only from the employer but from the other workers, it prevents workers from knowing whether other workers cooperated, weakening their ability to sanction each other for defecting. Thus, the secret ballot blunts divide and conquer, but also weakens the underlying cooperation that the unitary actor seeks to undermine. Unions appear to believe that the second factor is more significant than the first, and thus support a bill pending in Congress that would allow for a union to be formed if more than 50 percent of the workers in a workplace sign an authorization card, which is not secret. Opponents of this bill argue that this system would enable unions to intimidate workers who are reluctant to unionize (Epstein 2009, 30–32).

A normative assessment of the law obviously depends on one's prior assumptions about the social costs and benefits of unionization. If, as many but not all economists believe, unionization merely cartelizes the labor market, then divide-and-conquer tactics by the employer promote social welfare. Indeed, unions may use divide-and-conquer tactics against workers to disrupt opposition to representation in workplaces, and against whole industries by using divide-and-conquer tactics against employers. The first but not the second approach is largely prohibited by the law: unions cannot use bribes and threats against workers to win a representation election. We leave these matters to future research.

4.2. Constitutional Design

In the design of constitutions, divide and conquer strategies play a dual role, either as the problem that constitutional designers must solve or else as a solution that the designers themselves use to cope with other problems. In the first case, the problem for constitutional design is to prevent or inhibit the use of divide and conquer strategies by the incumbent government, which may use those strategies to benefit itself while reducing overall

welfare. In the second case, constitutions themselves raise the costs of cooperation to groups whose joint action would reduce overall welfare, such as a majority faction seeking to exploit minorities. In any given constitution, however, there will be tradeoffs between these two desiderata: the same structures that make it easier for groups to coalesce to defeat a welfare-reducing sovereign can also make it easier for groups to coalesce into an exploitative majority faction.

68   *Divide-and-conquer as a problem.*   In one well-known model of constitutionalism (Weingast 1997), the incumbent sovereign or government confronts two or more major political entities: states or provinces in a federal system, political parties, socioeconomic classes such as capitalists and workers, status groups such as nobles and commoners, or ethnic groups such as Hutus and Tutsis. The incumbent requires the support of at least one of the groups to remain in power, but if the two combine forces, the incumbent is deposed. Given this, the incumbent must decide whether to transgress against one or both groups by violating their rights. It is assumed that doing so will benefit the incumbent, but reduce social welfare overall. The groups' choice is whether to challenge the incumbent's transgression or instead to acquiesce.

69   In the simplest version of the problem, the incumbent is restricted to attempting a transgression against both groups simultaneously or against neither. In this condition, the two groups face a coordination problem, interpreted in Section 3 as a Stag Hunt game: it is best for each group to challenge transgressions by the incumbent, conditional on the other group also doing so, yet the worst outcome for each is to be the sole challenger, which incurs the costs of challenging without blocking the incumbent's transgression. The game thus has two equilibria in pure strategies, one in which both acquiesce, and one in which neither does so.

70   The incumbent's position improves dramatically if it can adopt a divide and conquer strategy, in which the incumbent can transgress against only one of the two groups while offering the other a side payment from the spoils of transgression against the first. In a single-shot interaction, the result is that the group that is offered the side payment has a dominant strategy of acquiescence. Knowing this, the group whose rights are violated will acquiesce as well, since challenging the incumbent is all cost and no benefit. Here the incumbent's bribe has in effect converted the Stag Hunt into a Prisoners' Dilemma, in which each group's first choice is defection rather than cooperation.

Faced with the threat of divide and conquer tactics, the groups may sustain cooperation against the incumbent only under certain conditions. In an indefinitely repeated interaction, the folk theorem applies and acquiescence to the incumbent becomes just one possible equilibrium. If neither group discounts the future too heavily, then cooperation may be sustained by a trigger strategy in which each group threatens to withdraw support from the other if the other does not support the first. Because a withdrawal of support would expose the would-be defector to transgression in all future periods, each group maximizes its payoff by cooperating in the present, conditional on the other doing so, and cooperation to block the incumbent's transgressions is an equilibrium.

There are three major implications for constitutional design. First, the incumbent's ability to play divide and conquer can allow it to maintain power even if it would be crushed by a united opposition. Indeed, as Section 3 discussed, all that is necessary is the *potential* to divide and conquer (Acemoglu, Robinson, & Verdier 2004). In the example motivating this refinement, kleptocratic leaders who control and exploit national resources manage to maintain power despite the fact that kleptocracy makes everyone else worse off. The reason is that a challenge will succeed only if all political groups join forces, but if a challenge occurs, the incumbent kleptocrat will offer a bribe to one of the putative allies to buy it off, and the other challenging groups will be made worse off by their failed attempt. Anticipating this, the groups will not challenge, and the kleptocrat remains in power without sharing national resources with anyone. The actual use of divide and conquer strategies by the kleptocrat remains off the equilibrium path, so observation of actual societies will tend to understate the importance of divide and conquer as a political mechanism.

Second, written constitutions or clear constitutional norms can lower the costs of coordination for groups that benefit by jointly opposing the incumbent's transgressions. Well-defined constitutional rules, whether written or unwritten, define what counts as a transgression and thus ensure that the incumbent's decision to transgress is common knowledge. Where the groups have Stag Hunt preferences for conditional cooperation, defining precisely what counts as a transgression thus provides a focal point for coordinating resistance. Even where the groups have Prisoners' Dilemma preferences, and would thus benefit most of all from defecting while others cooperate, they have an interest in coordinating so long as the game is

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indefinitely repeated and neither group is too myopic or impatient. In such cases, defining precisely what counts as a transgression allows each to implement its trigger strategy, threatening to punish the other for failure to provide support, and thus sustains cooperation as an equilibrium.

74   Third, constitutional nondiscrimination rules can be justified (although not necessarily explained) as mechanisms whose effect is to at least partly block the incumbent's best strategy of playing divide and conquer through discriminatory bribes. Standard nondiscrimination rules include not only vague or ambiguous commitments to "equal protection of the laws," but also more pointed restrictions. In the United States, the federal constitution mandates that "all Duties, Imposts and Excises shall be uniform throughout the United States,"[41] that rules of naturalization and laws on the subject of bankruptcies must likewise be "uniform … throughout the United States" and that "[n]o Preference shall be given by any Regulation of Commerce or Revenue to the Ports of one State over those of another." In the world of the late eighteenth century, these were consequential restrictions whose effect (and, to some degree, purpose) was to prevent the new federal government from playing divide and conquer strategies against the several states.[42] At the state level, constitutions frequently ban "special or local" legislation, as opposed to general legislation; ban governmental "gifts, subsidies or grants to private individuals" (Eskridge, Frickey, & Garrett 2007, 358); and require laws, especially tax laws, to be uniform across the state.

75   *Divide and conquer as a solution.*   In another perspective, divide and conquer can itself represent a solution to problems of constitutional design. For Madison, a basic problem of constitutionalism was how to prevent the formation of the oppressive majority factions that had plagued the democratic republics of the past.[43] Madison's idea was to exploit problems of collective action to promote the public good. By increasing the scale of the new republic, the Constitution would raise the costs of organizing a majority faction:

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41   As to taxes, the uniformity requirement was partly repealed by the sixteenth amendment.

42   For an application of Weingast's (1997) model to federalism, *see* de Figueiredo & Weingast (2005). For a legal analysis of the federal government's spending power, and the fear that it can be used to divide and conquer states through discriminatory offers, *see* McCoy & Friedman (1988).

