

COMMUNICATIONS, TIME AND POWER: AN INNISIAN VIEW

by

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In 1946, after visiting Russia, Innis remarked that the time had come to broaden the range of political economy by studying the struggle for social supremacy between states, churches and commerce and the related competition between languages, religions, cultures and communications media. This, I argue, is what he did and had done. His early studies of Canadian economic history led Innis to transcend conventional economics and laid the groundwork for his later political theory of communications. It expressly took up the 1946 challenge with its competing monopolies of knowledge and power based on manipulating the space and time-binding properties of communications media. It reflected a materialist model of communications, a social ecology, a soft determinism, philosophic naturalism, and it linked knowledge, freedom and power. Finally, I conclude, these insights enabled Innis' transcendence of bias and his search for cultural balance.

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Everything Flows. Heraclitus.

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"Political economy 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."

Harold Innis, "Reflections on Russia."

Innis' 1946 statement has revolutionary implications about "the significance of communications to the problem of empire" and political theory.¹ Its broad social reach reflects a continuity through his work, in terms of its problems, methods and multi-factoral ecological structure. Indeed in *Empire and Communications* Innis observed that he had been "influenced by a phenomenon strikingly evident" in his early study of "Canadian economic history [and] the French, British, and American empires".² Accordingly in this essay I wish to link his political theory of communications with his Canadian historical studies and resultant transcendence of conventional economics (in 1). They led him to a political theory of competition between space-binding states and time-binding religions (see 2).

This suggest that Innis' theory involves four core dimension: a materialist model of communications set within a social ecology that avoids the traps of hard determinism and economism (see 3). These Innisian links between knowledge, power and freedom, may help a culture transcend bias and discern balance (see 4). Now to begin our journey.

(1) IN CANADA / BEYOND ECONOMICS

1.1 A New Canadian Economics: Innis' quest led him down the garden path, right out of the imperial gardens and into the northern bush. In order to develop "new world theory" adequate to its problems he had to resist the old world's "monopoly of theory", e.g., about price systems.³ Indeed in Innis' early work on Canadian economic history various factors had been important from the first:

*A careful observation of commodities in their geographic setting,⁴

*The developmental role of the state,

*The imperial origins and limitations of the price system,⁵

*Its underpinnings in technologies of communication and transport as well as production and distribution,

*The interaction of different cultures : English, Scots, French, and Indian,

*Competing institutions and structures,⁶

*The need for a balanced social intelligence, and

*The ambivalence of social science.

An acute observer, Innis' method was as empirical, or historical, as he could make it. His lifelong realism underlay his bias against abstract mathematical theory.⁷ This was embodied in his original study of the space-binding imperial economy of the fur trade.⁸ Through the Hudson's Bay Co. London colonized the vast interior of North America. Its centralized organization involved a vast web of control, using diverse : transportation technologies, written communications, standardized accounting techniques, and bureaucratic regulations. Tensions flared across continents, from the metropolitan centre, London, to colonial Montreal and the hinterland factors traders and trappers. The trade's vast reach and cultural complexity (Indian trappers, French voyageurs, Scots factors, and British merchants) laid the foundations of Canada as a nation.

Similarly, his study of the north Atlantic cod fishery described a decentralised, free trading system, based on mobile ocean-going ships and scattered littoral settlements.⁹ It led to democratic institutions from Newfoundland to New England. The fishery and the fur trade together gave Canada its mixed market / non-market economy, staples fixation, cyclonics, and regional inequality and its political swings from centralised to decentralised federalism. Instead of pure political economy Innis' overall work suggested a complex social ecology.

Hinterland economies, he concluded, are rigidly biased for resources, and their depletion. They are the "storm centres" of the international economy following a distinctive but truncated development path in contrast to the stability and balance of the metropole. Accordingly "it cannot be over-emphasized", Innis wrote in 1929, that "Canadian problems cannot be answered in terms of the economics of older countries."¹⁰

1.2 Beyond Conventional Economics: Innis wide-ranging approach rejected Marxism, Canadian socialism, statism, and market theory. In contrast to Marshall's mathematics and static taxonomy Veblen's "cyclonics", he felt, offered a dynamic "embryology" of economic development and "ecology" of the complex interactions involved.¹¹ 50 years ago this view was best articulated in a breath-taking essay, "The Penetrative Powers of the Price System". In it he described the forces whose dynamic interaction explained capitalism's penetration of modern society:

"Into the moulds of the commercial *period*, set by successive heavier and cheaper *commodities*, and determined by *geographic* factors, such as the St. Lawrence River and the Precambrian formation; by *cultural* considerations, such as in the English and French *languages*; by *technology*, such as the canoe and the raft, by *business organization*, such as the Northwest [fur trading] company...; and by *political institutions* peculiar to France and England, were poured the rivers of iron and steel in the form of steamships and railways which hardened into *modern capitalism*".¹²

Here Innis articulated the complex ecology of interacting forces (each italicized) that came together to form North American capitalism. That historical *period* (= time) was characterized by the sequence of staple *commodities* found in Canada's harsh *geography* (= space). Various social factors enter into its formative dynamic: *culture* and *language*, *technologies*, international trade, *business organization* and *political institutions*.¹³

Extending capitalism into the new world significantly modified it. The resultant development sequence, as the staples thesis implied, is different from the European. This, I feel, is because of the greater 'modernization gap' between the "fourth world" of the Americas and the European civilization. In Europe capitalism emerged within the long settled, technologically sophisticated, agricultural feudalism of medieval Christendom.¹⁴

Innis had moved far from economists' conventional concerns with markets or production into questions of technology, institutions, history, and culture.¹⁵ *Economic factors alone, he argued, do not explain what needs explaining: the price system's socially penetrative powers in geography and history.* His model offered a better explanation of the origins of capitalism in distant regions and its distinctive path of development in the new world. The price system's penetrative powers rested on innovative technologies.

Coins "operated at a high level of efficiency in occupying the vacant spaces of the earth", because of their lucid communicability and ease of circulation. Accordingly "money permeated social relations", and even "encouraged political and economic freedom." In addition it has rich symbolic properties as an economic exchange and information medium and as a measure of value. Those symbolic properties explain its social penetrativeness as much as its economic. Improved goods transport must be matched by innovations in reliable and rapid communications media. Since prices must be standardized across space as fast as possible, value and time are inversely related. A money economy then is not time-binding (and can't be?).¹⁶

Innis' insights into communications and economics went further still. The Phoenicians for example developed the phonetic alphabet for the practical purposes of "maritime trade.. Commerce and the alphabet were inextricably interwoven". The 13th century commercial revolution rested on the spread of cheap paper from Syria to Italy and the invention of letters of contract. Renaissance navigational, transportational and communications technologies: the telescope, the ship and the book, aided the global spread of the price system. Today's global economy corporation depends on efficient transportation and communications technologies.¹⁷

Such technological innovations preceded classical mechanics by a century and mechanized industrial production by three. Capitalism, Innis' model suggests, had its origins in early Renaissance cities and later states, whose communications and transport technologies enhanced its European and global diffusion Nor does economics of itself explain how this new civilization, with its learning, its new states, etc gained social supremacy over the state and church. Modern Europe was not just a new 'mode of *production*'. Indeed mechanized mass industrial production systems arose only three centuries later. And *neither production nor distribution technologies can of themselves explain the reproduction of their own societies.*

To offer such monocausally economic explanations reflects a fundamental fallacy which I term '*economism*'.¹⁸ Merely to assert the 'ultimate' causal supremacy of the economic forces is simplistic. In contrast Innis' causally complex, ecological model precluded any reduction of historical development to one causal factor, whether modes of production, markets, technologies, or class relations. His approach offers much more cogent explanations of the social penetration of the price system, its different development path in the new world, and its growth in Europe prior to 19th century industrialism.

Marx's 'materialist' view of the economy as the social base and of culture, law, etc, as 'superstructural', assumes economism. 'Materialism' is too broad a concept for so narrow, monocausal, and reductionist a doctrine (see 3. 3). Innis' political theory was much more sophisticated. He not only rejected economism he reversed the economic sequence when he said that "political revolution opens way for industrial".¹⁹ And then went farther still.

