1830 and the Un-natural History of Revolution

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Authors' Note

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Natural Histories of Revolution

For all its origin in man's appreciation of the calm, continuous movement of the celestial spheres, the word Revolution evokes a sense of break, of rupture, of discontinuity. If it were only an evocation, that would matter only a little. But the idea of revolution as a self-contained process separate from ordinary social life has gained wide currency among serious analysts of political conflict. One major version of this view takes the classic form of natural history.

The intuitive charm of the notion of revolution as a species of event following a coherent, characteristic life history has encouraged writer after writer to play Audubon to revolution, first outlining the life cycle and then offering a number of colorful illustrations. Few have thought to criticize the natural historical analogy itself, and no one has assembled the sort of systematic evidence it would actually take to test those few portions of the available natural histories of revolution which will survive logical scrutiny.

Sometimes the sense of revolution as a departure from normality appears frankly in the language of pathology. Crane Brinton's urbane Anatomy of Revolution, for example, likens the development of revolution to that of a fever:

In the society during the generation or so before the outbreak of revolution, in the old regime, there will be found signs of the coming disturbances . . . Then comes the time when the full symptoms disclose themselves, and when we can say the fever of revolution has begun. This works up . . . to a crisis, frequently accompanied by delirium, the rule of the most
violent revolutionists, the Reign of Terror. After the crisis comes a period of convalescence, usually marked by a relapse or two. Finally, the fever is over, and the patient is himself again . . . (1952, pp. 17-18)

We do not propose to join the old game of Improving Brinton. (Simple rules, for those as yet uninitiated: **Inning One:** Scold Brinton for his prejudices; show no quarter. **Inning Two:** Promulgate a revised version of Briton's stages of revolution. **Inning Three:** Congratulate yourself on your achievement.) Nor do we intend to argue with Brinton's historical judgments about the specific revolutions he took up, although we disagree with a number of them. We hope instead (1) to identify some of the general reasons why natural-historical models of revolution have worked badly and are not likely to work well (2) to block out an alternative model of revolution emphasizing its continuities with routine contention for power and (3) to check some of the implications of that model against a series of events for which an unusual store of information is available: the French Revolution of 1830.

The turmoils of the 1960s in Europe and America have stimulated a great deal of new work, some of it excellent, on revolution, political conflict, collective violence and related processes. Among others, Bienen (1968) and Gurr (1970) have recently provided wide-ranging reviews of the literature. We have ourselves turned our hands to criticism and synthesis elsewhere (e.g. Tilly and Rule 1965, Tilly 1964, 1970b). As a consequence, there is no need to review the literature as a whole here.

Two or three comments will suffice. First, almost all recent quantitative work on political conflict, including revolution, has consisted
of comparisons of numerous countries at approximately the same point in time rather than of the analyses of change over time which would be appropriate for the direct testing of natural history hypotheses (e.g. Feierabend and Feierabend 1966, Gurr 1968 and 1970, Rummel 1966; among the rare exceptions are Kirkham, Levy and Crotty 1970, Russell Ekman 1970). Second, social historians have recently been doing rich, systematic work on the forms and personnel of revolution in Europe and America (e.g. Cobb 1961-63, C.S.L. Davies 1969, Hofstadter 1970, Rude' 1970, Williams 1968); that work, which often does treat change over time, is more directly relevant to the verification of natural-historical models, but has not so far been employed in that way. Third, recent social scientific investigations have tended to lump revolutions together with other forms of political conflict under headings like "internal war," "instability," "civil violence," "aggressive behavior" or simply, "violence." As a result, the proposal of distinct natural histories for revolution itself has become rarer than it used to be.

Natural history theorists differ from other students of the subject in that they depict revolution as the culmination of a series of qualitatively distinct developmental stages. The stages form a standard sequence; one stage cannot manifest itself until the preceding one is complete. In some cases the revolutionary change represents the end of the cycle, the final stage of revolutionary development. Elsewhere, there are stages subsequent to the revolution, through which the society moves from chaos back to normality. In general, the appearance of the first stages is a warning or a promise, but not a certain sign that the process will run its full course. What mark this variety of theorizing as natural history are the assertions a) that the "late"
developmental stages do not appear unless the "early" ones have already occurred and b) that some sort of inner logic propels the process, so that in the absence of major obstacles it will work out a standard sequence. Revolutions, like butterflies, have natural histories.

The number and content of the stages varies widely from one natural historical scheme to another. In Brinton's analysis, the first stages are characterized by widespread governmental inefficiency in times of relative prosperity, followed by the desertion of the government by the intellectuals. Next comes an increasing popular revolutionary excitement leading to the overthrow of the old regime, followed by a period of rule by moderate revolutionary elements. Finally comes the "rule of terror and violence," followed by a return to something like the status quo ante.

Rex Hopper (1950), another natural history theorist, sees four stages:

- Preliminary Stage of Mass Excitement and Unrest
- Popular Stage of Crowd Excitement and Unrest
- Formal Stage of Formulation of Issues and the Formation of Publics
- Institutional Stage of Legalization and Societal Organization.

Far more than Brinton's, Hopper's stages refer to the states of mind of the revolutionary and proto-revolutionary population, and thus sum up a social psychology of revolution.

These stage schemes have many variants, most of them interesting ... and all of them inconclusive. We could review Sorokin's two stages, Meadows' three or Edwards' five and gain insight from each one. But how would we choose among the bewildering array? Presumably by examining their internal
consistency, their openness to verification or falsification, their value in reducing complex phenomena to their essentials, their fruitfulness as guides to empirical investigation, and the fit between the results of that investigation and the propositions derivable from the scheme.

On these grounds (as opposed to the moral, aesthetic or heuristic grounds one might also invoke for the judgment of such schemes), the natural historical analyses of revolution stand up poorly. Their logic is peculiar, their vulnerability to proof slight, their reduction of complexity undoubted but misdirected, their fruitfulness for further investigation strikingly limited and their fit with other facts than those from which they were originally inferred quite bad. Most of these shortcomings spring from the very modus operandi of natural history, and are therefore unlikely to disappear. In particular, the practice of working backward from outcome to antecedent conditions provides little means (and no incentive) to determine how frequently, and under what circumstances, those same antecedent conditions exist without the development of revolution. That having reasoned backward we should present our conclusions forward, and in a dramaturgic framework, only aggravates the difficulty.

Let us concretize our complaints by scrutinizing three sophisticated recent statements, the first by James Davies, the second by Neil Smelser, the third by Chalmers Johnson. The first is marginal to natural history, the second contains a very special version of natural history in application to a wide range of phenomena which happen to include revolution, the third belongs squarely in the great tradition of natural histories of revolution.
Davies on the J-Curve

Davies (1962) does not present a scheme of "stages" as such; he does argue that a set of qualitative developmental changes lead to revolutionary outbreaks and that the full manifestation of all these changes is necessary before a revolution can take place. The crux is that revolutions "are most likely to occur when a prolonged period of economic or social development is followed by a short period of sharp reversal" (1962, p. 4). "Economic or social development," in turn, is "opportunity to satisfy basic needs, which may range from merely physical ... to social ..." (1962, p. 8). Davies considers three successful revolutions -- Dorr's Rebellion in early nineteenth century Rhode Island, the Russian revolution of 1917, and the Egyptian revolution of 1952 -- and finds evidence of such a pattern in each case. He refers to the pattern as the "J-curve" of need-satisfaction, with the progressive period of increasing satisfaction representing the shaft of the J and the sharp downturn its crook.