43   The quotations in this paragraph and the next are from Madison (1787).

> [W]hat remedy can be found in a republican Government, where the
> majority must ultimately decide, but that of giving such an extent to its
> sphere, that no common interest or passion will be likely to unite a major-
> ity of the whole number in an unjust pursuit. In a large Society, the people
> are broken into so many interests and parties, that a common sentiment is
> less likely to be felt, and the requisite concert less likely to be formed, by a
> majority of the whole. … If the same sect form a majority and have the
> power, other sects will be sure to be depressed. *Divide et impera, the repro-*
> *bated axiom of tyranny, is under certain qualifications, the only policy, by*
> *which a republic can be administered on just principles.*

Madison's divide and conquer strategy for constitutional designers can   76
be interpreted in several different ways. First is a coordination or Stag Hunt
problem: the large scale of the republic might simply make it difficult for
different individuals or subgroups to communicate, under the technolog-
ical and economic conditions of the eighteenth century, and thus difficult
to coordinate their plans for political action. A second interpretation draws
on the logic of collective action and is usually modeled according to the
Prisoners' Dilemma: latent majority factions will be less likely to organize
as the scale of the republic grows. Even if all members of the latent majority
would prefer collective action to no action, and thus share a common
interest to that extent, each would prefer most of all that others bear the
cost of organization, and this effect increases as the number required for
collective action increases. Finally, and most centrally, Madison argues
that scale reduces the chance that a majority will hold the same preferences
or experience the same sentiments or passions in the first place. Irreducible
disagreement about what sort of collective action would be best (even if it
could be achieved) divides the numerical majority as effectively as would
discriminatory offers. Whatever the precise mechanism, Madison's solu-
tion resembles the "combine and conquer" tactics used by union-busting
employers: lumping diverse groups into one large political entity—the
extended republic—makes cooperation more difficult to achieve. The
only difference is that, in Madison's account, the precluded cooperation
would be harmful, so the "combine and conquer" tactic is used to achieve
beneficial ends.

Tradeoffs. If divide and conquer is sometimes a welfare-enhancing   77
means to prevent latent majorities from organizing, and sometimes a
welfare-reducing strategy of the incumbent government that can only be

overcome by the formation of a majority, then the constitutional designer faces a tradeoff between the risk that majorities will form when they are undesirable and the risk that they will not form when they are desirable. Because the same institutional structures that reduce the former risk increase the latter, an optimization problem arises. Madison recognized this point as well, noting that "[a]s in too small a sphere oppressive combinations may be too easily formed [against] the weaker party; so in too extensive a one, a defensive concert may be rendered too difficult against the oppression of those entrusted with the administration" (Madison 1787). Divide and conquer, in other words, could be extended too far; the scale of the new republic could exceed the optimum as well as fall short of it. It is hard to say anything general about this issue, but it underscores that divide and conquer is intrinsically neutral from the standpoint of welfare; it can be put to good ends or bad ones.

4.3. Vote-Buying and the Separation of Powers

78   Whether under written or unwritten constitutions, a major arena for divide and conquer tactics involves the relationship between a sole executive and a multimember legislature. In this constellation, the executive occupies the same bargaining position as a sole defendant faced by multiple plaintiffs or a sole incumbent seller faced with multiple buyers, two structurally similar cases discussed in Section 3. The executive can use divide and conquer tactics to exploit problems of collective action among the legislators, especially by using discriminatory offers. As in other settings, however, the mere anticipation of such offers by legislators can be enough to accomplish the executive's ends, in which case the offers will never have to be actually paid.

79   For concreteness, we will focus on David Hume's account of the unwritten British constitution of the eighteenth century;[44] the basic ideas, however, generalize easily to relations between the president and Congress in a separation of powers system. Hume explained the "balance" of the British constitution as a byproduct of executive corruption, effected through divide and conquer tactics. Although the power of Parliament had swelled beyond all control after 1688, the Crown managed to maintain the balance by offering government sinecures and other forms of in-kind bribery to

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44   This paragraph and the two following incorporate material adapted from Vermeule (2003) and Vermeule (2009).

induce a decisive bloc of legislators to sell their votes on the cheap. "The interest of the body [i.e., the Commons] is here restrained by that of the individuals ... [T]he house of commons stretches not its power, because such an usurpation would be contrary to the interest of the majority of its members."

Hume is vague on the details, and two main interpretations are possible. In the first,[45] the Crown offers a cheap bribe to each legislator for voting in its favor. Suppose there is a private cost to each legislator of voting with the Crown when other legislators do not; perhaps the legislator is then conspicuously exposed to the slings and arrows of critics, whereas a mass vote in the Crown's favor provides each legislator with political cover. This is a Stag Hunt game, and two equilibria are possible in pure strategies: if legislators expect that other legislators will vote with the Crown, then they will do so as well in order to obtain the small bribe on offer, but they will not do so if they expect that other legislators will vote against. The implication is that if legislators do vote with the Crown, they will sell out for an aggregate bribe less than the total benefits to the Crown of the enactment: "democratic legislators may refuse to sell a statute at all (a Nash equilibrium), or they may sell it cheap (another Nash equilibrium), but they will not sell it dear" (Rasmusen & Ramseyer 1994, 313).

In this model, the same bribe is offered to each legislator. In a variant that allows discriminatory offers, the Crown can exclude the unfavorable equilibrium of rejection by all legislators by offering a bribe to only a decisive fraction of legislators, with the bribe set just high enough to slightly overcompensate the legislators for the private cost of voting with the Crown. Then voting with the Crown becomes a dominant strategy; each legislator offered the bribe benefits from accepting it no matter what other legislators do. The advantage to the Crown is that a larger bribe for a smaller number of legislators may be cheaper than a small bribe for all legislators.

In a second, somewhat different interpretation,[46] we drop the assumption that there is a private cost to legislators of voting with the Crown when other legislators do not, replacing it with the assumption that individual

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45 Applying the model in Rasmusen & Ramseyer (1994).

46 Applying the ingenious model in Dal Bo (2007).

legislators dislike the Crown's policy and thus incur some private cost if the Crown's policy is enacted. Here the Crown has a neat trick, based on the mechanism of bribery through offers conditional on others' votes. The Crown offers each voter a large sum[47] for providing the pivotal vote in the Crown's favor, a token sum for a nonpivotal vote in the Crown's favor, and nothing for a vote with the opposition. Any given legislator then reasons that if a majority of other legislators vote either for or against, he does best by voting with the Crown; the policy will be enacted or not, regardless of what he does, so taking the offered pittance is best in either case. However, if other legislators split equally and the legislator knows he will be pivotal, he still does best by voting with the Crown. The trick is that because all legislators reason this way, all vote with the Crown, *none* provides the pivotal vote, and the Crown obtains a decisive bloc of votes in its favor while paying each of its voters a token amount. The paradox is that no legislator obtains the large payout for being pivotal, although it seems that one of them must have been so.

83   In either model, the Crown exploits the logic of collective action for its own advantage. Legislator-sellers could benefit if they could collude by committing to sell their votes only as a group, in which case legislators could extract the full aggregate value of their votes from the Crown. But the larger the number of legislators, the more costly coordination becomes (Dal Bo 2007). Divide and conquer tactics that will not work on a small committee of decisionmakers can work in a larger modern legislature or a mass election. Moreover, vote-selling is corrupt behavior condemned by public norms, so the mutual transparency needed for coordination among legislators is lacking; each legislator sells his vote in the shadows and all legislators suffer by doing so. The overall result is that, as Hume wrote in a related context, "much less property in a single hand [i.e., that of the Crown] will be able to counterbalance a greater property in several; not only because it is difficult to make many persons combine in the same views and measures; but because property, when united, causes much greater dependence, than the same property, when dispersed" (Hume 1875, 122).

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47   More specifically, a sum equal to the individual costs to the pivotal voter if the Crown's proposal is enacted plus a token amount, in order to make the pivotal voter prefer that it be enacted (Dal Bo 2007).