(2) A POLITICS OF SPACE AND TIME

To say that Innis ignored power is to ignore Innis; for his last works offer a unique political theory. It 'broadens the range' of political economy, as he said in 1946. In it he defined power in fully *social* terms, reducible neither to economics (as in Marxist talk of 'social relations'), technology nor any other one factor. It linked communications and empire, *inter alia*: "A successful empire required adequate appreciation of problems of space, that were in part military and political, and of problems of time that were in part dynastic... and religious". And it stressed "two dimensions of political organization, on the one hand the length of time over which the organization persists, and on the other hand the territorial space brought within its control." These time-binding and space-binding properties were associated with religion and the state respectively.²⁰

2.1 Religion and Time: An empire for Innis is not merely a large state; it also lasts a long time. It must reproduce its civilization. Here religion was of imperial use. Its "monopoly over time" rested on appropriate communications media. In ancient Egypt, for example, Innis held that religion enjoyed a "monopoly of knowledge", e.g., of astronomy and the calendar. That monopoly allowed them to predict the Nile's flooding, the key to Egypt's agricultural economy. And the church controlled the calendar up until two centuries ago.²¹

In Egypt that monopoly rested on the priest's exclusive access to the complex writing medium of hieroglyphics on durable time-binding materials, like stone and the pyramids. Time-binding was also fundamental to Egyptian culture's drive to transcend death. Theocracy, the supremacy of religion over the state, was the goal of Egypt's priestly elites (as later in Israel, and now Iran). From the late Roman empire the western church's 'temporal' power rested on a similar monopoly of knowledge, now based on complex manuscript writing and durable parchment. This time-binding durability and continuity of power and knowledge lasted 1000 years; but it took religious form in the Roman west and political in the Byzantine east, whose balanced civilization lasted for centuries.²²

Religion's "monopoly over time" however "stimulated competitive elements in the organization of space", especially by the state. Governments do not quietly accept the social supremacy of religions. The pharaoh was the high priest, deemed a god, and claimed immortality. His control of the army and economy gave him counter-weights to priestly power. Some pharaohs in addition sought to simplify the state religion, tolerate other religions, and develop simpler competing media using papyrus. The state has always competed with religion to control knowledge: via archives, libraries, and schools, like that in Alexandria. Monarchy, too, is a time-binding institution, for it rests the legitimacy of the state on the reproductive power of the family. Ideologies like paternalism and patriarchy help legitimize either elite's attempt to control time.²³

Establishment represents the state's victory over religion in the battle for social supremacy, from Constantine to Henry VIII and Louis XIII. The resultant violent rise and fall of states, churches, and religious / secular elites was the harbinger of modern class conflict, but here mediated through the Innisian *optique* of competing communications media. Time was in tatters in this new space-binding world.

Protestant bibles printed in the vernacular rapidly spread 'the word' through Europe and overthrew Rome's monopoly of religious knowledge and power. It replaced with the individualized immediacy of '*sola fides*'. Its cognitive subjectivity however rendered secure interpretation of the Bible impossible. Reinforced by the use of vernacular languages it promoted a self-destructive sectarian divisiveness. This opened the way for the new secular state's victory over the church. Heralded by Machiavelli, it was confirmed in Bodin's doctrine of sovereignty.²⁴ The social supremacy of the state was assured when Locke's *First Treatise on Government* attacked the religious rationale for monarchy.

Innis' association of religion and time embodied a nice irony. The church's drive for social supremacy over the state and its claim to be a spiritual power, are material and temporal affairs. They rest on the time-binding properties of appropriate communications media. The Church then is a worldly power, another form of empire; it is not a 'mystical body'. Only the 'Body Social' reigns.²⁵

2.2 Space and the State: Classically states have sought to make political space prevail over religious time. States and religions differ less as worldly / unworldly institutions, than as competing time- / space-binding *worldly* powers. And different media mediate the competition for social supremacy among institutions and elites. This is the core of Innis' political theory.

"The effective government of large areas" like empires and states, depends to an "important extent on the efficiency of communication" and other space-binding technologies, like weaponry, transport, and the law.²⁶ Transportation is the classic space-binder; hence the significance of the Nile to Egypt, roads to Rome, the sea to Britain, and the great interior waterways to Canada itself. The control of large areas, from Egypt and China to Rome, has required appropriate, i.e., light, easily transportable, space-binding communications media: viz, paper vs. parchment.

