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*Presented at a Conference on "The 1917 Explosion: Collision in Halifax Harbour and its Consequences," The Gorsebrook Research Institute for Atlantic Studies, St. Mary's University, Halifax, Nova Scotia, 3-6 December 1992.

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THE PLACE OF THE 1917 EXPLOSION IN HALIFAX HARBOR IN THE HISTORY OF DISASTER RESEARCH: THE WORK OF SAMUEL H. PRINCE¹

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The 1917 explosion in Halifax Harbor was important for a number of reasons, not the least of which was that particular tragedy became the focus of the first systematic social scientific study of disaster. In October 1920, Samuel H. Prince published Catastrophe and Social Change, Based on a Sociological Study of the Halifax Disaster, which had been done as part of her Ph.D. work at Columbia University. Because the chair of his dissertation committee was F.H. Giddings, a significant figure in the developing field of sociology, Prince's study can be placed both within the context of sociological thought at the time as well as its place within the disaster research tradition which has evolved since his pioneering work.

At the time of Prince's doctoral work, sociology was developing its theories and techniques in response to the major issues of the time when urbanization and industrialization were increasing social complexity. There was the perception that the problems this social transformation had produced could be solved by rational systematic effort. For scholars like Giddings, social engineering would be required to move society toward a more Such ideas were not rational and beneficent social system. confined to the academy but were found in most reform movements. Certainly, Prince was conversant with the Social Gospel movement with the church. Nor were these ideas restricted geographically. In the Maritimes, the growth of industries and communities had created the promise of a more prosperous future and that the problems which emerged from those changes could be solved by progressive reform. Howell, in discussing the climate of the first decade of the twentieth century in the Maritimes, said there "was a more hard headed faith in the efficient and 'scientific' administration of the social system - the application of scientific principles to society in the name of greater efficience."2 Prince's approach to the study of Halifax fit within an early twentieth century intellectual and cultural tradition which venerated social engineering.

Prince's study covers a period of approximately two and a half years after the explosion and centers on the idea that catastrophe creates social disintegration, and the conditions for social change. While Prince recognized that disaster-included change should not necessarily be considered "progress," he believed that knowledge derived from the scientific method could provide understanding which could turn such a tragedy into productive improvement. Prince's focus was on the social system which developed to distribute relief after impact but he provides much additional information about the impact itself, the response to it and other details of the changes which occurred during the period of the study.

The format of the dissertation opens with a discussion of catastrophe and social change and then concentrates upon the organization of relief in the period after the explosion. Prince provides a running critique of certain aspects of the relief process. He was pleased with the centralization of the relief but disturbed with the cooperation of several groups, such as the Salvation Army, the Roman Catholic Church, and several other private relief efforts which operated independently. He seemed particular offended that some relief was sometimes given without proper investigation and that some groups used volunteers, who in his view, could not be expected to "understand the nature of scientific relief service."

Prince then moves on to consider the effects of the catastrophe on subsequent social legislation. He noted that, in 1919, there was major legislation by Parliament concerning the control and shipment of explosives in Canadian harbors. This supported his view that catastrophe is closely associated with progress in social legislation. He also discussed the various factors which prompted outside assistance and raised the possibility that the extent of that assistance might have exceeded the losses incurred. He then made the suggestion that Federal disaster insurance might overcome "the irrationality of an inequitable level on the more sympathetic and the fluctuations of disproportionate relief."

In the concluding chapters, Prince returns to his theme of catastrophe and change. Halifax had been a conservative city intent of preserving the status quo, he argued, but the explosion prompted a number of significant changes. In support of this claim, he provided statistics demonstrating increases in building permits, bank clearings, postal and tramway revenues. He also noted the increase in the population and a renewed interest in voting as well as more effective city planning, and improvements in public health, education and recreation. He does concede that factors outside the community prompted change, especially the coming of the ocean terminals and the fact that there was particular interest in Halifax during wartime. The effect of these factors was to replace some of the economic losses, created by the explosion.