Hume argued that, given the baseline of an all-powerful Parliament, these vote-buying mechanisms maintained the balance of the British constitution and thus promoted social welfare, but even if that argument was correct it merely represents a contingent feature of Hume's own time. Under different circumstances, the same divide and conquer tactics might allow the executive to dominate the legislature and thereby upset the balance in its own favor. If constitutional designers fear that executive vote-buying will reduce social welfare, they may attempt to restrict the executive's opportunity to do it.   84

Depending upon the precise mechanism of vote-buying at issue, the solution we have seen in several previous contexts—a nondiscrimination rule—may not work. In the second interpretation discussed above, where bribes can be made conditional on others' votes, the Crown's offer is in one sense discriminatory because only the pivotal voter is promised a large bribe, but in another sense it is not: the initial offer is made to all legislators on equal terms, and in any event the large bribe is never paid. Constitutional designers must therefore fall back upon other devices. Outright money bribes are typically condemned by social norms and ordinary criminal law, so the Crown in Hume's time offered in-kind bribes in the form of official posts and sinecures. In the United States, however, such tactics are partly constrained by the Emoluments Clause and the Incompatibility Clause. The latter bars legislators from simultaneous service in the executive branch, while the former limits the President's ability to appoint a legislator to a newly-created executive post, or a post whose salary has been increased, during the legislator's elected term.[48]   85

Another mechanism is the secret ballot, which as we have seen blocks the offer of a bribe conditional on casting the pivotal vote, by making performance unverifiable. Parliament's efforts to keep its proceedings secret, in the seventeenth and eighteenth centuries, may be justified in this light. However, many constitutions require transparency for legislative votes, in order to promote political accountability. In the United States, the Journal Clause has this effect by establishing a public record of congressional   86

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48 U.S. Const. Art. I, § 6 (Emoluments Clause and Incompatibility Clause). The Emoluments Clause, however, is routinely circumvented by the notorious "Saxbe fix," in which the official's salary is limited to the level that obtained before the increase. For further discussion and evaluation, see Tushnet (2009).

proceedings and by requiring a roll-call vote when demanded by only one-fifth of the legislators present.[49]

4.4. Imperialism, Colonialism, and Race Relations

87   As illustrated in Section 2, the Roman empire is traditionally associated with a policy of *divide et impera,* yet in an earlier era the expanding Roman Republic routinely used similar tactics. When Rome was conquering the rest of Italy in the fourth and early third centuries B.C.E., "[h]er enemies rarely showed that harmony among themselves and that singleness of purpose which characterized the Romans, and Rome did her best to develop the spirit of discord among them by arraying community against community and the aristocracy against the democracy" (Abbott 1901, 58). Rome refused to deal with its adversaries as a bloc, and instead "made a separate treaty with each one of the Latin communities, with the express purpose of preventing future confederations between them" (Abbott 1901, 57). In order to destroy channels of communication and to limit interaction between potential cooperators, these treaties deprived the Latin communities not only of the right to trade with one another, but also of the right to intermarry (Abbott 1901, 57).

88   Divide and conquer has been a time-honored strategy of many other imperial and colonial powers as well.[50] Such powers are typically over-stretched and understaffed; their problem is how to achieve maximum control with a minimum of resources and force. Divide and conquer is an attractive solution in such environments, because it is cheaper to set factions within the latent opposition to fighting among themselves, and if necessary to defeat them piecemeal, than it is to defeat them as a unified enemy.

89   In some cases, the imperial divide and conquer policy rested straightforwardly on discriminatory offers to split the opposition. British policy in

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49 U.S. Const. Art. I, § 5.

50 In some cases, it is also possible that imperial governments only appeared to follow a divide and conquer strategy, which actually arose through an invisible-hand process as the byproduct of the ambitions of local imperial officials:

A former British colonial official once explained to me why colonial authorities appeared to "divide and rule" by playing favorites among tribes. Colonial development, he explained, began at the local level. District officers tended to seek favors for their peoples, not realizing that in the eyes of others they were seeking favors for a particular tribe (Newsome 2001, 37).

India was to create and exploit divisions among the indigenous monarchies by means of explicit or implicit subsidies to loyal allies, "who competed with each other for imperial favours" (Ashton 1982, 4). Although some of these subsidies were large, some merely involved honors and titles (Copland 1982, 94), and in any form they were certainly cheaper than all-out conflict against a unified opposition.

In other cases, imperialist divide and conquer tactics involved fomenting divisions among subjugated groups by sowing mutual mistrust, rather than by selective bribery. In the British colonies of the American southeast,

> [i]n addition to keeping Indians and Negroes apart, Whites pitted the colored groups against each other. In 1725, Richard Ludlam a South Carolina minister, confessed that 'we make use of a Wile for our [present] Security to make Indians & Negro's a cheque upon each other least by their Vastly Superior Numbers we should be crushed by one or the other.' ... In 1758, James Glen, long governor of South Carolina, explained ... that 'it has always been the policy of this govert to creat an aversion in them [Indians] to Negroes' (Willis 1963, 165).

Of course, the two forms of divide and conquer tactics could be used in combination. In 1777, the British Governor of St. Vincent wrote to his superiors that "by dint of address, by properly working on their different passions, and *by some treats* [i.e., presents], I have happily effected a breach of [a threatened] Alliance between the runaway negroes and ... the Charibs [an indigenous people]" (Fisher 1945, 437). By warning the Charibs that the "runaway negroes," who seem to have been a band of escaped slaves, would plunder their settlements, the governor *"laid the grounds of that Jealousie, and distrust, which I wanted to avail myself of"* (Fisher 1945, 437). The governor's strategy thus had two prongs: bribery of the Charib chiefs, and inducing distrust between the two groups.

In cases of this sort, the relationship between the subjugated groups may be interpreted in three ways. In the simplest version, the groups had Prisoners' Dilemma payoffs; resistance to the British was equivalent to staying quiet, while not resisting was like confessing; the first choice of each group was to gain the benefits of the other's resistance to the British while refusing itself to contribute to the joint cause. As indicated in Section 3, even where such games are repeated, a unitary actor who can affect payoffs—here the governor—may be able to block cooperation by means of discriminatory offers, making defection a dominant strategy for both groups.

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93   In a second version, it was a Stag Hunt game under complete informa-
tion, in which it was common knowledge among both groups that the
other's first choice was to cooperate against the British. However, lack
of cooperation is also an equilibrium in such games; the governor's
discriminatory bribes to the Charibs, the apparent inability of the Charibs
to communicate with the runaways, and the focal-point effect of the gov-
ernor's announcement to the Charibs that the runaways would not coop-
erate, all conduced to selecting the equilibrium of noncooperation. After
the governor bribed the Charib chiefs, the "negroes" attempted "acts of
violence … against the women of the nearest Charib settlement, and
[attempted] to cut off the Chief of the same for having been with me
and received presents as they said" (Fisher 1945, 438). The implication
is that the "negroes" viewed the chief's receipt of presents as a defecting
rather than cooperative move.

94   In yet a third interpretation, it was a Stag Hunt game under incomplete
information, in which each group's true preference would be to cooperate
with the other, but in which each group is uncertain of the other's prefer-
ences. In such cases, cooperation can be forestalled by the governor's strat-
egy of sowing "Jealousie, and distrust"—inducing one or both players to
believe that the other player has Prisoners' Dilemma preferences instead
of Stag Hunt preferences for conditional cooperation, or a disposition to
exploit rather than to reciprocate.[51] This version of the Stag Hunt game,
however, requires that the third party's statements be credible. Here the
evidence does not explain why the Charibs would take the governor's
warnings seriously.

95   While the divide and conquer strategies pursued by imperial and colonial
powers are often successful in the short run, they can be self-defeating in the
long run. The presence of the dominant power, and the very fact that it is
known to use divide and conquer tactics, both tend to create emotions of
solidarity among indigenous groups, unifying the opposition. In eighteenth
century India, "there was no political discourse … to construe resistance to
the foreigners as a national war for the defence of the country." However, the
British use of divide and conquer tactics themselves provoked the first stir-
rings of Indian unity. In 1780, "the Poona minister Nana Fadnis…wrote to
his old antagonist Haidar Ali of Mysore [in the following terms]:

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51   *See* Kydd (2006) for the literature on Assurance Games with incomplete information.

> Divide and grab is their [i.e. the British] main principle … They are bent
> upon subjugating the States of Poona, Nagpur, Mysore and Haidarabad
> one by one, enlisting the sympathy of one to put down the other. They
> know best how to destroy Indian cohesion (Marshall 1998, 519).

