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**Technology Transfer Or Technology Dialogue :
Rethinking Western Communication Values**

by

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Technology Transfer or Technology Dialogue: Rethinking Western Communication Values.

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The title of this conference is problematic for a Western academic. It assumes that there is a connection between the primary process of communication, material things in the form of technology and the secondary process of development that may or may not exist. For the purposes of this presentation I will accept the assumption but suggest that the relationship should not be accepted as a given, but always in terms of its constructed nature.

The sub-title is even more challenging: Alternatives for Asia. Alternatives to what? Does this sub-title assume that the present relationship between communication, technology and development is inappropriate for Asia? If this is the case, why? But more to the point, what is Asia, and if we can establish what that is, which Asia and further, whose Asia? Vietnam, Sri Lanka, the Philippines, India, China, Japan? Are we talking about geography, history, economics, society, culture, or powerful combination of all these elements?

I pose these questions because I think this topic is fundamental to our understanding of the future Asia. It is so important that we must address every conceivable permutation of factors that impinge upon the topic - and then accept that we have an imperfect and partial glimpse of the reality of the situation. The perspective I bring to this massive enterprise is that of communication history augmented by an infusion of cultural studies. Thus I see the relationship between communication, technology and development as always contextual and contingent. I will argue this case in respect to a number of theoretical positions that I find attractive and informative in respect

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to the problems outlined above which I will inform with reference to Indonesia and Vietnam, the Asian countries I am most familiar with. Finally, as the new communication technologies are at the heart of our deliberations I also want to raise questions about the notion of technology transfer, suggesting that it is an inappropriate means of framing discussions as it implies a set of power relations that empower the donor at the expense of the recipient. In its place I want to posit the counter proposition of technology dialogue as a starting point in rethinking the relation between communication, technology and development.

I would like to begin this analysis with three quotes which I think epitomise the issues at stake here. The first provides an historical perspective to an issue which is usually considered to be comparatively new: the question of globalisation. The second, sets out some of the conditions of the issue from an oppositional perspective which sees the new communication technologies as facilitating globalisation for the benefit of a very restricted group. The third, hopefully, ironises the situation, suggesting that technologies can be appropriated and used against the donors forcing a re-evaluation of their power.

With the closing of the frontiers, the development of worldwide electronic communication, and the extension of the railroad networks ... it had become necessary to view the world as a single organism that will respond as a whole to power shifts anywhere on the globe. "For the first

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time we can perceive something of the real proportion of features and events on the stage of the whole world, and may seek a formula which will express certain aspects ... of geographical causation in universal history". Also for the first time in history there was a potential for an "empire of the world" dominated by whoever controlled the pivot area, or 'heartland' of Euro-Asia.

Stephen Kern (1983) **The Culture of Time and Space**, p. 228 on the writings of Halford J. Mackinder, reader in Geography, Oxford and Director, London School of Economics, in 1904.

The second quote is from Herbert I. Schiller, doyen of the American Marxist-influenced school of writing global communications

Reinforced by new delivery systems - communication satellites and cable networks - the image of flow is heavier than ever Cultural domination means also adopting broadcasting systems that depend on advertising and accepting deregulatory practices that transform the public mails, telephone systems and cable television into private profit centres ... The cultural primary that the ruling national power in the world economy historically exercised may now be changing ... The domination that exists today, though still bearing a marked American

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imprint, is better understood as transnational corporate cultural domination.

Herb Schiller, (1991) "Not Yet The Post-Imperial Era", **Critical Studies in Mass Communication**. 39:1, 13 - 27.

The third quote is from a work of fiction, which I perceive to be a particularly imaginative transformation of the technological relationship between Asia and the West.

"Things are not yet perfect, of course," sighed the Collector. "All the same, I should go so far as to say that in the long run a superior civilization such as ours is irresistible. By combining our advances in science and morality we have obviously found the best way of doing things. Truth cannot be resisted! Er, that's to say, not successfully," the Collector added as a round shot struck the corner of the roof

J.G. Farrel (1973) **The Siege of Krishnapur**, p. 171.

Technology is like that round shot, it can be returned to the donor in unexpected ways.

11.

As Asia becomes the economic powerhouse of the new world economic order it becomes apparent that the new communication technologies are a crucial component of the infrastructure needed to facilitate and organize its development. Information and data are transmitted instantaneously around the globe. It is also apparent that the temporal and spatial co-ordinates of the known world are rapidly being transformed. National boundaries, hitherto closed to unwanted discourse, are transcended. The business week is seven days long, 24 hours a day as funds are shifted electronically from point-to-point, and back again if some financial advantage can be gained. In short these technologies have the power to interact with every aspect of a culture, including the mode of thought, or consciousness. On the surface it would appear that McLuhan's global village is with us.

