Telecommunications planning and the power of expertise

'In the person of the planner the intellectual lays claim to a key role in the process of social reproduction'. George Konrad and Ivan Szelenyi, *The Intellectuals on the Road to Class Power*

James Miller

The article points out the often neglected political importance of telecommunications planning experts. It does so by first locating policy planning in the larger societal phenomenon of technocracy. Next discussed is the relationship of policy planners to political power. Finally the article examines some instances of national telecommunications planning, in particular the USA.

Keywords: Technocracy; Telecommunications planning; Political power

James Miller is assistant professor of Communications at Hampshire College, Amherst, MA 01002, USA (Tel: 413 549-4600).

Issues of communication and democracy loom large enough these days for scholars to have chosen the phrase as the organizing theme for a recent international conference.[1] 'Democratization of communization' lies at the heart of UNESCO's MacBride Commission report.[2] And in North America a number of communications practitioners and academics have banded together as the Union for Democratic Communications.[3] Concern for democratic principles in relation to emerging telecommunications technologies must take into account a role that at first seems marginal; namely, the role of policy planners. For be they employed by national governments, international bodies, or transnational corporations, technocratic policy planning experts have access to, and presumably wield, political power that helps to determine the development of novel technology and the implementation of unprecedented telecommunications services. Such determinative power will have profound consequences for the shape of the information age. Accurate understanding of present-day dynamics in telecommunications policy decision making can promote participatory processes today, a more egalitarian information-based society tomorrow.

Policy planning and technocracy

By the late 1960s observers had begun to take notice of fundamental changes in the organization and ramifications of production activities in the developed nations. So portentous were these changes that a new term was devised to stress their historical uniqueness. At least two writers coined the phrase 'post-industrial society' to describe them. For Bell[4] an industrial society is organized around the fabrication of goods, while a pre-industrial society extracts primary resources by means of physical labour. A post-industrial society, in contrast, is characterized by a service economy, the pre-eminence of professional and technical groups, the centrality of theoretical knowledge, a future orientation toward technology control, and rationalized decision making.[5] Touraine

[1] This was the biennial meeting of the International Association for Mass Communication Research, held in Paris in September 1982, where an earlier version of this paper was presented to the Communication Technology section.
[2] International Commission for the Study of Communication Problems, *Many Voices, One World*, Unipub, New York, 1980.
[3] The first general meeting and conference took place in Philadelphia in November 1982 and brought together more than 200 people.
[4] Daniel Bell, *The Coming of the Post-Industrial Society*, Basic Books, New York, 1973, p x.
[5] *Ibid*, pp 14–33.

0308-5961/83/020137-12$3.00

generally agrees, but he is more to the point: 'A new kind of society is being born. If we want to define it by its technology, by its "production forces", let's call it the programmed society. If we choose to name it from the nature of its ruling class, we'll call it technocratic society'.[6] The notion of technocracy thus injects the necessary element of politics into the post-industrial conception by raising the crucial question of power and its distribution under new structural conditions.

' "Technocracy" ', says Armytage, 'signifies a social order organized on principles established by technical experts'. The word itself originated in 1919 with a US engineer, though the concept is at least a century older, being identified with St Simon.[7] Williams writes that technocracy 'usually refers to the actual and potential political power of technical administrators, economists, engineers, and related groups. In short it is to be thought of as a rather special mutation of bureaucracy'.[8] Touraine goes further, arguing that:

> . . . technocracy is power exercised in the name of the interests of the politico–economic production and decision-making structures, which aim at growth and consider society to be only the collection of the social means to be used to achieve growth and to reinforce the ruling structures that control it.[9]

Ironically, the initial appeal of technocracy lay in its seemingly apolitical (or transpolitical) nature. It was part of an 'old utopian dream of a future in which technical and industrial progress would let political authority wither away, or at least greatly reduce its influence'.[10] Ours was to have been a time, says Benveniste, 'when reason and fundamental technical demands would somehow displace old-style politics and the confusion of competing ideologies'.[11] Instead the rise of the technocratic post-industrial society has brought about a new sort of political power – to otherwise very different, even antithetical, political–economic systems – inherent in the common tendency toward policy planning by experts.

Formal policy planning probably began with the great corporations early this century.[12] Engineers were especially prominent in promoting 'effective corporate management' through planning.[13] Now planning in one form or another is ubiquitous. This is the age of planning – 'of the multidisciplinary large-scale approach to systems research for policy-making', as Benveniste puts it.[14] Writers concur that planning results when rapid technological change makes the future uncertain and threatens the stability of present political–economic orders.[15] Gunn cites the 'planning style of politics' in contemporary Western capitalist countries which may be a consequence of such 'imperatives of technology' as 'the need for larger areas of government activity, especially when that activity is supportive of industrial expansion and innovation; and the apparent desire for a greater degree of economic planning . . .'.[16]

Williams notes that however a given political economy is labelled – capitalist, mixed, socialist, communist – extensive state planning is a universal feature of technocratic society. The widespread feeling is that 'the state should share, or bear fully, the risks of research and development, and often of production too'. There is a need 'on national security grounds to protect key technological industries'. The state should 'strengthen industries which have to compete internationally . . . Benevolent abdication is less and less an alternative to discriminatory interventionism . . .'[17] in states that still officially distinguish between so-called public and private sectors.

