

Since the multiplicity of causal forces can make a false theory seem true or a true theory seem false, any single test of the theory may be weak, or far from decisive. Some of the tests of the theory offered here are weak, and the reader will be able to think of diverse causes that could have generated the observed results. At the same time, essentially all of the tests point in the same direction, so the results in the aggregate are incomparably stronger than the individual results. If, when we wake in the morning, we are surprised to see a patch or two of white outside, there could perhaps be uncertainty about the cause, but if every twig and piece of ground is freshly white, we know it snowed last night.

We turn now to the most crucial chapter in the book, which develops the logic needed to derive all the results and to make the rest of the book comprehensible.

Olson 1982

The Logic

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The argument of this book begins with a paradox in the behavior of groups. It has often been taken for granted that if everyone in a group of individuals or firms had some interest in common, then there would be a tendency for the group to seek to further this interest. Thus many students of politics in the United States for a long time supposed that citizens with a common political interest would organize and lobby to serve that interest. Each individual in the population would be in one or more groups and the vector of pressures of these competing groups explained the outcomes of the political process. Similarly, it was often supposed that if workers, farmers, or consumers faced monopolies harmful to their interests, they would eventually attain countervailing power through organizations such as labor unions or farm organizations that obtained market power and protective government action. On a larger scale, huge social classes are often expected to act in the interest of their members; the unalloyed form of this belief is, of course, the Marxian contention that in capitalist societies the bourgeois class runs the government to serve its own interests, and that once the exploitation of the proletariat goes far enough and "false consciousness" has disappeared, the working class will in its own interest revolt and establish a dictatorship of the proletariat. In general, if the individuals in some category or class had a sufficient degree of self-interest and if they all agreed on some common interest, then the group would to some extent also act in a self-interested or group-interested manner.

If we ponder the logic of the familiar assumption described in the preceding paragraph, we can see that it is fundamentally and indisputably faulty. Consider those consumers who agree that they pay higher

prices for a product because of some objectionable monopoly or tariff, or those workers who agree that their skill deserves a higher wage. Let us now ask what would be the expedient course of action for an individual consumer who would like to see a boycott to combat a monopoly or a lobby to repeal the tariff, or for an individual worker who would like a strike threat or a minimum wage law that could bring higher wages. If the consumer or worker contributes a few days and a few dollars to organize a boycott or a union or to lobby for favorable legislation, he or she will have sacrificed time and money. What will this sacrifice obtain? The individual will at best succeed in advancing the cause to a small (often imperceptible) degree. In any case he will get only a minute share of the gain from his action. The very fact that the objective or interest is common to or shared by the group entails that the gain from any sacrifice an individual makes to serve this common purpose is shared with everyone in the group. The successful boycott or strike or lobbying action will bring the better price or wage for everyone in the relevant category, so the individual in any large group with a common interest will reap only a minute share of the gains from whatever sacrifices the individual makes to achieve this common interest. Since any gain goes to everyone in the group, those who contribute nothing to the effort will get just as much as those who made a contribution. It pays to "let George do it," but George has little or no incentive to do anything in the group interest either, so (in the absence of factors that are completely left out of the conceptions mentioned in the first paragraph) there will be little, if any, group action. The Paradox, then, which we shall turn later to large groups, at least if they are composed of rational individuals, will *not* act in their group interest.

This paradox is elaborated and set out in a way that lets the reader check every step of the logic in a book I wrote entitled *The Logic of Collective Action*.¹ That book also shows that the evidence in the United States, the only country in which all powerful interest groups were considered, systematically supported the argument, and that the scattered evidence that I was aware of from other countries was also consistent with it. Since the present book is an outgrowth of *The Logic of Collective Action* and in large part even an application of the argument in it, the most serious critics or students of the present book should have read that one. For the many readers who naturally would not want to invest the time needed to do so without knowing what might be gained,

and for those with a more casual interest, the first part of this chapter will explain a few features of the argument in *The Logic* that are needed to understand the rest of the present volume. Other parts of the chapter, however, should not involve any repetition.

II

One finding in *The Logic* is that the services of associations like labor unions, professional associations, farm organizations, cartels, lobbies (and even collusive groups without formal organization) resemble the basic services of the state in one utterly fundamental respect. The services of such associations, like the elemental services or "public goods" provided by governments, if provided to anyone, go to everyone in some category or group. Just as the law and order, defense, or pollution abatement brought about by government accrue to everyone in some country or geographic area, so the tariff obtained by a farm organization's lobbying effort raises the price to all producers of the relevant commodity. Similarly, as I argued earlier, the higher wage won by a union applies to all employees in the pertinent category. More generally, every lobby obtaining a general change in legislation or regulation thereby obtains a public or collective good for everyone who benefits from that change, and every combination—that is, every "cartel"—using market or industrial action to get a higher price or wage must, when it restricts the quantity supplied, raise the price for every seller, thereby creating a collective good for all sellers.