Davies' scheme requires some sort of weighting and summing of the satisfaction of "human needs" in a population. Unless that assessment of needs is both reasonably accurate and logically independent of the behavior it is supposed to explain, the scheme will provide no means of distinguishing situations with a high likelihood of revolution from other situations. In practice, Davies reads back from the fact of revolution to the presumably frustrated needs, and shifts the weights assigned to various needs along the way. The discussion of Dorr's rebellion, for example, derives the long upward slope of the J-curve in terms of the increasing prosperity of the textile industry, on which a large segment of the population depended. But the final "sharp reversal"
precipitating the violent outbreak turns out to be the frustration of demands for popular suffrage in the state. Davies employs similar mixtures of needs in the development of J-curves for other revolutions. The mixing and shifting of needs makes it easier to fashion a plausible fit of the theory to any particular revolution. But makes it correspondingly more difficult to draw any reliable inference to the cases of revolution (or, for that matter, of non-revolution) not yet inspected.

The point is no quibble. On the contrary it is crucial to the viability of Davies' argument. Davies appears to start with the accomplished fact of revolution, then cast about in the period immediately preceding it for evidence of the sharp reversal of some need within some part of the population, then look farther back for needs which have undergone increasing satisfaction for some length of time. Given that different groups in any population experience the satisfaction and frustration of various needs at various times, such a search has a high probability of success. It also has a high probability of identifying as crucial for revolution circumstances which are in fact commonplace outside of revolutions -- as with the famed methodologist who achieved a hangover with bourbon and water, scotch and water, not to mention rye and water, and therefore stopped drinking the offending substance: water.

So what of frustrations which do not result in revolution? Frustration is as endemic in social life as need-satisfactions are various. Needs, as Davies himself points out, are always elastic, expanding to encompass more than the individual enjoys at present; this disparity presumably always entails its degree of frustration. For Davies, the crucial difference is between what one might think of as routine frustration and a "sudden, sharp reversal" of need satisfaction. How one could actually hope to measure the degree of
difference between these two states at any one point in time, let alone over a series of points for, say, the entire population of a country, is not clear. Davies suggests a public opinion poll, but neglects to mention what kind of poll would do the job. Is there any way to determine that the "gap between what people want and what they get" (to use Davies' words) is "intolerable" other than by the fact that they refuse to tolerate it?

This desultory picking at the scabs of Davies' scheme finally uncovers the real wound underneath. The actor has absconded! Who endures the frustrations in question, who makes revolutions, and what connection do the two actors have with each other? The J-curve formulation offers us two equally absurd alternatives:

a) regardless of who experiences the frustration of crucial needs, the "society" as a whole responds to them, and beyond some threshold the response takes the form of revolution;

b) the individual's propensity to foment or join revolutionary action is directly proportional to his degree of frustration, hence revolutions occur when more than some critical number of individuals are performing revolutionary actions and hence revolutionaries come from the most frustrated segments of the population -- frustrated, to be sure, by the special up-then-down process Davies describes.

On the surface, the second alternative will appear more plausible to those who do not find the reification of Society attractive. Unfortunately, closer scrutiny reveals that the second alternative not only compounds the practical difficulties already discussed by requiring the weighting and summing of
frustrations for each individual, or at least each group, within the population in question, but also treats as automatic precisely what is most problematic about the development of revolutions: the transition from uncoordinated individual dissatisfactions to collective assaults on the holders of power. Nor is it a simple matter of filling in the blanks. The fillings for these particular blanks will cause the essential structure of the J-curve hypothesis to explode through contradiction or to decay through qualification.

Smelser on Collective Behavior

Smelser's system (1963) is richer and more consistent than Davies'. It is thus more likely to survive quick criticism. Collective behavior, of course, includes the whole range of non-normative behavior carried on by groups of men; revolution constitutes a subtype of a more general case. Nevertheless, Smelser takes pains to show that all the various species of collective behavior exhibit the developmental stages which he posits.

The scheme specifies six conditions which must be met, or "activated", before an episode of collective behavior can take place (1962, pp. 15-17). They are (1) structural conduciveness or "permissiveness" of the social structure to a given form of collective behavior; (2) structural strain; (3) growth and spread of a generalized belief; (4) precipitating factors; (5) mobilization of participants for action; (6) the operation of social control. While all these elements may exist for varying lengths of time before the episode of collective behavior even begins, they enter the process itself in precisely that order. Hence the description of the scheme as a "value-added" analysis.
Smelser's is the most systematic and helpful discussion of the defining features of collective behavior we have. The natural-historical portion of the work, however, rests on propositions which are obvious or which represent explicaciones of the initial definition of collective behavior. This becomes apparent when one attempts to derive predictions of the form, locus and intensity of collective behavior in different social settings from those propositions.

Structural conduciveness, for example, means simply that collective behavior, like any other behavior, is circumscribed by its social context. The occurrence of a financial panic, Smelser points out, presupposes the existence of a money economy. Structural strain, the second determinant, seems to mean any sort of shared dissatisfaction with the way the world works (although at times it shifts to the structural conditions -- e.g. role-conflict -- under which such shared dissatisfactions arise). Since collective behavior means some collective attempt to make the world work differently, Smelser has simply called our attention to the fact that people do not act together to contravene existing social patterns unless motivated to do so.

The same sort of observations applies to the third determinant, "growth and spread of a generalized belief", which appears to mean that people do not actconcertedly unless they share some common perceptions of their social world. (Smelser's suggestion that such generalized beliefs include a symbolic representation of the strains to which the actors are responding, on the other hand, is more intriguing, less obvious and more open to empirical verification). The effect of any particular set of "precipitating factors" again appears only to lend itself to establishment after the fact, and therefore to have no
predictive value. The fifth determinant, "mobilization of participants for action," states the truism that only mobilized men act collectively. Like Davies' leap from dissatisfaction to rebellion, it leaves the essential questions untouched: where, when and how does the mobilization actually occur?

The last determinant, the "operation of social control," does not run parallel to the first five. It is unclear why the workings of social control should affect collective behavior only after people are mobilized for action; Smelser himself seems to include the effects of social control among the conditions of structural conduciveness, his first determinant. If we drop the idea of sequence, however, we are left with the observation that others resist collective behavior, and the assertion that the interaction between the resistance and the collective behavior produces a new equilibrium. The first enters into the practical definition of collective behavior, since without resistance we would never detect its occurrence; the second is merely a conceptual convenience not open to proof, an artifact of the observer's willingness to mark a beginning and an end to any particular instance of collective deviation from expected behavior.

In short, Smelser's scheme of stages turns out to be the careful explication of a definition -- quite a useful definition, but a definition nonetheless. This disappointing result comes from the characteristic modus operandi of sociological natural history: starting with the identification of the "species" and working backwards to identify its necessary antecedents. The result is the identification of stages in the development of the species which are either present by definition or common in situations which do not produce the species. The actual work of explanation only begins at that point.
Chalmers Johnson's *Revolutionary Change* (1968) exhibits most of the same difficulties. Like Davies and Smelser, Johnson views the life-cycle of revolution as a homeostatic process, in which the early stages of growing disequilibration lead to the climactic events of the change of regime itself, to be followed by re-equilibrating processes which bring the society back to its accustomed balance. Like Smelser, Johnson defines the main condition of normality in terms of value-integration, and portrays the first condition of susceptibility to revolution the failure of synchronization between values and realities. In particular, Johnson sees that failure as manifesting itself in the population's withdrawal of moral authority from the government. He sees three clusters of causes of revolution:

First, there are the pressures created by a dis-equilibrated social system -- a society which is changing and which is in need of further change if it is to continue to exist. Of all the characteristics of the disequilibrated system, the one that contributes most directly to a revolution is *power deflation* -- the fact that during a period of change the integration of a system depends increasingly upon the maintenance and deployment of force by the occupants of the formal authority statuses.

