

POLITICAL SCIENCE QUARTERLY

SOCIAL SELF-CONTROL

AT a meeting of the inhabitants of Dorchester, Massachusetts, on October 28, 1634, it was "agreed that whosoever is chosen into any office for the good of the plantation, he shall abide by it or submit to a fine as the company shall think meet to impose." Less than a week later, on November 3, it was "ordered that no man within the plantation shall sell his house or lott to any man without the plantation whom they shall dislike of."¹

In voting these measures the people of Dorchester only made definite and explicit a general policy adopted by all the early New England towns, and for a long time adhered to. No one was a franchise-exercising member of a town until he was formally admitted as a freeman, and at the outset church membership was a condition.

Historically interesting because of the conditions which it was intended to meet and because of the specific tests that were applied in carrying it out, this policy was not new or exceptional as a phenomenon of community action. Since human beings began to dwell together in groups and to work together in bands or companies, the groups and the bands have exercised supervision over their membership and over the conduct of their members. On a larger scale than ever before in human history, the United States today, through its immigration and naturalization laws, exercises supervision over the membership of a national community; and our local state and federal laws

¹ Fourth Report of the Record Commissioners of Boston (1880), document 9, pp. 7, 8.

probably comprise the largest body of rules of conduct ever enacted by a politically organized population for the regulation of individual life.

It is not for the purpose of recalling a chapter of American history, however interesting it may be in itself, that these facts are here set down. They are given because they happen to exhibit clearly a social phenomenon that has been overlooked or forgotten in the construction of social science, but which may prove to be the point of departure for important discriminations.

The minutes cited from the Dorchester record quite plainly show that the inhabitants of that town were looking after the make-up of their community and the conduct of its members for at least two distinct purposes. The resolution that a man chosen to office must undertake its duties or pay a penalty shows that the Dorchester folk assumed that they were collectively *doing something*, not idly enjoying the pleasure of neighborly association while pursuing merely individual ends. Translated into the compact language of these latter days, the resolution tells us that the townsmen of Dorchester understood that they were attempting "team work," and that every man in the enterprise must accept that particular part of the task which "the team" assigned to him. The second resolution manifests an alert consciousness of the importance of group cohesion, a thing even more essential than individual efficiency as a factor in common enterprise. The members of the community must be agreeable one to another. The man "disliked of" should be kept out.

Let us now apply a bit of analysis to these elementary facts. The common activity of a community of the simpler sort—a neighborhood group of farmer folk, for example—may be extremely slight. Its team work may for a long time be potential only, a mere readiness to undertake the common defence, if necessary, or to coöperate in some emergency, as of flood or fire. In a large and complex community the team work is actual, often energetic, carefully organized and extremely varied. It provides for the common safety. It engages in the

production of wealth. It establishes and maintains those rules of the game which collectively are called law, and it carries on government to ascertain and to apply the common will.

But whether actual and organized or only potential and unformed, the collective activity of any group of human units obviously presents to scientific view two unmistakably different aspects. A community collectively does things *for* itself—that is, for its members—and it collectively does things *to* or *upon* itself, scrutinizing and determining its membership, scrutinizing and censoring conduct. It does things collectively for itself, because experience has shown that many things can be accomplished by collective action or team work that cannot be accomplished adequately or at all by individual effort. It does things to itself, because experience has shown that not every aggregate of individuals can carry on team work effectively or even live together amicably.

This differentiation of social function into collective action for and collective action upon society would seem to be fundamental. If it is, we apparently have here the point of departure for a working distinction between certain special social sciences and a more general science of society. It is clear, for example, that the economist, in studying the social production and distribution of wealth, is primarily investigating the action of the community in doing an important work for its productive units. He concerns himself only incidentally with the reactions of economic activity upon the social composition and structure. In like manner the jurist, in studying the nature and the evolution of legal relations and activities, and the student of political science, in examining the nature and the evolution of government, are primarily looking at social functioning as it bears directly upon the well-being of component elements of society, although incidentally or secondarily they may be interested in consequent modifications of the integral social order. On the other hand, a student who has followed the genesis of the community itself and has observed that sooner or later it becomes aware of itself as a community and begins consciously to react upon itself, may then direct his further inquiries upon the nature, scope and consequences of the reaction. If he does

this, he is engaged upon investigations which, in recent years, have been grouped under the name of general sociology.