If governments, on the one hand, and combinations exploiting their political or market power, on the other, produce public or collective goods that inevitably go to everyone in some group or category, then both are subject to the paradoxical logic set out above: that is, the individuals and firms they serve have in general no incentive voluntarily to contribute to their support.² It follows that if there is only voluntary and rational individual behavior,* then for the most part neither govern-

*Rational need not imply self-interested. The argument in the text can hold even when there is altruistic behavior, although if particular types of altruistic behavior are strong enough it will not hold. Consider first altruistic attitudes about observable outcomes or results—suppose an individual would be willing to sacrifice some leisure or other personal consumption to obtain some amount of a collective good because of an altruistic concern that others should have this collective good. In other words, the individual's preference ordering takes account of the collective good obtained by others as

ments nor lobbies and cartels will exist, unless individuals support them for some reason *other* than the collective goods they provide. Of course, governments exist virtually everywhere and often there are lobbies and cartelistic organizations as well. If the argument so far is right, it follows that something *other* than the collective goods that governments and other organizations provide accounts for their existence. **

In the case of governments, the answer was explained before *The Logic of Collective Action* was written; governments are obviously supported by compulsory taxation. Sometimes there is little objection to this compulsion, presumably because many people intuitively understand that public goods cannot be sold in the marketplace or financed by

well as personal consumption. This assumption of altruism does not imply irrationality, or a tendency to make choices that are inconsistent with the maximal satisfaction of the values or preferences the individual has. Altruism also does not call into question the normal diminishing marginal rates of substitution between any pair of goods or objectives; as more of any good or objective (selfish or altruistic) is attained, other things being equal, the extent to which other goods or objectives (selfish or altruistic) will be given up to attain more of that good or objective will diminish.

A typical altruistic and rational individual of the sort described will not make any substantial voluntary contributions to obtain a collective good for a large group. The reason is that in a sufficiently large group the individual's contribution will make only a small and perhaps imperceptible difference to the amount of collective good the group obtains, whereas at the same time every contribution reduces dollar-for-dollar the amount of personal consumption and private-good charity, and the diminishing marginal rates of substitution entail that these sacrifices become progressively more onerous. In equilibrium in large groups there is accordingly little or no voluntary contribution by the altruist to the provision of a collective good.

Jarring as it is to the common-sense notion of rationality, let us now make the special assumption that the altruist gets satisfaction not from observably better outcomes for others, but rather from his or her own sacrifices for them. On this assumption we can secure voluntary provision of collective goods even in the largest groups. Here each dollar of personal consumption that is sacrificed can bring a significant return in moral satisfaction, and the problem that substantial personal sacrifices bring little or no perceptible change in the level of public good provided is no longer relevant. Even though this latter participatory or "Kantian" altruism is presumably not the usual form of altruism, I think it does exist and helps to account for some observations of voluntary contributions to large groups. (Yet another possibility is that the altruist is result-oriented but neglects the observable levels of the public good, simply assuming that his or her sacrifices of personal consumption increase the utility of others enough to justify the personal sacrifice.) My *Altruism, and Rationality* (Cambridge: At the University Press, 1982).

**This argument need not apply to small groups, which are discussed later in the chapter.

any voluntary mechanism: as I have already argued, each individual would get only a minute share of any governmental services he or she paid for and would get whatever level of services was provided by others in any event.

In the case of organizations that provide collective goods to their client groups through political or market action, the answer has not been obvious, but it is no less clear-cut. Organizations of this kind, at least when they represent large groups, are again not supported because of the collective goods they provide, but rather because they have been fortunate enough to find what I have called *selective incentives*. A selective incentive is one that applies selectively to the individuals depending on whether they do or do not contribute to the provision of the collective good.