Prince's final conclusion was optimistic. Reiterating that catastrophe produces change and change is not necessarily progress. Prince argued that "the nature of social change in Halifax is one in the direction of progress we think to be based on reason and not alone on hope."

The way in which Prince structured his study had much to do with the nature of his graduate education at Columbia. In his preface, Prince indicates that the idea of the work was suggested to him while carrying out a civic community study of the disaster

under the direction of Professor F.H. Giddings of Columbia University. "The work...is the first attempt to present a purely scientific and sociological treatment of any great disaster." In addition to Giddings, Prince thanks Professor A.A. Tenney, a long-time colleague of Giddings, Professor R.E. Chaddock, a social economist, Professor S.M. Lindsey, an expert on social legislation and Professor R.S. Woodsworth of the Department of Psychology.

Of the committee, it was obvious that the primary intellectual quide was Giddings, who along with Lester Ward, William Grabham Sumner and Albion Small, is rather universally considered a key figure in American sociology.7 Giddings received an A.B. in Engineering at Union College. For eight years, he wrote various articles for the Massachusetts Bureau of Labor Statistics and for academic journals, such as the Political Science Quarterly. These writings led to his appointment in 1888 as Woodrow Wilson's professorial successor at Bryn Mawr College. In 1890, he began to conduct a graduate seminar on modern theories of sociology. Four years later, he was asked to fill a special professorship in Sociology at Columbia "to develop the theoretical teaching of sociology proper and to direct the students in practical sociological work."8 Giddings became Carpentier Professor of Sociology and the History of Civilization in 1906. Under his leadership, Columbia became, at that time, one of the two dominant departments of sociology, the other being the University of When Prince came to Columbia, Giddings was well established, both because of his writing and the accomplishments of his students, many of whom went on to have distinguished careers. During his tenure as chair, the department awarded some fifty Ph.D.'s. Six later became President of the American Sociological Society as Giddings himself had done in 1910 and 1911.

Although Giddings' long career and extensive writing makes it difficult to summarize his sociological thought, three themes in Giddings' work were apparent in Prince's dissertation. These were: (1) that social change is not necessarily progress, (2) that progress can be achieved by the application of rational knowledge, and (3) that rational knowledge is a product of the scientific method.

At several points, Prince rejected the notion of the inevitability of progress. Prince wrote: "The point is that catastrophe always means social change. There is not always progress. It is well to guard against confusion here." But Prince argued that progress might be achieved if one could identify certain factors which would be subject to social control. He said: "It is indeed this very thing which makes possible the hope of eventual social control and the translation of seeming evil into tremendous good." 10

Prince continually emphasized the importance of the scientific methods and insisted on the value of comparative data. He said, "Knowledge must grow scientific only after the most faithful examination of many catastrophes" and he suggested that "the sociological studies of Chicago, Galveston, Baltimore, San Francisco and other disaster cities should be initiated at once."

Prince is less clear as to a description of the specific methods he used in the dissertation. One can infer that he intended for the study to be dependent on an "obiective" description of behavior which occurred during the emergency period as well as a chronicling of events which took place subsequently. While there are some personal references, there was never any systematic attention given to other sources of information, except a list of acknowledgements in the preface. In other words, there was no clear indication that interviewing key people in particular organizations was done, nor was there extensive citation of unpublished data sources. In the last chapter, there was an effort to obtain certain statistical indicators of change, such as changes in bank clearings and revenues. In general, Prince downplayed his personal involvement and experience to focus on a description of "what happened." He was insistent as to the necessity to replicate his findings in other disaster contexts. He does footnote his involvement in Halifax, and his earlier trip to the scene of the sinking of the Titanic and his more recent investigation of a Wall Street explosion, but these personal experiences are not presented as enhancing the current study. Instead, he considered his study as the first step to develop cumulative knowledge. "This little volume on Halifax is offered as a beginning." He wrote, "It is hope that the many inadequacies of treatment will receive the generous allowances permitted a pioneer."12