The adoption of planning cannot be explained by any single phenom-

[6]Alain Touraine, *The Post-Industrial Society*, Random House, New York, 1971, p 27.
[7]W.H.G. Armytage, 'The rise of the technocratic class', in D.O. Edge and J.N. Wolfe, eds, *Meaning and Control*, Tavistock, London, 1973, p 65.
[8]Roger Williams, *Politics and Technology*, Macmillan, London, 1971, p 24.
[9]Touraine, *op cit*, Ref 6, p 98.
[10]Don K. Price, 'The spectrum of truth to power', in Thomas J. Kuehn and Alan L. Porter, eds, *Science, Technology and National Policy*, Cornell University Press, Ithaca, NY, 1981, p. 134.
[11]Guy Benveniste, *The Politics of Expertise*, Glendessary Press, Berkeley, CA, 1972, p vii.
[12]Robert K. Merton and Daniel Lerner, 'Social scientists and research policy', in Daniel Lerner and Harold D. Lasswell, eds, *The Policy Sciences*, Stanford University Press, Stanford, CA, 1951, p 283.
[13]David F. Noble, *America by Design*, Oxford University Press, New York, 1977, p 271.
[14]Benveniste, *op cit*, Ref 11, p 4.
[15]*Ibid*; Theodore J. Lowi, *The End of Liberalism*, W.W. Norton, New York, 1979; Marc U. Porat, 'Communication policy in an information society', in Glen O. Robinson, ed, *Communications for Tomorrow*, Praeger, New York, 1978, pp 3–60; Williams, *op cit*, Ref 8.
[16]Lewis A. Gunn, 'Government, technology, and planning in Britain', in Edge and Wolfe, *op cit*, Ref 7, p 163.
[17]Williams, *op cit*, Ref 8, pp 14–15.

enon. In post-war France, for instance, planning may have been one way to avoid extensive nationalization. In the Soviet Union planning may have been a practical response to difficulties encountered in the push toward modernization, evident only after the revolution. It is clearly not the case that for planning to occur, the state must own the means of production. Nor is it that the 'call for plans' and the corresponding demand for increased levels of rationality in policy making 'arise from the emergence of a more profound or better scientific understanding of society. They are [rather] the result of the excessive social dislocation and uncertainty fostered by science and technology'.[18] Thus 'second-order effects of technological and social change' encourage 'new and large powers to be vested in administrative boards'.[19] So commonplace are these new realities that the post-industrial test of good government has become the 'application of knowledge to political means'. It is no longer, if it ever was, 'the responsiveness of government to private wants'.[20]

While policy planning may have at one time 'implied a better and more coherent order beyond the realm of politics',[21] it is now mired in what a student of French planning has called a 'technocratic mystique'.[22] Both a source of this mystique and a chief beneficiary of it are policy making experts.[23]

It was characteristic of the nascent nation state to promote the role of public servant to administer it.[24] In post-industrial societies – which 'spend increasing resources to reinvent their cultures', and where the dominant values are 'research and development and the myth of economic growth' – the technocratic expert is expected to invent images of the future, in addition to tending to traditional administrative chores.[25] Even the term for this role reminds us, Cohen suggests, that the character of governmental administration has changed. They are 'modernizers, managers, experts, expansionists, planner and rationalizers'. Fifty years ago they were 'bureaucrats and mandarins'.[26] They assume a pragmatic, not politically ideological, stance, except for their belief in their own right to leadership.[27] 'The image of society to which they refer themselves is that of a ceaselessly growing productivity which brings about in some natural way the amelioration of the social conditions of life'.[28] They possess a 'technical mentality; a commitment to modernization; a compulsion to get things done; and a strong sense of caste and duty'.[29] Their allegiance is 'service to the State, to the party in power, to the economy; their ethics are impersonal; their style is manipulation rather than imperiousness'.[30] They are inclined to self-protective resentment of both intellectual debate and popular arguments about their areas of expertise.[31] Their organizations are apt to 'wrap themselves in secrecy'.[32] Their command of scientifically based knowledge is compelling, for science and technology today 'appeal to us with [nothing less than] the force of truth itself'.[33] They are both policy advisers and policy makers.

The press for immediate policy decisions often assigns them the latter role. They proclaim adherence to a policy science, or the systematic application of specialized knowledge to current societal problems.[34] 'The shaping of conscious policy . . . calls to the fore men with skills necessary to outline the constraints ahead, to work out in detail the management and policy procedures, and to assess the consequences of choices'.[35] Their status is high. In the UK, for example, it is the expert, 'the thinker serving and analyzing practice, and not the ideologist [who is seen] as a mental worker'.[36]

By their presence technocratic experts alter the structure of con-

[18]Benveniste, *op cit*, Ref 11, pp 4–5.
[19]Bell, *op cit*, Ref 4, p 286.
[20]David E. Apter, *The Politics of Modernization*, University of Chicago Press, Chicago, 1965, pp 316–317.
[21]Benveniste, *op cit*, Ref 11, p vii.
[22]Stephen Cohen, *Modern Capitalist Planning: The French Model*, Harvard University Press, Cambridge, MA, 1969, p 214.
[23]Benveniste cautions that the ubiquity of planning should in no way be equated with its achievements. 'Since 1945 more than twelve hundred national development plans have been elaborated, over one hundred and twenty-five central planning offices have been established in rich and poor countries, one hundred specialized training centers give courses in national and regional planning. Yet with twenty-five years of experience behind them, national planners talk more about failures than about successes', (*op cit*, Ref 16, p 14.)
[24]Seymour Martin Lipset and Asoke Basu, 'The roles of the intellectuals and political roles, in Aleksander Gella, ed, *The Intelligentsia and the Intellectuals*, Sage, Beverly Hills, CA, 1976, p 141.
[25]Benveniste, *op cit*, Ref 11, p 4.
[26]Cohen, *op cit*, Ref 22, p 45.
[27]Lewis S. Feuer, 'What is an intellectual?', in Gella, *op cit*, Ref 24, p 51.
[28]Touraine, *op cit*, Ref 6, p 160.
[29]Cohen, *op cit*, Ref 22, p 45.
[30]Touraine, *op cit*, Ref 6, p 49.
[31]Lipset and Basu, *op cit*, Ref 24, p 127.
[32]Touraine, *op cit*, Ref 6, p 54.
[33]J. Littlejohn, 'Discussion', in Edge and Wolfe, *op cit*, Ref 7, p 94.
[34]Merton and Lerner, *op cit*, Ref 12, pp 302, 284.
[35]Bell, *op cit*, Ref 4, p 311.
[36]Tibor Huszar, 'Changes in the concept of intellectuals', in Gella, *op cit*, Ref 24, p 102.

