LEGAL IMPACT ANALYSIS : THE IDEAL AND THE PRACTICABLE

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Introduction

IT 1S becoming increasingly recognised that within the modern complex state the effectiveness of the law is too important a matter to be left to chance or conjecture. Informed knowledge upon the working of past laws and the possible consequences of proposed new legislation provides a setting against which both the legislature and the executive can have greater confidence that the proposed statute's purpose will be achieved. The belief that legal reform is most effectively undertaken upon a bedrock of knowledge rather than the quicksands of ignorance is the major justification for studying the effect of the law upon our society. Legal impact analysis is a tool for such endeavours.

Academic lawyers are increasingly concerned to examine the way the law works in an everyday setting and not only in the narrow confines of doctrinal or black-letter law. A country's statutes provide its citizens with a guide to the desired and acceptable forms of behaviour in the conduct of both business and everyday life. The law, in the formal sense of the statute book, may be altered by Legislative revision or by the introduction of a completely new law. Clearly the legislature must have some reason or purpose in changing the existing law. In some way the law is no longer believed to be operating efficiently in meeting a particular need. However, there is no known calculus that allows a statute to be effectively drafted so as to produce the desired effect. But the legislature is often faced with qualitative issues such as conflict of rights (those of child protection compared with those of parents to decide their children's upbringing), and of quantitative form (who will be affected by the new legislation). Legal impact analysis attempts to replace nescience by understanding.

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Nature of Legal Impact Analysis

The purpose of legal impact analysis is to record and explain how a particular law or group of subject-linked laws (tort, family) works within a particular social setting. The setting would normally be a geographical area that can be readily defined such as, the federal legislature's authority over India. Or it may be the obvious and apparent self contained legal boundaries provided by the individual states forming the federation. The Geographical area can be as small as a village, or a local institution such as a school or prison.

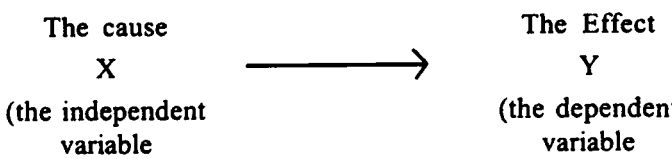
The focus of such a study is the law in action as compared with the more confined doctrinal approach that concentrates on judicial interpretation and reasoning (though the latter of course is not being dismissed as unworthy). We wish to examine the effect that a law has on behaviour and attitudes of individual citizens living within the law's jurisdiction; those individuals normally being studied as groups, communities or populations. It is the impact of the law upon people—whether they be practitioners (the judges, court administrators, lawyers), enforcers (the police, prison guards), or the recipients (the general public)—to which the researcher applies his dissecting tools. In short, the question that is being asked is how does the law work out in practice? This leads on to the related question of why should the law produce such effects? But there are many problems to be faced before any useful conclusions can be drawn from the available evidence.

The information to be sought should allow comparison to be made between the state of things (conduct/attitudes) as a result of the new law and the situation that occurred either (a) before the commencement of that statute, or (b) the likely current situation if the old law had continued unchanged. Situation (b) brings one far more into the world of conjecture, whereas situation (a) does provide the means for a more reliable and verifiable description and measurement of the old law's impact before the new legislation's introduction. The researcher is faced with the need to develop concepts that describe likely changes over a period of time. For example, a researcher might well hypothesise that one result of extending the grounds of divorce is increased marital instability. The notion of marital instability becomes a concept, which now needs indices to explain and define its meaning within the enquiry. It could be defined in objective terms such as the annual number of divorce and separation orders. Equally, subjective indices such as individual personal assessment of the quality of their own marriage would be legitimate and acceptable. Overall, the problem we are faced with is the need to record change (assuming that there has been a movement) and to pinpoint the cause of that change. At this point the legal researcher has to be aware of the meaning and importance of the terms "causality" and "association".

Issues of causality and association

The term "causality" implies that, factor (or variable) X causes the recorded effect Y. This link is summarised in figure 1.

FIGURE 1



It is useful to make some observations about the determination of causality in the world at large before narrowing the discussion down to the field of law. When assessing the nature of causality three types of evidence are relevant.

First, if X is a cause of the recorded effect Y, then we can note that an association does exist between X and Y. If heavy smoking of cigarettes (say, 25 or more per day) is a cause of lung cancer, then the medical researcher would expect heavy smokers to experience a higher rate of this disease than non-smokers. But in establishing causality it is not essential that all heavy smokers contract lung cancer or that all non-smokers remain clear of the disease. If it was the case that heavy smoking (X) always led to lung cancer (Y), then when describing the relationship it could be properly said that X was a sufficient condition for Y. But we know that there are cases where Y is experienced without X previously occurring, *i.e.*, non-smokers can also get lung cancer.