In many ways, Prince's modest beginning was an isolated event within the history of sociological thought. There are several reasons for the lack of attention it received. Giddings was moving toward the end of his career and his interest was changing increasingly in a behaviorist direction. The study of social change was being transformed, primarily by the work of William Ogburn, another student of Giddings. Ogburn's book, Social Change (1922) moved the field toward the idea that technology invention were major movers of social change. That view, particularly the concept of "culture lag - discontinuities between technology and ideas," became a dominant explanation of the mechanisms behind social change. It is worth noting here that Oqburn was on the faculty at Columbia when Prince was completing his dissertation. Ogburn returned to Columbia in 1919 and stayed there until 1927 when he moved to Chicago where he spent the rest It is perplexing that Ogburn is neither of his career. acknowledged nor cited in Prince's dissertation nor is Prince cited later in Ogburn's book. Prince's contribution to social change theory is noted, however, in Pitirim Sorokin, <u>Contemporary Sociological Theories</u> (1933). It is possible that if Ogburn had been on Prince's committee during the initial stages of his distinguished career, Prince's work on change would have had greater visibility. If Prince had been affiliated with a dominant graduate department in his subsequent career, moreover his initial work would have made a larger impact on subsequent social change theory.

Prince's application of social science methods to disaster also lacked continuous replication within the discipline. During the next thirty years, there was a singular lack of attention given to disaster within the social science community. It was only in the early 1950s when social scientists returned to the study of disaster. In the last 40 years, there has developed a In the last 40 years, there has developed a considerable research tradition on disasters and the field has become increasingly multidisciplinary and international. 14 When disasters became a focus for renewed interest, Prince was rediscovered and his work became a source of ideas and data. Prince has been used by many others as a source of research leads, with respect to the effects of disaster on change. Since Prince selected a very complex problem to begin with, our subsequent comments are not intended as a belated criticism but as a springboard to explore the complexities of the relationship between disaster and social change.

One way to evaluate the work of Prince is to attempt to untangle the continuing relevance of the issues he raised about Halifax. While he had a clear focus on one aspect of the disaster, that is, the relief process, he also provided considerable description of the event which was somewhat tangential to his focus. His writing style was considerably more flowery than one would expect in dissertations today. In addition, certain descriptions would now be summarized into concepts which are common to the field. And, while he focused on a particular social system - that of the distribution of relief and rehabilitation, a number of other issues are still relevant.

1. His brief description about individual behavior in the post impact period is consistent with research in other disasters. That is that the behavior of the residents was very adaptive to the set of problems which confronted the community.

To a large extent, his description of the adaptive individual actions and of the organized response which emerged contradicted his theoretical assumptions, introduced in the first chapter, which he describes as "social disintegration." Perhaps Prince felt that he needed to posit "disintegration" as a precursor of change, but he describes instead the effectiveness of the community in responding quickly and in an organized fashion to the scope of the

problems which the explosion produced. For example, Prince points out that within an hour after the explosion, telegraph service was re-established with the "outside" world and that within four hours, a train with many injured left for Truro. While many individuals were operating on their own to deal with the problems which confronted them immediately, (which now would be described as the mass assault phase) there were preliminary forms of coordination beginning to develop by noon. By late afternoon of the first day, tentative plans for dealing with the emergency were formulated at There were other indications of the rather rapid restoration of "normal" functioning. On Friday, the regular train service to Montreal was resumed, tram service began again and the first newspaper after the explosion appeared. These hardly indicate "disintegration." Prince's description of the early emergency period is very consistent with subsequent studies which underscore the continuity of preimpact social structures and the adaptation of those structures to cope with problems emerging in the emergency period. That this adaptive response is not peculiar to Halifax has been revealed by research in a variety of communities which, as Prince anticipated, now allows us to generalize across events.