A selective incentive can be either *negative* or *positive*; it can, for example, be a loss or punishment imposed only on those who do not help provide the collective good. Tax payments are, of course, obtained with the help of negative selective incentives, since those who are found not to have paid their taxes must then suffer both taxes and penalties. The best-known type of organized interest group in modern democratic societies, the labor union, is also usually supported, in part, through negative selective incentives. Most of the dues in strong unions are obtained through union shop, closed shop, or agency shop arrangements which make dues paying more or less compulsory and automatic. There are often also informal arrangements with the same effect: David McDonald, former president of the United Steel Workers of America, describes one of these arrangements used in the early history of that union. It was, he writes, a technique

which we called . . . visual education, which was a high-sounding label for a practice much more accurately described as dues picking. It worked very simply. A group of dues-paying members, selected by the district director (usually more for their size than their fact) would stand at the plant gate with pick handles or baseball bats in hand and confront each worker as he arrived for his shift.³

As McDonald's "dues picketing" analogy suggests, picketing during strikes is another negative selective incentive that unions sometimes need, although picketing in industries with established and stable unions is usually peaceful, this is because the union's capacity to close down an enterprise against which it has called a strike is clear to all; the early

phase of unionization often involves a great deal of violence on the part of both unions and anti-union employers and scabs.*

Some opponents of labor unions argue that, since many of the members of labor unions join only through the processes McDonald described or through legally enforced union-shop arrangements, most of the relevant workers do not want to be unionized. The Taft-Hartley Act provided that impartial governmentally administered elections should be held to determine whether workers did in fact want to belong to unions. As the collective-good logic set out here suggests, the same workers who had to be coerced to pay union dues voted for the unions with compulsory dues (and normally by overwhelming margins), so that this feature of the Taft-Hartley Act was soon abandoned as pointless.⁴ The workers who as individuals tried to avoid paying union dues at the same time that they voted to force themselves all to pay dues are no different from taxpayers who vote, in effect, for high levels of taxation, yet try to arrange their private affairs in ways that avoid taxes. Because of the same logic, many professional associations also get members through covert or overt coercion (for example, lawyers in those states with a "closed bar"). So do lobbies and cartels of several other types; some of the contributions by corporate officials, for instance, to politicians useful to the corporation are also the result of subtle forms of coercion.⁵

*The references to the often violent interaction between employers and employees in the early stages of unionization should not obscure the consensual and informal "union-organization" that also sometimes occurs because of employers' initiatives. This sort of labor collaboration or collusion arises because some types of production require that workers encourage team spirit and social interaction among employees. Staff conferences and work-group meetings, newsletters for employees, firm-sponsored employee athletic teams, employer-financed office parties, and the like are partly explained by this consideration. In firms that have the same employment pattern for some time, the networks for employee interaction that the employer created to encourage effective cooperation at work may evolve into informal collusions, or occasionally even unions, of workers, and tacitly or openly force the employer to deal with his employees as a cartelized group. This evolution is unlikely when employees are, for example, day laborers or consultants, but when stable patterns of active cooperation are important to production, the employer may gain more from the extra production that this cooperation brings about than he loses from the informal or formal cartelization that he helps to create. The evolution of this type of informal unionization implies that there is more organization of labor than the statistics imply, and that the differences between some ostensibly unorganized firms and unionized firms are not as great as might appear on the surface.

Positive selective incentives, although easily overlooked, are also commonplace, as diverse examples in *The Logic* demonstrate.⁶ American farm organizations offer prototypical examples. Many of the members of the stronger American farm organizations are members because their dues payments are automatically deducted from the "patronage dividends" of farm cooperatives or are included in the insurance premiums paid to mutual insurance companies associated with the farm organizations. Any number of organizations with urban clients also provide similar positive selective incentives in the form of insurance policies, publications, group air fares, and other private goods made available only to members. The grievance procedures of labor unions usually also offer selective incentives, since the grievances of active members often get most of the attention. The symbiosis between the political power of a lobbying organization and the business institutions associated with it often yields tax or other advantages for the business institution, and the publicity and other information flowing out of the political arm of a movement often generates patterns of preference or trust that make the business activities of the movement more remunerative. The surpluses obtained in such ways in turn provide positive selective incentives that recruit participants for the lobbying efforts.

III

Small groups, or occasionally large "federal" groups that are made up of many small groups of socially interactive members, have an additional source of both negative and positive selective incentives. Clearly most people value the companionship and respect of those with whom they interact. In modern societies solitary confinement is, apart from the rare death penalty, the harshest legal punishment. The censure or even ostracism of those who fail to bear a share of the burdens of collective action can sometimes be an important selective incentive. An extreme example of this occurs when British unionists refuse to speak to uncooperative colleagues, that is, "send them to Coventry." Similarly, those in a socially interactive group seeking a collective good can give special respect or honor to those who distinguish themselves by their sacrifices in the interest of the group and thereby offer them a positive selective incentive. Since most people apparently prefer relatively like-minded or agreeable and respectable company, and often prefer to associate with those whom they especially admire, they may find it costless

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to shun those who shirk the collective action and to favor those who oversubscribe.