If Y only occurred after event X, the factor X could be described as a necessary prior condition when Y is present. If this was the case in our example then medical research would show that the disease only attacked heavy smokers. In these circumstances, every patient's (Y) case notes would show a previous history of heavy smoking (X). We are arguing that X is a necessary condition for Y to occur.

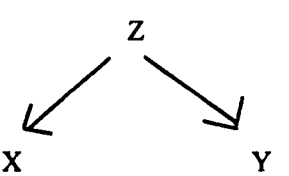
Describing a link between X and Y as causal does no more than indicate the nature of the connection, but it does not reveal the degree (or strength) of that association. Few smokers would be deterred if the risk factor of X resulting in Y was only 2 per cent (this being a low probability compared to a high risk rate of 95 per cent) and especially if the rate for non-smokers was, say, 1 per cent. But smokers would be more concerned if, though the risk was only 2 per cent, it was found that smoking was a necessary condition for lung cancer, and as such non-smokers had a zero risk. What is now being argued is the need to have information about the magnitude of the association. In short, for a proper understanding of the causal connection we need to have knowledge

of both the existence and the degree of association

The second type of evidence that need to be examined when studying causality is the sequence in which the major variables occur over a period of time. If the supposed effect Y precedes the supposed cause X, then X cannot be the cause of Y. (However, as already observed, causality cannot be inferred from the reality that Y does follow X). But the behaviour that we aim to observe and study is far more complex than this simplistic model of the textbook, or even of the scientist experimenting in the purified world of the laboratory. The real world is a cauldron of ongoing events and actions of varying enormity and cohesion to which are constantly being added new ingredients, only one of which is a new law. It might be that a series of gangster murders had caused the legislature—which was under pressure from public opinion to deter the offenders—to reintroduce capital punishment for this crime. Though the murder rate showed a significant drop following the introduction of capital punishment, can the researcher be satisfied with the explanation that the new law has been responsible for this change? It might be that the same public pressure had resulted in the recruitment of more police. At the same time the public, deterred by the threat of possible street violence and murder, stay indoors, thereby reducing the criminals opportunity to undertake attacks. The real effect of the new tough law upon the murder rate might be less than the official statistics suggest, and the reduction has been caused by factors that preceded the new law. We are now working towards the crux of the legal impact study problem. It is this. How do we know that we have caught all the relevant evidence (the variables at work) within our net? Might not crucial evidence—the other unknown variables that are possibly affecting the impact of the law—have slipped through our net because we have not realised they were present or understood their significance?

The third type of evidence requires that other variables can be ruled out as the explanation of association. We know that our purpose is to observe, record and analyse the effect of the independent variable X. It might be, if we but knew the truth, that another factor Z was causing both X and Y, as in figure 2.

FIGURE 2



In the smoking/lung cancer example medical research might indicate that a deficiency in vitamin A (factor Z) causes a person to smoke heavily (X) and to be more susceptible to lung cancer (Y). It is only because of the presence of factor Z that X and Y are associated. The explanation of X affecting Y would be spurious and misleading because of the omission of the causative factor Z. This situation provides warning of the grave error of implying a causative connection either when two variables are shown to be statistically associated, or when a strong correlation exists between the two variables in that an increase (or decrease) in one is associated, on average, with an increase {or decrease) in the other.

Another possibility is that the supposed cause X is in truth produced by a previously occurring factor Z which is the real explanation for the effect Y. If vitamin A deficiency (Z) caused people to smoke heavily [X), then omission of such vital evidence seriously erodes the efficiency of any explanation regarding the causes of Y.

FIGURE 3

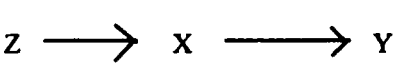


Figure 3 describes the time sequence in such a situation.

