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INNIS AND ECONOMICS°

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Oven the three decades of teaching and rescarch allotted Harold Innis, no subject concerned him more than the state of economies. He looked to economic history to enrich and broaden economic thought, and he sought to explain fashions in economies and to make economists intelligible to themselves. Although Veblen's influence left its mark on his work, Innis remained throughout a disciple of Adam Smith and no name appears more frequently in his observations on economies past and present. His plea was, as he put it, for "a general emphasis on a universal approach" and in his unfinished paper he writes, "The economic historian must test the tools of economic analysis by applying them to a broad canvas and by suggesting their possibilities and limitations when applied to other language or cultural groups."

Apart from this search for perspective in economic thought there were other elements of continuity in Innis's thinking which give his life's work a coherence and a unity whether his interest centred on Canadian economic history or the duration powers of empires. It is scarcely necessary here to refer to his dislike of concentrations of power in any form or to his uncompromising belief in the free and creative powers of the individual, attitudes which stamp his research from beginning to untimely end. In his writings on economic history, technological change, free or controlled, links past and present. In his more specific references to economics, the pricing system provides the key to his reflections on the state of the subject. Early in his work there is present the same pricetechnology dichotomy that is to be found throughout Veblen's writings; later Innis sought to resolve this dichotomy in his studies of communication in which he saw technology and pricing as elements interacting with politics, law, and religion in a larger network of human relationships.

If one word may be used to bring to a focus his research in economic history and his observations on the state of economies, it is *industrialism*, its antecedents, course, and consequences in economic and cultural change. It is used in the following pages to set out the principal phases in Ionis's enquiries and to aid in outlining his reflections on economics in each of these phases. Examination of his writings in terms of their timing and content, of his readings over the whole period of his studies, and of available correspondence suggest a number of turning points in his explorations which mark off successive phases on the way to what was to be, I think, a philosophy of history.

The first, or Veblen phase, ends with the publication of *Problems of Staple Production in Canada.*² In this early phase he was concerned with the antecedents of industrialism in Canada and in his major work of this stage, *The Fur Trade in Canada,*³ he set out the conditions for the rise of the old indus-

"This paper was presented at the annual meeting of the Canadian Political Association in London, June 5, 1953. ""The Decline in the Efficiency of Instruments Essential in Equilibrium," American

¹"The Decline in the Efficiency of Instruments Essential in Equilibrium," American Economic Review, May, 1953, 17–18. ²Toronto, 1933.

"The Fur Trade in Canada: An Introduction to Canadian Economic History (New Haven, 1930).

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trialism of coal and iron, canals and railways, wheat and tariffs. His studies at this time were marked by emphasis on the drive of technology and the efficiency of the pricing system.

The second phase begins with the article "Economic Nationalism,"⁴ an article which serves as an introduction to his studies in the new industrialism of mining, pulp and paper, and hydro-electric power and his growing interest in the limitations of the pricing system and the economics of disturbance. This phase comes to a close with his *Cod Fisheries* volume,⁵ a work which carried him beyond his earlier interest in staples to reflections on the problems of empires, the impact of machine industry in exposed regions, and the broader implications of technological change and marketing influences. As such it marks the end of his basic research in Canadian economic history.

In the third phase his reflections on industrialism take a new turn. Although there are suggestions of the change in his writings of the late 1980's, a glance at his reading indicates that in the summer of 1940 he turned abruptly to an intensive study of technological and pricing factors in the area of mechanized communications beginning with printing and the press. In his published work, the article "The Newspaper in Economic Development"⁸ may be regarded as the first fruit of his new inquiries, and his work for the next five years or so consists mainly of explorations along lines suggested in this key article. The researches of this phase represent a stremuous attempt to apply more broadly the methods of analysis which had yielded such rich returns in his studies of Canadian problems.

The fourth and final phase was ushered in with the publication of the article "Minerva's Owl."⁷ This along with his *Empire and Communications*⁸ comes closest to a complete survey of his unpublished volume on the history of communications. We find him working back from the industrialization of communications to its antecedents in early empires as he had worked back in Canadian economic history to the antecedents of industrialism in Canada.