In offering this distinction between general sociology and the special social sciences, I suppose that I am not making an essentially new generalization; certainly I am not doing violence to usage. For the distinction itself, I think, has unconsciously grown up in usage, and I am here merely recognizing it, pointing out the two distinct aspects of social functioning upon which it rests and putting it in explicit terms for more convenient application.

Assuming, then, that general sociology, whatever else it may comprise, is particularly concerned with the phenomenon of social self-control,¹ including under this term the social determination of the composition of the community, the control of conduct, the promotion of efficiency, the shaping of social organization and the determination of general policies, we may further look at the whole subject in certain other lights, hoping so to get a more rounded notion of what social self-control is, how it arises, what it does and by what methods it may be subjected to effective scientific study.

All nations compel their subjects to live under restraints and to perform prescribed acts. So far as their observed conduct goes, subjects must be loyal, whether or not they are patriotic at heart. In a lesser degree the modern nations constrain their subjects in accordance with some prevailing idea of the common good. The protective tariff, for example, does not altogether prevent, but it restricts, the purchase of desired commodities produced abroad.

Within the broad limits fixed by national policy, states and municipalities regulate the individual lives of their citizens in endless detail. From birth to death the pressure of organized society is hourly felt by its conscious units. Parental authority is restrained within bounds which the state prescribes. At the command of the state the child is taught and drilled. Growing

¹ In employing this term I am not trying to improve upon the phrase made familiar through Professor Ross's admirable book on "Social Control" but am only examining some aspects of social control more particularly.

to manhood, he orders his walk and conversation as the state instructs, or he languishes in jail.

If the citizen, thus reared and moulded by an external power manifesting itself through government and law, happens to be a religious as well as a political animal, he finds himself subjected to further rules and orders. The church to which he belongs exacts an obedience sanctioned by penalties which may be as fearsome to his mind as are the fines and imprisonments imposed by a secular power. If he earns his bread in the sweat of his brow, he discovers that he is only partly free to work as he pleases, or when or as long as he pleases, or to make such contracts as his own best judgment approves. The "walking delegate" finds him out and instructs him in the ethics of industrial solidarity. If in idleness he consumes the substance that other men have provided and, in the quiet of his club, seeks refuge from the over-regulated life of a Philistine world, even there he encounters the rules committee taking cognizance of his language and his drinks, and standing ready to exclude him if he oversteps the line of that conduct which is reputable among gentlemen.

In barbarian and in savage communities the collective regulation of life is not less but greater than it is in the civilized state. The bounds that may not be overstepped are narrow and dread. Immemorial custom is inflexible, and half of all the possible joys of existence are forbidden and taboo.

Even in animal bands and herds, individual behavior is constrained. Inadequate or obnoxious members of the company are abandoned, expelled or killed by their fellows. We do not know that in animal groups there is any coöperative understanding in these matters. We can hardly suppose that there is. But through like response to the same stimulus or to similar stimuli, through example and imitation, through suggestion and impression, a real although non-reasoned coöperation is effected. While, therefore, we may not say that animal society abides by rules, we observe that it lives by usages or habits from which a member departs only at the risk of life.

There would be no excuse for bringing forward observations so commonplace as these if the general truth which they thrust

upon us had not been very nearly left out of consideration in our attempts to establish the broad conceptions of a science of society. Whatever else society is, it is a group of units and relations which collectively acts under self-direction. It not only manifests a continuing process, as brain and nervous system manifest the processes of mind, as organic matter manifests the processes of life, but also, like living matter and like mind, it controls its own processes. Society constrains. Unconsciously at first, but consciously in its later and higher development, it brings pressure to bear upon its component units. It incites and restrains them. It trains and moulds them. It conforms them to a norm or type and sets limits to their variation from it.

Here, then, we have a generalization of significance. *Society is a type or norm or mode, which in a measure controls the variations from itself.*

In thus functioning, society, by instinctive and by rational effort, carries further and brings to greater precision that process which in its unconscious mode we call natural selection. In the organic struggle for existence those individuals and those groups survive which are adapted to the conditions under which they dwell. This is only another way of saying that organisms which in some fortunate way combine certain structures, qualities and traits, and which, therefore, conform closely to a type that happens to be suited to a given place, can live there; while individuals or groups that vary too widely from this type sooner or later fail there to perpetuate their race. Or, to put it in yet another way, in every inhabitable region there is an environmental constraint, compelling conformity of organic structure and of life to certain adapted or adaptable types, from which variation is possible only within somewhat definite limits.