The purpose of this section has been to bring out some of the problems the social scientist faces when attempting to analyse and explain the reasons for peoples' behaviour. The natural scientist has two distinct advantages over the social scientist when it comes to providing convincing evidence from their respective research arenas. The former has the means, firstly, to control the environment in which the research is being undertaken and, secondly, to manipulate his subject into either an experimental or a control group. For instance, the metallurgist can make a new alloy that has the addition of metal X whose effect is uncertain. An experimental design to provide this information would be to produce 500 similar bars and then measure accurately the individual breaking point of each one. The average breaking point for this experimental group alloy can be compared with that found for a control group of 500 bars that lack the new ingredient. If X does in fact produce a higher breaking point, then a repeat undertaking of the experiment will produce the same findings in that laboratory, or in New Delhi or New York. But when people become the focus of investigation it is seldom possible to place them randomly into either the experimental group experiencing the independent variable X (the law) or the control group that is free of factor X. Nor is it possible (or desirable) to produce the sterile pure conditions of the laboratory in which extraneous variables

that may also affect results, such as temperature, pressure and humidity, can be controlled by the scientist. These practical realities normally force the legal impact researcher to consider less precise research designs for the gathering of data and subsequent analysis. There are, however, techniques and approaches that still allow meaningful and relevant legal impact data to be collected.

Research design

Two commonly used types of design are (a) the retrospective or *ex post facto* (after the event), and (b) the prospective investigation. The retrospective method can be undertaken in two ways: First, by looking from the past to the present by examining how important the factor of legal change has been in causing the present behaviour patterns (the observed effect) such as an increase in motoring offences. The second approach looks back in time for an explanation of the present observed effect, for instance, asking what factors have caused motoring offences to have doubled, say, over five years. The researcher might find that the legal penalties had increased, and at the same time the number of motorists had also risen and their yearly mileage had doubled, the road surfaces had not been maintained because of depressed economic conditions, and police surveillance of road driving had intensified as a result of public or political pressures. The problem, of course, is to try and analyse the relative importance of all these and other factors that are at work in producing the recorded effect.

In the prospective study the subject is followed forward in time. Thus, the introduction of a new law allows the researcher to study its impact over a period of time, though knowledge of current conditions is necessary to provide a comparison with possible future changes. The monitoring of new legislation is a way of examining the social effectiveness of the law in operation. It provides a means of studying the unintended effects of the law, giving the legislative authority knowledge about those circumstances in which the law has worked in a negative and undesired way.

The prospective approach is stronger than the retrospective design, for one can ask people about their current behaviour and habits with the likelihood of a more reliable memory recall than when people try to recollect past conduct. A further advantage is that the researcher is better able to observe and record the presence of other factors that might be influencing the pattern of behaviour that is being recorded. The practical weakness of this approach is that it takes a far longer time for the facts to be assembled.

The problems that emerged in the discussion of causality and association are still present. It could be that the recorded change would have

occurred anyway because long term trends (whose causes we need to discover) were moving in that direction, and the law only accelerated an ongoing change. For instance, it was true that different racial groups were slowly becoming more integrated. A researcher studying a law passed to provide racial harmony and equal opportunity might collect evidence from within the social structure that suggested the legislators' aims had been successful. But it could be that the legislation had done no more than quicken an already occurring process.

Sometimes a law is passed that is not expected to cause significant change to the social fabric. Its purpose is symbolic, setting an ideal which it is hoped will be slowly accepted by citizens. The Dowry Prohibition Act of 1961 is such an example. The researcher might concern himself with the quest for seeking cases where no dowry had been paid, and seeing whether such variables as education, income, caste or geographical area held any powers of explanation. It also has to be recognised that in some circumstances there may be no relationship between law and behaviour.

Investigative techniques

(a) *Historical approach*—Those sympathetic to the belief that the present cannot be properly understood without firm knowledge about the past will readily accept that the historical approach is an essential part of any legal impact enquiry. It is hard to imagine a major study examining the working of a facet of Indian law which did not find it necessary to research into the condition and working of that law in earlier times, and the reasons that have caused it to evolve into its present shape and content. Similarly, researchers in England and Wales who were studying the working of wife maintenance in the magistrates' courts found that a historical appreciation of the jurisdiction was essential to their enquiry. Valid data about the effectiveness of the law could be (and was) obtained by analysing 1,200 case files that had been randomly selected from a sample of 55 courts scattered around the country. But it was only by undertaking a historical examination that certain aspects could be fitted together to give greater coherence to the publication of findings. Some of the questions asked in this project were: How did the husband's obligation to maintain come to be; what was Parliament's purpose in passing the first Act in 1878? Other matters emerging were the economic reality of the prohibitively high costs of divorce, the double standard in divorce that operated against wives until 1923, and the magistrates' court structure that was (and is) geared to deal with criminal rather than civil hearings. All this and other evidence helped provide an account of how the law had come to be what it was. The contemporaneous survey data could now be more effectively analysed

and interpreted once the researchers (and their readers) had a historical awareness of the law's past. A base needs to be established against which any future change can be set and compared.