As "technologies of the mind" the NCT can influence, and indeed alter, consciousness. For some, such as Alvin Tofler, they herald the Utopian world order where work and leisure co-mingle in a satisfying user-orientated social order that dispenses with exploitation. For others they are the harbinger of Huxley's **Brave New World** where cultural homogeneity and standardised subjectivity prevail, and difference is eliminated. However, in all cases these scenarios are essentially Eurocentric. Tofler purports to speak globally, but it is always through an American lens. Huxley, and the other dystopians, look back to an imagined lost golden age, destroyed by the Industrial Revolution, where English-style class relations were the natural order of things.

In no sense can Asia be construed as entering into their world view as anything but other. They express a deeply ingrained Western sense of values, which is hardly surprising given their perceived audience. And yet Tofler, and other technological Utopians, present global perspectives. Huxley, and other dystopians, speak from universalist position. The question is, how does Asia fit into these scenarios? Should it be passive and accept technology as a donation from the West or should it be pro-active and set its own technological agenda. Clearly, in the changing world order the latter is the preferred option.

In considering this problematic I will draw upon the work of two theorists who have profoundly influenced my thinking about technology and culture: Harold A. Innis, the Canadian political economist and communication historian, and Arnold Pacey, the English historian of technology.

Innis died in 1952 and for most of the time then he has exercised considerable influence on Canadian intellectual discourse. He has been claimed by Canadian nationalists as defining the terms whereby Canada can articulate its difference from both the thrall of England and the United States. He is also seen as the founding father of the Canadian discipline of political economy. Innis, in short, has been canonized in the Canadian context. However, there is another, internationalist, dimension to Innis that has ensured the widespread circulation of his ideas. As James Carey (1989) suggests Innis was

simultaneously geographer, historian, economist,
and political scientist and he located communications

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study at the point where these fields intersect. (p.149)

Towards the end of his career Innis underwent a remarkable change of direction and began to construct a totalizing theory of history. Others such as Toynbee and Spengler have attempted this. What distinguishes Innis from the others is the position he accorded communication and communication technologies to the civilizing process. Innis argued that in any civilization there was always a dominant form of technology which determined the shape that civilization achieved. In a synoptic survey of world civilizations he observed that there was a fundamental difference between speech orientated cultures compared to literate cultures. He then went on to investigate the different roles technologies such as clay tablets, papyrus, parchment and paper played in shaping different civilizations. From this he deduced that not only were communication technologies central to the formation of a specific culture but they also had an inherent temporal or spatial bias. That is, paper which is inherently portable and preservable could transcend boundaries which led to the creation of specific types of institutions and forms of knowledge. As James Carey (1989) put it

communication [is] the entire process whereby a culture is brought into existence, maintained in time, and sedimented into institutions. (p.144).

Other scholars influenced by Innis have applied his concepts to electronic communication. Daniel Czitrom, (1982) the American communication historian argues

The institutional history of the telegraph forms

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only a necessary background for exploring the cultural reception given the first breakthrough into modern communication. But the tension between what the communications revolution implied and what the telegraph became, between fervent visions and prosaic reality.....(p.4) are different realities.

The tendency to begin thinking about the introduction of satellite communications in Asia is apparent.

Innis was greatly interested in Asia's contributions to world communication history. He recognised the contributions China made in print and paper making and also the institutional basis whereby communication was facilitated in a vast imperial system. His interest in China didn't end with these truism. He was also interested in the effects of the re-export of these technologies back to China. In his unpublished manuscript History of Communication Innis devotes a good deal of attention to the effects of modern printing techniques on modern Chinese history. For example, he pointed out in 1950 that there was a link between the re-introduction of printing into China and the the 1911 revolution led by Sun Yat Sen. He was also aware that the electronic media would have global effects. In fact there is a perception that Marshall McLuhan, another Canadian communication theorist, completed the Innisian project with his pronouncements on the global village.

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Innis provides concepts with which we can 'examine the actual historical record' rather than a verification model. (Carey,1989:150).

These concepts are

- * the limitations of technology;
- * the spatial and temporal bias inherent in technology;
- * the monopolies of knowledge toward which they tend and which they support;
- * the analysis of social change - selective advantage, cultural stability and collapse;
- * frontier/'back-tier' relationships;
- * the cultivation of new structures in which thought occurred - national classes and professions;
- * the development of new things to be thought about - speed, space, movement, mobility;
- * the cultivation of new technologies to think with - abstract, analytical and manipulative symbols.