Although it is possible to mark out some such phases as these in Innis's work, there is at no point any suggestion of a break or a radical shift in his mode of approach to national or general economic history. In each phase questions emerged which called for explorations in strange territories and it is difficult to escape the thrill of the chase one experiences in tracing through these adventurons excursions in the realm of ideas. "He was,... says Professor Brady, "in the grip of an exploratory spirit which would not let him be content with the traditional highways of economics."⁹

⁴This appeared in *Papers and Proceedings of the Canadian Political Science Association*, VI, 1984, 17–31 and in revised form in the Introduction to the volume *The Canadian Economy* and *Hs Problems* edited by H. A. Innis and A. F. W. Plumptre (Toronto, 1934). ⁵The Cod Fisheries: The History of an International Economy (Toronto and New Haven, 1940).

"Journal of Economic History, vol. 11, Supplement, Dec., 1942, 1-83.

Proceedings of the Royal Society of Canada, 1947. Appoudix A. Presidential Address, 83-108.

80xford, 1950.

⁹Alexander Brady, "Harold Adams Innis, 1694–1952," Canadian Journal of Economics and Polytical Science, XIX, no. 1, Feb., 1953, 92.

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I

Turning back to the first phase of his explorations (1920–S3), one name, from the beginning stands out in his readings that of Veblen appears again and again throughout the 1920's, and his volumes were read and reread. This may account for one of the most revealing of linnis's publications, his "A Bibliography of Thorstein Veblen."¹⁰ In it he sketches those influences which shaped Veblen's thought, putting heavy emphasis on his place on the frontier of the industrial revolution. "The constructive part of Veblen's work," he writes, "was essentially the elaboration of an extended argument showing the effects of the machine industry and the industrial revolution. Veblen's interest was in the state of the industrial arts which had got out of hand, . . .^{*11} There is a reference to Veblen's scarch for laws of growth and decay and to his concern with the effects of industrialism on the preconceptions of economic science.

It is not without relevance here that Innis commented of Vehlen: "It is much too early to appraise the validity of this work-certainly he attempted far too wide a field for one individual but it is the method of approach which must be stressed, and not the final conclusions."¹² And again: "His anxiety has always been to detect trends and to escape their effects."¹³ [His work] stands as a monument to the importance of an unbiased approach to economics. . ."¹⁴ Veblen, like Adam Smith, ". . . is an individualist and like most individualists in continental countries, . . . he is in revolt against mass education and standardization."¹⁶ Such statements will recall Innis's use of George Jean Nathau's remark that "all biography is a form of unwitting self-betrayal." Like Veblen, Innis lived through the economic strains of a new country and sought to work out their more important characteristics through studies of the impact of industrialism on a continental background.

In his method of approach, in the selection of questions he regarded as most significant, and in his emphasis on the total environment of economic thought, Veblen's influence was great beyond question. But there was, none the less, one profound difference between the two men for, unlike Veblen, Ionis brought a genuinely historical bent, an emphasis on empirical or dirt research, to his work. It was through his historical studies that he lived up to his expressed hope that Veblen's attempt at synthesis might be revised and steadily improved and it was his historical insights that were to carry him into areas beyond the reach of Veblen.

In this first phase, his reflections on economics centre on the state of the subject in Canada and the contributions of research in the economic history of new countries to an economic theory developed in older countries. In his note on "The State of Economic Science in Canada" he begins with the observation that "To the cynically inclined the above title may appear to parallel the title 'Snakes in Ireland' " but, quoting Dr. O. D. Skelton, " 'an era of definite promise is beginning.' "¹⁸ On more than one occasion there is expressed the view that

| 10Southmestern Polit | ical and Social Science Quar | terly, X, no. 1, 1929, 56-68. |
|----------------------|------------------------------|--|
| 11Ibid., 64. | 12Ibid., 65. 15Ibid., 66. | ¹³ Ibid., 66. ¹⁶ Commerce Journal, 1933, 5–8. |
| 14Ibid., 67. | 101Dec., 00. | Commerces (|

the study of the development of new countries will have its uses in testing the validity of the principles of economic theory. "The conflict between the coonomics of a long and highly industrialized country such as England and the economics of the recently industrialized new and borrowing countries will become less severe as the study of cyclonics is worked out and incorporated in a general survey of the effects of the industrial revolution such as Veblen has begun and such as will be worked out and revised by later students."¹⁷ In 1929, writing on "The Teaching of Economic History in Canada," he comments: "A new country presents certain definite problems which appear to be more or less insoluble from the standpoint of the application of economic theory as worked out in the older highly industrialized countries. Economic history consequently becomes important as a tool by which the economic theory of the old countries can be amended."¹⁸