ventional political power. They 'have made themselves indispensable, though not infallible', because of their particular usefulness in the political arena of post-industrial society.[37] 'Many are persuaded', claims Price, 'not merely that we cannot build a nuclear-age society on a Jeffersonian model, but also that goverment must be entrusted to those who are expert'.[38] Price asserts that public discourse, at least between officials and elite journalists, supports this view, increasingly addressing matters of technique, not objectives.[39]

For constitutional government generally, the rise of public policy planning experts presents a special crisis. For advanced capitalist democracies, in particular, it blurs customary categories. Science is a new estate, along with the branches of government and the large corporations.[40] The technocratic expert fills an unforeseen political role.[41] One US legal scholar terms the advent of 'the techno-corporate state' as 'a constitutional change of the first magnitude'.[42] From another point of view, the blending of private economic power and public political power' results in 'a form of private socialism'[43] for the already rich and powerful, or those on their way. The risk of technocracy lies in the possibility of 'uncontrolled power held by an elite and devoted to special values or interests rather than to the general welfare'.[44]

Policy planners and political power

To what extent do technocratic experts, engaged in policy planning, possess political power? What are the bases for such power and in whose interest do they wield it? These questions are really part of a much larger debate over whether intellectuals in post-industrial society now constitute a class. If so, technocratic experts who plan policy would, as members of this new class, clearly possess political power and could be expected to use it on their own behalf. This debate is beyond the scope of this article. Suffice it to say that major writers support this new-class hypothesis.[45] Whether one accepts their conclusion or prefers the notion of intellectuals as a stratum between classes,[46] elements of this argument help to illuminate the likely political influence of technocratic experts.

Technocratic experts have access to three basic sources of political power in the policy planning process. The first derives from their command of technical knowledge, from membership in a professional group, and subscription to a professional ideology. The second assumes the first but gains additional force through fealty to political or corporate authority. The last originates in a threat: that an alliance might be struck with critical, disaffected intellectuals outside the planning process, in opposition to officials and established power.

Technocratic experts are intellectuals in the sense that they 'participate in the creation or administration of cultural values and knowledge'.[47] While experts may not actually create values, there are surely values expressed in the policy objectives toward which experts plan; and they contribute specialized knowledge to the administration of these values-in-policy. Experts may be better considered as part of the 'technocratic intelligentsia'. It is they, according to Gouldner, who 'manage the new means of production and administration'.[48] Konrad and Szelenyi suggest that when one wears the mantle of an official title, be it minister of culture or corporate president (or even consultant?), one is automatically a member of the intelligentsia. Upon leaving the official position one may regain the credentials of an intellectual.[49] Another way of making a

[37]Williams, *op cit*, Ref 8, p 25.
[38]Price, *op cit*, Ref 10, p 96.
[39]*Ibid*, p 101.
[40]*Ibid*, p 128.
[41]Mark R. Berg, 'The politics of technology assessment', in Kuehn and Porter, *op cit*, Ref 10, p 481.
[42]Arthur Selwyn Miller, 'The rise of the technocratic state in America', *Bulletin of the Atomic Scientists*, Vol 26, No 1, January 1969, p 18.
[43]Walter Adams, 'The military complex and the new industrial state', *American Economic Review*, Vol 58, No 2, May 1968, p 56.
[44]A similar warning was issued more than 20 years ago by a retiring US president, one not especially known for his personal or political aversion to the social sector he called 'the military–industrial complex'. Eisenhower predicted the 'danger that public policy could become the captive of a scientific-technical elite' (*Public Papers of the Presidents, Dwight David Eisenhower 1960–61*, US Government Printing Office, Washington, DC, 1961, pp 1038–1039).
[45]Lewis S. Feuer, 'What is an intellectual?', in Gella, *op cit*, Ref 24, pp 47–58; Alvin W. Gouldner, *The Future of Intellectuals and the rise of the New Class*, Seabury, New York, 1979; George Konrad and Ivan Szelenyi, *The Intellectuals on the Road to Class Power*, Harcourt Brace Jovanovich, New York, 1979; Touraine, *op cit*, Ref 6.
[46]Philip Schlesinger, 'In search of the intellectuals: some comments on recent theory', *Media, Culture and Society*, Vol 4, No 3, July 1982, pp 203–224.
[47]Gella, 'Preface', *op cit*, Ref 24, p 7.
[48]Gouldner, *op cit*, Ref 45, p 49.
[49]Konrad and Szelenyi, *op cit*, Ref 45, p 29.