I want to suggest that the application of these concepts to the new communications technologies in Asia is a very fruitful path to follow.

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Augmented by the work of Pacey it provides a methodology that avoids most of the pitfalls of technological determinism that underpin much of the analyses of globalization.

Arnold Pacey is an Englishman who tutors at the Open University. He has written three significant books on the history of technology. They are The Culture of Technology (1983), The Maze of Ingenuity: Ideas and Idealism in the Development of Technology (1992) and Technology and World Civilization (1992). As I understand him Pacey is strongly opposed to technological determinism. Rather he detects a response to social needs (the provision of material goods), idealism (the desire to solve problems and aestheticism), and culture (creativity and beliefs) as major factors in shaping technological development. As he says

The function of technology in society is mainly to provide our food, clothing, shelter, defense, and transportation, but creativity in technology, and the urge to innovate, is often driven by quite different considerations - by visions of new worlds, ideals of rational order, and sheer fascination with machines, materials, or inanimate power.....it is clearly a dangerous force unless constrained by response to social need, ethical principles, or economic disciplines.

(1992:vii)

Technology represents a powerful intersection of social need, ethics, economic forces, history, geography, politics and knowledge. To view the introduction of the new communications technologies in Asia in terms of commerce and globalization is simplistic in the extreme.

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Another Canadian communication theorist Marjorie Ferguson, has tackled the issue of globalization. She sees the term as a signifier of social, cultural and institutional change which raises more questions than it answers. She detects three underlying problems relating to its widespread utilization as the signifier of change: what does it actually mean, what tangible evidence is there to show it actually occurs, how can it be evaluated? In brief

To whatever extent globalization (however defined) actually is occurring (and to whom), its alleged positive benefits or negative costs are difficult to assess.

Ferguson (1992) "The Mythology About Globalization" **European Journal of Communication**. 7. 69-93.

She further observes that these definitional problems have given rise to a mythology about globalization whose principal elements are;

* "Big is Better".

* "More is Better".

* "Time and Space Have Disappeared".

* "Global Cultural Hegemony".

* "Saving Planet Earth"

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* "Democracy for Export via American Television".

* "The New World Order".

We have all heard one or other of these articulated at some place. They arise, I think, from two major cultural sources that have shaped our thinking on technology. Firstly, the promethean promise that technology, applied judiciously, can resolve the fundamental problems besetting humankind. The evidence of two millenia can be marshalled to support this view, and to deny it on one level would have had me walking and swimming to Kuala Lumpur to attend this conference. However, from an environmentalist position the promethean promise can be viewed as destructive rather than constructive. The second source of these myths seems to me to be another promise: that of plenitude. That through technology we can construct the ideal society in which want has been dismissed. The media are thoroughly imbricated in this second source, primarily through advertising, where the desire to possess is constructed and promoted.

From this perspective technology has itself been colonised and exploited in the name of commodity and promotional culture. Its values are not the values of the nation state. A comparison between the nation state and the (for want of a better term) global city/village are instructive. As I understand it a nation state is historically specific, possessing clearly demarcated spatial boundaries, and shares a set of images and cultural and symbols. By

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contrast, the global city is ahistorical, marked by synchronicity and ephemera. No archaeologist will be able to discover a palimpsest of this construct in two thousand years from now. By definition its boundaries are transcendent and isomorphic, determined by the demands of the market. Finally, its images and symbols are decontextualised, shared by all in a state of apprehension but without comprehension. International broadcasters and advertisers plunder the world's cultures for an arresting image whose currency becomes devalued through an inbuilt obsolescence. There is, then, an incommensurability of values at work here, between the commercial and the cultural, the national and the global. It is this incommensurability that it as the heart of the dilemma confronting Asian policy makers and broadcasters at this moment as they are confronted by the demands of commodification and promotion.

The impasse created by incommensurability demands resolution or a culture will implode. Two possible solutions are the creation of an intense regionalism or the production of an hybridized culture.

By regionalism I mean a return to historicity, boundaries and a sense of shared images and symbols where "here" is not "there". Central to this regionalism is a variation on Anderson's imagined community, where tradition is privileged, and sometimes invented and relationships of power are imagined in particular ways. An example could be my own state of Western Australia where once again talk of secession from the rest of Australia has arisen. This is a consequence of two developments in Australian politics that are

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perceived to undermine the foundations of Anglo-Australian political hegemony. They are the move away from the monarchy towards a republican form of government and the Mabo decision of the High Court of Australia that overturned the legal fiction of *Terra Nullius* by recognizing indigenous title to the land prior to 1786. Despite all of the communicative and institutional links that ostensibly hold Australia together as a nation state these acts have caused a profound crisis of imagination in significant sections of Western Australia's political and economic cultures. Marginalisation and isolation have always characterised the state's relationship with the rest Australia. The fact that the unthinkable can be thought in this era of globalisation is staggering. Similar processes are more sharply and tragically etched in other regions that seek to assert their sense of difference.