In the course of little more than a decade limits had laid the foundations for a systematic treatment of industrialism in Canada. The dynamics of growth were to be found in changing technologies applied to abundant resources.¹⁹ He had clearly demonstrated the possibilities of the "staples approach" as a method of attack on problems of new and developing countries. He had shown mastery of one element in Veblen's dichotomy, but the other, the pricing system and its historical implications, called for further study if he was to pass beyond what might be called technological history. His reflections on pricing factors in the next phase were to take him a long step in the direction of a more adequate formulation of the relation of economic history to economic theory.

II

He made a promising beginning in this direction in his article "Economic Nationalism" (1934). New techniques applied to such resources as hydroclectric power and petroleum, the appearance of new metals and new means of transportation are seen as productive of strains or tensions between areas of the old industrialism and the new. Early industrialism was marked by a free and expansive technology and an increasingly effective pricing system; the later or more modern stage by nationalism, regionalism, and the growth of new metropolitan areas as centres of control. The consequences were apparent in the increasingly important role of the state as an agency of adjustment and in the limitations of the pricing system in the face of disturbances resulting from new technologies which strengthened divisive tendencies. It was an exploratory essay which raised issues which were to concern him over this second phase of his researches. The distinction he drew between industrial techniques making for co-operation and industrial techniques making for division was

17"A Bibliography of Thorscein Veblen," 67-8.

¹⁸Contributions to Canadian Economics, in University of Toronto Studies, History and Economics, II, 1929, 52.

¹⁹A more complete survey would include reference to the influence of J. M. Clork. In the economies of overhead costs, Innis found much of the dynamic of change in both Cauadian expansion westward and the spread of industrialized communications on a world scale. See II. A. Innis, "Unused Capacity as a Factor in Canadian Economic History," *Canadian Journal of Economics and Political Science*, II, no. 1, Feb., 1936, 1–15.

similar to the distinction he drew later between communication devices which unite and communication devices which divide. In each area, industrialism and industrialization of communications, reflections on nationalism and the role of the state assume an increasingly important part in his thinking as he moves from early to late stages in their development.

In writing on "Approaches to Canadian Economic History"20 he expresses the fear that economists' preoccupation with price statistics and their failure to take into account the unpredictable results of technological change and discoveries of new resources will rule out understanding of the historical role and functions of the pricing system and lead to neglect of the crucial role of pricing factors in economic change. Along with this growing interest in the pricing system in this phase there are signs of increasing awareness of the significance of communication techniques to modern society and to economics, His studies of modern industrialism and, in particular, of the pulp and paper industry led him to the conclusion that the newsprint industry possessed a dynamic of its own, that it exerted a pervasive influence on the climate of economic thought, and that to understand its place in economic and social change he must move beyond the well-tried staples approach. There appears in the late 1980's a shift of interest to the impact of industrialism on communications, and in this shift indications of a more adequate handling of technology and pricing. There is a faint sign of changes to come in his remark in 1936 to the Commerce students that "The increasing power of the state and its conquest of the press, the Church and the university, and of the tromendously improved system of communication . . . perhaps weighs more heavily against you than it did against us."21

Two years later, under the heading, "The Passing of Political Economy," he writes: "The end of the nineteenth century and the twentieth century were marked by the extension of industrialism dependent on minerals, new sources of power, physics and chemistry and mathematics. These have led to the decline in freedom of trade and the hardening of political entities in the intensity of nationalism. With these has come the end of political economy, the emergence of specialization in the social sciences, and its subordination to nationalism."22 And he continues: "It has been argued that the disappearance of political economy is an illusion and that it will emerge from behind the clouds. But the circumstances are not propitious for another great epoch of thought. The rise of literacy and improved communication promoted the rapid growth of groups, associations and nations and reduced social scientists to a position as defenders . . . of this and that particular cause. Under the influence of modern industrialism in the printing press and cheap paper, universities have become increasingly specialized, and increasing demands for space in the curriculum have enhanced the activity of administration and promoted the growth of vested interests."23