Social selective incentives can be powerful and inexpensive, but they are available only in certain situations. As I have already indicated, they have little applicability to large groups, except in those cases in which the large groups can be federations of small groups that are capable of social interaction. It also is not possible to organize most large groups in need of a collective good into small, socially interactive subgroups, since most individuals do not have the time needed to maintain a huge number of friends and acquaintances.

The availability of social selective incentives is also limited by the social heterogeneity of some of the groups or categories that would benefit from a collective good. Everyday observation reveals that most socially interactive groups are fairly homogeneous and that many people resist extensive social interaction with those they deem to have lower status or greatly different tastes. Even Bohemian or other nonconformist groups often are made up of individuals who are similar to one another, however much they differ from the rest of society. Since some good are socially heterogeneous, the social interaction needed for selective incentives sometimes cannot be arranged even when the number of individuals involved is small.

Another problem in organizing and maintaining socially heterogeneous groups is that they are less likely to agree on the exact nature of whatever collective good is at issue or on how much of it is worth buying. All the arguments showing the difficulty of collective action mentioned so far in this chapter hold even when there is perfect consensus about the collective good that is desired, the amount that is wanted, and the best way to obtain the good. But if anything, such as social heterogeneity, reduces consensus, collective action can become still less likely. And if there is nonetheless collective action, it incurs the extra cost (especially for the leaders of whatever organization or coalition is at issue) of accommodating and compromising the different views. The situation is slightly different in the very small groups to which we shall turn shortly. In such groups differences of opinion can sometimes provide a bit of an incentive to join an organization seeking a collective good, since joining might give the individual a significant influence over the organization's policy and the nature of any collective good it would obtain. But this consideration is not relevant to any group

that is large enough so that a single individual cannot expect to affect the outcome.

Consensus is especially difficult where collective goods are concerned because the defining characteristic of collective goods—that they go to everyone in some group or category if they are provided at all—also entails that everyone in the relevant group gets more or less of the collective good together, and that they all have to accept whatever level and type of public good is provided. A country can have only one foreign and defense policy, however diverse the preferences and interests of its citizenry, and (except in the rarely attainable case of a “Lindahl equilibrium”)⁷ there will not be agreement within a country on how much should be spent to carry out the foreign and defense policy. This is a clear implication of the arguments for “fiscal equivalence”⁸ and of the rigorous models of “optimal segregation”⁹ and “fiscal federalism.”¹⁰ Heterogeneous clients with diverse demands for collective goods can pose an even greater problem for private associations, which not only must deal with the disagreements but also must find selective incentives strong enough to hold dissatisfied clients.

In short, the political entrepreneurs who attempt to organize collective action will accordingly be more likely to succeed if they strive to organize relatively homogeneous groups. The political managers whose task it is to maintain organized or collusive action similarly will be motivated to use indoctrination and selective recruitment to increase the homogeneity of their client groups. This is true in part because social selective incentives are more likely to be available to the more nearly homogeneous groups, and in part because homogeneity will help achieve consensus.

IV

Information and calculation about a collective good is often itself a collective good. Consider a typical member of a large organization who is deciding how much time to devote to studying the policies or leadership of the organization. The more time the member devotes to this matter, the greater the likelihood that his or her voting and advocacy will favor effective policies and leadership for the organization. This typical member will, however, get only a small share of the gain from the more effective policies and leadership: in the aggregate, the other members will get almost all the gains, so that the individual member

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does not have an incentive to devote nearly as much time to fact-finding and thinking about the organization as would be in the group interest. Each of the members of the group would be better off if they all could be coerced into spending more time finding out how to vote to make the organization best further their interests. This is dramatically evident in the case of the typical voter in a national election in a large country. The gain to such a voter from studying issues and candidates until it is clear what vote is truly in his or her interest is given by the difference in the value to the individual of the "right" election outcome as compared with the "wrong" outcome, multiplied by the probability a change in the individual's vote will alter the outcome of the election. Since the probability that a typical voter will change the outcome of the election is vanishingly small, the typical citizen is usually "rationally ignorant" about public affairs.¹¹ Often, information about public affairs is so interesting or entertaining that it pays to acquire it for these reasons alone—this appears to be the single most important source of exceptions to the generalization that typical citizens are rationally ignorant about public affairs.