The second cluster of necessary causes revolves around the quality of the purposeful change being undertaken while a system is disequilibrated. This quality depends upon the abilities of the legitimate leaders. If they are unable to
develop policies which will maintain the confidence of non-deviant actors in the system and its capacity to move toward resynchronization, a \textbf{loss of authority} will ensue. Such a loss means that the use of force by the elite is no longer considered legitimate, although it does not necessarily mean that a revolution will occur at once . . .

The final, or sufficient, cause of a revolution is some ingredient, usually contributed by fortune, which deprives the elite of its chief weapon for enforcing social behavior (e.g. an army mutiny), or which leads a group of revolutionaries to believe that they have the means to deprive the elite of its weapons of coercion. (1968, p. 91)

Johnson then attempts to link these very general phenomena to individual behavior through the sequence: rapid change - systematic disequilibrium - overtaxing of existing means of homeostatic and purposive response to change - panic-anxiety-shame-guilt-depression etc. - formation of movements of protest. True to his predecessors, he proposes the suicide rate as a prime index of disequilibrium.

The resemblances to Davies' and, especially, Smelser's arguments are striking. The drawbacks are similar. To the extent that "failed synchronization between values and realities" can be identified at all independently of the revolutionary behavior it is supposed to predict, the evidence that it differentiates revolutionary countries from others is in extremely short supply. That failure is the general condition of mankind. Similarly, it is true by definition that power deflates and legitimate leaders lose authority during
revolutions, but nothing in the evidence known to us indicates that the deflations and loss necessarily precede revolutions or, conversely, that their occurrence predicts to revolution. (One could, if willing to work within this conceptual framework, manufacture a plausible case that despite the disagreeable resistance of Parliament, Charles I's power was inflating up to shortly before the outbreak of the Civil War in 1642; it is even easier to point out how regularly terror quells dissent). Only moving backward from the fact of revolution to its presumed standard features makes it so easy to arrive at such helpless propositions.

Again we face the Case of the Absconded Actor. The ideas of power deflation and loss of authority treat generalized inabilities of a regime to make its dictates felt, widespread opposition to the exercise of governmental power. That the inability should be generalized and the opposition widespread gain credibility from their connection with the underlying assumption that "a whole society" somehow expresses itself in revolution. We would be inclined to deny the existence of any such actor as a "Whole Society" as well as the utility of His invention. But even leaving aside doubts on that score for some other polemical occasion, it is not clear that the assumption helps in solving the problem at hand. The nub of revolution is a seizure of power over a governmental apparatus by one group from another. If we want to limit the portentous word "revolution" to those cases in which the groups are social classes and/or the seizure of power produces extensive changes in social life, so be it. It remains that the bare requirements of such a change are the involvement of only a small portion of the population. Nor does it seem at all likely that a relatively uniform state of mind on the part of the remainder of the population
is a necessary condition for such a change. Yet except for the important point concerning the control of the military and other repressive forces, Johnson's argument provides us with no reliable way of anticipating either the nature of the conflict or the identity of the participants. Smelser's scheme, Davies' and, indeed, the whole range of natural historical theorizing leaves those central explanatory questions virtually untouched.

In their present condition, natural-history theories of revolution are nearly irrefutable -- not because they are manifestly correct, but because they consist mainly of ways of rationalizing events after the fact. Even Crane Brinton, who provides us with the most concrete characterizations of the stages of revolution, offers them as no more than preliminary empirical generalizations, restricted to the few great revolutions he takes up. Any effort to apply systematic evidence to the available natural-historical analyses will therefore require recasting the arguments into testable propositions. We shall make some efforts in that direction. But we shall put more of our energy into the formulation and preliminary testing of a model embodying a rather different general understanding of the character of revolutions from that implicit in natural history.

For any population, we may ask whether there exist one or more organizations controlling the principal concentrated means of coercion within the population. Such organizations are governments. We may then enumerate all groups within the population which, during some particular span of time, collectively apply resources to the influence of a certain government. They are contenders for power with respect to that government. To the extent that a contender can routinely lay claim to the generation of action or yielding of
resources by agents of the government, the contender is a member of the polity, which therefore consists of all contenders successfully exercising routine claims to government response. Some groups are not contenders, and some contenders (which we call challengers) are not members of the polity; the members of the polity differ among themselves in the amount and type of response their application of resources to the government produces.

So much for definitions. We imagine the general operation of polities in the following way: Every polity establishes tests of membership, and all polities include among such tests the ability to mobilize or coerce significant numbers of people. Furthermore, within the polity members continually test one another; repeated failures of partial tests lead to fuller tests which lead, if failed, to exclusion from the polity. Each new entry or exit redefines the criteria of membership in a direction favorable to the characteristics of the present set of members; the members tend to become attached to those criteria as a matter of principle. The life of the polity therefore consists of a) the routine application of resources to the influence of the government by members of the polity; b) attempts by non-members (ordinarily resisted by members in collaboration with agents of the government) to influence the government, including attempts to gain membership; c) an ongoing series of contests, ranging from parliamentary maneuvering to street fighting, among members of the polity. (Actually a) will frequently lead to c), as when one member lays claim to resources already committed to another, and b) will frequently coincide with c), since members often form coalitions with non-members in order to increase the resources available for application to their common ends.)
Because of the testing process by which contenders acquire or lose membership, collective violence tends to increase when the membership of the polity is changing rapidly. Collective violence will pit members against members, and agents of the government (especially repressive forces like troops and police) against non-members, but rarely non-members against non-members, agents of the government against members, or agents against each other. In the event of revolution, however, all these regularities change.

Revolution, in this political model, consists of the fragmentation of a single polity. The case in which the fragmentation turns out to be permanent greatly resembles the revolution -- indeed, the two cases are often indistinguishable at the start -- but the term "revolt" or "civil war" applies more easily in that case. Leon Trotsky (1932, 222-230) stated the essentials of the fragmentation years ago, under the heading of "dual sovereignty." We differ from Trotsky in three ways: 1) in claiming that in many revolutions sovereignty is actually multiple, rather than dual; 2) in considering it more likely that the alternative polities will be composed of coalitions of classes than that they will be single classes; 3) in recognizing that the coalitions sometimes include groupings which are based on language, religion, region or some other form of solidarity than class.

The fragmentation of the polity can occur in several different ways. The most likely is for some new coalition of contenders (at the extreme, a single non-member of the polity) to lay claim to exclusive control over the government while the remaining established members of the polity continue to press their exclusive claims, while some portion of the population honors the claims of each of the fragment polities. These circumstances may well produce
a temporary fragmentation of the government (as when insurrectionary armies administer part of a country) in addition to the fragmentation of the polity. In any case, a revolution begins when previously acquiescent citizens faced with strictly incompatible demands from the government and an alternative authority obey the alternative authority. It continues until only one central authority remains.

So far we have merely set up a conceptual scheme, embedded in a strongly political view of conflict, which contains a few propositions so general as not to be amenable to verification in their present form. The scheme, nevertheless, narrows the search for the causes of revolution from the detection of anomie, strain, dysfunction or frustration to the specification of the conditions producing the following outcomes:

a) appearance of contenders (or coalitions of contenders) advancing exclusive alternative claims to the control over the government currently exerted by members of the polity;
b) acceptance of those claims by a significant segment of the population;
c) formation of coalitions between members of the polity and the contenders advancing the alternative claims;
d) unwillingness or incapacity of the government to suppress the alternative coalition and/or the acceptance of its claims (historically, the unreliability of armed forces has been crucial in this regard).