It is because of this conformity to type that society arises. Typical units or individuals of a given species or variety are alike so far as they are typical. Animate individuals that closely resemble one another respond in like ways to the same given stimulus or to similar stimuli. So organized and respond-

ing, they want the same things and by similar behavior try to obtain them. If the supply is inadequate for all and some part of it can be obtained by individual effort, like acts develop into competition. If the supply is adequate for all but cannot easily be obtained by individual effort, the like efforts of many individuals directed toward the same end develop, unconsciously or merely imitatively at first, but afterwards, in mankind, rationally, into coöperation. In either case, those adaptations which the animate organism, in common with all others, makes directly to its environment in general, are supplemented by a set of highly complicated adjustments made to the similar adaptations of other units like itself.

These adjustments of animate individuals to the like adaptations of other individuals of their own kind are the bases of social relations. Repeated and developed into habits, they create and establish those relationships which we call social organization.

The similarity which is antecedent to all these adjustments and relations becomes to some extent an object of consciousness in all associating creatures of the higher varieties. Appearing first as sympathy, it develops into a perception of likeness and at length, in mankind, into a more or less rationalized understanding of resemblances and differences, of agreements and dissensions. Step by step with this evolution of a consciousness of kind, the importance of "kind" itself is apprehended. Fundamental identities or similarities of nature and purpose, of instinct and habit, of mental and moral qualities, of capacities and abilities, are recognized as factors in the struggle for existence. To the extent that safety and prosperity depend upon group cohesion and coöperation, they are seen to depend upon such conformity to type as may suffice to insure the cohesion and to fulfil the coöperation.

Conforming to the requirement of group life—which itself is a product of the struggle for existence—animals instinctively, human beings instinctively and rationally, manifest a dominant antipathy to those variations from type which attract attention. There are striking exceptions to this rule, as there are to nearly all rules of behavior by organic units. But the rule is beyond

question. From the insects to the highest mammals, individuals deformed or queer are commonly objects of instinctive or imitative attack and may be put to death by their fellows. Death or abandonment usually overtakes the conspicuous variates among savages and barbarians, while in civilized communities they are objects of suspicion and avoidance, or of guardianship or restraint, according to the state of enlightenment and the degree of humane feeling.

How far individual conduct in communities of social insects and gregarious animals is forced into conformity to type by a social, as distinct from an environmental, constraint, it is not possible on the basis of present knowledge to say. That the dead uniformity of human conduct in savage and barbarian communities is immediately a product of social constraint—largely spontaneous, imitative and unconscious, but also partly conscious and deliberate—and only remotely and indirectly a product of environmental constraint, is a fact too familiar to call for demonstration. By the conscious coöperation of elders in directing the rearing of children by young parents, by organized initiation ceremonies, by clan and tribal councils, each new generation is remorselessly trained in those beliefs, habits and loyalties which the group regards as vital to its existence. Carefully analyzed, the entire mass of inculcations and restrictions whereby individual behavior is controlled in uncivilized society may be seen to be a means of enforcing conformity to type, of recognizing and maintaining a “kind,” for the ulterior purpose of ensuring group cohesion and coöperative efficiency.

The restraints, the inculcations, the obedience-compelling devices of civilized society are so varied and so interlaced that they easily mislead, and it is only after long and comprehensive study of them that one begins to grasp their nature and function. Stripped of all adventitious features, they one and all are means to the same general end which is served by social constraint in barbarian, in savage, in animal communities. They determine, limit and control variation from type, now extending its range, now narrowing it and compelling a closer conformity.

A word must here be added regarding the consequences of

social control. Society constrains. What are the effects of constraint?

The proximate results are new or wider uniformities of behavior and ultimately of character. Life is made so difficult for the variates that stray too far from type that they go down in the struggle. Society, in a word, creates artificial conditions of existence which affect selection, as natural conditions do, by determining a selective death-rate. When, for example, a Christian civilization compels a savage population to wear clothes, it kills off those individuals whose viscera cannot adapt themselves to the unaccustomed burden. When society increases its educational pressure, it eliminates some who cannot endure further nerve strain or whose reproductive powers fail under the increased requirement of individuation. Social constraint then creates artificial conditions, which act selectively upon the associated units.

