

SUMMARY *We are witnessing an inflated production of knowledge, which is resulting in increased specialization. The mass of available information and the growing specificity of knowledge reduce communication across disciplines and professions. Adding to the fragmentation of knowledge is the influence of post-modernism and the associated loss of common points of reference. The role of integrative professions, such as planning, has become especially important, but also particularly difficult, in this fragmented context. This article relates the present compartmentalized context to the history of planning. It also explores the information planners require in order to assume an integrative role and foster the profound changes in urban development called for by the Smart Growth movement. Planners need to think as Renaissance people in a fragmented knowledge and professional environment.*

RÉSUMÉ *Nous assistons à une rapide croissance des différents champs de connaissance, causant une spécialisation progressive du savoir. La croissance des connaissances ainsi que les spécificités des savoirs appartenant à différents domaines, perturbent la communication entre différentes professions et disciplines. La fragmentation du savoir est aussi le fait de la montée du post-modernisme et de la perte de points de référence qu'elle entraîne. Dans ce contexte, le rôle intégrateur de l'urbanisme est de plus en plus important, bien qu'il soit confronté à des difficultés grandissantes. Cet article situe la présente période, caractérisée par un savoir fragmentaire, dans une perspective historique. Il se penche aussi sur les connaissances que les urbanistes doivent posséder afin de pouvoir promouvoir l'intégration des savoirs et favoriser l'avènement d'une forme urbaine qui soit plus environnementale.*

RENAISSANCE THINKERS FOR A FRAGMENTED WORLD

BY PIERRE FILION

In this article, I explore how knowledge has evolved to its present compartmentalized state and examine the information planners need in order to carry out the integrative mission of their discipline. I look at tendencies affecting knowledge in general and particularly at their repercussions on planning.

PLANNING AND THE EVOLUTION OF KNOWLEDGE

From the early to the mid-20th century, governments and corporations began relying on the growing proficiency of social sciences. As numerous organizations drew on social sciences to improve their

efficiency, widespread organizational reliance on these approaches reverberated across society. Public relations, publicity, scientific management, industrial psychology, the pursuit of war and countless other applications became the objects of scientific methods as organizations themselves and their impact on society were

transformed. By adopting these methods, organizations not only sought to enhance their efficiency, but equally to benefit from the immense prestige then associated with science. Science was indeed perceived as a superior form of knowledge; hence publicity's repeated presentation of consumer goods as 'scientifically improved'.¹ Planning did not escape the influence of instrumental scientific knowledge. In the two or three decades following World War II, a time of accelerated economic growth and large-scale urban transformation, planning turned to scientific methods to formulate and justify extensive urban

interventions. In those days, marked by the dominance of the rational-comprehensive model, planners were revered for their apparently scientific approach to urban problems. We used this approach to sanction urban renewal and large-scale suburban development, while our engineer colleagues relied on elaborate mathematical models to devise and validate highway networks.²