similar point in historical terms is to say, as does Feuer, that a distinguishing characteristic of modern-day intellectuals is their aspiration to political power. Unlike educated persons of previous eras, contemporary intellectuals seek 'to be society's political rulers', or to direct 'its conscience and decisions'.[50]

The technocratic expert fills the ranks of the modern intelligentsia. The expert's institutional base tends to be the university, which furnishes such material resources as library and laboratory, as well as providing a hospitable environment for the growth of professional consciousness. The professions, writes Price, are 'organized around a combination of a social purpose and a body of knowledge'.[51] Gouldner sees this sense of purpose or mission as self-serving and ultimately political. 'Professionalism silently installs the New Class as the paradigm of virtuous and legitimate authority, performing with technical skill and with dedicated concern for society-at-large'.[52]

Policy planning technocrats are at once a new aristocracy and a meritocracy.[53] High levels of education and training and the rigorous process of credentialling screen and socialize prospective members. Their heightened sense of professional ideology and possession of arcane knowledge encourage a separation between them and 'the middle echelons of the hierarchy' of administrative policy-planning organizations.[54] They may even feel 'a certain contempt' for nominal superiors who are 'not competent participants in the careful discourse concerning which technical decisions are made'.[55] The expert's power resides in the nearly mythical notion that 'productivity depends primarily on science and technology and that the society's problems are solvable on technological bases, and with the use of educationally acquired technical competence'.[56] Experts exercise their power when making statements about the future. This influence is multiplied when the statements appear to have a high probability of proving true, and are taken up as their own by policy planning authorities.[57] The way planners articulate their visions and the manner in which authorities perceive them are an element in the degree of influence available to expertise.

Essential to their performance as a historically new kind of political adviser is the tendency of technocratic experts to work in large groups sharing the same or similar professional ideology. They utilize applied scientific methods, one of which – technology assessment – has been described by a proponent as nothing less than 'a movement or worldwide phenomenon'. This is the transpolitical and transnational dimension of technocratic expertise. As adherents to a global movement–science–ideology, experts must learn to 'cope with politicians and bureaucrats who will often have very different time frames and motives' from the expert. ' "Being right" ' may not be enough for the expert. 'Winning may require that [technology] assessors learn to use their "power of expertise" as a political force capable of mobilizing its own constituency as it institutionalizes and broadens its base of support'.[58] Independent of the strength drawn from coalition-building, the influence of expertise is distinctive: 'reliance on a considerable body of expertise, on exhaustive intelligence gathering and analysis, and on access to secret information provides a foundation for the apparent knowledge of the experts'.[59]

According to the classic Marxist notion, technicians merely formulate ideas determined by the interests of a ruling class. While this may be too simple in a time when the intellectuals–intelligentsia may actually constitute a new class, it is certainly the case that technocratic experts

[50]Feuer, *op cit*, Ref 45, p 49.
[51]Price, *op cit*, Ref 10, p 105.
[52]Gouldner, *op cit*, Ref 45, p 19.
[53]The subculture of technocratic expertise, especially as exhibited at international conferences concerned with development issues, has been the subject of perceptive fiction (see Doris Lessing, *The Summer before the Dark*, Knopf, New York, 1973).
[54]Touraine, *op cit*, Ref 6, p 52.
[55]Gouldner, *op cit*, Ref 45, p 52.
[56]*Ibid*, p 24.
[57]Benveniste, *op cit*, Ref 11, p 36.
[58]Berg, *op cit*, Ref 41, p 494.
[59]Benveniste, *op cit*, Ref 11, p 37.

tend to play a 'subordinate role in advanced economies'.[60] For if technical and managerial knowledge is an essential requirement in the operation of post-industrial society, it is the centres of political and capital power that create the demand for it. In general the technocratic expert responds to the invitation of others. The greater an expert's independent power, the more suspicious will be authorities.[61] Technical knowledge may on its own enjoy a certain degree of political legitimacy, but other principles, like representation, tend to mitigate it.[62] In any case the power of experts is apt, over the long run, to accrue not to individuals but to institutions, and so doing becomes an extension of established power.[63] That power will likely benefit the class with dominant political and capital resources.[64]

Yet the importance of symbolic politics in the modern state cannot be denied. Gouldner for one argues that established power centres have 'failed to capture the symbols of legitimacy: ie science, morality, technology, professionalism . . .'[65] Technocratic experts would seem to command at least three of these four sets of symbols, which could contribute to their independent influence or fortify any alliance with intellectuals.

Political authorities expect their policy planners to serve political ideologies, even if the experts are not predisposed to do so.[66] A compromise of sorts exists in the tendency for technocratic experts 'to solve problems, not contribute to the definition of goals'[67] for national policy. 'Experts', after all, 'are expected to be competent in choosing means; but the ends of organizations are to be chosen – in principle – by political representation or the market'.[68] Ellul, however, points out that ends can be partly, even crucially, defined by means. The possible outcomes of any plan are circumscribed by the technical boundaries implicit in its drafting.[69]

There are substantial rewards for technocratic experts to trade off the prospect of independent power. Merton and Lerner, writing over thirty years ago, recognized that an academic hired out as a technical expert could expect to double his salary and, within his own profession, increase his prestige.[70] Gouldner refers reprovingly to the inetlligentsia's propensity for 'toadying for favor, advancement, awards, and notice; its eagerness to provide (paid) service and arguments for both industry and the state; its readiness to be "the servant of power" '.[71] Berg worries about cooptation and even corruption 'by the enticements of power'. 'The risks', he says, 'involved in being the bearer of bad news' are as great as the rewards for 'not rocking the boat'.[72]