From a human point of view, such selective action may be good or evil. It may tend to produce and to perpetuate a stock of which intelligent minds think well, or one of which they think ill. From the point of view of the evolutionary process, the selected and surviving stock may be one which perpetuates its line with diminishing or with increasing cost to the individual. Assuming that race perpetuation with diminishing cost to the individual, or with actual increase of individual opportunity and happiness, is worth while and is, substantially, the thing which mankind calls progress, we may say that social constraint makes for progress or against it.

Summarizing the foregoing observations, we note that the unconscious evolutionary process in nature creates types. Because they conform more or less closely to type, animate organisms of the same variety or kind want the same things and in like ways try to obtain them. The various primary adaptations to environment, therefore, are inevitably supplemented by adjustments made by each individual to the similar adaptations of fellow-individuals. Group relations in which both competitive and coöperative activities are carried on—unconsciously or only imitatively at first, but presently, in the human

species, deliberately—therefore necessarily appear. Society comes into existence. The conscious units of human society become increasingly aware of differences and resemblances among themselves. They apprehend the extent of their conformity to type or kind. The belief arises among them that in most instances marked departure from type is dangerous to the safety of the group or is a limitation of coöperative efficiency. Conformity to type is regarded as contributing both to the safety and to the efficiency of the group. Out of this notion grow conscious efforts to increase conformity, to scrutinize the “kinds” and to limit the range of variation. A social constraint is consciously evolved which exerts its pressure upon all component units of the group. Like environmental constraints, social constraint affects selection. In the long run it makes itself felt in the selective death-rate. The kind or type that survives under social pressure is believed by the conscious units of society to be relatively efficient in the struggle for existence. It is supposed also to be relatively individualized. A group or community in which increasing individuation is secured without imperiling race maintenance thinks of itself as progressive.

These phenomena present four general problems for scientific investigation, namely: first, the general problem of the origin and evolution of society; second, the general problem of social constraint and the conformation of behavior and character to type as the immediate and general function of society; third, the problem of the effect of social constraint upon selection; and fourth, the problem of the final consequence of social constraint conceived as an amount or a rate of progress.

The scientific investigation of these four correlated problems is the task of the sociologist. Sociology is the science of the origin, the process, the extent and the results of type control of variation from itself, within a group or population of more or less freely associating individuals.

The foregoing account or interpretation of social phenomena is reasonably clear, I hope, to readers familiar with the ideas and the terms employed in the evolutionist explanation of the natural world. Perhaps it is not altogether clear to minds un-

familiar with evolutionist literature and accustomed in their thinking about social relations to use only the familiar terms of every-day experience—terms of history, of politics and of business or of religious, educational and philanthropic activity. It may be useful, therefore, to translate into these more familiar terms the conceptions above presented.

How does any given social organization, as a church, a trade union, a political party or a state, secure conformity among its members to certain standards of belief and practice, to preferred models of deportment, and the maintenance of a certain efficiency in coöperation? The child or the wayfaring man can answer. It offers rewards; it inflicts disabilities and punishments. By praise and blame, by avoidance and rebuke, by indulgence and license, by penance and fine, by suspension and expulsion, by corporal punishment and maiming, by imprisonment and execution, men are forced to desist, to obey, to help; their conduct is educated into habits; their efforts are stimulated or goaded to acceptable degrees of intensity and persistence; their characters are moulded to approved types.

For all these processes of social constraint and regulation in their entirety, society has its own descriptive name. Collectively they constitute the thing familiarly known as *discipline*.

The creation and perfecting of discipline, the standardizing of conduct and character by means of discipline, has been the work upon which society has directed its conscious efforts from the beginning. At first instinctively, afterwards more or less rationally, it has discovered, applied and tested the various disciplinary measures. The object in view from the first has been to diminish the failures and to multiply the successes of gregarious animals, of associating human beings, in the struggle for existence. And the particular methods constituting discipline have been employed in the conviction that much conformity to kind or type or standard is essential to security and to coöperative efficiency.

Society, then, in the simple language of every-day life, is an organization for the promotion of well-being and efficiency by means of standardization and discipline.