The result was a joint plan "for the expulsion of the English nation from   96
India" (Louis et al. 1998, 519). Although the plan did not ultimately suc-
ceed, such efforts laid the groundwork for Indian nationalism.

4.5. International Law

Political scientists writing about international relations frequently   97
describe divide-and-conquer behavior among states. The classic balance
of power scenario involves a small number of Great Powers that are in
a security competition—each state seeks to maximize its power at
the expense of other states. Initially, there may be an equilibrium in
which the states are at peace because no one state is powerful enough
to defeat any other state. Then a shock occurs—one state, a "rising
power," like Germany at the end of the nineteenth century, poses a
threat to one or more of its neighbors. Other states "balance" the rising
power by forging alliances with the state or states being threatened. The
balancers in this way attempt to anticipate and foreclose a divide-and-
conquer strategy by the rising power, which, after conquering the first
state and eliminating it as a threat, might turn its attention to one of
the remaining states.[52]

This and other problems of international cooperation can be analyzed   98
with the Stag Hunt and Prisoners' Dilemma models, depending on the
assumptions one makes about payoffs. In the balance of power scenario,
the Stag Hunt seems to be the right model. Suppose that each of two
weaker states faces a choice between resisting the powerful state and
appeasing it. If both states resist the more powerful state, then they obtain
the highest payoff (10). If a state appeases, it receives the middle payoff (6).
If a state resists while the other state appeases, it receives the lowest payoff
(0). Other types of international cooperation might be better modeled as a
Prisoners' Dilemma. In international trade, for example, each of two states
that agree to reduce trade barriers might do better if the other state alone

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52 The literature is enormous. A lucid discussion is found in Waltz (1979). Classics include
   Gulick (1955) and Liska (1957). For modern formal treatments, *see* Wagner (1986); Niou,
   Ordeshook, & Rose (1989); Powell (1999). These works have a different focus from ours.

reduces barriers while the first state cheats. In that way, the first state obtains export markets for its export-oriented industry while protecting other interests from foreign competition. In both cases, a third state that seeks to undermine the cooperative relationship between the first two states can offer bribes, threaten punishments, disrupt communications, and engage in the other divide-and-conquer tactics that we have discussed.

99   The most common divide and conquer tactic in international relations is that of offering bribes and threatening penalties, and this tactic will be the focus of our discussion. States have few methods for disrupting communications among other states in the modern world, though in the past blockades might have served that purpose. States have frequently used propaganda to sow seeds of distrust among their enemies; currently, however, this tactic is not very popular, perhaps because propaganda can be easily refuted in the age of the Internet. States are also not in a good position to limit the frequency or duration of interaction among other states, or to "combine and conquer" them.

100   Let us start with the balance of power case. "Walter Lippman and George Kennan defined the aim of American grand strategy [during the Cold War] to be preventing any single state from controlling the combined resources of industrial Eurasia, and they advocated U.S. intervention on which side was weaker when this prospect emerged" (Walt 1985, 9). The United States pursued this strategy by offering aid to states that defected from the east bloc and isolating states that did not. In both World War I and II, Germany's strategy was first to conquer France and then Russia. Britain countered by forming early alliances with France and Russia; the United States would follow this strategy as well. In World War I, France and Russia formed an alliance to counter Germany's divide and conquer strategy; in World War II, Germany anticipated this move by entering a secret alliance with Russia, which it broke after conquering France. In the nineteenth century, Britain served as an "offshore balancer," offering to come to the aid of weak states on the continent that were threatened by powerful states like Germany and France. Then as France declined, Britain joined France to counter Russia (Liska 1957, 37–39).

101   The classic balance of power cases involved a more anarchical international environment than that which exists today, but divide-and-conquer tactics and balancing counter-tactics remain alive and well. For example, in 2003 Donald Rumsfeld famously divided the European Union into "Old Europe" (consisting of France and Germany) and "New Europe" (consist-

ing of Poland, Spain, Italy, and the United Kingdom). The division did not reflect the age of the countries in question but their orientation toward the United States. Rumsfeld hoped to forestall a united front against the American-led invasion of Iraq by implicitly offering American favor to states that supported the invasion. These states resented Franco-German leadership of the EU or had other reasons for strengthening ties with the United States, and thus could be more easily extracted from a European coalition against the invasion.

Even within the European Union, divide and conquer tactics can be observed. The European Commission has advanced integration by (ironically) using divide and conquer tactics against states that resist integration (Schmidt 2000). In the 1990s, the Commission sought to break monopolies on airport ground-handling services in several states. It could not initially pass legislation that would have outlawed these monopolies because seven states in which the monopolies prevailed prevented a qualified majority from being formed in the Council. Instead, the Commission launched investigations of the monopolies on the basis of existing European law, in three of the states, and informed a fourth state that aid for its national airline would be withdrawn unless it agreed to the new legislation. The first three states ended their monopolies by changing domestic law, and the fourth changed its position on the Commission's proposed law. With four of the seven opponents to new legislation now on its side, the Commission was able to obtain approval for a new law in the Council (Schmidt 2000, 46–48).[53] The new law swept in the three holdouts.

Divide and conquer tactics also play an important role in the modern international trading system. As part of the Uruguay Round of trade negotiations, which was launched in 1986, the United States sought the elimination of agricultural subsidies and other agriculture-related trade barriers. Because the EC operated by unanimity and its most protectionist country, France, opposed concessions, the EC rejected the American position. The United States responded by threatening to slap punitive tariffs on French, German, and Italian targets but not on industries in other countries. It hoped to pressure France directly, and encourage Germany and Italy to pressure France, without incurring the costs of a trade war with

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53 It appears from the discussion that the Commission could use existing laws to challenge monopolies but that these laws were weaker than the law it sought to create.

other European countries. The divide-and-conquer strategy met with limited success, however. In the end, the United States obtained only modest concessions (Meunier 2000, 122–126).

104   The United States tried divide and conquer in negotiations over public procurement liberalization in the same trade round. This time the EC sought liberalization and the United States resisted. After liberalizing public procurement within the common market, the EC threatened to impose discriminatory barriers against the United States unless the United States repealed "Buy American" legislation that required the U.S. government to favor American producers. After further negotiations and agreements, the United States sought to undermine European unity by concluding a bilateral telecommunications agreement with Germany, which eliminated barriers for American and German procurement of telecommunications products and services from those two countries. The United States publicly announced the agreement, even though the Germans apparently hoped that it would be kept secret (Meunier 2000, 126–129). Although a commentator at the time wrote that "if the Americans' plan was to try to erode Europe's admirable yet shaky unified stance on trade policy, they succeeded" (Meunier 2000, 126–129), in fact the European institutions deemed the U.S.-German deal void and the European countries managed to close ranks.

105   But later the United States had more success with divide-and-conquer tactics. In the 1990s the United States sought to liberalize international aviation. France, Germany, and Britain had long resisted these efforts, fearing that their national airlines would not survive open competition. In this case, European law did not give the EC the power to negotiate on behalf of all the member states, and the divide-and-conquer strategy proved effective. The United States sought to enter bilateral open-skies agreements with smaller European states, and succeeded in concluding a deal with the Netherlands, among others. This threatened to divert air traffic from other European states, and in response European institutions were given some authority to negotiate a deal with the United States on behalf of the EC. Here, partly because of the weaker institutional legal structure in the EC for addressing international aviation, the divide-and-conquer strategy helped ensure a favorable outcome for the United States (Meunier 2000, 129–131; *see also* Grant 2002).

106   European countries try to forestall American divide-and-conquer tactics by creating institutions that routinize interactions between European

countries. The institutions increase the benefits of cooperation by facilitating issue linkages, and reduce the costs of cooperation by enhancing information about the moves of each player (through independent courts and commissions). They also set up mechanisms for resisting divide and conquer tactics by other countries. The unanimity rule that prevails for some types of EC action prevents any member state from cutting a deal outside the group. However, the unanimity rule has proven too cumbersome in many settings; weaker voting rules are used but they also create vulnerabilities, as we have seen.