If these are indeed the constituent elements of a revolutionary situation, they have some interesting implications for the natural history of revolution.
They give us no particular reason for expecting a gradual crescendo of conflict up to the point of revolution, followed by a rapid readjustment, which is the sequence a tension-release model implies.

On the contrary. A more reasonable sequence would run:

1) the gradual mobilization of contenders unacceptable to the members of the polity and/or making exclusive claims to governmental control;
2) a rapid increase in the number of people accepting those claims and/or a rapid expansion of the coalition including the unacceptable or exclusive contenders;
3) an unsuccessful effort by the government, acting on behalf of the members of the polity, to suppress the alternative coalition and/or the acceptance of its claims;
4) establishment by the alternative coalition of effective control over some portion of the government;
5) struggle of the alternative coalition to maintain or extend that control;
6) reconstruction of a single polity through the victory of the alternative coalition, through its defeat, or through the establishment of a modus vivendi between the alternative coalition and some or all of the old members.

It is a matter of pure convenience whether we say dual sovereignty -- and therefore revolution -- commences at stage 2, stage 3, or stage 4. It ends, obviously, at stage 6.
Some Inferences from the Model

This "natural history" of revolution, like those reviewed earlier, contains little more than the explication of a definition. It leads, however, to some intriguing observations on the sequence of violent conflicts in revolutions. First, the level of conflict is likely to be much higher after the first major actions of the revolution than before, because the emergence of dual sovereignty challenges the position of every member of the polity, and thus begins a major round of testing.

Second, the struggle between the two polities is itself likely to produce a polarized form of conflict, activating an exceptional proportion of the population on one side or another.

Third, the successful revolutionary coalition -- whichever combination of the original contenders it contains -- is likely to face considerable resistance as it attempts to reestablish routine governmental control over the population as a whole after seizing the governmental apparatus. To the extent that the revolutionary action begins with the seizure of a crucial but narrow geographical and/or organizational part of the apparatus, the struggle is likely to shift away from that locus after the revolutionaries consolidate their control there. In geographically and organizationally centralized states like those of the modern West, revolutionary conflicts are most likely to originate at the center and then shift to the periphery if the center is won.

Fourth, the initial revolutionary coalition is likely to fragment, leaving a few contenders exceptionally powerful, for several reasons: a) the initial seizure of control requires a larger coalition than does the maintenance
of control; b) the divergence of the longer-run objectives of the coalesced contenders is likely to become more salient and serious after the initial effort of dislodging the previous polity from control is past; c) those contenders which have mobilized rapidly in response to short-run crises but which remain relatively underorganized are also likely to demobilize more rapidly than other contenders, and thus to lose position in the testing which immediately follows the initial seizure of power. On these matters, coalition theorists (e.g., Gamson 1968a) have already suggested some promising hypotheses.

Testing the Model

Though easy to state, these ideas are difficult to test -- for they require a form of data much harder to assemble than the bald recitation of events which fuel the natural history arguments. Needed for this "political process" model of revolutionary change are data which relate the manifest conflicts of the revolution to different segments of the base population before, during and after the revolutionary events, via an analysis of the changing actions and relations of the principal contenders for power. These materials must be gathered in such a way as to view events transpiring before, during and after the revolution with the same analytical lens, so as to avoid the natural history fallacy of "working backward" from the accomplished fact of revolutionary change in order to identify stages which "had" to lead to revolution. Such data are a thousand times more difficult to assemble than are straightforward accounts of the principal events. The collection of the information on which we shall draw in the following analysis has taken seven years of the time of good-sized research teams at Harvard, Toronto and Michigan. Even that information fails to represent directly several crucial parts of the processes
of mobilization, contention and transfer of power that we have been discussing. Despite a number of trials, we have not so far been able to develop a reliable procedure for enumerating contenders, measuring their mobilization and characterizing their relationship to the existing structure of power which is truly independent of the conflicts we are attempting to explain. The portions of the argument we are in the best position to test directly are therefore those dealing with the timing and personnel of violent conflicts.

The data consist chiefly of coded, machine-readable accounts of every violent conflict above a certain scale occurring in France noted by trained readers scanning two national daily newspapers for each day over the periods from 1830 through 1860 and 1930 through 1960, plus a random three months per year over the period from 1861 through 1929. Information on these events is drawn not only from the original newspaper accounts, but also from archival sources and secondary historical materials. In addition, further data consist of machine-readable descriptions of a wide variety of social indicators year by year for the 86 to 90 French départements and for France as a whole.

A "disturbance," for these purposes, is a continuous interaction between two or more formations, or between one formation and the property of another, in which at least one formation has fifty or more participants and in the course of which at least one formation seizes or damages persons or property. (Acts of war between states, however, are excluded.) The following incident, as recorded by one of the readers, described events which took place in the southern French city of Carcassonne in March, 1832:

The disturbance which afflicted this commune on the eighth of this month broke out again yesterday (Sunday), with even
greater violence. The insistence of the Bishop on supporting
the interdiction of Father Bataillé, the parish priest, and
the presence of other priests sent to Saint-Vincent parish
to conduct the Sunday services, brought forth a large crowd
in the church, and the priests were chased from the premises.
The Prefect, who on the eighth had refused to call in the
National Guard to disperse the crowd, took recourse to the
Guard on this occasion, declining to call in the regular
army for fear of creating additional antagonism.
Thus the National Guard assembled at Canal Square. The
Guard would have succeeded in calming the disturbance,
except for the presence of the Prefect, the General and
several municipal officials. The sight of these brought the
crowd to new excesses. The crowd jeered the Prefect, threaten-
ing to throw him in the canal, and forced him to flee to the
side of the General. A hail of stones thrown at the officials
by the crowd struck the General on the head and the deputy
mayor on the face. The latter later submitted his resigna-
tion. The crowd then became still more threatening. Four
officers of the Guard left their troops to harangue the crowd,
with some effect. "We'll obey you", cried some of the principal
residents of Carcassonne, "for you are good patriots". The
crowd dispersed. Calm returned, and the night passed quietly.
Now that these deplorable events have occurred, the Bishop
and the Prefect can no longer do us any good; their presence
alone creates general antagonism and ferment. The most peaceable
and respectable citizens are hurrying to sign a petition to the legislature seeking the removal of the Prefect and the transfer of the Bishop.

The authorities have been astonished at the moral authority over the crowds shown by the National Guard . . .

(Le Constitutionnel, March 19, 1832).

Some of the available accounts are more detailed than this one, a majority of them sketchier. Taken together, the approximately 1,400 disturbance reports from 1830 through 1960 constitute a comprehensive sample of events in which men were sufficiently committed to their objectives to take violent action, plus information on the contexts of the events.

Our procedure yields, so far as we can tell, a more representative sample of violent conflicts than would reliance on standard histories or on any combination of major series of documents available to French historians for the period in question. Yet it tends to underrepresent areas and segments of the population which are either less accessible or less interesting to journalists. This bias is probably greater in times of crisis at the center, which draw attention away from the rest of the world.

