

Each year, the activities of the Royal Society of Canada traverse the range of intellectual inquiry and artistic expression in Canada. Most of these activities are meant to evoke key issues for Canadian scholars and artists, both as participants in national scientific and policy debates and as contributors to building international capacity through Inter-Academy exchanges. They, and other outreach endeavours of the Society aimed at promoting a culture of knowledge – be these directed to post-doctoral scholars, doctoral candidates, undergraduates, high school students and the general public -- are reviewed in detail on the various pages of this web-site. The quarterly President's messages on this page involve a more personal reflection by the current President of the Royal Society about central issues of the times, and the role of the Society in engaging with these issues.

Beyond the Two Cultures - March 2010

Half a century after C.P. Snow first proposed the idea of two cultures as a general explanation of the breakdown of communication between the sciences and the humanities, we still puzzle about its implications for intellectual life.

Snow's hypothesis continues to intrigue, but for reasons he might not have clearly perceived in 1959. Snow believed that these competing scholarly cultures compromised our human capacity to seize, analyze and perhaps even solve central problems confronting the world. Yet contemporary reflection about the claim and its implications has been sceptical. Some see it as nothing more than a contemporary reflection of longstanding debates about the contribution of science and technology to improving the human condition in both moral and material dimensions. Others see it as naïve reductionism: on what basis can it be asserted that all the sciences share a unique culture of inquiry and all the humanities and social sciences likewise are simple variations on a single theme? Still others observe significant bridges across the supposed cultural divide: they point to epistemological similarities among sub-atomic physics, post-Mendelian genetics, plate tectonics, psychoanalysis, the literary work of Proust, Plath and Beckett, atonal music, cubism, legal realism, and so on.

Nonetheless, there is a facet of Snow's hypothesis that commands attention. How should we deal with what appears to be the increasing specialization of intellectual inquiry? As the above rejoinders to Snow suggest, today we have come to see both increased plurality and increased unity in our scholarly endeavours. No categories, disciplines or sub-disciplines survive as irreducible when projected in fine-grained analysis upon both physical and social data; conversely, since all distinctions vanish in the presence of the infinite, sub-disciplines, disciplines and categories tend to merge in macro-analysis under scholarly meta-theories.

A canon of faith now seems to be that we cannot know everything under a single analytical framework with sufficient subtlety and fidelity to be able to offer plausible and testable diagnostic hypotheses. What we purchase in terms of coverage when we propound a "general theory of everything", we lose in terms of detailed knowledge that can be replicated or operationalized. Specific disciplinary knowledge is held out to be an indispensable step for building more comprehensive understandings of complex phenomena. Discrete conceptual apparatus, exclusionary methodologies and field-specific research protocols, ground the shared scholarly commitment necessary to produce robust advances in scientific knowledge, to engender more subtle reflection on the human condition, or to inform public policy. This is as true of the arts and the humanities as it is of the social and other sciences.

This recasting of Snow's hypothesis points to a central challenge facing the contemporary academy. We surely desire the increased understanding that scientific inquiry and artistic expression generates. And we surely want politicians and policy makers to make decisions based on the best available knowledge produced across the broad range of scholarly disciplines. Still, we cannot be content with a situation where scholars are consigned to the production of specialized knowledge that can be instrumentalized,

and our politicians and policy-makers alone are meant to play the syncretic role of a Da Vinci, a Shakespeare, a Descartes, a Kant, a Wollstonecraft or a Tagore. Achieving science-based policy implies our responsibility to provide decision-makers with the capacity to absorb, assess and act upon this knowledge.

The multiple dimensions of Snow's hypothesis are experienced every day in the work of the Royal Society of Canada and in the scholarly and artistic activities of its Fellows. We recognize diversity not only as between our Academies, but within them as new fields of knowledge emerge. Concomitantly, we recognize that sometimes, exchange and reflection is easier across the apparent divide of science and the humanities and social sciences than within either of these meta-categories.

The titles of our three expert panels and the membership of these panels bear witness to the difficulty of rendering modern intellectual life accessible to the governments seek to advise: Ocean Climate Change and Marine Biodiversity; Environmental and health Impacts of Canada's Oil Sands Industry; and End-of-Life Decision-Making. The topics and panels all reflect our commitment to promoting a broad interdisciplinary culture of knowledge and evidence-based policy-making.

Our Annual Symposia likewise reflect the challenges of integrated knowledge. In 2007 the Academy of Social Sciences organized a Symposium on Gene x Environment Interactions, soon to be published by McGill Queens Press. In 2008, the Academy of Arts and humanities sponsored The Cultures of War and Peace; and in 2009 the Academy of Science adopted The Universe and Our Place in It as a Symposium theme. So too, our intellectual activities reflect not only a kaleidoscope of scholarly knowledge devoted to the solution of complex problems, but also the richness and diversity of the knowledge communities in Canada – language, culture, gender and geography. A national Academy in a country like Canada is a microcosm of the world and the knowledge frames found therein.

Perhaps most significantly, the manner in which the Society conceives its process for the selection of new Fellows and those who receive its Prizes and Awards testifies to the disciplinary heterogeneity of Canadian intellectual life, while acknowledging the unity of the quest for scholarly excellence. Each division of each Academy proposes new Fellows for election, and the Selection Committee of the three Academies finalizes the list to be put to the membership. Every new Fellow is then inducted as a Fellow of the Royal Society of Canada. Without the discipline of disciplines the line between fact and fancy is difficult to draw, and ideological or "faith-based" claims are seriously advanced as plausible substitutes for knowledge and theory generated by intellectual inquiry. So also, without the broader understanding of excellence brought to bear by multidisciplinary selection committees, genuine advancement beyond defined parameters – the very heart of education of policy makers, will be lost.

In brief, we would be doing a disservice to the mission of the Royal Society of Canada and to the deep commitment of its Fellows to informing public intellectual debate and State policy formation, were we not to draw attention to the full artistic as well as scientific dimensions of the scholarly endeavour. Plausibly tracing the policy implications of any field of inquiry involves attending to both the material and socio-psychological context of human action and interaction, including all our various intellectual and expressive attempts to understand human beings and their environment. Here, then, lies the key continuing lesson to be drawn from Snow's half-century old hypothesis.

Over the next few years in our expert panels, symposia and the manner we recognize of outstanding artists and scholars, we will continue to pursue the challenge of integrated knowledge: to not separate categories of knowledge as we seek understanding and evaluate alternatives; but not to fail to separate these same categories in order to advance particular knowledge. At a time when both commerce and politics aim to instrumentalize research and artistic creativity, the Royal Society of Canada cannot abandon or renounce this crucial contribution to Canada and the world.