Individuals in a few special vocations can receive considerable rewards in private goods if they acquire exceptional knowledge of public goods. Politicians, lobbyists, journalists, and social scientists, for example, may earn more money, power, or prestige from knowledge of this or that public business. Occasionally, exceptional knowledge of public policy can generate exceptional profits in stock exchanges or other markets. Withal, the typical citizen will find that his or her income and life chances will not be improved by zealous study of public affairs, or even of any single collective good.

The limited knowledge of public affairs is in turn necessary to explain the effectiveness of lobbying. If all citizens had obtained and digested all pertinent information, they could not then be swayed by advertising or other persuasion. With perfectly informed citizens, elected officials would not be subject to the blandishments of lobbyists, since the constituents would then know if their interests were betrayed and defeat the unfaithful representative at the next election. Just as lobbies provide collective goods to special-interest groups, so their effectiveness is explained by the imperfect knowledge of citizens, and this in turn is due mainly to the fact that information and calculation about collective goods is also a collective good.

This fact—that the benefits of individual enlightenment about pub-

lic goods are usually dispersed throughout a group or nation, rather than concentrated upon the individual who bears the costs of becoming enlightened—explains many other phenomena as well. It explains, for example, the "man bites dog" criterion of what is newsworthy. If the television newscasts were watched or newspapers were read solely to obtain the most important information about public affairs, aberrant events of little public importance would be ignored and typical patterns of quantitative significance would be emphasized; when the news is, by contrast, for most people largely an alternative to other forms of diversion or entertainment, intriguing oddities and human-interest items are in demand. Similarly, events that unfold in a suspenseful way or sex scandals among public figures are fully covered by the media, whereas the complexities of economic policy or quantitative analyses of public problems receive only minimal attention. Public officials, often able to fall over an exceptional mistake striking enough to be newsworthy. Extravagant statements, picturesque protests, and unruly demonstrations that offend much of the public they are designed to influence are also explicable in this way: they make diverting news and thus call attention to interests and arguments that might otherwise be ignored. Even some isolated acts of terrorism that are described as "senseless" can, from this perspective, be explained as effective means of obtaining the riveted attention of a public that otherwise would remain rationally ignorant.

This argument also helps us to understand certain apparent inconsistencies in the behavior of modern democracies. The arrangement of the income-tax brackets in all the major developed democracies is distinctly progressive, whereas the loopholes are more often tilted toward a minority of more prosperous taxpayers. Since both are the results of the same democratic institutions, why do they not have the same incidence? As I see it, the progression of the income tax is a matter of such salience and political controversy that much of the electorate knows about it, so populist and majoritarian considerations dictate a considerable degree of progression. The details of tax laws are far less widely known, and they often reflect the interests of small numbers of organized and usually more prosperous taxpayers. Several of the developed democracies similarly have adopted programs such as Medicare and Medicaid that are obviously inspired by the concerns about the cost of medical care to those with low or middle incomes, yet implemented or administered

these programs in ways that resulted in large increases in income for prosperous physicians and other providers of medical care. Again, these diverse consequences seem to be explained by the fact that conspicuous and controversial choices of overall policies become known to the majorities who consume health care, whereas the many smaller choices needed to implement these programs are influenced primarily by a minority of organized providers of health care.

The fact that the typical individual does not have an incentive to spend much time studying many of his choices concerning collective goods also helps to explain some otherwise inexplicable individual contributions toward the provision of collective goods. The logic of collective action that has been described in this chapter is not immediately apparent to those who have never studied it; if it were, there would be nothing paradoxical in the argument with which this chapter opened, and students to whom the argument is explained would not react with initial skepticism.¹² No doubt the practical implications of this logic for the individual's own choices were often discerned before the logic for ever set out in print, but this does not mean that they were always understood even at the intuitive and practical level. In particular, when the costs of individual contributions to collective action are very small, the individual has little incentive to investigate whether or not to make a contribution or even to exercise intuition. If the individual knows the costs of a contribution to collective action in the interest of a group of which he is a part are trivially small, he may rationally not take the trouble to consider whether the gains are smaller still. This is particularly the case since the size of these gains and the policies that would maximize them are matters about which it is usually not rational for him to investigate.