The sources for historical evidence lie in published parliamentary debates, official reports of inquiry (commissions, departmental committees), case reports, newspaper reports; evidence of criticism and discontent such as letters in newspapers, magazines and professional journals; the comments and observations of influential and powerful personages such as politicians, trade union leaders, lawyers and judges (both in and out of courts); and the life histories of important people. Any evidence of pressure groups working towards change would be noted. Such sources are usually to be found in libraries, archives and public record offices.

Often the official published returns such as the census reports, or departmental annual reports as (in the U.K.) the *Criminal Statistics* or the *Civil Judicial Statistics*, can provide relevant data about both the past and present situation. This evidence has the advantage of often being compiled by disinterested officials without hypothesis to prove or refute. It is open for inspection and analysis without all the problems facing the researcher undertaking expensive and lengthy new surveys. But the researcher must always examine the reliability and validity of published evidence. Did the census actually record all the people living in the land, or might there be evidence that a significant element of the very poorest were omitted from the return? If this was indeed the case, has it resulted in, say, the quality of housing being shown at a higher level than actually exists in the overall population? But though there are problems the fact remains that relevant published evidence is all too often ignored or under-utilised by researchers.

(*b*) *Survey method*—This is the quantitative exercise by which information is gathered from a randomly selected sample of the population living in the geographical area of the enquiry. Statisticians have shown that the error caused by taking a fraction of the total population is in fact very small if proper sampling procedures are followed. It is the acceptance of sampling reliability (as we all do when a sample of blood is taken for medical examination) that allows surveys to be undertaken at all. The researcher has to first decide what information is required for evidence, and then whether it can be obtained. If the answer to the latter question is positive, a choice has to be made from the various methods of data collection. It may well be that officials will not allow access to court records, or people are unwilling to provide confidential and possibly incriminating evidence to interviewers who are strangers. There is also the reality that these technical issues may vary from country to country, and even between different parts of the country. It would be surprising if a villager in the Punjab reacted to an interview situation in the same

way as a civil servant in Bombay. A pilot, or pre-run, of the proposed survey is needed to detect some of the possible difficulties. However, we are now in the situation that, in undertaking legal impact analysis, we need to appreciate the crafts and techniques available to the social science researcher. (I understand law to form one of the social science disciplines as does, say, economics or sociology). The analysis can only be as good as the research design and its implementation.

Just as sociologists can come to grips with the nature and working of, say, economics or law, or the economist with statistical theory and techniques, so the lawyer can learn the basic techniques of research in the field. The old saying of "nothing ventured, nothing gained" is as much applicable in this area as any other. Legal researchers must be prepared to leave their desks and venture into the field.

(c) *Comparative approach* — The comparative method offers an effective tool of analysis. If comparable social, economic and political conditions operate in two countries or states with a similar legal framework, then the earlier introduction of a new law in the former land provides researchers in the latter with an opportunity to study its consequences. This seems a realistic approach within Indian context. The researcher plans to marshall all the relevant material. This may be by such means as a survey, studying official reports and law reports, or talking to judges and lawyers, and then undertaking an analysis of the changes occurring in this other state. Once more the danger is the risk of not appreciating, or failing to record an important factor that is actually present.

Conclusion

It is not a matter of mastering other disciplines but it is necessary to be willing to read some of their texts and understand their ways of thinking and operating. This is not saying anything particularly radical, for it would be a remarkably cloistered legal mind that never raised questions of, say, a historical or philosophical nature. The interdisciplinary approach is fundamental to imaginative research. For instance, it might be a partnership of the combined talents of lawyer and economist joining together to investigate the working of legislation that aimed to control the discharge of industrial effluent. The research team might soon find that the law was being openly flouted and that the question that now emerged was how far would sanctions have to be raised before recalcitrant industrialists found that the likely penalty overtook the loss of profit caused by the need to ensure a safer disposal of waste? Similar examples of factory safety regulations regarding effective machinery protection which also slows down production, or the illegal employment of child labour, come to mind.

Justice V.R. Krishna Iyre has observed of the Indian situation:

> The Law Commission and the legislative wing of the Law Ministry should not act on impressionistic ideas but on empirical research data. Likewise, legislations may misfire in actual working, the executive or judicial infra-structure may not be operating on the wavelength of the authors of statutes and defects and deformities and lacunae and gaps may be noticed in the working of socio-economic laws. Only by a post-audit can these be detected and researchers must focus on law reform where socio-economic goals are not attained as intended. All these add up to new vistas for socio-legal research on an inter-disciplinary basis.[1]

There is a risk to interdisciplinary research. It is that the researcher in attempting to satisfy the standards of the two disciplines, produces a study that fails to satisfy either, and so risks being disowned by both.