By hybridity I refer to a process, which I see as dialogic, whereby one culture borrows from another and transforms that borrowing through specific cultural practices. The relationship between the members of this dialogue may be between superior and subordinate, but in a very real sense that relationship be immaterial to the both the process and the product. In communication acts it is the receiver who completes the process. The sender may intend one message but there is no guarantee that this message will be read according to that intention.

The soap opera is now recognised as a global form of popular culture that is often dismissed on a number of grounds, not least of which is cultural inauthenticity. However, since the work of Ien Ang, a cultural

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studies theorist, on Dallas another view of soap operas is possible. It does not follow that those which are disseminated from the cultural centres are necessarily agents of cultural imperialism. Viewers from a different culture view Dallas is a different cultural context to its cultural source and their reading of the text is determined more by context than origins. Similarly, indigenous soap operas bear the marks of American production values but they speak a different language that is nuanced by their own culture. They may be read against American values but they are in fact hybrids, the product of a dialogue between the host culture and the global culture, between the dominant and the subordinate.

I would now like to explore these matter with reference to Indonesia and Vietnam, not because I think they are exemplary, but because they are two countries whose media I know a little, albeit, from the position of an outsider looking in, which in itself is also problematic.

111.

The contours of the Indonesian media environment are well known. There is an extensive press, sometimes characterized as compliant, a extensive radio network and a national and international television system. The details of the Indonesian media are beyond the scope of this paper but it does have a number of features I would like to comment on, invoking the ideas outlined above. I would argue that all Indonesian social, economic, cultural policy making has been concerned with spatial matters and that the methods employed to

achieve the security of a definable Indonesian space have been underpinned by technologies with a spatial bias.

In the first place the Indonesian media were set up in a framework of national values which they were expected to articulate. Pancasila remains the unifying ideological force of Indonesian national expression. Given the geographical, cultural, linguistic and ethnic diversity of Indonesia a sense of bounded unity had to be constructed through language and other symbolic systems. The media were to become the principle agents in this process of nation building.

In these terms, then, it is no surprise that Indonesia became the third nation in the world to install a domestic satellite in 1976. The intriguing question, for me, is whether the Indonesian telecommunications experts recognised the inherent spatial bias (Innis' term) of the technology explicitly or intuitively? Irrespective of that, satellite communication has served Indonesian needs brilliantly. It has provided the means whereby cultural symbols and Bahasa could be disseminated as unifying agencies throughout the archipelago as a national enterprise.

All of this was achieved under a clearly articulated set of national values which the media conformed to. Subsequently, with changing economic policies, the media environment of Indonesia underwent a radical change with the introduction of commercial television. While the press and state television services are still expected to conform to the principles of Pancasila it appears that the commercial sector

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does not. Arising from this contradiction an oscillation between national value systems and commercial values within the one culture, which give rise to tensions.

At the moment the press and commercial television are competing for the advertising dollar in Indonesia. The international trend arising from similar competition has seen the demise of the evening newspaper, and a constriction in the press generally. It may be that Indonesia follows its own path in these matters, although I doubt it. Further, there is considerable tension between the regional and metropolitan press. Groups such as Gramedia , publishers of Kompas, Jakarta's leading daily, have acknowledged their vulnerability in the face of satellite competition and have sought to expand their operations on a national scale. The technology to compose a paper in Jakarta and disseminate to the regions by fax is available. The regional papers are highly resistant to this suggestion, and the government has blocked them through regulation. Gramedia, in order to secure its economic future, has turned itself into a conglomerate, with investments outside the media field.

The introduction of commercial television has also impacted on the state controlled television network, TVRI. One of the most obvious effects has been the loss of audience. Another has been a serious undermining of its public service role. With declining revenues TVRI cannot compete with RCTI largely because it cannot fund programmes, purchase high demand programmes nor promote itself to the same degree as the commercial sector. Moreover, it is the commercial

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sector rather than the public that has implicated Indonesia into the value system of the global culture. Thus the oscillation between national and commercial values has become pronounced in Indonesia.