The United States responds by trying to provoke member states to violate their obligations under European law. The American response takes place at an institutional level: the goal is not only to achieve agreement in certain issue areas, but also to sow distrust among member states. As we saw in the procurement case, the U.S. strategy of making a side agreement with Germany and then publicizing it was evidently intended to embarrass Germany and cause other member states to doubt the robustness of EC institutions—a classic example of sowing the seeds of distrust.

Examples can be multiplied. The United States has pursued a divide-and-conquer strategy in TRIPs-related negotiations with developing countries, trying to use bilateral trade agreements to peel off poor countries from the G-20 coalition led by Brazil and India (Yu 2005, n. 152–153). The EC has pursued a divide-and-conquer strategy against developing countries that oppose its agricultural policies by offering preferential trade agreements to Mercosur countries in Latin America (Drezner 2004). The United States has also tried to split Latin American countries in a range of environmental and trade negotiations—for example, in one instance entering an environmental agreement with Chile in order to isolate Brazil and Argentina (Block 2003).

At the international (as opposed to European) level, institutions are much weaker. States outside Europe have not been as effective as the European states at establishing institutions that forestall divide-and-conquer tactics, even though such institutions would be in the interest of all. In the place of formal legal institutions, however, we do observe the gradual emergence of a nondiscrimination norm. One such norm is that all countries should join multilateral treaties that place identical obligations on all parties and that bilateral treaties are frowned upon, except in narrow circumstances (Blum 2008). States that violate this norm are frequently criticized. For example, the United States has been criticized for failing to join

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a number of multilateral treaties—including the Law of the Sea convention, the Kyoto Accord, the Landmines Convention, the Rights of the Child Convention, and many others—on the grounds that most other states have joined these treaties and thus the United States blocks the emergence of uniform international rules of behavior (Koh 2003). The concern is not just that the United States fails to contribute to the creation of some global public good. It is that the United States will not be subject to institutions set up to foreclose divide-and-conquer tactics in particular issue areas—for example, in the distribution of sea resources under the Law of the Sea treaty.

110   This problem is particularly acute in the area of trade. The GATT/WTO system has a strong nondiscrimination norm. The most-favored-nation rule requires that all tariff reductions be applied to all member states. This rule prevents states from offering trade benefits as bribes when they use divide-and-conquer tactics against other states. Unfortunately, GATT rules create a loophole for preferential trade areas—treaties that reduce trade barriers for a subset of WTO members. States have exploited this loophole, and so now it is routine for the United States, for example, to reward allies by offering them bilateral trade pacts (Bhagwati 2002).

111   We see the same phenomenon at the level of general international law. The nondiscrimination norm has provoked a counter-norm—the norm of "common but differentiated responsibilities" in environmental treaties and its twin, "special and differential treatment" for trade treaties (Stone 2004). Both norms have been asserted by developing nations that argue that multilateral treaties should impose weaker obligations on developing countries than on rich countries. The Kyoto Protocol, for example, imposes greenhouse gas limits only on developed countries and not on developing countries. Similar norms of differential treatment can be found in the Law of the Sea convention and a treaty that limits emissions of ozone (Safrin 2008; Stone 2004).[54]

112   The problem with the nondiscrimination norm is that, while it may prevent some divide and conquer tactics, it sweeps too broadly, as it implies that differential treatment cannot be justified on the basis of the capacities of states. The counter-norm tries to hive off a class of poor states that can be treated differently, but only if they are treated better, and presumably uniformly so. This pattern resembles the effort in labor law to prevent

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54 *Montreal Protocol on Substances That Deplete the Ozone Layer,* Sept. 16, 1987, 1522 U.N.T.S. 29.

discrimination within classes but not between classes; here, the idea is that there are two classes of states—rich and poor—with nondiscrimination required within each class, and discrimination between classes permissible as long as it favors the poor class. Unfortunately, this classification is far too crude. All states are different, giving rise both to legitimate discrimination among states (on the basis of capacity, for example) and division and conquest that exploits differences in order to undermine cooperation.

One might argue that these examples reveal nothing about international [113] law and merely illustrate features of international politics or relations in general. There is a lesson for international law, however. The effort to institutionalize relations among European countries, which gave rise to European law, was, at least in part, a response to divide-and-conquer tactics of other countries, and European legal institutions have had to counter the continuing divide-and-conquer tactics of the United States. As noted above, international law (above the regional level) does not have robust institutions. But efforts by states to advance certain norms—most-favored-nation status in trade law, norms of universal obligation in other areas of international law—seem to be responses to the divide-and-conquer problems endemic to the otherwise anarchic international environment.

4.6. Litigation, Settlement, and Plea Bargaining

Divide and conquer strategies also appear in a variety of settings where a [114] unitary litigant faces a group of opponents. These include tort settings, for example, where a defendant is being sued by a group of separate plaintiffs who will enjoy economies of scale in litigation. They also can arise in criminal settings when a resource-constrained prosecutor is negotiating plea bargains with a group of defendants who have allegedly committed unrelated crimes. They can arise in civil settings where a group of defendants are being held jointly liable for the injuries sustained by a unitary plaintiff.

Suppose that there are two plaintiffs who are suing a single defendant. If [115] a plaintiff goes to trial, either individually or jointly with the other plaintiff, the court will award damages of $100 to that plaintiff. Trials are expensive, however—let's assume that the cost of a trial is $150. If the plaintiffs both pursue the defendant, they will enjoy economies of scale in litigation, each bearing costs of $75. Litigating jointly therefore gives each plaintiff a payoff of $100 − $75 = $25. If a plaintiff goes to trial alone, however, he will have to bear the $150 entire cost, giving a net payoff of $100 − $150 = − $50. The decision to litigate corresponds to the Stag Hunt game: a plaintiff

will only find it in his or her interest to pursue the defendant if the other plaintiff pursues the defendant as well. The defendant can take advantage of the plaintiffs through a divide and conquer strategy. By offering to settle with one plaintiff for $26, say, and offering the other plaintiff nothing, he can settle the claims for $26 in total. The first plaintiff has a dominant strategy to accept the $26, and the second plaintiff drops his or her claim (Che & Spier 2008). In this way, the plaintiffs are coerced into settling for less than their claims are jointly worth.[55]

116   Note that the plaintiffs in this example would be jointly better off if they could coordinate their actions. It is in their mutual interest to reject the divide and conquer offers, since going to trial will give them a net payoff of $25 + $25 = $50, while accepting the offers yields $26 + $0 = $26. Coordination might be achieved in a variety of ways. Suppose that the plaintiffs can get together before in advance, before they know who the "favored" plaintiff will be. In this case, they might agree to join their claims and make a single acceptance decision. By doing so, the plaintiffs can commit themselves not to accept offers that add up to less than $50 in total. Note that such arrangements would be facilitated if the plaintiffs retained the same legal counsel, or if the plaintiffs can write binding contracts with one another. In addition to helping the victims of torts receive higher compensation for their injuries, these arrangements also enhance the incentives of defendants to take precautions to avoid accidents in the first place.[56]

117   Divide and conquer strategies may also be adopted by a prosecutor (the unitary actor) when negotiating with multiple criminal defendants. Suppose that a district attorney is dealing with a heavy case load; resources are limited and it simply isn't possible to take all of the defendants to trial. The prosecutor might be tempted to offer reduced sentences to the defendants, since he lacks a credible threat to devote the required litigation efforts to all of them. But by sequencing the defendants in a predetermined order and targeting particular defendants for harsher treatment, the prosecutor can coerce the defendants to agree to heavier sentences than they would otherwise accept (Bar-Gill & Ben-Shahar 2009). As in our previous

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55   The ongoing work of Lavie (2008) explores the ex ante and ex post mechanisms that defendants may adopt to facilitate these and related divide-and-conquer tactics.