A willingness to acquire knowledge of quantitative research methods is fundamental. But there is no mysticism about these techniques. Numeracy is a requirement, but sophisticated statistical procedures are seldom called for. If such procedures are felt necessary then expert advice should be sought. Whatever the size of the project some system of tabulation and classification is necessary as a means of not only establishing an association between two events, but also in determining its nature and strength. The researcher must be clear about what the intentions and purposes of the enquiry are.

A major emphasis of this work has been on the utilitarian justification for legal research. A democratic state should be aware of the effects caused by its laws and legal structure. An open society should know whether social rights and justice are available to all citizens regardless of wealth and power. Or is access to a legal remedy comparable to entry at a four-star hotel, open to everyone though few have the means to enter?

Time soon covers a carefully undertaken project with a dusty historical irrelevance. No lasting progress will be made in this subject unless we design investigations that can be repeated both in other societies and at later times in one's own land. All too often the results of an investigation become isolated within that period of time and the findings lose their relevance as the years pass. We are studying a two-way interaction in which only the researcher of narrow vision would consider no more than the effect of law upon society. For, of course, the law itself is responding to the changing needs, aspirations and beliefs of that society. It is often more important to find out the conditions operating in that society before considering how the law can be changed.

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1. Upendra Baxi, *Socio-Legal Research in India : A Programschrift* (Indian Council of Social Science Research occasional monograph no. 12 (v) 1975).

The subject's infancy is revealed by the very few relevant works (books and articles known to the writer) that have emerged from Britain and North America. My limited knowledge suggests that India has fared no better. This scarcity of publication is partly due to the lack of trained researchers who are sympathetic to the needs of legal impact investigations. Problems have been raised concerning the validity and verification of findings. Fear of rebuttal stops some researchers from publishing their findings and interpretation of the evidence. Yet close involvement with the subject gives them an expertise which cannot be lightly dismissed. The researcher's imagination has a role in the interpretation of results. Empirical evidence should be our servant but never our master.

References

1. Claire Selltiz, L. Wrightsman and S. Cook, *Research Methods in Social Retations*, ch. 5 "Methods for Determining Causal Relationships among Variables" and ch. 14 "Analysis and Interpretation" especially at 489-97 (3rd ed. Holt, Rinehart and Winston, New York, 1976).

2. Colin S. Gibson, "Divorce and the Recourse to Legal Aid", 43 *Modern L. Rev.* 609-25 (1980).

3. Edwin M. Schur, *Law and Society: A Sociological View* (Random House, 1968).

4. Gerald Hursh—Cesar and Prodipto Roy (Eds.), *Third World Surveys: Survey Research in Developing Nations*, ch. VI "Problems in Measurement" and ch. VIII "Problems in Data Processing" (Macmillan, 1976).

5. Hirschi, Travis and Hanan Selvin, *Principles of Survey Analysis* (The Free Press, 1973).

6. I. Ehrlich, "The Deterrent Effect of Capital Punishment: A Question of Life and Death", 65 *American Economic Review* 397-417 (1975).

7. Mervyn Murch, *Justice and Welfare in Divorce* (Sweet and Maxwell, London, 1980).

8. O.R. McGregor, Louis Blom-Cooper and Colin Gibson, *Separated Spouses: A Study of the Matrimonial Jurisdiction of Magistrates Courts* (Gerald Duckworth & Co. Ltd., London, 1970).

9. Paul Burrows and Cento G. Veljanovski (Eds.), *The Economic Approach to Law* (Buttetworths, 1981).

10. Richard D. Schwartz and Jerome H. Skolnick (Eds.), *Society And the Legal Order: Cases and Materials in the Sociology of Law* (Basic Books Inc., Publishers, New York/London, 1970).

11. Robert L. Kidder, "Courts and Conflict in an Indian City: A Study in Legal Impact", XI *Journal of Commonwealth Political Studies* 121-39 (1973).

12. Ross, H. Lawrence, Donald T. Campbell and Gene V. Glass "Determining the Social Effects of a Legal Reform", 13 *American Behavioral Scientist* 493-509 (1970).

13. Stephen L. Wasby, "The Supreme Court's Impact: Some Problems of Conceptualization and Measurement", 5 *Law and Soc. Rev.* 41-60 (1970-71).

14. W. M. Landes, "The Economics of Fair Employment Laws', 76 *Journal of Political Economy* 507-59 (1968).