The choice would seem obvious. In Eastern European countries, Konrad and Szelenyi observe, 'a leading technocrat's life is actually more pleasant than that of a high-ranking party man'.[73] And in both East and West there is, in addition to financial benefit and a privileged life, 'access to a court of glory'[74] for technocratic experts willing to contribute to policy planning according to the interests of dominant power. Authorities gain, in addition to technical knowledge about complex issues, scientific blessing for their action or inaction. By proposing an outlandish plan, experts can, for example, induce controversy directed toward themselves. This leaves authorities with the brave option of publicly rejecting a plan that probably never was taken seriously. Such a decision may generate political support for an authority where there might have been none or little previously. Experts who help out in this manner can be filed away and brought out again under friendlier political circumstances as needed.[75]

[60]Gouldner, *op cit*, Ref 45, p 12.
[61]Benveniste, *op cit*, Ref 11, p 19.
[62]Konrad and Szelenyi, *op cit*, Ref 45, p 76.
[63]Benveniste, *op cit*, Ref 11, p 33.
[64]Noble, *op cit*, Ref 13, pp 323–324.
[65]Gouldner, *op cit*, Ref 45, p 88.
[66]Benveniste, *op cit*, Ref 11, p 18.
[67]The full quote is: '. . . the intellectual as expert is rarely given the opportunity to point out that a query delimits a range of possible solutions or that an issue is posed in irrelevant terms. He is asked to solve problems, not to contribute to the definition of goals'. Dramatic evidence that such a claim is not always the case resides in the ironic identity of its author – Henry Kissinger ('The policymaker and the intellectual', *The Reporter*, 5 March 1959, p 33).
[68]Duncan MacRae, Jr, 'Science and the formation of policy in a democracy', in Kuehn and Porter, *op cit*, Ref 10, p 499.
[69]Jacques Ellul, *The Political Illusion*, Knopf, New York, 1967, p 247.
[70]Merton and Lerner, *op cit*, Ref 12, p 296. This estimation of increased remuneration for consulting work was also part of graduate-school folklore among doctoral students in sociology at two major US universities during the mid-1970s. The prestige value of highly visible service to government and industry is evident from perusal of a list of presidents of any major professional organization, say, eg the American Economics Association.
[71]Gouldner, *op cit*, Ref 45, p 40.
[72]Berg, *op cit*, Ref 41, p 485.
[73]Konrad and Szelenyi, *op cit*, Ref 45, p 208.
[74]Lipset and Basu, *op cit*, Ref 24, p 145.
[75]Benveniste, *op cit*, Ref 11, pp 45–47.

Members of what Gouldner might call the Old Class – party *apparatchiki* and business professionals – are jealous of sharing their power with technocratic experts, resent their increasing prominence, and sometimes fear the intelligentsia's potential alliance with disaffected, critical intellectuals. What conditions might impel such an alliance? First it should be recognized there is sufficient role ambiguity about the appropriate contribution of technocratic experts to policy planning that tensions arise. And the professional ideology which spawns a leadership myth among technocrats may in an extreme form drive a wedge between them and political leaders. This hubris would be most evident when technocratic experts 'expect to undertake a careful professional study of problems and to recommend the most reasonable course of action', only to 'find themselves in the confusing situation of recommending courses of action that are imposed upon them'.[76] The potential to subvert established power, under such conditions, may be as great as the likelihood of a contribution to its reproduction.

The routinization of the expert into a 'bureaucratic technician', by failing to question policies, state problems, formulate alternatives, is a brand of 'moral suicide', Merton and Lerner warn.[77] To the extent that the intelligentsia's professional ideology allows perception of this debasement, it is a potentially disruptive force in the expert's relationship with authority. Indeed at the heart of technocratic conditions is the confrontation between organizational interests and personal and professional autonomy.

A more practical matter is cessation or reduction of the material rewards enjoyed by experts. 'Impairment of the New Class's upward mobility, either *politically or economically*, contributes to their alienation'.[78]

Whether pride or greed is the driving force, technocratic experts may ally themselves in opposition to established power with disaffected intellectuals in the context of the long-recognized function of educated persons acting as critics on behalf of an entire society. Lipset and Basu stress that, 'the very nature of intellectual life is to undermine the stability of existing conditions'.[79] Whether conceived as Mannheim's 'free-floating intelligentsia', C. Wright Mills's trust in a youthful critical social science or Schutz's 'well-informed citizen', this is a common theme in Western sociological thought. It is possible that just as ' "the intellectual as adviser" superseded the intellectual as estranged prophet',[80] the intellectuals–intelligentsia will, on occasion, rally their combined influence over issues appealing for either selfish or altruistic reasons. Williams predicts one of several threats to the political stability of post-industrial life to be 'the intellectuals who resent the "smothering compulsion" of technological society'.[81] And Gouldner[82] imagines the New Class as flawed and morally ambiguous but the 'most progressive force' on the horizon.