While Prince's description of the immediate emergency period was not extensive, he was especially interested in a specific area, that of relief and rehabilitation. He pointed out that the organization of relief had developed a structure which was innovative and based on "scientific" principles. First, there was the centralization of authority and administration into one official relief organization. There was coordination of relief in one central committee. Funds from all sources went into the hands of one finance committee, all records were cleared through one registration committee, and there was a small managing committee to interpret policy set by an executive committee. In particular, Prince was concerned about lack of coordination in relief and the wasting of resources. He underscored the desirability to move rather quickly from "relief" toward a more rational bureaucratic) evaluation of the real needs of victims. Prince felt that "public opinion" within the community revealed little thought and, hence, that the consequent delay in planning meant duplication in giving relief or giving without substantial inquiry into need. He also suggested that when the Federal Relief Commission finally took charge providing both social and material assistance on January 21st that, instead of assisting victims in rehabilitation. there was an attempt to make modified restitution - compensating for material losses. Prince was especially critical of the lump sum restoration - compensating losses in a single payment. While quoting others, he said: "They assert that for many it proved simply a lesson in extravagance and did not safeguard the economic future of the recipients. Unused to carrying all their worldly goods in their vest pockets, these same pockets became empty again with uncommon rapidity. Victrolas, silk shirts, and furbelows Merchants' trade grew brisk with 'explosion' money. multiplied.

There seemed to be a temporary exchange of positions by the social classes. \mathbf{n}^{15}

There are two related issues here. Prince used as his prime example of social change the attempt to introduce rational administrative methods into the distribution of relief. While he recognized that some "unorganized" relief was necessary in the short run, he saw the rational organization of social services as necessary to insure some notion of equity and justice. He did mention that in Halifax there was considerable criticism of the "cold professionalism" of the more rational methods at organizing relief but he tended to blame this conflict on the obtrusiveness of the symbols of bureaucracy - the forms, the typewriters, and the file cabinets. He suggested that "social workers of the future when thrown into a similar situation should curtain their machinery a little closer, at least until the community can realize the principles which organization can conserve." 16

Subsequent research suggests that such conflict is much more basic than Prince suggests and is not likely to be solved by "pulling the curtains" across the bureaucratic machinery. While Prince mentions conflict between the general public and relief organizations at various times, he treats public concern as somewhat "pathological," having been created by the lack of acceptance of "scientific" principles. Further understanding of this kind of controversy is found in our examination of the consequences of the reconstruction process which followed the Alaskan earthquake. In observing the reconstruction of Anchorage after a 25 year period, we point out the importance of issues of equity and the tendency for the predisaster stratification system to determine effectively the long term consequences of such a process. We found that:

- 1. The reconstruction and recovery process is always characterized by heightened social conflict.
- 2. Social process after a disaster will direct the reconstruction along patterns already established prior to the disaster.
- 3. The reproduction of past patterns is most certain when high status groups are adversely affected.
- 4. This means that the reconstruction process benefits the most socially powerful at the expense of the less powerful. The end result is usually described as what is "good" for the community.
- 5. The distribution of any type of relief and assistance always raises issues of equity.

- 6. Reconstruction which requires the relocation of parts of the community raises issues of equity in a quite visible way.
- 7. Government policies reinforce the advantage of the most powerful in the reconstruction period. Since the more powerful are not unified, government policies are often inconsistent.¹⁷

While our conclusions are based on a 25 year time frame and are dependent on the "concrete" results of the rebuilding of Anchorage, it can be argued that the application of the "scientific principles" which Prince advocated would have resulted in reinforcing the "status quo" since the distribution of relief and rehabilitation would avoid duplicative and unnecessary claims. While the introduction of the principles of scientific organization were used by Prince as an example of change, one could argue that their major function was to minimize conflict over equity, and hence to insure the status quo.