When Gutenberg mechanized print using standardised type, the new space-binding paper book replaced the old time-binding parchment manuscript. The book rapidly took secular form, encouraging the rise of secular knowledge and new scientific, literary and political elites. The 16th century victory of the modern state over the church created a social vacuum which the rising force of commerce economy sought to fill. Earlier commerce had gained recognition in Roman law; and/the spread of cheap paper from the middle east supported the commercial revolution of 13th century Italy. Commerce triumphed over the medieval church's attack on interest, and was legitimized by Calvin. Locke, once more, saw the trend. He saw private property as the "chief end" of the modern state in his *Second Treatise on Government*. And coins, Innis notes, can aid state's attempts to control commerce.²⁷ Adam Smith's political economy and the rise of self-regulating markets were still two centuries off; Marx's critique of industrialism would take another 60 years and a further century for Innis' theory of communications and power.

However Innis also felt that "Power is poison", and it evokes opposition.²⁸ The state's monopoly of force then has to be regulated. It should not rest merely on a ruler's oral *dicta*. Ruling demands rules, and written media standardise and stabilize rules through social space/time, making them laws. A public written legal code is a medium appropriate to the state. "The sword and the pen worked together" so closely that the state is a product of writing. Writing then helps the state to moderate and regularize political force; it unites power and knowledge. Through it one law is extended over a territory and maintained over time. Written law unifies the state--as Hammurabi had done. A legal code legitimizes a state's monopoly of secular power and knowledge, securing its supremacy over the church's competing monopoly of time and religious knowledge. In the east Justinian's *Corpus Iuris Civilis* constrained the church's power, but the papacy's code of canon law reigned supreme over weak Western monarchies until the early modern era. Not for nothing was the law the main arena of medieval church / state conflict.²⁹

The law has also been a historical font of philosophy. Ideas of divine, natural, moral and scientific law lie at its heart. Epistemology long assumed a legal model of judgement. Problems in interpreting legal and biblical texts were the source of hermeneutics. Mosaic law's prohibition against images evoked a universal ethic, while Roman law reflected the values of the Stoa and modern notions of property and rights.³⁰

But its rule was not uncontested. Empires, states, nations and cities competed to control civil society. The commercial exploitation of the mass media and state attempts to suppress publications both show an awareness of their power.³¹ Indeed "the essence of bureaucracy, political or commercial, was paper, for [it allowed] instantaneous communication". Today electronic media intensify that process. Innis cited Albert Speer on the associated development of "a new type... the uncritical recipient of orders".³²

The space-binding properties of communications media were important to that struggle. However, Innis warned, authority's reach can exceed its grasp; for central controls tend to break down when overextended through space, giving "marginal classes" a breathing space and the hinterland some autonomy. A centre / margin dialectic is at work, leading to oscillation between central control and decentralism. The result are clearings for freedom, which "flourishes in colonies [where] ancient usages can't be preserved", like north America.³³ That freedom suggests democracy in its original Renaissance sense of the city's independence of foreign empire. It is typified in the multidimensional clash between the city and the empire, and oral and written media: "The powerful oral tradition of the Greeks and the flexibility of the alphabet enabled them to resist the (absolutist) tendencies of empire in the East. They drove a wedge between the political empire concept with its emphasis on space and the religious empire concept with its emphasis on time and reduced them to the rational proportions of the city state".³⁴

Democracies deploy user-friendly oral media, like vernacular languages and the phonetic alphabet. They "emphasize simplicity rather than complexity in writing". Everyone understands them. They can help the rise of "once marginal classes" and intensify the centre / margin dialectic. Such media supported popular institutions and free cities, e.g., the Greek polis, Italian commune, and medieval trading city. In juries and parliaments oral traditions have remained a

democratic countervail against state-made law; but oral *dicta from above* have the opposite effect, and the democratic will needs written expression if it is to endure.³⁵

In sum, Innis suggests, freedom as well as power depend on the efficiency of communication. This was hardly the view of a technological determinist (see 3.3).

(3) A SOCIAL ECOLOGY OF COMMUNICATIONS AND POWER

A materialist theory of communications arose from Innis' transcendence of conventional economics and prior studies of Canadian economic history. It involves a rich social ecology which rejects economism and 'hard determinism' and implies interesting links between knowledge and power.