Members of the 'world-intelligentsia' may have already broken from subservient relationships 'with national capital and international governmental bureaucracy'.[83] Yet it is hard to imagine how the mutually rewarding dependence[84] between societal power centres and those who possess expertise will soon be toppled.[85]

Telecommunications planning

The increasing political power of planning experts for technology-related

[76] *Ibid*, p 43.
[77] Merton and Lerner, *op cit*, Ref 12, p 306.
[78] Gouldner, *op cit*, Ref 45, p 62.
[79] Lipset and Basu, *op cit*, Ref 24, p 144.
[80] Feuer, *op cit*, Ref 45, p 52.
[81] Williams, *op cit*, Ref 8, p 60.
[82] Gouldner, *op cit*, Ref 45, p 83.
[83] Konrad and Szelenyi, *op cit*, Ref 45, p 83.
[84] Benveniste, *op cit*, Ref 11, p 22.
[85] It is worth remembering Benveniste's sage remark that truly 'strong political actors do not need the advice of well-meaning experts and planners', *op cit*, Ref 11, p 30. This is one conclusion to be drawn from the experience of a United States telecommunications policy planning organization. The policy objectives it failed to achieve were reached after its abolition by a president operating in more favourable political conditions (see James Miller, 'The president's advocate: OTP and broadcast issues', *Journal of Broadcasting*, Vol 26, No 3, Summer 1982, pp 625–639).

policy seems to be global, and perhaps unavoidable. Problems presented by this power lie at the heart of what Williams calls a paradox of modern existence: complicated social issues demand 'specialized skill and intricate knowledge', and tend to centralize decision making. At the same time people in general are more 'highly educated and inquiring', perhaps more ready than ever before to participate in public policy planning. It is an authentic dilemma: 'How can democracy, in this predicament, satisfy both the need for greater efficiency and the need for wider participation?'[86]

Predicting the precise nature of the political power wielded by policy planning experts for telecommunications is difficult. This is because the patterns of national, international and corporate planning activities are diverse; the degree of actual or potential participation by unorganized, though not necessarily uninterested or uninformed, publics is uncertain; and the efficacy of communications policy is often problematic. Brief comparison of just a few Western countries underscores this variety.

In the late 1970s, for instance, Australian authorities undertook a futurist communications policy planning programme, *Telecom 2000*. Reflecting on its outcome, they articulated a most unusual, but admirable, kind of official self-criticism. They found *Telecom 2000* to be lacking in devices that would discourage the common tendency toward what Jacobson has termed 'exclusionary policy-making', and instead promote open, democratized planning.[87] Here emphasis was upon the planning process, as much as the policy outcome.

Canada has longer and more extensive experience than Australia in communications policy planning. It has often seemed a model case. Canada has developed national policies for several communications technologies, including satellites, cable TV, over-the-air broadcasting, and even newspapers and book and magazine publishing. These policies have generally attempted to protect national cultural integrity. Corollary issues have been a desire to serve minority-culture groups and isolated geographic regions, to balance media commercialism with other organizational principles, and to prevent Canada becoming an 'information colony' to wealthier nations, such as its neighbour to the south.[88] From the outside, at least, it appears as if participation by ordinary citizens, either directly or through representative officials, has characterized Canada's communications policy planning history. And yet it is not uncommon to hear knowledgeable Canadians remark that while their policy planning activities may be relatively open, and most policies fairly enlightened, neither condition has resulted in much real change in basic qualities of Canadian communications.

In France, as in Australia and Canada, the national government has been an important actor in communications planning. There, since about 1978, a series of commissions, reports and meetings has addressed complicated social questions posed by new information and communications technologies.[89] In addition, under the Mitterand government, France has identified the electronics field as a special beneficiary for increased research and development funds, intended to bolster that country's domestic and international position in the growing market for telecommunications-related technology. Part of the same broad policy approach is the concomitant 'democratization' of science – which joins 'representatives of various elements of society, including labor' to existing French administrative councils – and the 'regionalization' of scientific enterprises, dispersing 'research efforts now heavily concentrated in the

[86]Williams, *op cit*, Ref 8, pp 28–29. See also Lipset and Basu, *op cit*, Ref 74, p 128.

[87]Robert E. Jacobson, 'Who gets what in the information society?: distributional aspects of communications policy making', in Timothy R. Haight, ed, *Telecommunications Policy and the Citizen*, Praeger, New York, 1979, pp 40–46.

[88]See, for example, the recent Clyde report: Department of Communications, Consultative Committee on the Implications of Telecommunications for Canadian Sovereignty, *Telecommunications and Canada*, Ottawa, 1978.

[89]See Simon Nora and Alain Minc, *The Computerization of Society*, MIT Press, Cambridge, MA, 1980; and Jean-Claude Simon, *L'education et l'information de la societe*, Fayard, Paris, 1981.

Paris area'.[90]

One must not understate the unique aspects of the Australian, Canadian and French examples. But these countries, along with Japan and others in the West, share an evident commitment to planning, under the auspices of national authorities, for the new telecommunications technologies. This collective orientation confronts quite a different one, held predominantly by the UK and the USA.[91]

The US approach not only differs from these others, it is really quite odd. Looking well beyond telecommunications, Wilson claims that as late as 1972 the 'national planning idea was almost nonexistent in US national public policy, thought or action'.[92] At best there was 'piecemeal, ad hoc planning on certain issues at the national level by a multitude of agencies, councils, advisory commissions, and interagency committees'.[93] For communications, the USA has never seriously engaged in systematic national planning. Over the years governmental authority has largely been passive, acquiescing to the power of oligopolistic industries. Awkward steps toward technocratic rationalization of aspects of telecommunications regulation in the early 1970s may have been partly an attempt to shut out organized citizens and others threatening this status quo.[94] Today there are two contrary impulses toward planning in the USA, and they divide cleanly between domestic and international communications issues.