Prince did not discuss the class composition of Halifax in any systematic way, although this is critically important and not just as an issue of equity in the recovery period. Socio-economic status defines the social location of the damage as well as the nature of the problems to be faced in the emergency period. Hazardous locations are not randomly distributed within cities but tend in port cities to be located in less affluent areas, inhabited by residents of lower economic status who are less able to deal with, respond to and recover from disasters. Issues of equity are not solved by "pulling the curtains" on the bureaucracy. Rather, the nature of conflict and the ultimate solutions are rooted in the pre-existing power relationships within the community.

Subsequent studies of the relationship between disaster and change have shown somewhat mixed results. Some of these studies have looked at longer time periods and some have focused on different kinds of social units. One similar study to Prince's was Anderson's examination of changes in the organizations which had become involved in the emergency after the Anchorage earthquake. In examining these organizations a year after the quake, Anderson identified a number of conditions which tended to propel change. He suggested the following variables: (1) if changes were already planned or in the process of being realized; (2) if new strains were generated or old ones were made more critical by the disaster; (3) if the organization experienced so great an alteration in its environment that new demands were made on it; (4) if alternative organizational procedures were suggested by the disaster experience; and (5) if increased external support was given to the organization following the disaster. While several of the factors may have been operative in Halifax, the origins of the "scientific principles" which were used to guide

the relief efforts are particularly significant. On this issue, there is an interesting circularity in Prince's account. The primary source used by Prince to establish the criteria by which relief should be judged was a book by J. Byron Deacon, Disaster and the American Red Cross in Disaster Relief (1918). That book involved an evaluation of previous Red Cross experience administrating disaster relief and was intended to produce quidelines for the future. In the introduction, written by the head of the Disaster Relief Services, American Red Cross, there is the following reference, "Just as the last pages of this little book were being corrected came the tragic news of the Halifax disaster, reinforcing Mr. Deacon's plea for the fullest possible means of preparedness for such possible calamities." The point is that elsewhere at the time of the explosion, there had already been considerable attention given to the rationale for and delivery of disaster relief. Some who had contributed data to the book and others who had read the proofs were members of a delegation from Boston who helped structure the relief effort in Halifax. had been a strong "professional" connection between Boston and Halifax established during the Titanic sinking. Prince may have been aware of the Deacon study and, those who came from Boston certainly were. Prince described that "with the coming of the American Unit, the transfer of the work to a new headquarters upon their advice and the adoption of a complete plan of organization, the systematic relief work may be said to have in reality begun."19 The reference to the American Unit was to a group from the Public Safety Committee of Massachusetts and from the Boston Chapter of the American Red Cross. It would thus seem that the Deacon document setting forth the scientific relief principles to be implemented in Halifax involved the same principles Prince used as his basis for evaluating the system. The important point here is that change is likely to occur when changes are planned or in the process of being implemented at the time of disaster impact. scientific principles existed, at least within the minds of the relief "professionals," prior to the explosion and Halifax provided the opportunity to implement them. In a more modern idiom, there was a small window of opportunity for change created but the direction of change was present prior to the disaster. direction was consistent with the reform impulses of the time - to develop rational and efficient social systems. The most consistent finding in subsequent research concerning disaster and change is thus emphasized - disasters seldom create radical and dramatic change but the changes which do occur are rooted in the predisaster intellectual and administrative climate.

An Evaluation of the Prince Study

We think it possible to argue that Prince's study was not about social change, at least in the substantive sense. His major focus was on an emergent system to distribute disaster relief to

the "victims" of the explosion. That system emerged some sixty hours after the explosion subsequent to a discussion by locals coping with immediate emergency conditions and by those coming from Boston fresh with ideas, derived from the Deacon study, on how to "professionalize" relief. While there was considerable success in organizing that effort, Prince also described the resistance to that effort, which he attributed to a lack of understanding of the principles on which the system was based. The system operated only until January 20th when the Federal Relief Commission took over and changed (or violated) the principles which had been institution-alized before. So the change which Prince identified was implemented for less than two months. While Prince talks in his later chapters about changes within the community which were evident in 1919 and in the early 1920s, none of these relate to ways the emergent relief system became institutionalized within the community.