3.1 Communications and Materialism: Innis' theory of communications was materialist, not idealist, as previous philosophy might lead one to expect. As we saw, it is an expressly *political*, almost anarchist, theory. Communications media play a central role in the historical struggles among elites, institutions and societies for social supremacy.³⁶

Now, power was not for Innis an *immediate* relation among individuals or even groups. (Is it *ever*?) Typically social groups and societies, seek supremacy over others. That struggle is socially and technologically mediated, notably by communications media. However the primary function or use of technologies of communication and transportation, production, etc, is to transmit information, to move and make goods. These technologies and their functions, are what competing groups deploy in their struggle for social supremacy. Technologies mediate power then; but the causes of social action are not thereby 'reduced' to those technologies.

A medium's space/time bias, Innis wrote, can support different and competing forms of power: the state, empire or bureaucracy, versus cities, hinterland resistance and democracies. Communications media both reflect and change the structure of power. "Language was tougher than force" Innis' said.³⁷ The vernacular reinforced, and democratic decolonizing nationalism,³⁸ but could have divisive effects if pushed too far, e.g., in provincial rights, India and the USSR. This insight into the cultural politics of time-binding media like language resonated his earlier Canadian study of the fur trade.

In corollary, innovations in communications media and the resultant increases in the quantity and speed of information flow were socially destabilizing. The rise of the simple phonetic alphabet within a vital oral tradition helped bring on a democratic revolution in ancient Greece; and Gutenberg's press contributed to the revolutions in 16th century Europe. However such processes can reverse themselves: the multiply intensified "mechanization of communications" produced by modern commercial and electronic media was to Innis far from socially progressive. Innis then did not equate technological progress with social. On the contrary.³⁹

This view of technology as a social force is *materialist* (but not 'determinist'; see 3.3); for "the relative emphasis [of a medium] on time or space" in a society then "will imply a bias of significance" to the extent and duration of the power of a state, institution, elite, *vis a vis* competing groups. A communications medium's space/time bias is objective and material, not

subjective and mental. Media bias is rooted in the technology's space and time-binding properties: "Heavy and durable [media] not suited to transportation", Innis wrote, disseminate information better "over time than over space"; while space-binding media are light and easily transportable and often less durable, as are electronic media. Political theory then, as Innis said, studies communications through space and time; it is social and materialist.⁴⁰

The space/time bias is further reinforced by a medium's intrinsic *communications* bias, viz, for monopolizing or diffusing knowledge (see 3.4). By implication the efficiency of large centralised organizations is put in question, as was the durability of small decentralised democracies. Hence arose the cry for balance (see 4). Power (or social supremacy) then rests on several factors: communications media, other technologies, space and time biases, knowledge, and organization: political, religious, or economic, etc. Innis gives *none* of the latter a social primacy. There is no single, fixed 'social base'.⁴¹ Economism, ie, stipulating (it was never *proven*) that power, social structure or historical development are 'ultimately' determined by the 'mode of production' (or market) is ruled out.

Rather his 1946 visit to Russia reinforced an already developing transcendence of conventional political economy and his critique of Marxism. While "Marxian class struggle" recognized the "importance of interrelation of technology and classes", it was interpretable in terms of a competition between written and oral media. Agitation in the "class struggle [is] adapted" to the "more vital oral tradition against written law"; but it in turn "crystallizes in written tradition" which "forged new chains": textual orthodoxy; and the "communist state", which, Neill notes, is "homogeneous and unitary".⁴²

And "Max Weber reversed Marx --the system of production grows out of the dominant attitude. Role of intellectual in revolution effected by supply of medium of communication and reward for service". Innis cautioned however that Marx neglects communications and Weber, technology. So a "middle ground" between them is needed. That is clearly what he saw himself as clearing. In 1948 he announced, "I have tried to use the Marxian interpretation to interpret Marx. There has been no systematic pushing of the Marxian conclusion to its ultimate limit" and thereby "showing its limitations."⁴³ This he had done. I see no reason to deny his very words.

This did mean that communications technology is the new 'ultimate cause'. The very notion smacks of metaphysics. Of course communication is a universal human interest, like producing / distributing goods through space and reproducing culture over time. The latter are aided by communications media; and all interact with the available technologies. But none of these interacting systems is closed, or reducible to the other two. This dynamic, interactive approach implies...