These reflections on modern industrialism and the state of communications were brought to a focus in "The Penetrative Powers of the Price System."²⁴ He had not yet embarked on intensive work on communications but his search

| 20Commerce Journal, 1988, 24-30. | 21Ibid., 1936, 30. | |
|---|---------------------------------------|----|
| 22 Ibid., 1938, 5. | ²⁸ Ibid., 1938, 6. | |
| 34Convilian Journal of Feanomics and Pa | litical Science IV, no 3 Any 1938 200 | 19 |

for a more adequate formulation of the forces back of change, peaceful or disruptive, was moving him rapidly in this direction. There is apparent a growing awareness of the possibilities of communication studies for the treatment of change as a whole rather than change as looked at from one aspect or point of view only. There are few signs of this synthesis as yet; at some points the price system is treated almost as a thing apart, but the close relationship established between changes in the role of the price system. in techniques of communications, and in the power of such institutional elements as the state, underline the advance in his thinking which was to lead away from "the traditional highways of economics."

He writes: "The price system operated at a high state of efficiency in the occupation of the vacant spaces of the earth";²⁵ and he describes its part in the decline of feudalism and moreantilism and in the rise of industrial capitalism. Its drive in turn evoked the new industrialism, increased strains between areas of early and late industrialism, and the resulting instability has led to increasing intervention by the state. Its limitations today are apparent in the appearance of monetary nationalism, changing concepts of the role of government, and the interest of economists in imperfections of competition. These developments, he continues, have "reduced the value of economic theory based on Adam Smith and increased the value of economic theory adapted to nationalism."²⁶ Study of the historical role of the price system, its possibilities and its limitations, is looked to for a more realistic approach to the economic problems of our time.

It was at this point that he moved to new ground. Back of the pricing system, its efficiency at one time, its distortion at another, have been developnients in communications which at one time increased its penetrative powers over wide areas and which now in the twentieth century have limited these powers and produced the disease of economic nationalism. The key to economic change and much of its dynamic must be sought in changes in comcommunications, for the penetrative power of the pricing system is but one aspect of the penetrative power of systems of communication. Innis's concern with the economic history of the price system had led him directly to the communication studies of the next phase of his work. This growing awareness of the strategic place of communications in change may explain the irritation he displayed in taking Schumpeter to task for his neglect of their importance to economics. Thus, ". . . Professor Schumpeter writes, 'we pass by paper,' 'we also pass by printing' . . . The reader will forgive the reviewer who has read 1050 pages if he insists on technological advance in these industries and the effects of the 'competing down' process on comomic and other literature."27

III

Innis was now ready for the third stage of his researches—an intensive study of technology and pricing factors in communications—using these as he had used them in Canadian economic history as spearheads for investigations which went far beyond them alone. "Communication" is, unfortunately, as Melvin

25Thid., 307.

28Thid., 318.

²⁷Canadium Journal of Economics and Political Science, VI, no. 1, Feb., 1940, 95-6.

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Knight has put it, "... an omnibus label for social relationships varying from simple, direct and merely practical transmissions between persons to the shifting continuity of institutions on a world scale and throughout human time."²⁹ The "practical transmissions" referred to ordinarily embrace transportation factors in addition to such developments as the telegraph and the cable, the press and radio, and are in the main related to the spatial aspect of communication, the ease or difficulty with which information is exchanged between individuals or groups. It may be said, with some minor qualifications, that in Innis's work in Canadian economic history problems of communication in this spatial sense occupied a central place long before he focussed attention on the role of communications in change.²⁹ But a more explicit treatment of this subject awaited further researches from which emerged questions that led him to concentrate on this area of study.

For the economic historian to venture into this field there is demanded an enormous extension in the scope of his inquiries, and it is worth noting that almost half Innis's reading, as indicated by his use of the resources of the University of Toronto and other libraries, was accomplished in the years following 1940. Apart from such demands on scholarly time and energy, studies in the economic history of communications raised a problem which was to occupy a central place in the last phase of his work. In his work in Canadian economic history he had viewed technology and pricing factors as an observer of events; now, in turning to communication studies he found himself inside or part of the universe he sought to explore, subject to influences productive of bias from which there could be no escape other than through knowledge of the forces which produce bias. Although he had not been unaware of the problem, witness his early reference to the need for ascertaining trends and escaping their effects, it now becomes so central in his thinking that it provides possibly the best clue to his research of the last decade.