Part of the issue here is the question of what constitutes social change. With the benefit of hindsight, Prince would have been better advised to conceptualize his study in terms of a description of "emergent" organization, rather than as description of change. The emergent relief system which Prince described was a "temporary" solution to the rather immense problems which arose in the immediate post impact period. For some sixty hours, various segments of the community worked simultaneously and rather independently to meet various, but especially "medical" As those rather immediate problems were receding, the longer term issues of "rehabilitation" emerged. The arrival of the "American Unit," allowed the existing activity to be "reorganized" in keeping with what Prince saw as "scientific principles." subsequent disaster research, there has been a long tradition of studying various types of "emergent" organizations, i.e., those that had no predisaster existence. 20 Rather than seeing the emergent social system as a legitimate object of inquiry, Prince was pleased with the directions of the change which occurred toward a more rationalized relief system. He concluded: "If there is one thing more than another which we would emphasize, it is this final principle. Progress is not necessarily a natural or assured result It comes only as a result of effort that is wisely of change. expended and sacrifice which is sacrifice in truth.21

Researchers today are still interested in the efforts to implement policy - and the controversy surrounding those efforts - in the emergency period. For example, the same conflict evident in Halifax was more recently observed in major U.S. disasters when the Federal Emergency Management Agency was criticized for its imposition of bureaucratic rules relating to the distribution of a sea of contributed goods. Less useful are Prince's conclusion about social change. The indicators of post-impact social change which most researchers would now look for would include:

- 1. alterations in the structure of social systems which would affect routine functioning in the post emergency period;
- 2. differences in the distribution of resources within the community,
- 3. differential growth patterns in various institutional sectors, and
- 4. the elaboration and increased complexity of behavior, in part created by changes in infrastructure.

In a recent summary of research stemming from the Prince hypothesis, Bates and Peacock²² have tried to specify the underlying social conditions which might be expected to produce change. Most of what they say is relevant to understanding Halifax in 1917.

- 1. Disasters place the structure of the social system under stress and test its capacity to perform vital functions. Certainly, in Halifax, the relief system was tested.
- 2. Disasters differentially affect socio-economic and ethnic groups and thus the stratification system may be affected. Prince expressed concern that certain people were getting more than their "share." In addition, he noted that "German residents of the city were immediately under arrest, when the disaster occurred, but all were later given their freedom."
- 3. Disasters bring new groups and organizations into being and provide the circumstances which foster new forms of behavior.
- 4. Disasters frequently destroy or severely damage outmoded infrastructure and force its replacement by more modern technology. Prince noted that during the reconstruction, some 20 miles of new sidewalks were ordered which would have changed the interaction patterns among neighborhoods.²⁴
- 5. Disasters frequently result in the influx of large numbers of outsiders who supply additional labor and expertise as well as large amounts of outside physical and financial resources. Prince notes: "Glaziers, drivers, repair men and carpenters came by trainloads bringing their tools, their food and their wages with them. The city's population was increased by thirty five hundred workmen, twenty three hundred of whom were registered with the committee at one time." Prince also estimated that over 27 million dollars in external contributions came into the city.

- 6. Outsiders bring with them different forms of behavior which may be transferred to the local population. Of course, a major theme in Prince's study was the arrival of the group from Boston with their ideas on how to distribute relief.
- Conflicts often emerge over the distribution of scarce resources and over the equity principle which should These have serious political guide the recovery process. implications and results in changes in the relationship between the government and other units in the system. Prince, of course, admitted that the system of relief became the object of controversy. "The merest touch of 'cold professionalism' soon became fuel for the burning disapproval which spread through the city regarding the methods of relief. Letters to the press gave vent to the indignation of the sufferers. One of the judges of the Supreme Court was as outspoken as anyone. In criticizing the food distribution system, he wrote very plainly of the 'overdoes of business efficiency and social service pedantry. "126 Prince also noted that such controversy emerged at public meetings in Wards Five and Six but noted that the "dissatisfied" did not constitute a protest movement.