3.2 A Social Ecology: First, Innis proposed a complex socio-technical interaction of "homme / milieu". It was not merely economic, technological, or geographic, etc.⁴⁴ I see it as a *social ecology*. Innis' 1946 statement suggested the need for a multifactoral social ecology. It emerged gradually out of his work on Canada and the subsequent critique of the price system, and matured in his theory of empire and communications. It suggested a complex dynamic socio-technical model of the spatio-temporal interplay among competing groups (elites, states, empires, cities) and diverse social factors (centres / margins, markets, religions, cultures, knowledges, and technologies, especially of communications).

Throughout Innis' concern was with *social* systems, not on individuals. He was an individualist only in his independence of mind. He expressly rejected the idealized "detachment of the self" or soul from the world as either a religious or spatialized view rooted in writing and mathematics.

His concrete ecology and sense of the limits of human action and intelligence contrast starkly with totalizing European thinkers like Ellul and Grant. Their metaphysical idealism reifies 'Technology' into one Idea, e.g., '*la Technique*'. This inevitably elides into old world fatalism.⁴⁵ Impotent lament is the sole option. In contrast Innis' model implies that no one factor predetermines history, and his naturalist social ecology was rooted in evolutionary science. Innis preferred its temporal bias, social materialism, and philosophical naturalism over mathematical abstraction, impotent idealism, and crude materialism.⁴⁶

This was not a real dialectic however; for Innisian cyclonics oscillate without resolution. It does not assume the unity of opposites, a rosy ideal which subverts realistic critique. Forces and institutions that go to extremes invite reversal from the margins; and once more, *da capo*.⁴⁷ History then is not progressive; rather it is "a web of which the warp and the woof are space and time woven in very uneven fashion and producing distorting patterns". It is a "sequence of biases".⁴⁸

Innis' multifactorally dense explanations reflected that ecology. Neither economics, geography nor technology operate alone and untrammelled. Rather each is limited relative to the others; and their dynamic interplay changes over time and space. Finally he saw such systems as *open* not closed. This is hardly determinism.

3.3 Soft Determinism: Innis at times may have seemed to hold a version of technological, geographic or economic determinism.⁴⁹ But his 1946 statement showed the wide socio-technical reach of his political theory, beyond political economy into religion and culture. It is ecological in its multifactoral dynamic. It transcends uncausal hard determinism, and rather implies '*possibilisme*': humans face a set of concrete possibilities for action in their *milieu*.⁵⁰ Freedom arises from within the Innisian dynamic of competing powers, knowledges, technologies, groups, institutions, and societies. "An unpredictable freedom arises in the clash between monopolies", e.g., in the hinterlands and social interstices. There the human "spirit breaks through at new levels of society and on the outer fringe", e.g., by deploying simpler media like the alphabet and the vernacular against elite monopolies of knowledge.⁵¹

Innis rejected the idealist dichotomy of causality versus *an uncaused free will*. His soft, ecological determinism is compatible with his naturalist philosophy and political theory of communications. Like John Dewey he was concerned with the concrete conditions of human knowledge, freedom and action.⁵² His concept of freedom thus resonates the commodious reach of 'soft' philosophical determinism (or the broad causal explanatory principle). It is compatible with the naturalistic notion of freedom appropriate to Innis' biological, evolutionary, social ecology. Its multifactoral dynamic contrasts with any monocausal fetishes of technology, geography, or economics. Indeed we must liberate the term 'materialism' from its restriction to merely economic or physical explanation.⁵³

Despite his pessimism Innis was no fatalist. Rather he had a classical, view of humans' limited powers *in* the world. Thus his theory cannot accept the abstract Hegelian idea of totalizing self-emancipation.⁵⁴ Marx, living in a revolutionary era, was optimistic about people's power to change history; but Innis, living in non-revolutionary Canada, was less sanguine. Humans can affect their history somewhat, he might have agreed, stressing that the circumstances were usually *not* of their choosing. Freedom for Innis comes through understanding the possibilities for one in the world at a certain place and time (see 3.4). One's situation held possibilities for action, not just constraints. This suggests links between knowledge and power.

3.4 Knowledge and Power: A key concept in Innis' ecology is the linkage of knowledge, communications and power. Practical knowledge can help one's action over time to match its original intent.