This is the same thing as to say, in evolutionist terms, that

society is a type, controlling variation from itself for its own survival and further evolution. Discipline, from the evolutionist point of view, is a distinct phenomenon, differing in kind, rather than in mere degree, from all others. Motion, the activity of all matter, inorganic or organic; metabolism, the activity of organic matter; response to stimulus, the activity of animate organic matter; discipline, the activity of type-conforming conscious groups—this is the series of natural phenomena. Physics and chemistry, biology, psychology and anthropology, sociology—these are the corresponding sciences.

Sociology, accordingly, defined in the language of ordinary life, is the science of the phenomena of discipline, including the study of their rise and evolution, their nature, methods and extent, and their consequences, both for the community as such, and for the individuals which compose it.

Material for the descriptive and historical study of the evolution of discipline and of the relations of discipline to efficiency, to individuation and to survival, is abundant. Descriptive and historical sociology is already well advanced. From the nature of the social phenomenon, as consisting essentially in partial control, by a type, of variation from itself, it is one which pre-eminently calls for precise or quantitative study by the statistical method.

In making this last affirmation I am assuming that the phenomenon of type as it appears among natural objects, including forms of plant and animal life, as it appears in mental processes and in conduct, and as it appears in the groupings and the collective activities of individuals socially organized, can always be expressed in the statistical terms of "frequency" and "mode." In other words, a type or norm can always be resolved into numerical elements. In biology and in psychology the conversion of data into numerical form and their subsequent analysis by statistical methods have already placed these sciences on a basis of approximate exactness. There is no reason for supposing that the statement of essential data in numerical terms is by nature of the facts more difficult in sociology than it is in other sciences.

It is, therefore, not because of the nature of its problems that sociology has made slow progress toward good scientific form with consequent power of prevision. Its halting pace has been due in part to failure to perceive the exact nature of its subject-matter and of its problems, in part to the past and present lack of adequate collections of statistical data. More largely, however, I am disposed to think, our slow progress may be attributed to our failure hitherto to comprehend a great process of social evolution which has been going on under our eyes, and which already has been numerically described in statistical reports, the full significance of which we have not yet quite apprehended.

The clustering of individual measures, or of their frequencies, about an average or a mode may be conceived as a consequence of pressure exerted upon them. In biological and psychological statistics we assume that conformity of living forms or actions to a type is a consequence of various environmental constraints. Social types, kinds, classes are produced in part by constraints deliberately imposed by the community or the class upon its units. Discipline is created and applied with conscious intent. It is of primary interest, therefore, to inquire whether it is possible to measure or at least to obtain a fairly sensitive index of the strength and the distribution of (1) disciplinary or constraining intent, (2) the disciplinary or constraining effect.

At this point it may be well to explain that disciplinary intent and disciplinary effect may otherwise be described as consequences of primary and secondary social pressure. Conscious disciplinary intent, exhibited by a community or by some portion of it, is itself a consequence of a social pressure, partly unconscious and more or less unconsciously brought to bear upon individual minds. In other words, a common intent or purpose is a product of innumerable suggestions, examples, imitations and discussions and of a diffused approval or opposition, all combining in a constraint to which every individual is subjected. This is the primary social pressure. It is measured by the amount of common purpose or intent which it creates. Accordingly any measure of common intent is a measure of primary social pres-

sure. But common intent, in its turn, exerts a disciplinary constraint which is more or less effective. It actually does, or fails to do, the thing that it desires and undertakes. If we could obtain a statistical measure of actual disciplinary achievement through consciously exerted social constraint, we should have a measure of secondary social pressure.

In an article on "The Measurement of Social Pressure,"¹ I have suggested a method for obtaining index numbers from an analysis of the statutory enactments of legislative bodies. Whatever else it may be, statute law is undeniably an expression of social intent and is, therefore, a measure of primary social pressure. The index numbers that I have suggested would not be absolute measures of the disciplinary intent of society, any more than the familiar index numbers of prices are absolute measures of economic values. But like index numbers of prices, they would indicate the frequency and the extent of fluctuation.

For the measurement of secondary social pressure, or the actual effect of social pressure upon individuals, we do not at present possess the requisite statistical data, and it must be admitted that the difficulties in the way of obtaining them for any large population are serious. On a small scale, of course, disciplinary effect can be studied statistically; for example, in the schoolroom, in the church, in the factory, in the trade union and in the army. And it may be anticipated that intensive studies within these groups will have value. But for the statistical investigation of the effects of social constraint exerted on a large scale and over a wide field, we must seek our data in collections of facts relating to other than the individual elements of society.