Yet the general bias is endemic, and probably constant over short periods. The method appears to capture the general fluctuation of conflict over time fairly well. A comparison between the number of disturbances in the sample and those mentioned in the inventory of two of the standard archival series on the internal policing of France (Archives Nationales BB¹⁸ and BB³⁰) yields the following numbers of disturbances by quarter from 1830 through 1832:

*On the basis of this report and two others, all drawn from Le Constitutionnel, our coders estimated the total number of participants at 400 to 600, and broke them into two formations: one a "crowd of common ideology" and the other one a National Guard plus public officials.
The comparison is weakened somewhat by the imprecision of the inventories concerning the number of participants and extent of violence in the smaller conflicts and by their tendency to lump together a number of related events (notably the multiple counter-revolutionary movements in the West during the second quarter of 1832) into a single item. But in general the swings in frequencies correspond to those of our sample ($r = .52$). For that reason, it may be useful to extend the series back a few years in time via the archival materials:

<table>
<thead>
<tr>
<th>Year</th>
<th>1826</th>
<th>1827</th>
<th>1828</th>
<th>1829</th>
<th>1830</th>
<th>1831</th>
<th>1832</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>50</td>
<td>23</td>
<td>68</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Archive</td>
<td>13</td>
<td>11</td>
<td>13</td>
<td>22</td>
<td>70</td>
<td>27</td>
<td>38</td>
</tr>
</tbody>
</table>

The counts show a much higher frequency of collective violence immediately after the revolution than in the years before, despite the accumulation of a certain number of food riots in 1829. The observation, which is reinforced by the quarterly count presented above, will take on some importance later.

As we completed our enumeration of disturbances meeting our criteria, we coded them extensively in a uniform manner. That involved breaking the participants in each event into "formations" -- sets of persons acting together -- and describing each formation's characteristics and actions separately, as well as characterizing the setting and the disturbance as a whole. The items coded ranged from multiple measures of the scale of the
disturbance to detailed sequences of action for individual formations to manifest objectives of the participants. In this report, however, we draw only on our classifications of formations and our estimates of the number of participants in each disturbance.

Here we analyze only one small segment of the sample: The disturbances recorded from the years 1830, 1831, 1832. Those events include all the larger violent encounters which were part of the Revolution of 1830, but they also include a number of small incidents to which historians have not attributed any particular political significance. Inclusiveness is a virtue, for it permits us to study how the occurrence of revolution affects the whole pattern of violent conflict.

The Revolution of 1830

The "Three Glorious Days" of July, 1830, brought about a popular overthrow of entrenched power, one which spelled the definitive end of the Bourbon monarchy in France and led to a sweeping change in the personnel of the government's upper echelons. (In our general analysis of the context, we rely especially on the following accounts: Aguet (1954), Dolleans (1967), Chevalier (1958), Labrousee (n.d.), Mantoux (1901), Girard (1961), Lhomme (1960), and Pinkney (1964).) In place of the Bourbon Charles X, the Revolution elevated Louis-Philippe of Orleans to the throne - not as King of France, but as "King of the French." The revolution curtailed the power of the old landed aristocracy and instituted a regime based on the ascendant upper bourgeoisie, bringing France one step closer to parliamentary democracy. Nor did these changes come without bloodshed. In the course of the "Three Glorious Days" of fighting between insurgents and the army in the streets of Paris, some two thousand Frenchmen lost their lives.
The Revolution of 1830 did not excite the popular involvement of 1848. It did not accomplish the sweeping rearrangements of 1789. Its rank and file did not share the single-minded commitment to a revolutionary program of the Communards of 1871. It was no less a revolution for all that. In our view, the effort to single out a class of "true" revolutions through the extensiveness of popular participation, the depth of the structural changes resulting from the transfer of power or the radicalism of the intentions of the participants defeats itself. It makes crucial to the definition of the phenomenon to be examined just those features which are hardest to detect, and which ought to be treated as variables. It makes virtually impossible what is already a very difficult task: analyzing what distinguishes those transfers of control over governments which do involve massive popular participation and widespread structural change from those which do not. Employing the more strictly political criterion of multiple sovereignty makes it clear that 1830 brought France a genuine revolution. Once we examine 1830 outside the shadows of 1789 and 1848, moreover, we can see well enough that the transfer of power were far more extensive than appears at first glance.

Who took part? Who were the members of the polity on the eve of the revolution, who the contenders testing one another in the revolutionary and post-revolutionary power struggles? Jean Lhomme's summary is convenient: First, the backers of Charles X, the most powerful group up to the Revolution; Lhomme sees them as representatives of the landed aristocracy. Second, poised against this group, another privileged element: a counter-elite composed of the upper bourgeoisie, with activist representatives in the Chamber of Deputies, the press and other key positions. In terms of the conceptual scheme we are employing, both these groups count as members of the polity; there are,
of course, others, but they matter less for the present analysis. Another two groups identified by Lhomme as active in the political contests of this period were the numerous urban working classes -- poor, inarticulate, and badly organized, but still capable of some degree of collective action -- and the rural poor, destitute as their urban counterparts but different in political orientation. These latter groups were active contenders in the power struggle during the years under study, but were excluded by the first two from membership in the national polity.

These rough categories, obviously, simplify enormously a rich, complex class structure. For most purposes, a class analyst of this period would want to distinguish the expanding class of small manufacturers from the world of small craftsmen and shopkeepers which supplied so many of the revolutionary activists from 1789 to 1848, the true peasants from the agricultural proletariat, the factory workers from the unskilled laborers, and so on. These distinctions matter a great deal to our more refined treatments of nineteenth century conflicts. For present purposes, the would simply obscure the general argument.

Our categories, for all their crudeness, take us a giant step toward a more subtle understanding of the revolutionary events themselves; although representatives of the first three groups all had their roles to play in the Three Glorious Days, they were different roles indeed. The Revolution came after a period of smoldering if unspirited conflict between the government and the bourgeois counter-elite. The immediate spur to action came on July 25 when the government, facing a defeat from its antagonists in the Chamber of Deputies, promulgated a series of measures suspending freedom of the press,
dissolving the recently elected Chamber, and restricting the franchise. The parliamentary opposition -- the bourgeois counter-elite -- called on the nation to resist, posting placards to this effect throughout Paris. Perhaps more important, the opposition press closed down in response to the government's measures, sending the printers and other workers into the streets. News and agitation spread through the existing networks of neighborhood, work and local political organization. By July 27 barricades had appeared in the city -- especially in the old working-class neighborhoods -- and fighting between insurgents and the army had begun. By the 29th, the challengers had won the day. The king abdicated and fled the country; the Duke of Orleans was installed in his place. Three short days sufficed to depose the last of the Bourbons and shift the reins of power.

We recount the events partly to emphasize the nature of the coalition which effected the overthrow. The bases for action on the part of the working-class challengers and the bourgeois members of the polity were quite different. David Pinkney's recent work on the Paris revolution of 1830 has shown that the disparities were so great that unanimity (however one might reckon it) was impossible. Pinkney argues, for example, that the working-class crowd were uninvolved in the quarrel between the government and its elite antagonists:

1964, p. 2)
The conventional way to deal with this discrepancy has been to treat the workers as impelled, rather blindly, by hardship; Pinkney's analysis, however, makes it easier to see that a genuine coalition of groups with rather different objectives was at work in the early revolution. The nature of the coalition adds irony to the fact that although few bourgeois died in the Parisian events in comparison to the terrible toll of workers, the upper bourgeois picked up the pieces, set the cast of the new government and occupied the stations of power within it.

This account of the Paris days also provides another ground for skepticism about those natural history theories of revolution which implicitly posit a single state of mind or shared tension through entire populations. For the actual change in government was accomplished both in a remarkably short time and through the participation of a small segment of the French populace: perhaps twenty thousand participants—less than a hundredth of one percent—of a nation of twenty-five million. Certainly these twenty thousand people were in a strategic location. Certainly many other non-combatant Frenchmen shared at least some of their outlook. But only the rashest observer could automatically ascribe the perceptions, grievances and desires of those who fought to the rest of the populace. A minority of a specific class in a single city were able to dislodge the Bourbon regime from its position of power. To stake one's explanation of the change of government on what the rest of the French nation was thinking or feeling seems to us unwarranted and risky.