Innis saw human intelligence as finite, limited, and mediated, by communications media, institutions, interests, media and cultures. "The limits of reason in human affairs" are numerous. Social turbulence adds spice to the normal complexity of the information environment. Knowledge is mediated through languages, persons, and technologies. Rationality, Neill remarks, is "bounded ", symbolic, situational. There is no "universal language." There are no pure minds just good ones (and the other kind).

This is a classic, worldly view of the tensions between power and knowledge, in contrast to the naive rationalism of much modern thought. Rationalist illusions about the mind's absolute power, like the technocratic fantasy of controlling nature, implies *hubris*. It opens one to a deserved, Promethean fate.⁵⁵ Innis rejected Plato's mathematical Idea-lization of knowledge, whose atemporality reinforced its tendency to fatalism. Descartes' idea of the purely subjective ego excluded it from communication with the social world and enclosed human freedom in this privatized mind. This left the absolute state and church's sway in the public realm unopposed. Such idealism offers an unworldly haven which it is hell for any theory of knowledge and freedom, communications and power.⁵⁶

No theory is pure, free from social interest or impact. Innisian realism thoroughly fumigated the mind of rationalist infection. Although he felt that science might disclose a common ground or world view among the welter of competing perspectives and idealized the university as the home of free learning, opposed to force, Innis was aware that specialized knowledge was only too often the tool of commercial, political and military interests. Social science might be able to diagnose and foresee social problems and help control their impact, but only if it were independent of vested institutional and social interests. Nor did Innis lightly dismiss government control of culture and social reproduction; for "education is the basis of the state".⁵⁷

Specialized knowledge tended to take the form of powerful, `monopolies of knowledge' and of media.⁵⁸ Here a dialectic of reversal intervened: "monopolies fall of their own weight [because they] invite competition [and] realignments" of power. Competing "monopolies of knowledge developed and declined partly in relation to the medium of communications on which they were built and tended to alternate as they emphasized religion, decentralisation and time, and force, centralisation and space".⁵⁹

Monopolies of knowledge still prevail in today's information society, which is permeated by knowledge monopolies. Executives "rely on intermediaries between [them] and the computer." Similarly the pharaoh "had no way of knowing whether his scribe was representing his thoughts authentically... The opportunities for mischief were great because the real power lay in the hands of the scribes, the select few with the knowledge of writing". And access to such media is still far from equal. Nonetheless freedom is possible; each communications medium also has a tendency "to create monopolies of knowledge to the point that the human spirit breaks through at new levels of society and on the outer fringes."⁶⁰

The monopoly metaphor is economic, and the theory assumes that knowledge has value and affects power. Different kinds of knowledge are of value to someone, somewhere, sometime; and how knowledge is encoded and stored is of socio-political significance. Power and knowledge meet in communications media. They both encode knowledge and mediate the struggle for social supremacy. User-friendly interpretative codes and easily accessible media for example abet democratic groups; difficult codes and less accessible media abet elite control.⁶¹

Innis distinguished the power impact of oral and written media, vernacular and foreign / dead languages. Christ's attack on the scribes monopoly of knowledge rested on oral media: "It is written but I say unto you". The political "significance of the oral tradition" for Innis was democratic, as "shown in the position of the assembly, the rise of democracy, the drama, the dialogues of Plato and the speeches of Thucydides."⁶²

Finally, "Knowledge of the forces which produce bias" can help one "establish the bounds of feasible action."⁶³ Knowledge has some power to transcend the struggle for social supremacy between empires, churches, cities, etc.

(4) FROM BIAS TO BALANCE

Innis was ambivalent about freedom in face of modernity and the west's forgetfulness of time. His concern about this critical civilizational imbalance never abated. In contrast to Ellul's fetish of technology and metaphysical fatalism however Innis soft determinism and social ecology assumed that marginal classes, hinterland regions and knowledge itself had a potential to transcend the bias of the moment, resist the dominant monopoly of knowledge and clear a space for freedom.