The early years of the forties may be regarded as a period of preparation for study of what Knight referred to as "the shifting continuity of institutions." In embarking on intensive research in the economic history of communications, Innis turned from the position he had attained as a national communications, Innis turned from the position he had attained as a national communications, Innis turned from the position he had attained as a national communications, Innis turned from the position he had attained as a national communications, Innis turned from the position he had attained as a national communications, Innis turned from the position he had attained as a national communications, Innis turned from the position he had attained as a national communications, Innis turned from the position he had attained as a national communications, under the control of monopolies of knowledge, dominated by experts who viewed with suspicion and worse this intrusion by an economist, and therefore a barbarian, into the backyards they occupied. Nor were his brethren inclined to applaud this strange veering off into pioneer work in an area which seemed to have little to do with economics. This change of direction gives rise to the paradox that in this new concern with communication systems he faced for a time an almost complete break-down in his communications with those who knew him best.

I have the impression that this shift to a new phase in his thicking was a vastly bigger step than he himself realized. There is apparent the intention to

28American Economic Review, March, 1953, 180.

²⁹See his "Transportation as a Factor in Canadian Economic History," Papers and Proneedings of the Canadian Political Science Association, III, 1931, 100-81, also his "Significant Factors in Canadian Economic Development," Canadian Historical Review, XVIII, no. 4, Dec., 1937, 874-84.

keep communication studies within the compass of more or less traditional economic history. He writes of his "... concern with the use of certain tools which have proved effective in the interpretation of the economic history of Ganada and the British Empire,"⁸⁰ Nor does his reading suggest at the beginning any marked shift of interest to the "big" problems of empires and eivilizations, stability and progress, which so occupied his attention in the last years.

Beginning in July, 1940, his readings in Canadian history gave way almost completely to the reading of works on paper and printing, journalism and the press, literature and the book trade, censorship, advertising and propaganda, and memoirs, biographics, and autobiographics which throw light on these aspects of communication. Interest in the appearance and spread of machine techniques in printing took him to studies of the press in England and the Continent, and in the United States as the area of greatest freedom of technological change. There is the growing conviction that at the heart of industrial change lie these advances in communication technology, that early developments in printing and changes allied to them were back of the extension of markets and the spread of industrialism in the old world and the new.

His first important published work in this phase was "The Newspaper in Economic Development" (1942). It consists of a review of technological advances in printing and paper making, with the power press seen as the pioneer in the development of speed in communications and transportation, exerting pressure for more rapid transmission of news by cable, postal, and express systems and more efficient transportation services. The press provided the impetus to the spread of the price system over space and vertically in terms of income categories by its penetration to lower income groups. It appealed to a wide audience of all levels of literacy and strengthened the move to compulsory education and extension of the franchise.

As the pioneer in mass production and distribution, the press, in its emphasis on volume and rapid turnover, heralded the appearance of advertising and the giant department store. Increasing concentration of power in the newspaper field encouraged a corresponding concentration in business in areas making most effective use of new developments in communications. It is suggested that in the lumpiness of technological change in communications, and the instability resulting from the sensationalism of the press and its stress on the immediate, are present valuable clues for students of the business cycle and more broadly for those interested in the dynamics of change.

Innis's observations on economics in this third phase reflect these changes in his thinking. Following brief experiments with imperfect competition and liquidity preference, he turned with more profit to observations "On the Economic Significance of Culture,"⁸¹ wherein he sought to bring technology and pricing together in a more coherent and unified approach. He writes: "The conflict between technology and the price system described by Veblen . . . can be resolved more easily with a broader perspective."⁸² Schumpeter had

30 Empire and Communications, 5-6.

³¹ Journal of Economic History, vol. IV, Supplement, Dec., 1944, 80–97.
³²Ibid., 83–4.

tried to narrow the gap between pricing and technology but is seen as sacrificing much in both approaches and as neglecting the political factor. Silbering was more successful in his attempt "to coordinate the political, pecuniary and technological approaches," but weakened his effort by concentration on national boundaries.