Prince also noted that the population of Halifax had increased from 50,000 at the time of the explosion to at least 65,000 or even to another estimate of 85,000 by 1920. He also suggested an increase in "civic interest" in voting although he does not indicate that subsequent election directly involved "disaster" issues. Certainly, there were conditions present which would predict social change in Halifax, but because of the pressures of dissertation deadlines, Prince chose to focus on a short period during the emergency period and to ignore the more long term and substantive changes which did occur in Halifax.

Summary and a Final Comment

Samuel H. Prince's study of Halifax was structured less on his personal experience than around certain intellectual issues of the times and commonplace assumptions about the desirability of scientific administration. The study was grounded in the value of scientific method in developing knowledge to guide future disaster relief efforts in a more rational way. These directions reflected the theoretical orientation of his dissertation advisor at Columbia, F.H. Giddings. Prince's study had little effect on social change theory but many years later, when a disaster research tradition developed, his ideas were re-examined.

In retrospect, Prince's analysis overestimated the "disintegrating" effects of disaster and underestimated the continuity of behavior from the predisaster community. The basis

for the change he examined, ideas about the application of relief principles, existed prior to the disaster. Prince's advocacy of these "scientific" relief principles, in fact, reinforced the status quo rather than creating substantive social change.

The complex relationship between disaster and social change remains a viable research issue, and is still an important issue for social policy. In the post World War II years, a major global policy thrust has centered on the issue of development. While a considerable effort in time and money has gone into development planning, relatively little has been accomplished. In recent years, in various national and international development agencies, there has been a resurgence of the position which Prince expressed that relief efforts should be more rationally handled. The frequency of development efforts being wiped out by disaster and the continual dependence of developing countries on outside agencies for relief raises the question as to whether relief funds should not be allocated to strengthen disaster mitigation and preparedness. As M. Anderson has suggested, such efforts not only minimize damage but also provide a stable economic environment for investment and a sense that people can control their own future. Such self confidence is necessary to sustain long-term development. So the hopes of a more rational distribution of relief, which was implemented and criticized in Halifax, still exist as a viable policy option around the world. Certainly, one can echo Prince's notion that disaster creates social change but obviously it takes considerable human effort to direct that change towards progressive ends.

NOTES

- Samuel Henry Prince was curate at S. Paul's Church in Halifax at the time of the explosion. In May 1919, he began a Ph.D. in Sociology at Columbia and his dissertation was published in 1920. The preface was dated in October. Prince stayed in New York until 1924, lecturing at Columbia and assisting in the ministry at St. Stephen's Church. In 1924, Prince was invited to become a King's College Professor in the Department of Economics and Sociology at Dalhousie and he continued to lecture in that Department until 1924. Within the Department, in addition to Principles course, courses were given on the Community, Social Institutions, Social Legislation and Social Anthropology. In addition to his responsibilities in that Department, he was also a member of the faculty of Divinity at His interest in Social Work was maintained by his King's. service for 20 years as Chair of the Nova Scotia Diocesan Council for Social Service and his role in the establishment of the Maritime School of Social Work. While officially retired from Dalhousie in 1951, he continued to serve both Dalhousie and King's until 1955. Prince died 19 October 1960. (For a more detailed description of Prince's life, see Hatfield 1990 and for greater detail on Prince's study of Halifax, see Scanlon, 1988 and 1992.)
- 2. Howell, "The 1900s: Industry, Urbanization and Reform," 156.
- 3. Prince, Catastrophe and Social Change, 84.
- 4. Ibid, 116.
- 5. Ibid, 146.
- 6. Ibid, 7.
- 7. Harry Elmer Barnes states that "Franklin Henry Giddings was probably the ablest sociologist that the United States ever produced, and among sociologists abroad, only Durkheim, Hobhouse and Max Weber would rank with him," <u>Introduction to the History of Sociology</u>, 763.
- 8. Odum, American Sociology, 60-61.
- 9. Prince, Catastrophe and Social Change, 21.
- 10. Ibid, 22.
- 11. Ibid, 23.
- 12. Ibid, 24
- 13. For a background of that period, see Quarantelli (1987).