Domestically, even the possibility for national planning seems doomed, for the federal government is intent on abandoning much of its (limited) presence in communications. A constitutional amendment in preparation would apparently bar any federal influence over mass media content.[95] The executive branch has reduced the policy planning capability of the single office, the National Telecommunications and Information Administration (NTIA), entrusted to carry out communications forecasting. The Reagan administration sees no likelihood of a full Department of Communications being established.[96] And finally the agency responsible for broadcast regulation during the last half century, the Federal Communications Commission (FCC), is fast divesting itself of authority in favour of market forces. This latter move began with liberals switching policy tactics from an interventionist posture of highly active federal telecommunications regulation characteristic of the late 1960s, to 'deregulation', or regulation through selective alteration of industry structure, to the present neo-classical preference for 'unregulation'. National planning for US domestic communications policies had barely become a recognized possibility when it was quickly rejected by changing short-term political conditions.

For international issues, however, there are actually calls for greater policy planning. Prominent among them is a 1980 report by a congressional committee recommending a cabinet-level council on international communications and information. It would 'coordinate development and implementation of a uniform, consistent, and comprehensive United States policy in response to the problems raised by barriers to international communications and information flow'.[97] Two recent legislative proposals recommend similar organizations with like-minded objectives.[98] These partial moves toward planning for a volatile global communications scene may be meant to avoid what one US writer terms the 'gray and unappealing Soviet model'.[99] Indeed, the association of planning with foreign ideologies, along with the patchwork federal structure and a plan-no plan mind-set, has been said by Wilson to be a

[90]Walter Sullivan, 'Seeking technological gains, the French socialize science', *The New York Times*, 15 August 1982.
[91]This confrontation can be a real one, as at the Versailles summit. See Barnaby J. Feder, 'Role of government in new technology development may split conferees', *The New York Times*, 6 June 1982.
[92]David E. Wilson, *The National Planning Idea in US Public Policy*, Westview Press, Boulder, CO, 1979, p 75.
[93]*Ibid*, pp 76–77.
[94]James Miller, 'Policy planning and technocratic power: the significance of OTP', *Journal of Communication*, Vol 32, No 1, Winter 1982, pp 53–60.
[95]See 'The Packwood amendment: going for broke', *Broadcasting*, 12 April 1982, p 30.
[96]'Wunder predicts reduced, but still important, role ahead for NTIA', *Broadcasting*, 3 May 1982, p 76.
[97]*International Information Flow: Forging a New Framework*, Report by the Committee on Government Operations, 96th Cong, 2nd sess, 1980 p 10.
[98]HR 1957, 97th Cong, 1st sess, 1981; and S 2469, 97th Cong, 2nd sess, 1982.
[99]Porat, *op cit*, Ref 15, p 18.

major obstacle to national planning in the USA.[100] But the desire to guard profit and maintain cultural hegemony can leap even this hurdle.

The retreat of goverment from domestic telecommunications will allow US telecommunications corporations to plan privately in an unfettered, utterly self-interested manner. It is now commonplace to find the trade press encouraging even its small-business telecommunications readers to consider the merits of planning. The source of such exhortations is apt to be technocrats who have only lately left government service to offer their insider's advice through 'a research and venture development firm' tailored to the needs of programme producers and distributors and others.[101] The international scene, however, is far more complicated; the economic stakes are greater. It requires direct federal involvement. This is a recognition that goes beyond communications industries.

For instance, the review of a book on the aviation business notes that the book's author fears that the USA may be losing 'its pre-eminence in commercial aviation, as it has in consumer electronics and automobiles'. The book writer observes that America's 'current and future trading position and its place within the special realm of high technology products shouldn't be left just to the companies concerned'. A competitive industry, whatever its product, needs 'constructive support from its government'[102] if it is to succeed abroad. In the realm of international telecommunications, the National Association of Broadcasters (NAB), primary lobby for commercial US broadcast interests, shares such a view. The NAB recently told the NTIA that broadcasters stand ready to assist the government with their 'professional and technical expertise' in shaping international communications policy. 'Coordinated and focused telecommunications policy', said the NAB, 'should become among our highest national priorities'.[103]

When, infrequently, US policy planning has not tended toward a fragmented, incremental approach, it has stressed 'the role of rational, analytic, social science expertise'.[104] Present-day actions to 'rationalize government', Dickson and Noble interpret as potentially threatening to democratic policy processes. The rhetoric of rationalization 'is frequently used to justify a hierarchical and authoritarian way of running the government', they say, 'with agencies responding less to the details of their congressional mandates and more to the directives coming out of the White House'.[105] Appeals to rationality in government can be 'used to counteract pressure from increased public participation in decisions about the allocation of technical and scientific resources'.[106] Outright disagreement with the substance or procedures of rationalized official planning can be 'dismissed as, by definition, irrational and unreasonable'.[107]

Lowi's conclusion that 'interest-group liberalism cannot plan'[108] may be qualified by emerging patterns of US corporate–state interactions for communications technology policy, at least for international matters. But growth in the importance of technocratic experts, governmental or corporate, decreases the capacity to be involved in policy planning by those people – 'a new plebs'[109] – whose lives will ultimately be deeply affected by the new technologies: the contemporary citizen–worker–consumer. Under 'rationalized' planning conditions, 'only a few circles of varied specialists will be able to play a role and influence decisions within narrow limits'.[110] The bleak prediction, in Bloch-Laine's words, is that the future will be a "period of technocracy tempered by democracy'.[111] Genuinely public policy planning will have degenerated, in the post-