Inois sought his broader perspective through studies in communications which passed beyond political boundaries and enabled consideration of the interrelations of politics, economics, and religion in historical change. Concerning the impact on religion of changes in communications he writes: "With the rise of a vast area of public opinion, which was essential to the rapid dissemination of information, and the growth in turn of marketing organizations, the expansion of credit, and the development of nationalism, the vast structure previously centering about religion declined."³⁸ Commerce succeeded religion as a force for stability, but new methods of communications have strengthened division, commerce is no longer the "great stabilizer" and the results are apparent in the radically altered role of the state.

New pressures are reflected in concern with the immediate and in the break-up of the classical tradition in economics. "At one time," he writes, "we are concerned with tariffs, at another with trusts, and still another with money. As newspapers seldom find it to their interest to pursue any subject for more than three or four days, so the economist becomes weary of particular interests or senses that the public is weary of them and changes accordingly."³⁴ As a corrective, Innis suggests that "Economic history may provide grappling irons with which to lay hold on the fringes of economics . . . and to rescue economics from the present-mindedness which pulverizes other subjects and makes a broad approach almost impossible."³⁵

The sharp contrast between the synthesis he sought and modern tendencies in economics led to increasingly pointed comments on the unhealthy state of the subject. In his review of Ronald Walker's *From Economic Theory to Policy* he writes:

Adam Smith was a distinguished representative of a century in which all knowledge was taken as a field: It was the supreme tragedy of his work that part of his contributions, namely the *Wealth of Nations*, developed around the principle of division of labour, and . . . that its application was made with devastating effects in the field of knowledge where he would have most abhorred it and where his writings stood most in contrast to it. The universe of Adam Smith was literally ground to atoms, or facts and figures, by the printing press and the calculating machine.⁸⁹

In these years, Innis had moved from description of the state of economics to diagnosis of its condition.

The work of this phase led to an increasing interest on his part in the ability of machine-dominated cultures to survive. Growing instability and increasing reliance on force are productive of uncertainties which optimists of the nineteenth century could overlook. And since his studies of the media and techniques of communications had yielded new and valuable insight into problems centring on the character and course of historical change, it was

| #31bid., 86-7. | 341bid., 92. | 261bid., 97. |
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| | of Economics and Political Science, X, no. 1, Feb., | 1944, 107. |

perhaps inevitable that he should look to the state of modern communications for light on the survival powers of Western civilization. In so doing he raised anew a problem which was at the heart of communications itself, namely the problem of understanding among peoples of different places and times.

In his article "Industrialism and Cultural Values" he speaks of "... the extraordinary, perhaps insuperable, difficulty of assessing the quality of a culture of which we are part or of assessing the quality of a culture of which we are not a part."³¹ This "difficulty of assessment" is rooted in the bias of communications present in our own and other cultures. The clearest manifestations of this bias appear in attitudes toward time, and it was this search for clues as to the meaning of the time dimension in different cultures that led Innis to the fourth and final phase of his work. Interest in the spatial aspects of communications now gives way to concern with time concepts and the possibility of avoiding the fatal disease of bias by attainment of a balanced view of time and space as a condition of survival. The dichotomy of technology-price has given way to that of time-space and again he sought to resolve it by communication studies.

His interest at this time in the problem of understanding Russia may have been a factor in this new preoccupation with comparative history. In his "Comments on Russia" he wrote: "To be trained in political economy, a subject which has its roots in the West and which has suffered from the characteristic disease of specialization, and to realize suddenly that a vast powerful organisation built around the efforts of 180,000,000 people has arisen with little interest in this specialization is to find oneself compelled to search for possible contacts in the broader approach to its history."³⁸ And again: "Political economy as developed in the Western world will be compelled to broaden its range and to discuss the implications of competition between languages, religions and cultural phenomena largely neglected by it."³⁹

IV

It is at this time (the mid-forties) that his readings take a new turn. The emphasis is now on the empires of the Mediterranean and, farther afield, of India and China, on law, religion, and the arts in classical and medieval cultures, on the character of communications as reflected in the alphabet and language and fashions in literature. There are increasing references to questions of power and stability, to nationalism, and to ancient and modern concepts of time. The first of his published works of this phase was the article "Minerva's Owl" of 1947, which like "The Newspaper in Economic Development" of 1942, provided the setting or outline for the following half decade. It represents a bird's-eye view of a larger work in process. *Empire and Communications* filled in some of the gaps and provided a more complete though still skeleton framework. The later sets of essays, *The Bias of Communications*⁴⁰

⁸⁷Papers and Proceedings of the American Economic Association, in American Economic Review, XLI, May, 1951, 202.