There are other elements, and it was to them that I referred a few paragraphs back, as affording statistical material, the significance of which has not hitherto been fully apprehended. Modern political communities are continually reacting not only upon their elemental units, human individuals, but also quite as extensively upon the component and the constituent groups

¹ *Quarterly Publications of the American Statistical Association*, March, 1908.

which enter into their highly complex organization. The empire or federal nation reacts upon its component nations or commonwealths, and the commonwealth upon its component municipalities and townships or towns. With even greater energy and insistence, nation and commonwealth at this present time react upon those artificial persons created by the state, the corporations. In much the same way in which the small communities discipline their individual members and compel them within a tolerated range of variation to conform to type, nations and commonwealths enforce conformity to type by towns, municipalities and corporations, controlling to some extent their composition and prescribing in much detail their conduct. This disciplinary activity of society on a large scale is, as a thing of necessity, kept track of and described in official reports, most of them statistical. We have, therefore, a mass of numerical data, much of which is available for a strictly scientific analysis of the extent and intensity of secondary social pressure within the nation and the commonwealth.

In the hope that, by calling attention to this large opportunity for sociological research, I may persuade adequately trained students to undertake promising investigations, I wish to mention here some of the feasible points of attack.

The determined but unsuccessful attempt made by the federal government, after the Civil War, to compel the reconstructed southern states to grant full political and civil rights to the enfranchised negroes, has been studied exhaustively by the methods of the historian and the constitutional lawyer. It should be re-analyzed by the methods of the sociological statistician. Just how extensive were the forces brought to bear? How much did they increase and decrease by five-year periods, from 1865 to 1895? In like manner, what were the forces of resistance numerically described? Grouping the figures by five-year periods, what local areas, *i. e.* counties, successfully resisted the federal pressure, until entire commonwealths began to devise the ingenious legislation whereby in the end nearly the entire negro voting population was eliminated from political contests?

Turning to the constraint exercised by commonwealths upon

their component cities and towns, there have been, since the Civil War period, two interesting examples which could be subjected to statistical examination. A period of enthusiasm for railroad building was marked by the reckless haste of towns and townships in all parts of the northern half of the United States to bond themselves in aid of new railroad enterprises. When insolvency threatened both towns and the taxpayers, a sharp reaction set in, and commonwealths, east and west, enacted legislation forbidding towns to assume such obligations. More recently, the enormous increase of municipal indebtedness has provoked drastic action in some of the states, including New York, fixing a legal limit for municipal borrowing. A hard and fast limit is vigorously opposed by powerful interests, and is disapproved by others. Apparently we are to see a struggle to make the limit by various devices practically elastic. This should afford an exceptionally valuable lot of numerical data for the statistical measure of a fluctuating social constraint, and, examined in the light of the contrast it is likely to offer to the history of the summary suppression of the town-bonding craze, such a study should be instructive.

Contrasted with that constraint of municipalities and towns which takes the form of imperative command to perform or to desist, is a mode of pressure which has rapidly been increasing in recent years. It is applied through the activity of state commissions, having little or no power arbitrarily to compel but large powers of persuasion and inducement. Those whose studies have not made them familiar with this peculiarly modern development of governmental action would be astonished were they to look through an adequate statistical exhibit of the work that has been accomplished by state commissions in standardizing the local administration of sanitation, education and poor relief. The facts presumably offer a delicate measure of fluctuating social pressure, and this measure the sociological statistician should attempt to derive from them.

Of all the processes of social evolution, past or present, none is of greater interest, and none makes more powerful appeal to scientific intelligence by reason of the magnitude of the interests involved, than the struggle for mastery now going on be-

tween integral society and the corporations. It is nothing less than a trying-out of the issue of sovereignty, not as spectacular as was the conflict between the nation and the rebellious commonwealths in the Civil War, but quite as real. It is a conflict that does not admit of compromise, between bodies created by the state but now controlling the capitalized wealth of the nation, on the one hand, and the politically organized people of the nation, on the other hand, to determine which has the power to compel obedience and thereby to rule. The issue is not doubtful. Already it is foreseen and discounted. The politically organized people are bringing a pressure to bear upon their legally created subjects which is irresistible, and which will compel so much conformity to type in matters of form, of dimensions and of obedience as experience may show to be expedient. For the interpretation of the experience we shall need the most exact statistical analyses.