Intelligent, free action is possible only in a complex world structured by a dynamic ecology of diverse media, social forces and competing institutions. Even religions are worldly powers competing with other institutions. Every theory or group has its bias. This approach reflected the re-emergence of naturalism and philosophy's return to finitude and the world.⁶⁴

Innis conceived Bias as an objective, material and limited phenomenon. It denotes more than subjective blindness or even habit. Rather it suggests that our models or paradigms (e.g., about price or production systems) constrain our thinking, inhibit insight and subvert theorizing.⁶⁵ An early idea of bias is found in Innis' talk of rigidities in Canada's staples economy. Later, bias arises from dominant technologies, e.g., mechanical industrial systems and then bias reflects dominant media. Bias then is theoretical, societal and then cultural in scope. It arises from the material space- / time-binding properties of technologies and especially

communications media, whose (in)accessibility discloses their potential for information monopoly or diffusion. This is further reinforced by friendly / unfriendly interpretive codes (and languages). Media then affect knowledge and power to a significant but not total extent. Totalizing is too Hegelian an idea for Innis' worldly, naturalist theory.

Innis was quite sensitive about the bias of observers. He felt his own writings were "perhaps in themselves a product of the instability which they attempt to describe as characteristic of a period in which time has been torn into fragments." And, he warned, "we must all be aware of the extraordinary, perhaps insuperable difficulty of assessing the quality of a culture of which we are a part." While his concern is understandable, his own theory had transcended the bias of modernity, by disclosing its limitations, and diagnosing its ills and excesses. Biases moreover are both limiting and permissive. The result was to clear a space for freedom, however small. Transcending a civilizational bias is not easy, Innis felt, especially given the reproductive "tenacity of culture." Nonetheless it is possible to a significant degree.⁶⁶

The need to transcend bias all too often seems equalled only by its disorienting power. The mechanization of communications has not improved understanding; it has increased social disorientation. The "technological drift of modern civilization" reinforced by the modern world's "obsession with present-mindedness" have reached a critical degree of social fragmentation and instability. This led Innis to warn that "The conditions of freedom of thought are in danger of being destroyed by science, technology and the mechanization of knowledge, and with them western civilization". The west's present-minded antipathy to temporality is rigidly resistant to change and reorientation. It subverts our understanding, our freedom, and our future. In a time when ancient eastern powers with more balanced cultures are in the ascendant it clearly threatens North America. "Each civilization has its own methods of suicide."⁶⁷

As monopoly invites competition, so trends pushed to the limit invite reversal:⁶⁸ The overextension of monopolies of knowledge or an empire's central controls can undo itself. Reversal however can take a healthy or unhealthy form. The western bias against time thus might lead to an opposite excess: a rigid bias for continuity, pathological traditionalism, or ethnocentric nationalism (cf. Iran, Azerbaijan). A healthier path for social reorientation would be to seek a new cultural balance, of space/time binding oral / written media, of knowledge and power, science and values. This is much more than a mathematical equilibrium. Such reorientation would seem to be Innis' prescription for western civilization.⁶⁹

Thus Innis' 'plea for time' lies at the core of his work. It is the key to overcoming the "almost insuperable difficulty" of assessing our culture and its claim to superiority. In identifying the problem of time Innis had developed a sense of history which transcended the anti-temporal bias of modernity. It led the way to his tragic conclusion: "the problem of empire and the western world [is to discover how] the bias of communication can be checked and an appraisal of the significance of space and time can be reached."⁷⁰

However a glimmer of insight shines. An ironic, self-critical sense of one's limits is the beginning of wisdom. It involves a wide learning, time-binding foresight and balanced intelligence: "learning concerned to conserve spiritual resources" can help us transcend bias. Balanced intelligence is the beginning of freedom and an approach to a common view and the common good. Empires and monopolies invite hinterland resistance, local autonomy and limited

nationalism. Civilization then depends on cultural balance, on continuity without rigidity. It involves a vital social ecology in which space-binding and time-binding, written and oral media, reflection and action, desire and intelligence, knowledge and power, all interact in vital but stable fashion.⁷¹

Innis' 1946 insight into a balanced social ecology was rested on his insight into Canada's own complex social ecology, and was provoked by his recent visit to our northern neighbour, Russia. It complemented another ideal of civilizational balance, the vibrant urban and oral culture of the free city-states of ancient Greece and Renaissance Europe. His words ring even truer in the era of *perestroika* and *glasnost*:

"Nothing is more favourable to the rise of learning than a number of neighbouring and independent states connected by commerce and policy".⁷²

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