Instead, the model of revolution already presented directs attention to shifts in the form, locus and intensity of conflict as the struggle for
power continues. If the model is correct, we should expect to find:

1) a significant rise in the level of conflict after the inception of the revolution, as a) the struggle for power over the central governmental apparatus generalizes; b) all contenders find their positions within the polity open to test and change; c) the coalition which acquires control over the center attempts to reimpose control over the peripheral segments of the population as a whole;

2) a movement of conflict toward the centers of power as the revolution begins, and toward the periphery as it proceeds to reimposition of central control over the remainder of the population;

3) an increased use of specialized repressive forces as the revolutionary coalition consolidates its control over the center, demobilizes some of the contenders which took an active part in the initial seizure of power, and extends its control to the periphery;

4) a general "politicization" of conflict with and after the revolution, as the existence of the revolutionary situation encourages all contenders to test each other in order to maintain or aggrandize their positions, and as every conflict comes to have some significance for the structure of the polity to emerge from the revolution;

5) a general tendency for both the politicization and the intensity of conflicts to vary as a direct function of
the proximity of different segments of the population to the center.

Now, these inferences from our general scheme obviously assume a highly centralized government; they very likely draw some of their plausibility from their fit with what we already know to be the common run of modern European experience. The peasant wars so powerfully analyzed by Eric Wolf (1969), on the other hand, will only fit these statements after some tugging and squeezing. We claim only that these are reasonable inferences from our argument to the sorts of centralized governments modern Europe did produce, and therefore to the polities which have supplied theorists of revolution with most of their classic cases, and that "natural history" schemes either provide no inferences regarding these matters or suggest contrary ones.

The Timing of Collective Violence

As preliminary tests of these assertions, let us examine data concerning the timing, locus and participants in violent conflicts within France from 1830 through 1832. First, timing. Figure 1 displays the fluctuation in collective violence by quarter from January 1830 to December 1832, in terms of numbers of disturbances and estimated participants in them. (The estimating procedure a) gives precedence to specific numbers reported in the accounts used, b) permits the coder to draw inferences from the territory occupied by the disturbance, the number of arrests and casualties and the descriptive words used by witnesses, c) assigns to those disturbances for which there is too little information to make even that sort of judgment -- in this case 8 of the 141 disturbances -- the mean value of the estimates for other disturbances in the same quarter.) On the whole, the curves of disturbances and of participants
Figure 1. Number of disturbances and estimated number of participants in disturbances by quarter, 1830 to 1832.
move together. The largest exception in the three years is the third quarter of 1831, during which the number of disturbances declined to three, but the famous November insurrection in Lyon brought the participants up to over seventeen thousand. The graph also displays the general tendency for the average size of disturbances to rise in times of widespread conflict like July 1830 and June 1832.

Perhaps the most remarkable thing shown in these curves is the relative quiescence of France during the six-month period immediately prior to the revolution. From the first of January to the end of June 1830, we discover a total of six disturbances. During the five months from the beginning of August to the end of the year, however, there are a total of thirty-five. This accords badly with those natural history theories which posit a gradual build-up of excitement or tension during the pre-revolutionary period, followed by a down-turn and general subsidence once the revolution is accomplished. Indeed, Paris itself, the site of the revolution and the area where the data on disturbances are most complete, shows no violence above our minimum scale between the first of the year and the revolutionary days. Nor do 1831 and 1832 show much of a systematic decrescendo of violence or homeostatic return to the earlier equilibrium. 1831, it is true, is considerably less violent than the second half of 1830, yet 1831 remains more violent still than the first six months of the revolutionary year. And 1832, though showing a lower incidence of violence per month than the last half of 1830, nevertheless shows more than twice as many incidents as 1831 and many more per month than the pre-revolutionary period of 1830. Indeed, an examination of our sample shows that 1832 produced the greatest number of violent incidents of any year during the 1830-1860 period. By any reckoning, the "Three Glorious Days" of July,
1830, mark the beginning, rather than the climax, of a turbulent period in French history.

A closer look at the incidents in the months after the revolution in 1830 shows a still more interesting pattern of development of revolutionary violence. The revolution itself had played out within a remarkably short period of time. Within five days of the first signs of popular hostility to the regime in Paris, and after just three days of fighting, the Bourbon monarchy fell for good; given the state of communications at that time, the revolution was an accomplished fact before most of the country had heard about it. Yet the reestablishment of single sovereignty through France as a whole took months, and remained open to serious challenge both in Paris and in the provinces for another two years. Most of the major cities of France were the scenes of sympathetic responses as soon as news of the Parisian insurrection reached them. In Nantes, for example:

The July Ordinances were known the morning of the 29th. They had a powerful impact. Feelings ran high all day and disorderly crowds gathered in front of the theater that evening. The gendarmes and the soldiers of the Tenth Line Regiment intervened and restored order. Fifteen demonstrators were arrested and taken to the Château. The next morning, there was great agitation, and it spread to the masses. The merchants and the upper bourgeoisie did not hide their fears. They asked for the reestablishment of the National Guard, but the authorities did not seem inclined to listen to them.
The mayor was strongly urged . . . to free the
demonstrators who had been imprisoned in the Château
the night before. He said all he could do was speak
to the military commander.
After that reply, a group formed and headed for the
headquarters of the military division, grew along the
way, and included a hundred-odd persons when it got to
the Place Louis XVI. There it found a detachment of the
Tenth in battle formation before the headquarters.
In the midst of the shouts and imprecations of the crowd,
someone fired a gun. The soldiers responded with a
volley. The demonstrators fled, with seven of them
shot to death and some forty of them more or less
seriously wounded.
The populace invaded the guard house and disarmed the
soldiers on duty there. The military authorities
limited their action to securing the Château and the Place
Louis XVI, and the city was abandoned to itself. Some
citizens who had met at the Bourse during the day
organized patrols which walked the city that night and
maintained order.
The members of the court and the Chamber of Commerce
took the initiative in reestablishing the National Guard
and appealed to the loyalty of their fellow citizens in a
notice posted Saturday, July 31.
Because of a delay in the mails, only on the night of August 1 did people learn the departure of Charles X and the establishment of a provisional government.

The prefect and the mayor, considering the game lost, left the city on the 2nd; that night general Despinois, taking part of his garrison with him, headed for the Vendee, hoping to raise an insurrection there.

The National Guard organized. Lt. General Dumoutier, who lived near the city, took command.

Mayet, senior member of the prefectoral council, took over direction of departmental affairs on the 3rd.

On the 4th, the official news finally came. The tricolor flag went up. On the 6th, Dumoutier took command of the Twelfth Division. (Libaudière 1905, 81-83; a far superior account appears in Giraud-Mangin).

Between the time of the revolution in Paris and August 4, similar events broke out in Toulouse, Bordeaux, Lille, Amien and Dijon. All of these incidents represented assertions of strength by local representatives of the forces who had seized power in Paris. In terms of our political process model of revolution, these events represented the first of a series of tests among various members of the polity and contenders for political power to determine the concrete power relations which would result from the revolutionary change at the center.

These essentially urban events played themselves out almost immediately after the revolution, even though the overall level of violence hit another
peak before the end of the year. Inflating the rates during the remainder of 1830 were another kind of violent confrontation, one pitting a different combination of parties against one another in a different kind of mutual testing. These were the small-town and rural outbreaks of attacks against the agents and symbols of central control. Particularly favored for such attacks were the taxation offices by which Paris collected its much-detested internal taxes and which cut the income of local farmers while raising the level of food prices in the cities and towns. For example, an account of a tax riot in the Champagne city of Epernay in December, 1830 begins:

Six hundred wine growers descended on the house of the collector of excise, sacked his offices, seized his record books, and burned them in the square by the city hall. (Archives Nationales BB18 1191).

and then goes on to give details: The presences of women and children in the crowd, the refusal of part of the National Guard (themselves recruited from the winegrowers) to act against their brothers, the request for troops from outside, the dispersal of the rioters. Another account of the same incident from a newspaper source notes that the mayor of the town and other "good citizens" tried to prevent the invasion, but to no avail.