Wherever the pressure applied is elastic, the resulting effects afford good data for statistical determinations of degree. Among the best examples for this purpose are those afforded by public regulation of banking, insurance and railroad corporations.

The national banking laws, by a nice adjustment of pressure, have created a dominant type of banking institution, without forbidding or destroying all variations from it. A careful statistical analysis, therefore, of the rise of the national banking system, including the rate at which the national bank displaced its predecessor, the state bank, the subsequent revival of state banking enterprise and the evolution of the trust company, should afford a satisfactory measure of the fluctuating extent and intensity of a social pressure that has been directed upon one class of corporate organizations. Even more instructive in some particulars would be a similar study of the state control of insurance company organization and enterprise, because in this field the different commonwealths have exhibited differing purposes and have followed differing methods. Most enlightening of all, when we get it, will be the statistical analysis of the public control of railway organization and conduct, because here we have the effect of a dominant and central constraint, exercised through federal law and the Interstate Commerce Com-

mission, supplemented by the varying efforts of the commonwealths, producing local variations in results.¹

The statistical studies that have here been suggested are only a few of the relatively simple and more generally interesting ones among a large number that I hope will some day be undertaken. The percentages, the index numbers and the coefficients of variation that could be obtained by any one of them would of course not suffice to measure the varying constraint of society upon the totality of its component and constituent groups. Each would measure one particular line of

¹ As an illustration of method (as perfected by H. L. Moore, *cf.* POLITICAL SCIENCE QUARTERLY, vol. xxii[1907], p. 64) the following tables are offered. The pressure of the federal government upon the railroad corporations to equip all passenger and freight cars with the train break and the automatic coupler has been practically constant for more than ten years. The detail of the tables shows the extent of standardization. The diminishing coefficient of variation shows the increasing uniformity of non-resistance and active compliance throughout the ten territorial groups in which the Interstate Commerce Commission has placed the railroads of the country.

EXTENT OF USE OF TRAIN BRAKE AND AUTOMATIC COUPLER, 1897

RAILROADS	TOTAL CARS IN SERVICE	CARS WITH TRAIN BRAKE	PER CENT WITH TRAIN BRAKE	CARS WITH AUTOMATIC COUPLER	PER CENT WITH AUTOMATIC COUPLER
Group I . .	58,159	24,728	47.50	34,116	58.66
Group II . .	396,272	127,559	32.08	229,346	57.88
Group III . .	246,198	71,308	28.92	123,080	49.89
Group IV . .	54,811	15,695	28.63	23,864	43.63
Group V . .	82,906	17,153	23.00	28,493	34.39
Group VI . .	257,934	116,262	45.20	145,324	56.45
Group VII . .	36,783	24,705	67.25	22,443	61.19
Group VIII . .	97,082	52,695	54.31	33,571	34.50
Group IX . .	28,728	13,828	48.48	11,786	40.78
Group X . .	38,607	28,626	74.21	16,914	43.82
United States.	1,297,480	492,559	38.03	668,937	52.32
		Average of per cents .	44.96	Average of per cents .	48.12
		Standard deviation.	16.19	Standard deviation.	9.52
		Coefficient of variation.	36.01	Coefficient of variation.	19.79

social pressure only. But when we have obtained a large number of particular measures, we can begin to group and to analyze them also, as we grouped and analyzed their data, observing whether they disclose a central tendency. A final analysis, then, would show us the fluctuations of secondary social pressure in general, its tendency on the whole toward increasing scope and intensity of constraint or toward relaxation.

The question may naturally and properly be raised whether numerical measures of social constraint, both primary and secondary, would afford us any knowledge of social causation or of the trend of social evolution that we could not more directly obtain by other methods of inquiry. The same question was raised when exact statistical methods were introduced in biology, in psychology and in economics. We may confidently anticipate that the conclusive answer which trial and demonstration have afforded in those sciences will be reached and accepted in sociology also.