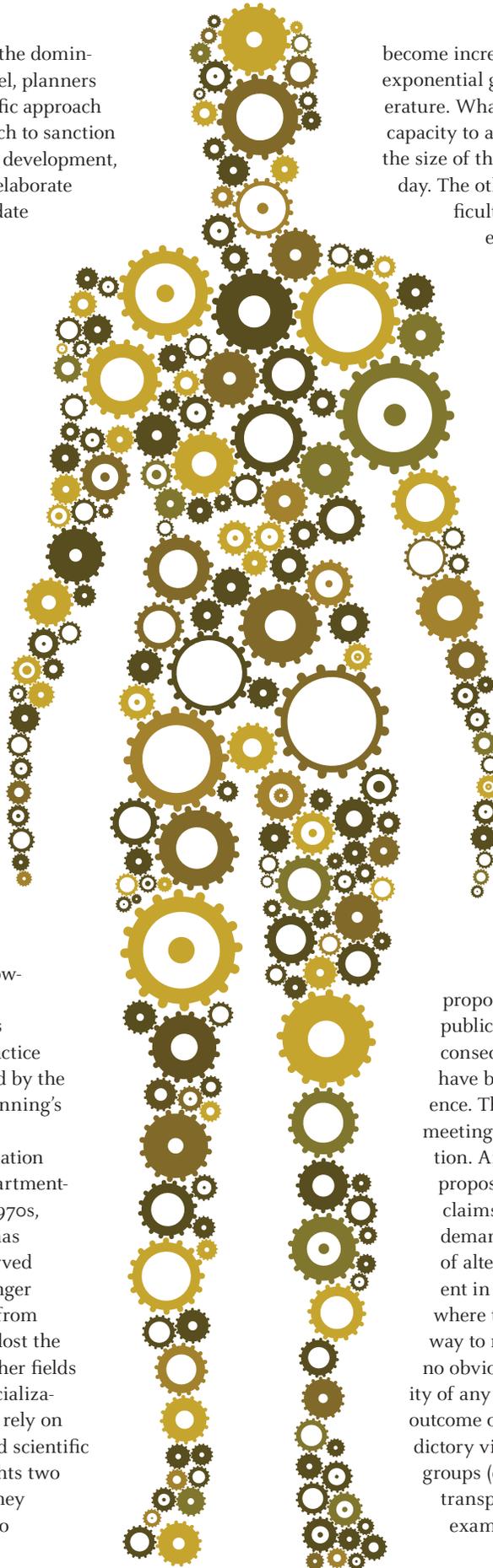
The adverse consequences of scientifically sanctioned interventions undermined confidence in experts, whatever the field. At a societal scale, experts were criticized for short-circuiting democracy, aligning themselves with dominant interests and overlooking the environmental consequences of their projects. Far from being a side show, urban protest was at the very centre of this challenge, with planners being obvious targets.³ Were planners not responsible, after all, for interventions that damaged the environment, uprooted countless households and destroyed traditional urban amenities? Jane Jacobs' message still reverberates loudly.

After epic battles, planning became more sensitive to input from the public. The participatory credo, according to which the public knows best and its volitions deserve to be accommodated, prevailed for a while.⁴ Views from the public on planning matters became legitimate knowledge for planners, thus challenging the erstwhile supremacy of scientific models within planning processes. Planning practice and output were profoundly transformed by the participatory turn, which moderated planning's enthusiasm for urban redevelopment.

All of this takes us to the present situation characterized by an ever growing compartmentalization of knowledge. Already in the 1970s, the German philosopher Jürgen Habermas noted this advancing situation. He observed that scientists from one discipline no longer had time to read the research literature from other disciplines and had, in any event, lost the capacity to understand research from other fields of study due to deepening scientific specialization. He concluded that scientists had to rely on mass media to remain informed of broad scientific achievements.⁵ This observation highlights two phenomena, more relevant today than they were 35 years ago. One is the necessity to

become increasingly specialized, because of the exponential growth of all forms of scientific literature. Whatever the progression of science, the capacity to absorb knowledge remains limited by the size of the human brain and the length of the day. The other phenomenon is the growing difficulty to reach across disciplines as they evolve their own paradigms, methods, lexicons and cultures. There is another confounding factor: the loss of common points of reference characteristic of the post-modern era.^{6,7} As it has become difficult to agree over the validity of different forms of knowledge, one view is now just as legitimate as another. Knowledge has taken a kaleidoscopic dimension. At present, debates can generally only be settled through protracted negotiations, reliance on the courts or raw political or economic power. Meanwhile, multiple constituencies often feel left out because they are under the impression that their views are not given fair consideration by the decision-making process.