- 14. See Drabek, Human System Responses to Disasters.
- 15. Prince, Catastrophe and Social Change, 96.
- 16. Ibid, 93.
- 17. Adapted from Dynes and Quarantelli, 1987.
- 18. Deacon, <u>Disaster and the American Red Cross in Disaster Relief</u>, 5.
- 19. Prince, Catastrophe and Social Change, 82.
- 20. For a detailing of some of that research, see Drabek, 154ff.
- 21. Prince, Catastrophe and Social Change, 146.
- 22. Bates and Peacock, "Disasters and Social Change," 311ff.
- 23. Prince, Catastrophe and Social Change, 77.
- 24. Ibid, 122.
- 25. Ibid, 115.
- 26. Ibid, 82.

BIBLIOGRAPHY

- Anderson, Mary B.
 - 1991 "Which Costs More: Prevention or Recovery?" in <u>Managing Natural Disasters and the Environment</u>, Alcira Kriemer and Mohan Munasinghe, eds., Washington, The World Bank.
- Anderson, William A.
 - 1969 <u>Disaster and Organizational Change: A Study of the Long-Term Consequences in Anchorage of the 1964 Alaska Earthquake</u>, Newark, DE, Disaster Research Center.
- Bates, Frederick and Walter Peacock
 - 1987 "Disasters and Social Change" in <u>Sociology of Disasters:</u>
 <u>Contribution of Sociology to Disaster Research</u>, R.R.

 Dynes, B. DeMarchi and C. Pelanda, eds., Milan, Franco Angelli.
- Barnes, Harry Elmer
 - 1948 An Introduction to the History of Sociology, Chicago, The University of Chicago Press.
- Deacon, J. Byron
 - 1918 <u>Disasters and the American Red Cross in Disaster Relief</u>, New York, Russell Sage Foundation.
- Drabek, Thomas E.
 - 1986 <u>Human System Responses to Disaster: An Inventory of Sociological Findings</u>, New York, Springer Verlag.
- Dynes, Russell R. and E. L. Quarantelli
 - 1989 "Reconstruction in the Context of Recovery: Thoughts on the Alaskan Earthquake," Newark, DE, Disaster Research Center, Preliminary Paper No. 141.
- Hatfield, Leonard F.
 - 1990 Sammy, The Prince: The Story of Samuel Henry Prince, Hantsport, Nova Scotia, Lancelot Press.
- Howell, Colin
 - 1993 "The 1990s: Industry, Urbanization and Reform," in <u>The Atlantic Provinces in Confederation</u>, E.R. Forbes and D.A. Muse, eds., Toronto, University of Toronto Press.
- Odum, Howard
 - 1951 <u>American Sociology: The Story of Sociology in the United States Through 1950</u>, New York, Longmans, Green and Co.
- Ogburn, William
 - 1922 Social Change, New York, Dell-Delta.

- Prince, Samuel E.
 - 1920 <u>Catastrophe and Social Change: Based Upon a Sociological Study of the Halifax Disaster</u>, New York, Columbia University.
- Quarantelli, E.L.
 - 1987 "Disaster Studies: An Analysis of the Social Historical Forces Affecting the Development of Research in the Area," <u>International Journal of Mass Emergencies and Disasters</u>, 5:285-310.
- Scanlon, Joseph
 - 1988 "Disaster's Little Known Pioneer: Canada's Samuel Henry Prince," <u>International Journal of Mass Emergencies and Disasters</u>, 6:213-232.
 - 1992 "The Man Who Helped Sammy Prince Write: Dwight Johnstone and the Halifax Explosion," <u>International Journal of Mass Emergencies and Disasters</u>, 10:189-206.
- Sorokin, Pitirim A.
 - 1933 <u>Contemporary Sociological Theories</u>, New York, Harper and Row.