⁸⁸International Journal, I, no. 1, 31. See also his "The Problem of Mutual Understanding with Russia," Queen's Quarterly, LIII, no. 1, 1946, pp. 92-100.

³⁹"Reflections on Russia" in Political Economy in the Modern State (Toronto, 1946), 262.
⁴⁰Toronto, 1951.

and Changing Concepts of Time41 present the results of research arising out of problems encountered in these new explorations. In these years Innis worked back from the industrialization of communications to its antecedents and forward to its consequences for our time.

His studies of pre-industrial communications parallel in purpose and method his studies of early staples in Canadian economic history. The elay, papyrus, and parchment of the empires of the past, like the cod, beaver, and square timber of colonial North America, appear as the predecessors of industrialism and knowledge of their role and significance is looked to in both cases for light on the character and timing of the industrialism that was to emerge.

It is not difficult to discern the general pattern of change of this last phase of Innis's writings: the early stage of free and creative expansion eventually gives way before the rise of monopolies of knowledge which buttress hierarchics in state, religion, and economics; these monopolies in turn invite competition from marginal areas in which creative elements are strong; this competition is productive of disturbances as new forms of organization clash with established forms, and may be resolved only by the attainment of balance among competing forces. This solution by balance of opposing forces appears throughout his writings of this last phase wherein he juxtaposes time and space, Church and Empire, stability and change, written and oral traditions, Roman Law and Common Law, force and sanction.42 Bias is lack of balance, it is the result of monopolies in communications representative of one point of view, and its explanation is to be found in the character of communication systems which shape attitudes and promote or destroy the possibility of understanding among peoples. The closed system rules out prospects for balance and no empire or civilization has escaped its effects.

Innis's approach "to the study of eivilizations and of monopolies in relation to them" leads to conclusions which provide no optimism for the present. "Lack of interest in problems of duration in Western civilisation suggests that the bias of paper and printing has persisted in a concern with space."43 States, divided by language, concern themselves with ". . . the enlargement of territories and the imposition of cultural uniformity . . . on [their] peoples."44 This spatial bias of the present is productive of an emphasis on change, instability and progress, and presents "... graver threats to continuity than the tyranny of monopoly over time in the Middle Ages to the establishment of political organisation."15

These explorations of the last phase consist essentially of study of the devices by which control over space (how large an area did it cover) and time (how long did it last) has been attempted in other cultures and times-such devices as reliance on the power of the state or the sanctions of religion, architecture, and education. The problems of the present are rendered vastly more complex

11'l'monto, 1952.

⁴²There are strong suggestions of ideal type method in Innis's approach, e.g., his references to the oral tradition of Greece, the durable bureaucracy of the Byzantine Empire. ⁴³A Plea for Time, Sesquicentennial Lectures, University of New Brunswick. (Fredericton,

1950), 8.

45" The Concept of Monopoly and Civilisation." A paper read at a meeting under the chairmanship of Professor Lucien Febvre, Paris, July 6, 1951.

by the impact on cultural values of industrialism in communications, by the obstacles it presents to understanding of other cultures, and by its demandsfor specialization in technology and thought and its emphasis on the here and now. In the United States, as the area of sharpest impact and most dangerous manifestations, the affliction of bias appears in its most advanced stages. Canadians must search for balance clsewhere and this in the face of an increasingly heavy cultural bombardment from the south.