By contrast Vietnam has not yet begun to confront the issues arising from this oscillation. Vietnam has its internal divisions, between North and South, Christian and Buddhist, Party and non-Party but in comparison to most other Asian states it is remarkably homogeneous.

It has a shared and passionate devotion to history, it possesses clearly demarcated boundaries and there is a pervasive symbolic culture. All of these have been harnessed and exploited by the Vietnamese Communist Party. Moreover, the media, as ideological state apparatuses, have been imbricated in the creation of a unified Vietnam, based on a clearly articulated set of national values.

The 1986 decision to move away from a command economy towards a market-orientated economy has created a contradictory situation with regard to the media in Vietnam. Journalists assumed that *doi moi* also applied to their profession. Government subsidies for publication were withdrawn, advertising was permitted, publications were expected to be financially self-sufficient. In response the press began to report official corruption and generally sensationalised their coverage of events. Circulation rose dramatically and a number of new publications emerged. In 1989 the state reasserted its control over the press. It stated in no uncertain terms that the press would follow party direction. In 1990 a conference on publishing was convened by the Central Committee and the Department of Ideology and Culture.

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Certain publishers were "severely chastised" and the hard-line position codified at the conference. The supremacy of the party and state over the media were reaffirmed at the 7th National Assembly in November, 1992.

While all of this has been going on Vietnam has continued to liberalise its economy. The contradiction between the policies towards the economy and the media respectively is not lost on the journalists. At the moment they express a deep sense of frustration and sense of powerlessness but as Dallas Smythe once observed, communications has always been the blind spot of marxism. Nevertheless, despite a history of compliance, the journalist profession in Vietnam is dissatisfied and is seeking ways of opening up, in moving from a closed national forum into the global village/city.

The technology is there. Australian Telecom has engaged in upgrading Vietnam's telecommunications which means the "small media" of phones, faxes and the like are now freely available. Further, Vietnam sits squarely within all the major satellite footprints. Access to the images transmitted by the satellites is limited to a privileged few and the broadcasting industry. Not surprisingly Vietnam has no plans to enter the global village yet. At one level this is understandable, massive investment in satellite technology could be viewed as irresponsible given Vietnam's paucity of resources. At another level it is the product of the state refusing to let go of the infrastructure. Open access for the citizens of Vietnam to the promises of advertising on Star would reveal clearly the failure of communism.

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The residual desire to control the mind, and through that process the technology, dies hard in Vietnam. The VCR is a case in point. All VCRs have to be registered, and the circulation of cassettes is also controlled, although not effectively.

It is the inherent spatial bias of these technologies that frightens the Vietnamese. Having constructed a nation-state within a carefully defined set of national values they are reluctant to surrender this form of sovereignty because they can see what has apparently happened elsewhere in Asia. There is reluctance to allow for the conditions of oscillation we find in Indonesia. On a broader scale Asia has to work out where it also stands on this issue. How it is going to deploy the technology to serves its ends. In making these decisions Asia will be confronted by the problematics of exclusion (Vietnam) and inclusion (Indonesia). In either case the resolution of the clash of values underpinning the dichotomy will have to be negotiated.

IV.

Conclusion.

Clearly there are many perspectives to brought to this topic. The one that I have chosen is a culturalist one informed by Innis, Pacey and Ferguson which posits that culture as a superordinate category subsumes other categories such as politics, economics and history. In taking this view I want to provide an interpretative lens that allows us make sense of the context of changing values. The debate about whose values is an important one, but not necessarily the correct one. History demonstrates that values are contingent but the manner in which they change is little understood. Drawing upon Innis, Pacey and

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Ferguson I hope that I have shown that the technologies of the mind we are considering here have played a significant role in changing consciousness. This change is expressed clearly in the oscillation between national and commercial values which is at the heart of the debate in developing countries about the possible effects of the new message bearing systems. From my perspective the technologies involved have an inherent spatial bias. In a very real sense their ability to transcend boundaries is uncontrollable. One answer to that is to harness this power and use it to think differently about what we mean by the term Asia. Instead of seeing it in terms of diversity and separation, see it terms of commonality, as region linked not by commerce alone, but by a sense of Asianness in contrast to that colonising view of other. One step towards this is to stop seeing the introduction of the new communication technologies in terms of technology transfer, which Pacey correctly argues always implies an active donor and a passive recipient, and begin to see it in terms of technology dialogue, which implies an entirely different set of power relationships.

I would like to conclude with another quote, this time from **TV World**, a trade publication. Peter Goodwin begins an article about satellites in Europe

Think satellite, and you think commercial.

(June,1992)

My response to that, is think again.

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