56   The social desirability of enhanced incentives hinges on whether the incentives were too high or too low to begin with (Shavell 1997). The use of these strategies can also increase the settlement rate (Che & Spier 2008).

examples of Stag Hunt games, the defendants would receive jointly higher payoffs if they refused to accept the prosecutor's offers. Indeed, their ability to accept plea bargains can make them collectively worse off.

Divide and conquer mechanisms may also be adopted in civil litigation settings by unitary plaintiffs who have been harmed by the joint actions of several injurers. Under joint and several liability, a single losing defendant can be held responsible for the entire level of the plaintiff's damages. Cases along these lines are common in toxic torts, where multiple defendants contributed to polluting a waste site. The rules of joint and several liability have interesting implications for the settlement behavior of the litigants. It has been shown that the likelihood of settlement and the magnitude of the settlement offers hinge on a variety of factors including the treatment of prior settlements when determining the liability of a non-settling defendant and the degree of correlation between the defendant's cases (Kornhauser & Revesz 1994). Chang & Sigman (2000) find support for Kornhauser and Revesz's model using data on disputes between the Environmental Protection Agency (EPA) and Superfund defendants. Under a *pro tanto* setoff rule, the liability of a non-settling defendant is reduced, dollar for dollar, by the value of the previous settlements. When the defendant's cases are sufficiently correlated, the plaintiff can coerce the defendants into settling their claims for significantly more than the value of the damages that they caused.

To see why this is true, suppose that there are two identical defendants who would either lose together or win together should they go to trial. In other words, the defendants' cases are perfectly correlated. The plaintiff's total damages are $80 and the probability that the plaintiff will win at trial is 50 percent. If both defendants go to trial, then the expected payment of each defendant is $20; they are held liable half the time and split the $80 between them. Suppose the plaintiff presents each defendant with an offer to settle for $S = \$20$. If the first defendant accepts the offer then the second defendant's liability has changed: under the *pro tanto* setoff rule, the second defendant's liability is capped at $80 − $20 = $60, which now implies an expected judgment of $30. The plaintiff can take advantage of this by offering to settle with the second defendant for $30. Through this divide and conquer strategy, the plaintiff can coerce the defendants to settle for $20 + $30 = $50, more than the $40 they would pay if they both went to trial.[57]

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57 *See* Spier (1994) for a discussion of the normative implications.

4.7. Antitrust Law

120 Competitors in concentrated industries typically have a joint incentive to soften the level of competition by curtailing industry quantities and raising prices above competitive levels. Explicit contracts that restrain trade, such as price-fixing and market division agreements, are of course unenforceable and largely prohibited in the United States and abroad. Nevertheless, competitors may succeed in softening competition through the formation of tacit agreements and implicit contracts. In the 1990s, for example, large multinational chemical companies Archer Daniels Midland (AMD), Ajinomoto, and Sewon America conspired to fix the price of the animal feed additive lysine. The authorities were tipped off by ADM executive Mark Whitacre, who as an informant aided the FBI in gathering audio and video tapes of the cartel's meetings. Three of AMD's executives were ultimately sentenced to federal prison, and AMD paid $100 million in fines (Eichenwald 1999).

121 Market competition often has the same structure as the Prisoners' Dilemma. Absent an explicit collusive agreement or a self-enforcing tacit understanding, individual firms would have an incentive to lower their prices (or increase their production levels) in order to secure greater profits. Such aggressive actions by individual firms to increase market share negatively impact the other firms in the industry, causing overall industry profits to fall. Through repetition and tit-for-tat strategies, however, competitors may succeed in raising their overall profits above competitive levels. These strategies are facilitated when the firms can easily communicate with each other and can monitor each others' actions and pricing strategies. In the lysine cartel example mentioned above, the executives had regular face-to-face meetings at trade associations around the world and could readily observe and track the prices of lysine (which is a standardized product). Moreover, collusion can be facilitated by a number of practices such as advance notice to consumers of upcoming price changes, uniform delivered price schedules, and most-favored-customer clauses, among others.[58]

122 The government—a unitary actor—can and does adopt a variety of divide-and-conquer strategies to prevent both explicit and implicit collusion among market competitors. First, criminal and civil penalties for antitrust violations can prevent the formation and perpetuation of cartels.

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58 *See* Hay (1999) for a discussion of these practices in the Ethyl case.

Second, discriminatory bribes and/or promises of amnesty can encourage whistleblowers and informants to come forward, and can serve as a useful complement to the legal sanctions imposed on violators. Third, regulations and laws that limit the amount of communication between competitors and prevent other mechanisms for information sharing (such as advance notice of price changes and the publication of price books by trade associations) can help to prevent collusion.[59]

Divide and conquer strategies may be used by incumbent firms to protect or enhance their market power. One well-known line of economics-based research, often referred to as the "Naked Exclusion" literature, argues that exclusive dealing contracts can be used by incumbents to profitably exclude more efficient entrants when there are economies of scale in production.[60] Intuitively, entry becomes unprofitable for the entrant when sufficiently many buyers have agreed to exclusive deals, since the entrant cannot achieve minimum efficient scale. In this setting, the decision by a single buyer to sign an exclusive contract with the incumbent firm imposes a negative externality on the other buyers and increases their incentive to sign exclusive deals as well. As in the Stag Hunt game, the buyers are lured by the safety of exclusivity with the incumbent monopolist and shy away from social cooperation with the other buyers. Through divide-and-conquer strategies, the incumbent can effectively exploit the negative externalities among the buyers and foreclose the market.[61]

These types of strategies have been observed in practice. Anheuser-Busch, the largest beer company in the United States, adopted so-called "100% share of mind" contracts with its distributors in the 1990s, preventing them from carrying competitors' brands. These tactics were viewed by analysts as contributing to the slowing of the growth of microbreweries during that decade, but were not strongly pursued by

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59 In *United States v. Airline Tariff Publ'g Co.*, 836 F. Supp. 9 (D.D.C. 1993), the government succeeded in obtaining a consent decree against air carriers' use of the computerized fare system to signal future pricing intentions.

60 This literature stands in contrast to the traditional Chicago School argument that vertical arrangements can be profitably adopted only when they serve legitimate business goals (such as protecting investments in relationship-specific assets and preventing free-riding). *See,* for example, Bork (1978). See Kaplow (1985) for a comprehensive discussion of this literature.

61 *See* Rasmusen, Ramseyer, & Wiley (1991) for an early model without discrimination, Segal & Whinston (2000) for the explicit design of divide and conquer mechanisms. *See also* Simpson & Wickelgren (2007) and Elhauge (2009) for alternative views.

the antitrust authorities (Wilke & Ortega 1998).[62] Similarly, Microsoft's adoption of per-processor licenses in the 1990s allegedly prevented the manufacturers of personal computers from distributing operating systems that competed with Microsoft's DOS and Windows, hastening the exit of competitor Novell. Under the terms of their settlement agreement, this practice was discontinued.

125   While there is anecdotal evidence demonstrating the strategic use of exclusive dealing contracts in market settings, there have been very few empirical tests of the exclusive dealing literature. This is due, no doubt, to the scarcity of data since, in practice, negotiations are private affairs and the contracts are not generally observed by researchers.[63] Recent work by Landeo and Spier (2009) presents experimental evidence, showing that the ability to make discriminatory offers raises the likelihood of exclusion and that communication between the buyers lowers it.

5. CONCLUSION

126   Our analysis has both explanatory and normative implications. At the level of explanation, we have seen that divide and conquer is a basic tool for understanding the dynamics of group interaction, and also that divide and conquer is invoked too casually in legal theory, history, and politics. These two points are entirely consistent; when divide and conquer is invoked, the analyst should explain what, precisely, the idea means in the given case, or should at least explain why the evidence is too thin to arbitrate between the alternative models we identify. Thus one of our central aims has been to offer a taxonomy of divide-and-conquer mechanisms, with illustrations in diverse settings, in order to encourage a more nuanced deployment of the idea in the future.

127   Divide and conquer tactics can be found in a range of settings that we have not discussed, and that should be the subject of future research. In some cases, the state itself uses divide and conquer tactics to counter antisocial group behavior. Examples are conspiracy laws, which increase the cost of group membership by making members responsible for the acts of other members, and whistleblower laws, which drive a wedge between

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62 The probe by the Department of Justice was later abandoned.