His reflections on Keynes⁴⁸ sum up his misgivings on the present state of economics. Keynes, under the spell of the immediate and of the Common Law tradition, is contrasted with the Adam Smith of Roman Law principles and a more balanced concern with time. It is less a critique of Keynes than a summing up of the forces that made Keynes run. More instructive is his unfinished paper, unhappily entitled "The Decline in the Efficiency of Instruments Essential in Equilibrium." In the main, this is concerned with the bias exerted by present-day communications on the state of mind of economists. It assumes close acquaintance with such writings as his A *Plea for Time*, "The Bias of Communication,"⁴⁷ and *Roman Law and the British Empire*,⁴⁸ wherein he has much to say about the nature of the obstacles in the way of any universal approach to economics or the appearance of "any central core of interest." The economic historian must take into account such obstacles and make others aware of their import.

He argues that the present state of communications rules out any effective contact between different cultural groups. Within Western civilization itself, the obstacles are almost as great, and by way of illustration he points to profound differences in outlook in the social sciences of Roman and Common Law countries.49 Law, as an aspect of communications, leaves its impress on change and on economic thought, and the difference in points of view which results is as wide as that between Adam Smith and Keynes. Similarly, modern nationalism as a by-product of the new industrialization of communications presents new and dangerous obstacles to understanding, and press and radio steadily reinforce national differences in outlook. These differences are reflected in present-day preoccupation with national statistics; concentration on national problems subject to measurement, obsession with statistics determined by national boundaries, produce new obstacles to effective communication across such boundaries, the more so since statistics reflect the character of the state. limis then turns to a familiar theme, the strategic position of communications in economic change, and in particular, to the role of the newspaper as the pioneer in mass production and distribution. And there the paper ends.

I do not think there is any doubt as to the direction in which he was proceeding.

⁴⁵Review: John Maynard Keynes, Two Momoirs-Dr. Melchior: A Defeated Energy; and My Early Beliefs, in Canadian Journal of Economics and Political Science, XVI, no. 2, Feb., 1950, 107-9. Also Review Article: "Sub Specie Temporis," Canadian Journal of Economics and Political Science, XVII, no. 4, Nov., 1951, 553-7.

⁴⁷Canadian Journal of Economics and Political Science, XV, no. 4, Nov., 1949, 457–76.
 ⁴⁸Sesquicentennial Lectures, University of New Brunswick. (Fredericton, 1950.)

⁴⁹The Common Lew with its flexibility and receptivity to change, its emphasis on facts and their interpretation, favourable to the scientific tradition and to industrial development, is contrasted with Roman Law and its appeal to principles and its greater emphasis on continuity and duration.

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Modern developments in communications, with their emphasis on speed of change, their contributions to instability, and their concern with the moment, explain bias in economics as reflected in the discase of specialization and the prevailing obsession with the short run. The bias of economics is that of our culture and Innis saw little evidence of any concern with its perils and less of any attempts to correct it. I have the impression that he was saved from the role of historical pessimist by the sense of humour which pervades his writings as it did his conversation, and by his awareness of the importance of humour as an element in balance and a means of distinguishing between economics and insanity. And I cannot escape the feeling that leg-pulling was not entirely absent from his writings.

I have tried to set out some of the milestones on the road followed by Innisthose which mark out the increasing range and maturity of his thought and the course of his search for what he termed "an integration of basic approaches" as an offset to the fragmentation of knowledge which destroys prospects for understanding among peoples and nations. This understanding comes only through open lines of communications and he looked to social scientists to lead the way, even though the American Economic Association lag behind, providing as it did for Innis a case study in the sickness of liberal economies.

Toward the end there were signs of yet another phase, one suggested by Innis's growing interest in philosophy and more especially the philosophy of history. In his review of Cochrane's *Christianity and Classical Culture* he wrote: "A society dominated by Augustine will produce a fundamentally different type of historian, who approaches his problem from the standpoint of change and progress, from classicism with its emphasis on cyclical change and the tendency to equilibrium. . . . His [Cochrane's] contribution to the philosophy of history is shown in the development of general concepts at the basis of progress and the adjustment of order to meet the demands of change. . . .⁷⁵⁰ It is doubtful if any work exerted greater influence on the general outlook of the Iunis of the last days than this volume. He, too, was searching for concepts useful in "the adjustment of order to meet the demands of change," a legitimate goal for an economic historian of cultures who sought to see things as a whole in the endeavour to throw light on the ceonomic problems of his time.

⁵⁰"Charles Norris Cochrane, 1899–1945," Canadian Journal of Economics and Political Science, XII, no. 1, Feb., 1946, 97.