Attacks like this one, endemic during this period, were no mere symbolic gestures. One of the main political issues of the time -- both before and after the revolution -- was the ability of the central government to squeeze taxes out of the rural populace. These events in the fall of 1830 represent another process of testing, as those in control of the central government struggled to consolidate its power and to exclude the rural poor from partici-
pation in the polity. The fact of a change of power at the top had resulted in a scramble for position among the other contenders within the polity, with each group seeking to establish its claim for what it saw as most crucial to it. The rural contenders simply responded to the new power arrangement at the center as an opportunity to press harder than ever for the same interests which they had been pursuing all along.

Nor were the rural poor the only groups whose representatives asserted their claims against the new government immediately after the revolution. Paris itself was the scene of a number of protests from its poorer citizens; the events of the fall demonstrated that the critical role of workers during the revolution had not led to working-class support for the middle-class government. Finally, in December of 1830, the trial of the ministers of deposed Charles X brought about a massive riot which rocked the new government. It showed plainly that the situation had not "re-equilibrated" itself during the months since the revolution.

Urbanity and Collective Violence

Another significant comparison in the nature of participation in violent collective conflicts during this period lies in the urbanity of their settings. Table 1 shows the estimated number of participants in disturbances during each period by the urbanity of the departments in which the disturbances occurred. (At the time, France was divided into 86 administrative units, or departments, averaging about 375,000 in population.) The entries in each cell are rates per 100,000 population, corrected to an annual basis. Of course, the fact that a disturbance took place in a department with more than 15 percent of its
Table 1. Estimated Participants in Collective Violence per 100,000 Population by Urbanity of Department, 1830-32 (corrected to annual basis)

<table>
<thead>
<tr>
<th>Percent of population in cities of 10,000+</th>
<th>Jan.-June 1830</th>
<th>July-Aug. 1830</th>
<th>Sept.-Dec. 1830</th>
<th>1831</th>
<th>1832</th>
<th>1830-1832 (Thousands)</th>
<th>Total Population (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>23</td>
<td>19</td>
<td>54</td>
<td>5</td>
<td>22</td>
<td>20</td>
<td>3.8</td>
</tr>
<tr>
<td>0.1-5.0</td>
<td>7</td>
<td>42</td>
<td>84</td>
<td>0</td>
<td>64</td>
<td>34</td>
<td>6.7</td>
</tr>
<tr>
<td>5.1-10.0</td>
<td>0</td>
<td>92</td>
<td>218</td>
<td>34</td>
<td>75</td>
<td>66</td>
<td>19.8</td>
</tr>
<tr>
<td>10.0-15.0</td>
<td>18</td>
<td>720</td>
<td>136</td>
<td>19</td>
<td>213</td>
<td>135</td>
<td>19.5</td>
</tr>
<tr>
<td>15.1+</td>
<td>28</td>
<td>2904</td>
<td>413</td>
<td>719</td>
<td>823</td>
<td>727</td>
<td>104.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>13</td>
<td>573</td>
<td>175</td>
<td>120</td>
<td>193</td>
<td>158</td>
<td>154.2</td>
</tr>
</tbody>
</table>

Total Participants (Thousands) 2.1 31.1 19.0 39.2 62.8 154.2

r, participants x urban population .01 .91 .66 .43 .89 .91
population in urban places does not necessarily mean the event itself was urban; a disturbance in an urban department can still take place outside the confines of the city.

The comparisons are striking. The urban departments show consistently higher rates of participation in disturbances throughout. Nevertheless, the geographic pattern varies considerably from one period to the next. The correlation coefficients at the bottom of each column in Table 1 conveniently summarize the varying strength of the relationship between the urbanity of a department and the volume of participation in its disturbances. The coefficients display both the general tendency of participants in disturbances to concentrate in the more urban departments and the sharp fluctuation of the pattern from period to period. The rapid geographic fluctuation in itself is a finding of some importance, for it suggests two interesting conclusions: a) the locus and character of the issues about which Frenchmen were fighting shifted dramatically as the revolution moved from phase to phase; b) other studies which have found strong relations between levels of conflict and structural variables at a single point in time may well have mistaken historically contingent relationships for general effects of structure.

Nor does the fact that over the long run the most urban departments generate the highest rates of violence mean it is urbanization as such which leads to violence. Multiple regression analyses of these same data plus other indicators of social characteristics of the departments involved consistently yield high positive weights for urbanity, low positive weights for rate of increase in urban population for the period 1826-1831, and low negative weights for net migration during the same period. The presence of cities, in other
words, makes collective violence more likely; the disruption presumably caused by rapid growth -- or at least by rapid in-migration -- does not.

How did the pattern change as the revolution proceeded? During the pre-revolutionary period, we find low rates throughout France; they do not differ greatly among the groups of departments. The picture changes drastically, however, once the revolution gets underway. During the revolutionary period, the extent of violence rose sharply for all classes of departments except the most rural ones; the change produced a strong relationship between urbanity and violent conflict. In the months following the change of government the disparity between the most and the least urban departments narrowed; the rates in the less urban departments rose, registering the shift of focus of conflict from the largest urban centers toward the provincial towns and the countryside. Concretely, the swelling of rates in the less urban departments during the closing months of 1830 represented the spread of tax rebellions and similar forms of resistance to central control. During 1831 and 1832, the differentials between the most and least urban departments widened again, although in 1831 the persistence of tax conflicts in the moderately rural departments while struggles among the members of the revolutionary coalition accelerated in Paris and other large cities reduced the correlation between urbanity and rates of participation. The largest single conflict of 1831 was the bloody revolt of the Lyon silk workers. In 1832, levels of involvement in collective violence rose in all classes of departments; in April, May and June they approached the heights of July and August, 1830, as repeated street-fighting in Paris coincided with widespread guerrilla in the counter-revolutionary West.

There are some special points worth noting in the rates for France as a whole. These figures should make it clear that, however modest the final
rearrangements in French social structure brought about by the revolution, the events of the revolutionary period did activate the French populace. The number of participants during the two-month revolutionary period, especially in the most urban departments, shows a remarkably high level of involvement in relation to the total population. 1830 may have lacked the long-term social implication of the Great Revolution of 1789, but it was certainly no palace coup, no matter of indifference to the bulk of the French population.