63 But *see* Sass (2005) on exclusive dealing in the beer industry and Heide, Dutta, & Bergen (1998) on exclusive dealing in industrial machinery and electronic equipment.

the interests of employer and worker. In other cases, the state restricts divide and conquer strategies employed by private agents: for example, protections for minority shareholders when corporate raiders obtain control of a firm through freeze-outs.[64] In yet another interesting setting, courts prevent governments from using eminent domain power to divide and conquer. Suppose, for example, the government announces a plan to build a landfill in an area. It condemns one portion of the area, pays the fair market price, and then waits for property values in adjoining areas to plummet before condemning them as well. Under the "scope of the project" rule, the government must pay the pre-project value of those lands rather than the market price at the time of condemnation.[65]

Normatively, divide and conquer is both a problem for law, when used as a tactic by actors who produce net social harms, and also a solution that law can sometimes use to control harmful collective action, as when the prosecutor exploits the Prisoners' Dilemma to prevent collusion. Where divide and conquer is a problem, law can sometimes increase social welfare by using a nondiscrimination rule, although we have seen that the benefits of such rules trade off against the costs of treating unlike cases alike; the inherent lumpiness of rules is a cost that may, depending on the circumstances, exceed the gains from preventing divide and conquer tactics. Other mechanisms that can block some divide and conquer tactics, such as the secret ballot, work only under special conditions and have collateral costs. Where divide-and-conquer is a solution, law can itself use divisive tactics to maximize social welfare, in order to prevent organized action by groups with harmful purposes, or even to prevent their very formation. Normatively, then, nothing general can be said in favor of or against the repertoire of divide and conquer tactics and the repertoire of legal mechanisms for blocking such tactics; both the tactics and the counter-tactics are powerful tools that can be put to good or bad uses, depending upon context. The same is true of "combine and conquer," which can be suppressed, where it is desirable to do so, by rules requiring that groups be disaggregated rather than consolidated.

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64 Bankruptcy provides another fertile area of research. Bankruptcy law allows debtors to divide creditors into classes; debtors can use this power to divide and conquer creditors who oppose reorganization; judges try to prevent this behavior.

65 United States v. Land, 213 F3d 830, 5th Cir. (2000).

REFERENCES

Abbott, Frank Frost. 1901. A History and Description of Roman Political Institutions. Boston: Ginn & Co.

Acemoglu, D., J. A. Robinson, & T. Verdier. 2004. Alfred Marshall Lecture: Kleptocracy and Divide-and-Rule: A Model of Personal Rule. 2(2–3) J. Eur. Econ. Assn. 162–192.

Ashton, S. R. 1982. British Policy Towards the Indian States, 1905–1939. London: Curzon Press.

Aumann, Robert J. 1990. Nash Equilibria are Not Self-Enforcing. In Jean Gabszewicz et al., eds, Economic Decision-making. St. Louis: Elsevier Science and Technology Books.

Axelrod, Robert & Hamilton, William D. 1981. The Evolution of Cooperation. 211 Science 1390–96.

Bar-Gill, Oren, & Omri Ben-Shahar. 2009. The Prisoners' (Plea Bargain) Dilemma. 1 Journal of Legal Analysis 737–773.

Bernheim, Douglas B., Bezalel Peleg, and Michael D. Whinston. 1987. Coalition Proof Nash Equilibria I: Concepts. 42 J. Econ. Theory 1–12.

Besanko, David, David Dranove, Mark Shanley, & Scott Schaefer. 2006. Economics of Strategy. 4th ed. New York: Wiley.

Bhagwati, Jagdish. 2002. Free Trade Today. Prisonersceton: Princeton University Press.

Block, Greg. 2003. Trade and Environment in the Western Hemisphere: Expanding the North American Agreement on Environmental Cooperation into the Americas, 33 Envtl. L. 501–545.

Blum, Gabriella. 2008. Bilateralism, Multilateralism, and the Architecture of International Law. 49(2) Harv. Int'l L. J. 323–379.

Blume, Andreas, & Andreas Ortmann. 2007. The Effects of Costless Preplay Communication: Experimental Evidence from Games with Pareto-ranked Equilibria. 132 J. Econ. Theory 274–290.

Bork, Robert H. 1978. The Antitrust Paradox: A Policy at War with Itself. New York: Basic Books.

Bronfenbrenner, Kate. 1994. Employer Behavior in Certification Elections and First Contracts: Implications for Labor Law Reform. In Sheldon Friedman, et al., eds., Restoring the Promise of American Labor Law. Ithaca, N.Y.: ILR Press.

Carlton, Dennis, & Jeffrey Perloff. 2004. Modern Industrial Organization. 4th ed. Boston: Addison-Wesley.

Chang, H. F., & H. Sigman. 2000. Incentives to Settle Under Joint and Several Liability: An Empirical Analysis of Superfund Litigation. 29 J. Legal Stud. 205–236.

Che, Y-K, & K. Spier. 2008. Exploiting Plaintiffs through Settlement: Divide and Conquer. 164 J. Inst. & Theoretical Econ. 4–23.

Cooper, R. W., D. V. DeJong, R. Forsythe, & T. W. Ross. 1990. Selection Criteria in Coordination Games: Some Experimental Results. 80 Amer. Econ. Rev. 218–233.

———. 1992. Communication in Coordination Games. 107 Q. J. Econ. 739–771.

Copland, Ian. 1982. The British Raj and the Indian Princes: Paramountcy in Western India, 1857–1930. Bombay: Orient Longman.

Dal Bo, Ernesto. 2007. Bribing Voters. 51(4) Amer. J. of Pol. Sci. 789–803.

Dal Bo, Pedro. 2005. Cooperation under the Shadow of the Future: Experimental Evidence from Infinitely Repeated Games. 95(5) Amer. Econ. Review. 1591–1604.

De Figueiredo, Rui Jr., & Barry Weingast. 2005. Self-Enforcing Federalism. 21 J. L. Econ. & Org. 103–135.

Drezner, Daniel. 2004. The EU's Divide-and-Conquer Strategy on Agricultural Trade. Available at: http://www.danieldrezner.com/archives/001210.html.

Eichenwald, Kurt. 1999. Three Sentenced in Archer Daniels Midland Case. New York Times, July 10.

Elhauge, Einer. 2009. How Loyalty Discounts Can Perversely Discourage Discounting. 5(1) J. Comp. L & Econ. Available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1275529.

Elster, Jon. 2009. The First Social Scientist: A Study of Alexis de Tocqueville. New York: Cambridge University Press.

Epstein, Richard. 1983. A Common Law for Labor Relations: A Critique of the New Deal Labor Legislation. 92(8) Yale L.J. 1357.

———. 2009. The Case against the Employee Free Choice Act. Working paper, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1337185.

Eskridge, William Jr., Philip Frickey, & Elizabeth Garrett. 2007. Legislation, Statutes, and the Creation of Public Policy, 4th ed. New York: West.

Farrell, Joseph. 1987. Cheap Talk, Coordination, and Entry. 18 Rand J. Econ. 34–39.

Farrell, Joseph, & Matthew Rabin. 1996. Cheap Talk. 10J. Econ. Perspectives 103–118.

Fishbacher, Urs, Simon Gachter, & Ernst Fehr. 2001. Are People Conditionally Cooperative? Evidence from a Public Goods Experiment. 71(3) Econ. Letters 397–404.

Fisher, Ruth Anna. 1945. A Note on "Divide and Conquer." 30(4) Journal of Negro History 437–438.

Grant, Thomas. 2002. An End to "Divide And Conquer"? EU May Move Toward More United Approach in Negotiating "Open Skies" Agreements with USA, 67 J. Air L. & Com. 1057–1070.

Gulick, Edward Vose. 1955. Europe's Classical Balance of Power: a Case History of Theory and Practice of One of the Great Concepts of European Statecraft. New York: Norton.