To illustrate the effect of these transitions on planning, let's picture a typical public meeting taking place over the rational-comprehensive, the participatory and the post-modern periods. In the first case, experts would have introduced proposals and their supportive studies to a public, which, while often opposed to the consequences of these proposals, would have been in awe of experts and their science. The dynamics of the participatory era meeting would have taken an opposite direction. An agitated public would have rejected proposals, irrespective of the scientific claims of their background studies, and demanded to be involved in the formulation of alternatives. Finally, the situation is different in the contemporary planning meeting where the expert-public dichotomy has given way to multiple points of reference. There is no obvious yardstick to establish the superiority of any side of the debate, whether it is the outcome of planning processes or the contradictory views of different publics and interest groups (environmental, heritage, alternative transportation, housing organizations, for example).⁸



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Different aspects of society are affected by the fragmentation of knowledge. Think of the medical field where future doctors opt for specialties rather than family medicine, and the ensuing problems for the delivery of medical services. As suggested by the medical example, tasks across society become increasingly segmented, largely because of inflation in the amount of specialized knowledge that is required.⁹ By definition, planning is an integrative profession, concerned with the functioning of systems in their entirety, rather than with the optimization of their sub-systems, the object of specialized professions and disciplines. Sub-system optimization at

the expense of the system as a whole is illustrated by the deleterious consequences major improvements in car-oriented transportation networks over the 1950s, 1960s and 1970s have had on the health of the city: decline of downtowns, increasing amounts of urban space given to the car, less walking and street life....¹⁰ In its efforts to assure that sub-systems contribute to the well-being of systems as a whole, planning must coordinate the actions of the different professions and disciplines with an impact on the form the environment takes. The role of planning thus becomes increasingly important and demanding as the fragmentation of knowledge progresses,

with, as we will see, major implications on what planners must know.

The need to rethink the low-density, automobile-oriented and functionally segregated urban models that have guided development over the last 65 years makes the integrative contribution of planning all the more important. It is incumbent on our profession to coordinate the actions of numerous actors to achieve the required, Smart Growth inspired, urban transition. To this end, planning needs to generate visions of alternative urban forms capable of addressing today's issues. To be sure, we are not devoid of such visions, one only need think of New Urbanism. The problem with current visions is that they tend to hark back to features of the pre-wwii city, perhaps insufficiently heeding the profound changes in values and life styles that have occurred since.

WHAT PLANNERS NEED TO KNOW

What knowledge should planners possess in order live up to this challenge? Moving from core to more peripheral planning knowledge, four categories emerge (see Figure 1). The first category pertains to *core planning knowledge*, that is, knowledge that defines the profession and is shared by all its members. Core knowledge comprises the history of planning, its theories and planning legal frameworks, along with planning processes and procedures. There is a clear integrative dimension to core knowledge, especially in the case of planning theory, processes and procedures, which emphasize ways of including within planning decision-making different categories of actors as well as their views and respective knowledge.¹¹ The *specialized knowledge* category reflects the fact that planning operates in the present time and that, despite its integrative aspirations, has itself become segmented into different branches. There are many sub-fields in planning, each with its own knowledge base: social planning, neighbourhood planning, transportation planning, urban design, strategic planning, etc. Contrary to core knowledge, specialized knowledge is not shared by all planners, only those operating within relevant areas of specialization.

The two last categories purport to make planning more integrative and capable of



Figure 1: Categories of Knowledge Relevant to the Integrative Role of Planning

As planners we should read voraciously and as omnivores.

Given the integrative nature of our profession, we should be among the best informed professionals on trends affecting society.

generating and implementing transformative visions. Category Three, *specific integrative knowledge*, pertains to the coordinating role of planning and the attendant need for planners to interface with a wide range of professions and disciplines. Without having to become experts in all these disciplines, planners do require some awareness of the paradigms, lexicons, models, methods and limitations of the numerous fields of knowledge with which they interface.¹² Finally, for our interventions to be consistent with prevailing demographic, economic, political, and cultural and lifestyle trends, we must keep informed of *emerging societal tendencies*. We are thus expected to read widely on different aspects of society and, thereby, avoid fixating narrowly on perspectives offered by the non-fiction bestseller of the moment.¹³ As planners we should read voraciously and as omnivores. Given the integrative nature of our profession, we should be among the best informed professionals on trends affecting society. The present need to come up with new forms of development, which are environmentally benign and enhance quality of life while

being economically and politically palatable, makes a broad awareness of societal trends all the more relevant.^{14,15}