This consideration of the costs and benefits of calculation about public goods leads to the testable prediction that voluntary contributions toward the provision of collective goods for large groups without selective incentives will often occur when the costs of the individual contributions are negligible, but that they will not often occur when the costs of the individual contributions are considerable. In other words, when the costs of individual action to help to obtain a desired collective good are small enough, the result is indeterminate and sometimes goes one way and sometimes the other, but when the costs get larger this indeterminacy disappears. We should accordingly find that more than a few people are willing to take the moment of time needed to sign petitions

for causes they support, or to express their opinions in the course of discussion, or to vote for the candidate or party they prefer. Similarly, if the argument here is correct, we should not find many instances where individuals voluntarily contribute substantial sums of resources where after year for the purpose of obtaining some collective good for some large group of which they are a part. Before parting with a large amount of money or time, and particularly before doing so repeatedly, the rational individual will reflect on what this considerable sacrifice will accomplish. If the individual is a typical individual in a large group that would benefit from a collective good, his contribution will not make a perceptible difference in the amount that is provided. The theory here predicts that such contributions become less likely the larger the contribution at issue.¹³

V

Even when contributions are costly enough to elicit rational calculation, there is still one set of circumstances in which collective action can occur without selective incentives. This set of circumstances becomes evident the moment we think of situations in which there are only a few individuals or firms that would benefit from collective action. Suppose there are two firms of equal size in an industry and no other firms can enter the industry. It still will be the case that a higher price for the industry's product will benefit both firms and that legislation favorable to the industry will help both firms. The higher price and the favorable legislation are then collective goods to this "oligopolistic" industry, even though there are only two in the group that benefit from the collective goods. Obviously, each of the oligopolists is in a situation in which if it restricts output to raise the industry price, or lobbies for favorable legislation for the industry, it will tend to get half of the benefit. And the cost-benefit ratio of action in the common interest easily could be so favorable that, even though a firm bears the whole cost of its action and gets only half the benefit of this action, it could still profit from acting in the common interest. Thus if the group that would benefit from collective action is sufficiently small and the cost-benefit ratio of collective action for the group sufficiently favorable, there may well be calculated action in the collective interest even without selective incentives.

When there are only a few members in the group, there is also the

* Then determining "del. incentives" and "costs"

possibility that they will bargain with one another and agree on collective action—then the action of each can have a perceptible effect on the interests and the expedient courses of action of others, so that each has an incentive to act strategically, that is, in ways that take into account interdependence of the individual's choices on the choices of others. This interdependence of individual firms or persons in the group can give them an incentive to bargain with one another for their mutual advantage. Indeed, if bargaining costs were negligible, they would have an incentive to continue bargaining with one another until group gains were maximized, that is, until what we shall term a *group-optimal outcome* (or what economists sometimes call a "Pareto-optimal" outcome for the group) is achieved. One way the two firms mentioned in the previous paragraph could obtain such an outcome is by agreeing that each will bear half the costs of any collective action; each firm would then bear half the cost of its action in the common interest and receive half the benefits. It therefore would have an incentive to continue action in the collective interest until the aggregate gains of collective action were maximized. In any bargaining, however, each party has an incentive to seek the largest possible share of the group gain for itself, and usually also an incentive to threaten to block or undermine the collective action—that is, to be a "holdout"—if it does not get its preferred share of the group gains. Thus the bargaining may very well not succeed in achieving a group-optimal outcome and may also fail to achieve agreement on any collective action at all. The upshot of all this, as I explain elsewhere,¹⁴ is that "small" groups can often engage in collective action without selective incentives. In certain small groups ("privileged groups") there is actually a presumption that some of the collective good will be provided. Nonetheless, even in the best of circumstances collective action is problematic and the outcomes in particular cases are indeterminate.

Although some aspects of the matter are complex and indeterminate, the essence of the relationship between the size of the group that would benefit from collective action and the extent of collective action is beautifully simple—yet somehow not widely understood. Consider again our two firms and suppose that they have *not* worked out any agreement to maximize their aggregate gains or to coordinate their actions in any way. Each firm will still get half the gains of any action it takes in the interest of the group, and thus it may have a substantial incentive to act in the group interest even when it is acting unilaterally.

Unilateral cooperation may generate more gains.

There is, of course, also a *group external economy*, or gain to the group for which the firm acting unilaterally is not compensated, of 50 percent, so unilateral behavior does not achieve a group-optimal outcome.¹⁵ Now suppose there were a third firm of the same size—the group external economy would then be two thirds, and the individual firm would get only a third of the gain from any independent action it took in the group interest. Of course, if there were a hundred such firms, the group external economy would be 99 percent, and the individual firm would get only 1 percent of the gain from any action in the group interest. Obviously, when we get to large groups measured in millions or even thousands, the incentive for group-oriented behavior in the absence of selective incentives becomes insignificant and even imperceptible.