The Participants

Still a further comparison of the different contributions to the process of revolution of different groups within the French polity comes from an analysis of the formations taking part in violent events. A formation is a group taking an independent role in a disturbance, as reckoned by its apparent autonomy or organization, distinctness of objectives, etc. In some instances, like the destruction of government taxation facilities during the immediate post-revolutionary period, the sample records only a single formation, since the insurgents had no antagonists present in person on the scene. The more common case is two formations contesting with each other, while some instances contain three or more formations, in different combinations of alliance with or antagonism against one another. For every incident we have attempted to gather as much information as possible about the identity of the formations taking part and the nature of their participation. This makes it possible to compare, in Table 2, the proportionate involvement of various kinds of formations throughout the revolutionary period.
Table 2: Types of Formations Participating in Collective Violence, 1830-1832 (Percent of total in specified period)

<table>
<thead>
<tr>
<th>Formation type</th>
<th>Jan.-June 1830</th>
<th>July-Aug. 1830</th>
<th>Sept.-Dec. 1830</th>
<th>1831</th>
<th>1382</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>simple crowd</td>
<td>30.8</td>
<td>22.2</td>
<td>23.5</td>
<td>12.0</td>
<td>15.1</td>
<td>17.4</td>
</tr>
<tr>
<td>Ideological group</td>
<td>0.0</td>
<td>29.6</td>
<td>5.9</td>
<td>24.0</td>
<td>28.8</td>
<td>22.6</td>
</tr>
<tr>
<td>Occupational group</td>
<td>23.1</td>
<td>11.1</td>
<td>21.6</td>
<td>12.0</td>
<td>6.2</td>
<td>11.1</td>
</tr>
<tr>
<td>Repressive force</td>
<td>7.7</td>
<td>25.9</td>
<td>33.3</td>
<td>42.0</td>
<td>41.8</td>
<td>37.3</td>
</tr>
<tr>
<td>Other</td>
<td>38.5</td>
<td>11.1</td>
<td>15.7</td>
<td>10.0</td>
<td>8.2</td>
<td>11.5</td>
</tr>
<tr>
<td>Total</td>
<td>100.1</td>
<td>99.9</td>
<td>100.0</td>
<td>100.0</td>
<td>100.1</td>
<td>99.9</td>
</tr>
</tbody>
</table>

Number of Formations: 13 27 51 50 146 287

Chi-square, 16 d.f. = 39.1, p < .01
The shifts in participation during this period are worth noting in detail, for they demonstrate a number of changes suggested by our model. Overall, Table 2 shows a broad trend toward the politicization of violent collective conflict. The "simple crowd"—any group recruited simply by virtue of its members having been in one particular place at a particular time—decreases in proportionate participation from its pre-revolutionary high to a markedly lower level during 1831 and 1832. In general, the proportion of participation of occupational groups also decreases, except during the immediate post-revolutionary period, when the protests of wine-growers and certain urban working-class groups apparently swells the rate. Growing over time, however, are the rates of participation by repressive forces—police, army, national guard, etc—and "ideological groups." The latter are formations which, in our judgment, were recruited and defined in terms of allegiance to some specific political position or grouping. The increase in participation by these two groups suggests that, with the revolution, the business of acting out violent conflicts became very much a matter for specialists—the agents of the government, on the one hand, and activist representatives of various political tendencies, on the other.

To some extent, certain of these differences may stem from the limitations of our knowledge of this period. The readers and coders may, in some cases, have interpreted the presence of formations in a more ideological light simply by virtue of the fact that the revolution had occurred. Nevertheless, the broad outlines of changing participation which we have derived from Table 2 are probably accurate. The participation of repressive forces, for example, rose as the new government strove to fix its control over the polity. The
frequencies of participation by repressive formations for 1830-1832 were as follows:

<table>
<thead>
<tr>
<th>Period</th>
<th>Percent of Disturbances in which Repressive Forces were Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan.-June 1830</td>
<td>17</td>
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<tr>
<td>July-Aug. 1830</td>
<td>43</td>
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<td>Sept.-Dec. 1830</td>
<td>59</td>
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<td>1831</td>
<td>78</td>
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<td>1832</td>
<td>82</td>
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<td>1830-32</td>
<td>70</td>
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Since repressive formations -- troops, police, National Guards and other armed forces employed by governments -- are relatively easy to identify in our records, there seems little doubt that a major change in the character of violent encounters occurred as the revolution moved on. As the survivors of the revolutionary coalition sought to consolidate their control over the government, they increasingly used organized force against their enemies.

Although they have rarely been documented as systematically as they are here, the politicization of collective violence and the rise of repressive formations after the transfer of power are well known to historians of revolution. The promulgators of natural-historical schemes for revolution ought to consider those two phenomena carefully, for they identify some serious difficulties in the schemes available to us so far. First, the strong variation in participation from group to group and time to time renders implausible (or at least inadequate) those theories which trace revolution back to a generalized state of tension or frustration. We have not undertaken the demonstration here, but it does not appear that in any
reasonable sense of the words the participants were drawn from the tensest or most frustrated segments of the population, or that the change in the structure of disturbances corresponded to a shift in the distribution of tension or frustration in the population at large. Changes in the power relationships of politically active groups at the local and national levels lay behind the variations we have detected.

Second, the rising prominence of repressive forces in these violent conflicts bespeaks the heavy involvement of governments in the struggles behind them. It is therefore improper to attribute the successive phases of a revolution to changes in the orientation of the population at large or even to changes in the position of some single group of "rebels." An adequate theory has to deal with relations among contenders and governments.

Third, both the politicization and the rise of repression grow from two large processes which are central to revolution, but have little place in natural-historical theories of revolution: 1) the struggle of those who have seized power to reimpose control over the rest of the population, which often produces a wider and fiercer conflict than the initial transfer of power; 2) the breaking up of the revolutionary coalition, and the effort of some members of that coalition to exclude others from power. These are the processes which tend to produce far higher levels of collective violence after the initial revolutionary transfer of power than before it. Among natural-history theorists, Crane Brinton (an expert historian of the French Revolution) and Pitirim Sorokin (an active participant in the Russian Revolution) were well aware of these processes; in general terms, however, both of them attributed these processes to the confrontation between a tendency of the most ruthless,
extreme revolutionaries to succeed their moderate brethren, and the intoler-
ability of extremism to ordinary people. Neither of these principles explains
much of 1830's natural history.

Nor is 1830 a special case, except in the sense that all revolutions
are special cases. The parallel data we have assembled for the French revolution
of 1848 (see Tilly 1969c, 1970a) fall into similar patterns: widespread
resistance to the reimposition of central control, violent post-revolutionary
struggles among the members of the revolutionary struggles among the members of
the revolutionary coalition, important shifts in the geographic pattern of
violence corresponding to the oscillating struggle for power, far higher levels
of involvement after the initial transfer of power, and so on. We do not have
the same sort of systematic data for the great revolution which began in 1789;
we recognize, moreover, that the events of that revolution had a far wider
impact than did those of 1830 and 1848. Within the limits of the generaliza-
tions we have offered, nevertheless, the 1789 revolution also appears to
exemplify the pattern. That should hardly be surprising, since it was our
reflection on 1789 and its aftermath which first led us toward rejecting
natural-historical models and formulating our alternative model.

There are, of course, some difficulties in our argument and in the
evidence we have offered for it. We have not provided reliable criteria for
identifying contenders for power or indexing their relative position independently
of the revolutionary struggles we propose to explain; instead, we have relied
on scholarly consensus concerning the main blocs involved in the revolution of
1830. Such a consensus often does not exist. Even where it does, it can
hardly form a reliable basis for the sort of comparable measurement over many
cases which the verification of our argument would require.

Again, our scheme yields only rather weak inferences concerning the kinds of countries and/or periods in which revolution is likely. It does little more than redirect the search away from general tempos of structural change or broad levels of tension toward the formation of political coalitions successfully making certain kinds of claims.

Finally, the evidence presented in this paper raises doubts about conventional natural-historical analyses, but it is insufficient to rule out a number of alternative interpretations of revolutionary processes -- including the more sophisticated frustration-aggression formulations which have been appearing in recent years. We are inclined to believe that the frustration-aggression road, too, turns into a blind alley, if not the same one to which natural history leads. But there we may be proved wrong. However the search among the intellectual avenues now open to the student of revolution finally turns out, it will surely take us to a much more explicit theory of the political process itself than modern sociologists and psychologists of revolution have been willing to employ.
References


Libaudière, F. Précis des événements de 1830 à Nantes. Annales de la Société Académique de Nantes, 1905, 8th s., no. 6, 81-83.