Harsanyi, John C., & Reinhard Selten. 1988. A General Theory of Equilibrium Selection in Games. Cambridge: MIT Press.

Hay, George A. 1999. Facilitating Practices: The Ethyl Case. In Kwoka, J. & White L. The Antitrust Revolution: Economics, Competition, and Policy. New York: Oxford.

Heide, Jan B., Shantu Dutta, & Mark Bergen. 1998. Exclusive Dealing and Business Efficiency: Evidence from Industry Practice. 41 J. L. & Econ. 387–408.

Hume, David. 1875. On the Independence of Parliament (1742). In T. H. Green & T. H. Grose, eds., Essays Moral, Political, and Literary. London: Longmans, Green.

Kaplow, Louis. 1985. Extension of Monopoly Power through Leverage. 85 Columbia L. Rev. 515–556.

Koh, Harold Hongju. 2003. On American Exceptionalism. 55 Stan. L. Rev. 1479–527.

Kornhauser, Lewis A., & Richard L. Revesz. 1994. Multidefendant Settlements: The Impact of Joint and Several Liability. 23 J. Legal Stud. 41–76.

Kydd, Andrew. 2006. When Can Mediators Build Trust? 100 Am. Pol. Sci. Rev. 449–462.

Landeo, Claudia M., & Kathryn E. Spier. 2009. Naked Exclusion: An Experimental Study of Contracts with Externalities. 99(5) Amer. Econ. Rev. 1850–1877.

Lavie, Shay. 2008. "Divide and Rule" Litigation Strategies—Ex-Post and Ex-Ante. Harvard Law School Mimeo.

Levitt, Martin J., with Terry Conrow. 1993. Confessions of a Union Buster. New York: Crown Publishers.

Liska, George. 1957. International Equilibrium: A Theoretical Essay on the Politics and Organization of Security. Cambridge: Harvard University Press.

Louis, William Roger, Alaine M. Low, Peter James Marshall, Nicholas P. Canny, Brown, & Judith Margaret. 1998. The Oxford History of the British Empire: The Eighteenth Century. Oxford: Oxford University Press.

Machiavelli, Niccolo. 1520 (2003). Art of War. Translated by Christopher Lynch. Chicago: University of Chicago Press.

Madison, James. 1787. James Madison to Thomas Jefferson. In Hutchinson et al., eds. The Papers of James Madison. Chicago: University of Chicago Press.

McCoy, Thomas R. & Friedman, Barry. 1988. Conditional Spending: Federalism's Trojan Horse. 1988 Sup. Ct. Rev. 85–128.

Meunier, Sophie. 2000. What Single Voice? European Institutions and EU-US Trade Negotiations. 54(1) Int'l. Org. 103–135.

Mommsen, Theodor. 1996. A History of Rome under the Emperors. New York: Routledge.

Newsome, David D. 2001. The Imperial Mantle: the United States, Decolonization, and the Third World. Bloomington: Indiana University Press.

Niou, Emerson M. S., Peter C. Ordeshook, & George F. Rose. 1989. The Balance of Power: Stability in International Systems. New York: Cambridge University Press.

Ochs, Jack. 1995. Coordination Problems. In Kagel, J.H. & Roth, A.E., eds. The Handbook of Experimental Economics. Princeton: Princeton University Press Inc.

Oversight Hearings, Subcommittee of Labor-Management Relations Committee on Education and Labor. October 16, 17, & 18, 1979, Pressures in Today's Workplace. House of Representatives, Ninety-Sixth Congress, First Session, Hearings Held In Washington, D.C., 409 (Statement of Robert A. Georoine, President of the Building and Construction Trades Department of the AFL-CIO).

The Oxford Dictionary of Proverbs. 2009. Ed. Jennifer Speake. Oxford University Press. Oxford Reference Online, http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t90.e561.

Powell, Robert. 1999. In the Shadow of Power: States and Strategies in International Politics. Princeton: Princeton University Press.

Rabin, Matthew. 1994. A Model of Pre-Game Communication. 63 J. Econ. Theory 370–391.

Rasmusen, Eric, & J. Mark Ramseyer. 1994. Cheap Bribes and the Corruption Ban: A Coordination Game Among Rational Legislators. 78 Public Choice 305–327.

Rasmusen, Eric B., J. Mark Ramseyer, & John S. Wiley, Jr. 1991. Naked Exclusion. 81(5) Amer. Econ. Rev. 1137–1145.

Roemer, John. 1979. Divide and Conquer: Microfoundations of Marxian Theory of Wage Discrimination. 10 Bell J. Econ. 695–705.

Rousseau, Jean-Jacques. 1985. A Discourse on Inequality. Translated by Maurice Cranston. Penguin, London.

Safrin, Sabrina. 2008. The UN-Exceptionalism of US Exceptionalism. 41 Vand. J. Trans. L. 1307–1354.

Sallust. 1921. The War with Jugurtha. Translated by J. C. Rolfe. Cambridge: Harvard University Press.

Sass, Tim R. 2005. The Competitive Effects of Exclusive Dealing: Evidence from the U.S. Beer Industry. 23 Int'l J. Indust. Org. 203–225.

Schmidt, Susanne K. 2000. Only an Agenda Setter? 1(1) Eur. Union Pol. 37–61.

Segal, Ilya R. 1999. Contracting with Externalities. 114 Q. J. Econ. 337–88.
———. 2003. Coordination and Discrimination in Contracting with Externalities: Divide and Conquer. 113 J. Econ. Theory 147–81.

Segal, Ilya R., & Michael D. Whinston. 2000. Naked Exclusion: Comment. 90(1) Amer. Econ. Rev. 296–309.

Shavell, Steven M. 1997. The Fundamental Divergence Between the Private and Social Motive to Use the Legal System. 26(2) J. Leg. Stud. 575–612.

Simmel, Georg. 1908. Sociology: Investigations of the Forms of Sociation. Berlin: Dunker & Humblot.

Simpson, John, & Abraham Wickelgren. 2007. Naked Exclusion, Efficient Breach, and Downstream Competition. 97 Amer. Econ. Rev. 1305–1320.

Spier, Kathryn E. 1994. Pre-trial Bargaining and the Design of Fee-Shifting Rules. 25(2) Rand J. Econ. 197–214.
———. Settlement with Multiple Plaintiffs: The Role of Insolvency. 18 J. L. Econ. & Org. 295–323.

Stone, Christopher. 2004. Common but Differentiated Responsibilities in International Law. 98 Am. J. Int'l. L. 276–301.

Stremitzer, A. 2008. Exploiting Plaintiffs through Settlement: Divide and Conquer: Comment. 164 J. Inst. & Theoretical Econ. 27–30.

Tushnet, Mark. 2009. Constitutional Workarounds. 87 Tex. L. Rev. 1499–1515.

Vermeule, Adrian. 2003. Hume's Second-Best Constitutionalism. 70 U. Chi. L. Rev. 421–437.

———. 2009. System Effects and the Constitution. 123 Harv. L. Rev. 4.

Wagner, R. Harrison. 1986. The Theory of Games and the Balance of Power. 38(4) World Politics 546–576.

Walt, Stephen M. 1985. Alliance Formation and the Balance of World Power. 9(4) Int'l. Sec. 3–43.

Waltz, Kenneth. 1979. Theory of International Politics. Reading: Addison-Wesley.

Weiler, Paul C. 1990. Governing the Workplace: The Future of Labor and Employment Law. Cambridge: Harvard.

Weingast, Barry. 1997. The Political Foundation of Democracy and the Rule of Law. 91 Amer. Pol. Sci. Rev. 245–263.

Wilke, John R., & Bob Ortega. 1998. Amid Probe, Anheuser Conquers Turf. Wall St. J. Mar. 9.

Willis, William S. 1963. Divide and Rule: Red, White, and Black in the Southeast. 48(3) J. Negro Hist. 157–176.

Yu, Peter K. 2005. Access to Medicines, BRICS Alliances, and Collective Action. 14 Minn. J. Global Trade 377–413.