Untypical as my example of equal-sized firms may be, it makes the general point intuitively obvious: other things being equal, the larger the number of individuals or firms that would benefit from a collective good, the smaller the share of the gains from action in the group interest that will accrue to the individual or firm that undertakes the action. Thus, in the absence of selective incentives, the incentive for group action diminishes as group size increases, so that large groups are less able to act in their common interest than small ones. If an additional individual or firm that would value the collective good enters the scene, then the share of the gains from group-oriented action that anyone already in the group might take must diminish. This holds true whatever the relative sizes or valuations of the collective good in the group.

There is a clear demonstration of this point in *The Logic of Collective Action*, a small part of which is included in the footnote to this sentence.* The fuller argument will make clear that the assumption in

*The cost (C) of a collective good is a function of the level (T) at which it is provided, i.e., $C = f(T)$. The value of the good to the group, V_g , depends not only on T but also on the "size," S_g , of the group, which in turn depends on the number in the group and the value they place on the good, $V_g = TS_g$. The value to an individual i of the good is V_i , and the "fraction," F_i , of the group value that this individual enjoys is V_i/V_g , and this must also equal $F_i S_i T$. The net advantage, A_i , that individual i obtains from purchasing an amount of the collective good is given by its value to him minus the cost, i.e., $A_i = V_i - C$, which changes with the level of T his expenditure obtains, so

$$dA_i/dT = dV_i/dT - dC/dT.$$

At a maximum $dA_i/dT = 0$. Because $V_i = F_i S_i T$ and F_i and S_g are constants

the preceding paragraphs of firms of equal size is unnecessary to the conclusion (though it is, I hope, helpful in obtaining a quick intuitive sense of the matter). Differences in size, or more precisely in the amount the different firms or individuals would be willing to pay for marginal amounts of the collective good, are of great importance and explain paradoxical phenomena like the "exploitation of the great by the small,"¹⁶ but they are not essential to the argument in this book.

The number of people who must bargain if a group-optimal amount of a collective good is to be obtained, and thus the costs of bargaining, must rise with the size of the group. This consideration reinforces the point just made. Indeed, both everyday observation and the logic of the matter suggest that for genuinely large groups, bargaining among all members to obtain agreement on the provision of a collective good is out of the question.¹⁷ The consideration mentioned earlier in this chapter, that social selective incentives are available only to small groups and (tenuously) to those larger groups that are federations of small groups, also suggests that small groups are more likely to organize than large ones.

The significance of the logic that has just been set out can best be seen by comparing groups that would have the same net gain from collective action. If they could engage in it, but that vary in size. Suppose there are a million individuals who would gain a thousand dollars each, or a billion in the aggregate, if they were to organize effectively and engage in collective action that had a total cost of a hundred million. If the logic set out above is right, they could not organize or engage in effective collective action without selective incen-

$$\frac{d(F_i S_i T_i)/dT - dC/dT = 0}$$

$$F_i S_i T_i - dC/dT = 0.$$

This gives the amount of the collective good that a unilateral maximizer would buy. This point can be given a common-sense meaning. Since the optimum is found when

$$dA/dT = dV/dT - dC/dT = 0,$$

and since $dV/dT = F_i(dV_i/dT)$

$$F_i(dV_i/dT) - dC/dT = 0,$$

$$F_i(dV_i/dT) = dC/dT.$$

Thus the optimal amount of the collective good for an individual to obtain occurs when the rate of gain to the group (dV_i/dT) exceeds the rate of increase in cost (dC/dT) by the same multiple by which the group gain exceeds the gain to the individual ($F_i = V_i/V$). In other words, the smaller F_i is, the less the individual will take, and (other things being equal) F_i must of course diminish as entry makes the group larger.

tives. Now suppose that, although the total gain of a billion dollars from collective action and the aggregate cost of a hundred million remain the same, the group is composed instead of five big corporations or five organized municipalities, each of which would gain two hundred million. Collective action is not an absolute certainty even in this case, since each of the five could conceivably expect others to put up the hundred million and hope to gain the collective good worth two hundred million at no cost at all. Yet collective action, perhaps after some delays due to bargaining, seems very likely indeed. In this case any one of the five would gain a hundred million from providing the collective good even if it had to pay the whole cost itself; and the costs of bargaining among five would not be great, so they would sooner or later probably work out an agreement providing for the collective action. The numbers in this example are arbitrary, but roughly similar situations occur often in reality, and the contrast between "small" and "large" groups could be illustrated with an infinite number of diverse examples.