[100]Wilson, *op cit*, Ref 92, p 78.
[101]See Stuart Brotman, 'Long-range planning in the new media age', *Broadcasting*, 2 August 1982, p 19.
[102]Richard Witkin, 'Planes in heavy weather', *The New York Times Book Review*, 11 July 1982, pp 12–13.
[103]Comments of the National Association of Broadcasters before the National Telecommunications and Information Administration in regard to the study of Long-Range International Telecommunications and Information Goals of the United States, 17 December 1982. The FCC is also receptive to industry's concern. See 'New technologies, new problems for international policy makers', *Broadcasting*, 19 April 1982, p 65.
[104]Wilson, *op cit*, Ref 92, p 82.
[105]David Dickson and David Noble, 'By force of reason: the politics of science and technology policy', in Thomas Ferguson and Joel Rogers, eds, *The Hidden Election*, Pantheon, New York, 1981, p 264.
[106]*Ibid*, p 265.
[107]*Ibid*, p 266.
[108]Lowi, *op cit*, Ref 15, p 3.
[109]Touraine, *op cit*, Ref 6, p 54.
[110]Ellul, *op cit*, Ref 19, p 249.
[111]Francois Bloch-Laine, 'The utility of utopias for reformers', in Kuehn and Porter, *op cit*, Ref 10, p 217.

industrial society, to little more than an instrument of social control for an equally rationalized economy.[112]

Some have argued that, in advanced capitalist democracies, opportunities already exist for adequate citizen participation in policy planning. What accounts for the present low level of actual involvement, according to this explanation, is people's limited understanding of technical matters.[113] But in the area of communications policy, the essential issues, domestic and international, are principally political; their technical dimensions are usually not at the heart of policy planning disputes. Nevertheless, advocates (and beneficiaries) of technocratic expertise are apt to hold out the promise of 'solvable equations', in the face of policy quandaries, as compared with the rather feeble hope for merely 'equitable solutions' available through less orderly, but more open, popular political discourse.[114]

Some writers are optimistic about the possibility of limiting the political power of technocratic experts in planning new technologies. Carroll envisions a scheme of 'participatory technology'. He recognizes that, 'the public order of industrial society is not particularly well structured for identifying, publicizing, and resolving in public forums political questions implicit in technological processes'.[115] Participation would thus require wholesale institutional reordering. Others are less sanguine about any such prospect. Gloomiest of all is Ellul, who believes:

> That the formula of democratizing planning, or of bringing together politics and techniques within a planning system is a characteristic example of a political illusion, of empty verbiage. It is a consolation that one gives oneself when confronted by the real growth of this planning power, and of the consequent questioning of democracy.[116]

In between are those, like Wilson, who perceive a shift toward 'corporate technological managers'[117] in the processes of national public policy planning, and who interpret the increasing attractiveness of national planning to business leaders as being due to their 'belief that such planning can be rather easily co-opted'.[118]

Conclusion

Critical examination of the influence exerted by policy planning telecommunications experts resonates with the themes of 'an ancient problem, the relationship of knowledge to power'.[119] What is new, here, is the nature of the communications systems shaped, perhaps in crucial part, by planners possessing specialized, technocratic knowledge. Modern telecommunications can provide almost unimaginable content diversity to practically everyone. As promoters never tire of exclaiming, the technologies of cable television, direct-broadcast satellites, video cassette recorders, the merger of the telephone with computers and video display screens, all have the potential for liberating social information. By making it freely available, information can become a truly shared resource. Democratized communication may contribute to an authentically democratic politics. On the other hand, there is, of course, the threat that the new technologies will simply reproduce the structurally 'distorted communication'[120] that some analysts already perceive. Apparent content diversity may mask the basest of commercial homogeneity; obstructed access may widen existing 'knowledge gaps',[121] disenfranchising a still larger proportion of the population; ever more

[112]Touraine, *op cit*, Ref 6, p 159.
[113]Williams, *op cit*, Ref 8, p 31.
[114]Konrad Kellen, Translator's introduction, in Ellul, *op cit*, Ref 19, p x.
[115]James D. Carroll, 'Participatory technology', in Kuehn and Porter, *op cit*, Ref 10, p 418.
[116]Ellul, *op cit*, Ref 19, p 258.
[117]Wilson, *op cit*, Ref 92, p 83.
[118]*Ibid*, p 115.
[119]Norman Birnbaum, 'The problems of a knowledge elite', in *Toward a Critical Sociology*, Oxford University Press, New York, 1971, p 418.
[120]Claus Mueller, *The Politics of Communication*, Oxford University Press, New York, 1973.
[121]P.J. Tichenor, G.A. Donahue and C. Olien, 'Mass media flow and differential growth in knowledge', *Public Opinion Quarterly*, Vol 34, No 2, Summer 1970, pp 159–170; G.A. Donohue, P.J. Tichenor and C. Olien, 'Mass media and the knowledge gap', *Communication Journal*, Vol 2, No 1, January 1975, pp 3–23.

centralized production control may lead to conditions in which culture is little more than propaganda.

It would be foolish to deny that planning for the new telecommunications technologies is necessary; the question is, who shall participate, and toward what ends. Experts need to be self-reflective about their contribution. Dickson and Noble argue, as do others, that state and corporate action 'cloaked in the mantle of science' can avoid accountability to 'democratic or juridical norms', through its claims to absolute rationality. The widespread belief, not uncommon among planners, that science (or the disciplined methods of the planning process) is value-neutral has the effect of sanitizing 'the policy formation process, justifying its removal from the control of mass democratic institutions'.[122] The arrogance of such a planning orientation and the frightening social consequences it engenders would be antithetical to the liberating potential of new means of communication now within technological grasp.

[122]Dickson and Noble, *op cit*, Ref 105, p 267.