EXTENT OF USE OF TRAIN BRAKE AND AUTOMATIC COUPLER, 1907

RAILROADS	TOTAL CARS IN SERVICE	CARS WITH TRAIN BRAKE	PER CENT WITH TRAIN BRAKE	CARS WITH AUTOMATIC COUPLER	PER CENT WITH AUTOMATIC COUPLER
Group I. . .	72,739	68,277	93.88	69,995	96.18
Group II. . .	528,683	502,136	94.90	525,426	99.38
Group III. . .	401,728	376,723	93.82	399,649	99.48
Group IV. . .	117,998	111,720	95.18	116,357	98.60
Group V. . .	175,232	165,525	94.50	173,821	99.19
Group VI. . .	431,538	401,913	93.15	426,457	98.79
Group VII. . .	66,148	62,452	94.30	64,375	97.25
Group VIII. . .	188,619	178,544	94.68	187,505	99.43
Group IX. . .	57,879	53,993	93.30	56,296	97.65
Group X. . .	86,030	83,412	96.95	84,646	98.46
United States.	2,126,594	2,004,695	94.25	2,104,527	98.90
		Average of per cents .	94.47	Average of per cents	98.44
		Standard deviation.	1.02	Standard deviation.	1.01
		Coefficient of variation.	1.08	Coefficient of variation.	1.02

A simple illustration may help to make the point clear. The temperature of the human body in health fluctuates within narrow limits about the normal of 98.5° Fahrenheit. Under the physiological disturbance of disease or of shock, the range of variation is greatly widened, and every one acquainted with modern medical practice, in hospitals and elsewhere, knows how closely the temperature curve is watched by nurses and physicians. In most cases the fact of illness or of shock is known independently of any scrutiny of the chart. But there are instances, sometimes critical ones, in which the temperature fluctuation affords the first warning; and in all cases it affords the warning that possesses the qualities of exactness and degree, and upon precisely these qualities the issues of life and death may turn. In other cases the condition of the system is made known by a blood test that is statistical in form, consisting in a count of corpuscles exhibiting certain characteristics.

It is reasonable to suppose that the social constraint which in any given community bears upon individuals and upon component or constituent groups is, under ordinary conditions, of a degree and an extent that might properly be described as normal, and that any considerable fluctuation from normal, could we measure it, would immediately make known to us the action of disturbing forces. The value of such knowledge can hardly be overestimated. The question, how much restraint, how much liberty, how much conformity to type, how much variation from it, are conducive to the general welfare, is the supremely important question in all issues of public policy. The right answer to it turns upon the determination of a previous question, namely, what is normal social constraint in a given community, at a given stage of its evolution, and what at a given moment is the actual range of fluctuation?

To obtain, then, determinations of normal social constraint for modern communities, including municipalities, commonwealths and nations, and to perfect the methods of measuring fluctuations must, I think, be regarded as the chief object of sociological effort in the immediate future. That the effort will be successful is, I am convinced, a fairly safe prediction.

F. H. GIDDINGS.

THE BALLOT'S BURDEN

WE have tried in the United States almost every scheme known in the history of politics except simple, direct, responsible government. By a strange perversity of fate, the fear of democracy and the passion for democracy have led to the same result—the creation of a heavy and complicated political mechanism, yielding quickly enough to the operations of the political expert and blocking at every turn the attempts of the people to work it honestly and efficiently. Powerful private interests find their best shelter behind a multiplicity of barriers, politicians have no desire to make plain the rules of the game, and reformers generally attack corruption or inefficiency by adding some new office or board of control. As an outcome, we now have such a complex of offices, commissions, caucuses, primaries, conventions and elections that the ordinary citizens, engrossed in the struggle for a livelihood, have been unable to maintain control over their own government, and it has fallen more and more completely into the hands of the professional politician, aptly described by Mr. Childs as one “who knows more about the voter’s political business than the voter does himself.”¹ Before we can accomplish any considerable reform in the conduct of state or municipal affairs under the present system, it is generally necessary to break down a controlling organization of experts; and to do this we must create another organization of experts which, for one reason or another, generally becomes as bad as that which it has displaced. And so the endless warfare of American politics goes on, dissipating the energies that might be devoted to the work of government in more or less fruitless contests over the possession of its mechanism.²

¹ Article on “The Short Ballot,” *Outlook*, July 17, 1909.

² President Lowell has pointed out that England “has little that resembles the two correlative types of men common in American public life, the spoilsman and the reformer.” *Government of England*, vol. ii, p. 55.