The significance of this argument shows up in a second way if one compares the operations of lobbies or cartels within jurisdictions of vastly different scale, such as a modest municipality on the one hand and a big country on the other. Within the town, the mayor or city council may be influenced by, say, a score of petitioners or a lobbying budget of a thousand dollars. A particular line of business may be in the hands of only a few firms, and if the town is distant enough from other markets only these few would need to agree to create a cartel. In a big country, the resources needed to influence the national government are likely to be much more substantial, and unless the firms are (as they sometimes are) gigantic, many of them would have to cooperate to create an effective cartel. Now suppose that the million individuals in our large group in the previous paragraph were spread out over a hundred thousand towns or jurisdictions, so that each jurisdiction had ten of them, along with the same proportion of citizens in other categories as before. Suppose also that the cost-benefit ratios remained the same, so that there was still a billion dollars to gain across all jurisdictions or ten thousand in each, and that it would still cost a hundred million dollars across all jurisdictions or a thousand in each. If no longer seems out of the question that in many jurisdictions the groups of ten, or subsets of them, would put up the thousand-dollar total needed to get the thousand for each individual. Thus we see that, if all else were equal, small jurisdictions would have more collective action per capita than large ones.

Differences in intensities of preference generate a third type of illustration of the logic at issue. A small number of zealots anxious for a particular collective good are more likely to act collectively to obtain that good than a larger number with the same aggregate willingness to pay. Suppose there are twenty-five individuals, each of whom finds a given collective good worth a thousand dollars in one case, whereas in another there are five thousand, each of whom finds the collective good worth five dollars. Obviously, the argument indicates that there would be a greater likelihood of collective action in the former case than in the latter, even though the aggregate demand for the collective good is the same in both. The great historical significance of small groups of fanatics no doubt owes something to this consideration.

VI

The argument in this chapter predicts that those groups that have access to selective incentives will be more likely to act collectively to obtain collective goods than those that do not, and that smaller groups will have a greater likelihood of engaging in collective action than larger ones. The empirical portions of *The Logic* show that this prediction has been correct for the United States. More study will be needed before we can be utterly certain that the argument also holds for other countries, but the more prominent features of the organizational landscape of other countries certainly do fit the theory. In no major country are large groups without access to selective incentives generally organized—the masses of consumers are not in consumers' organizations, the millions of taxpayers are not in taxpayers' organizations, the vast number of those with relatively low incomes are not in organizations for the poor, and the sometimes substantial numbers of unemployed have no organized voice. These groups are so dispersed that it is not feasible for any nongovernmental organization to coerce them; in this they differ dramatically from those, like workers in large factories or mines, who are susceptible to coercion through picketing. Neither does there appear to be any source of the positive selective incentives that might give individuals in these categories an incentive to cooperate with the many others with whom they share common interests. * By contrast, almost

*Even groups or causes that are so large or popular that they encompass almost everyone in the society cannot generate very substantial organizations. Consider those concerned about the quality of the environment. Although environmental extremists are a

everywhere the social prestige of the learned professions and the limited numbers of practitioners of each profession in each community has helped them to organize. The professions have also been helped to organize by the distinctive susceptibility of the public to the assertion that a professional organization, with the backing of government, ought to be able to determine who is "qualified" to practice the profession, and thereby to control a decisive selective incentive. The small groups of (often large) firms in industry after industry, in country after country, are similarly often organized in trade associations or organizations or collusions of one kind or another. So, frequently, are the small groups of (usually smaller) businesses in particular towns or communities.

Even though the groups that the theory says cannot be organized do not appear to be organized anywhere, there are still substantial differences across societies and historical periods in the extent to which the groups that our logic says *could* be organized *are* organized. This, we shall argue, is a matter of surpassing importance for the nations involved, and it is to this that we now turn.

small minority, almost everyone is interested in a wholesome environment, and poll results suggest that in the United States, for example, there are tens of millions of citizens who think more ought to be done to protect the environment. In the late 1960s and early 1970s, certainly, environmentalism was faddish as well. Despite this, and despite subsidized postal rates for nonprofit organizations and reductions in the cost of direct mail solicitation due to computers, relatively few people pay dues each year to environmental organizations. The major environmental organizations in the United States have memberships measured in the tens or hundreds of thousands, with at least the larger (such as the Audubon Society, with its products for bird-watchers) plainly owing much of their membership to selective incentives. There are surely more than 50 million Americans who value a wholesome environment, but in a typical year probably fewer than one in a hundred pays dues to any organization whose main activity is lobbying for a better environment. The proportion of physicians in the American Medical Association, or automobile workers in the United Automobile Workers union, or farmers in the Farm Bureau, or manufacturers in trade associations is incomparably greater.