The main message of this article is that planning is facing a tall order: integrating different fields of knowledge in a world where disciplines are becoming narrower and more hermetic. To pursue our integrative role, we are expected to join a shrinking breed of Renaissance thinkers in a world where knowledge is increasingly compartmentalized. As planners we are assisted in our integrative role by the core knowledge of our discipline, but also by a measure of awareness of the numerous disciplines with which we interact and, perhaps above all, by keeping our finger on the pulse of major societal trends. ■

PIERRE FILION is Professor of Urban Planning at the School of Planning of the University of Waterloo. His research interests include the transportation-land use relationship, metropolitan scale planning and Smart Growth. He can be reached at: pfilion@uwaterloo.ca.

REFERENCES AND NOTES

1. See for example: Sorell T. *Scientificism: Philosophy and the Infatuation with Science*. London: Routledge; 1994.
2. Weiner E. *Urban Transportation Planning in the United States: History, Policy, and Practice* (3rd Ed.). New York, NY: Springer; 2003.
3. For a critique of planners dating from this period, see: Goodman R. *After the Planners*. New York, NY: Simon and Schuster; 1971.
4. Two of the most eloquent cases for participatory planning were made by: Davidoff P. *Advocacy and pluralism in planning*. *Journal of the American Institute of Planning* 1965;31:331-8; Friedmann J. *Retracking America: A Theory of Transactive Planning*. Garden City, NY: Anchor Press; 1973.
5. Habermas J. *Communication and the Evolution of Society*. Oxford: Polity; 1991[1976].
6. Docherty T, editor. *Postmodernism: A Reader*. New York, NY: Columbia University Press; 1993.
7. Lyotard J.-F. *The Postmodern: A Report to Knowledge*. Minneapolis, MN: University of Minnesota Press; 1984.
8. Filion P. Rupture or continuity? Modern and post-modern planning in Toronto. *International Journal of Urban and Regional Research* 1999;23:423-44.
9. Abbott A. *The System of Professions: An Essay on the Division of Expert Labor*. Chicago, IL: University of Chicago Press; 1988.
10. Marshall A. *How Cities Work: Suburbs, Sprawl, and the Roads not Taken*. Austin, TX: University of Texas Press; 2000.
11. This is especially the case of communicative planning, which explores ways of broadening discussions over planning matters. See for example: Forester J. *Planning in the Face of Power*. Berkeley, CA: University of California Press; 1989; Healey P. *Collaborative Planning: Shaping Places in Fragmented Societies*. Basingstoke: Palgrave Macmillan; 2006. For a list of works related to planners' core knowledge, see the CIP accreditation exam reading list, accessible from the CIP web site.
12. For a definition and description of interdisciplinary thinking see: Zeisel J. *Inquiry by Design: Environment/Behavior/Neuroscience in Architecture, Interiors, Landscape, and Planning*. New York, NY: W.W. Norton and Company; 2006.
13. Over the recent past, two such works have had an exceptional influence on the thinking of planners: Foot DK, Stoffman D. *Boom, Bust and Echo: How to Profit from the Coming Demographic Shift*. Toronto: Macfarlane, Water and Ross; 1996; Florida RL. *The Rise of the Creative Class: And how It's Transforming Work, Leisure, Community and Everyday Life*. New York, NY: Basic Books; 2004.
14. See: Soule DC, editor. *Urban Sprawl: A Comprehensive Reference Guide*. Westport, CO: Greenwood Press; 2006.
15. Jacobs J. *Dark Ages Ahead*. New York, NY: Random House; 2004.



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45 St. Clair Avenue West, Suite 300 Toronto, Ontario M4V 1K9
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