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CANADA-CHINA
SPACE ENGAGEMENT:
OPPORTUNITIES AND PROSPECTS

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ABSTRACT

The US-China relationship is increasingly an axis around which much of the world revolves. US and Chinese space activities, particularly security-related activities, are a focal point of that relationship. Canada has specific interests shaped by that relationship, among which space security issues are also significant. Canada also maintains historically unique relationships with both countries, emblematic of its complex position and identity in the wider world community. This article considers Canadian engagement of the US-China relationship on space issues within the contexts of its broader relationships with these countries and its distinct global posture. The article briefly reviews the development of Canada's space activities with an eye to identifying the unifying features of its sometimes inconsonant behavior. The article then addresses prospects for Canada to promote US-China space engagement and advance Canada's own interests vis-à-vis both countries through both bilateral and trilateral approaches. The article concludes that, as in many other areas, Canada faces both opportunities and limitations, whose navigation requires imaginative foresight, diplomatic acumen, and resolute attention to rapidly changing circumstances.

RESUMÉ

Les liens entre la Chine et les États-Unis forment un axe autour duquel gravite une partie de plus en plus importante du monde. Et les activités spatiales des deux pays, surtout lorsqu'elles ont trait à la sécurité, sont l'un des pôles de développement des relations sino-américaines. Or celles-ci déterminent plusieurs des intérêts du Canada, dont certains concernent précisément la sécurité dans l'espace. D'autant plus qu'historiquement, le Canada entretient avec les deux pays des liens uniques illustrant la complexité de son identité et de sa situation sur l'échiquier international. Cet article traite de l'engagement du Canada sur les questions spatiales sous l'angle des relations sino-américaines, dans le contexte élargi de ses liens avec les deux pays et de sa situation particulière dans le monde. Il retrace brièvement l'essor des activités spatiales canadiennes en faisant ressortir les éléments unificateurs de l'orientation parfois erratique qui les a guidées. Il examine ensuite comment le Canada pourrait favoriser l'engagement spatial sino-américain tout en défendant ses intérêts auprès des deux pays au moyen d'une approche à la fois bilatérale et trilatérale. Il montre enfin que dans le secteur spatial comme dans plusieurs autres, le Canada se trouve face à autant d'opportunités que de restrictions, et qu'il lui faudra pour naviguer entre les deux combiner imagination, clairvoyance, habileté diplomatique et surveillance assidue d'une conjoncture en rapide évolution.

INTRODUCTION

The US-China bilateral relationship is increasingly becoming an axis around which much of the world revolves; in the words of one close observer, "the US-China relationship has become the primary lens through which many global issues are addressed."¹ Canada has specific interests in many of the issues for which the US-China relationship is the central feature, and so observes developments in that relationship closely. Canada's integral ties to the US are well known. Canada also maintains unique and familiar ties to China, sustained by growing economic and demographic linkages.² While economic and trade issues are perhaps at the forefront of these relationships, security questions are close at hand.

US and Chinese space activities, particularly security-related activities, have emerged as a focal point of their broader relationship. For the United States, military space capabilities now serve integral roles in a spectrum of terrestrial needs, and sustaining the US position in space has become a key concern for many military planners. Meanwhile, the space technologies of many other countries are developing rapidly. Although an outright challenge of the US position is not yet imminent, some countries already possess asymmetric capabilities posing genuine threats to US space operations. China in particular has markedly advanced its military space prowess in recent years, at least in part to offset its perceptions of US military advantages vis-à-vis vital Chinese interests, such as the status of Taiwan. Chinese military space achievements were showcased by its destruction of a defunct weather satellite in January 2007, demonstrating anti-satellite (ASAT) capabilities. The February 2008 US destruction of a failed and de-orbiting US satellite provided a counterpoint to the emerging US-China military rivalry in space.

The Canadian government has a longstanding and refined interest in the future of space security (described more fully below). Canada has historically been among the world's most active states seeking to prevent deployment of weapons in space, operating through multilateral forums and other diplomatic avenues to address questions of definitions, transparency, entry-into-force and verification. At the same time, Canada also has a space program of its own – uniquely accomplished for a country of its size – and has had a cooperative relationship with the US on military space uses, such as early warning satellite information, since the earliest years of the Cold War. The high level of public attention to both sides of Canada's space interests was vividly displayed by the contentious and controversial decision of the Canadian government in February 2005 not to join US continental missile defense development efforts, under the auspices of the NORAD, in part on the basis of concerns over connections to space weapons planning.³

Two underlying tensions, reflecting these assertions, animate Canadian international policy making. The first tension, distinct to countries of modern development levels and moderate size, is between conceptions of national interest and conceptions of what might be termed "international interest." This follows from the high permeation of and sensitivity to global circumstances characteristic of developed moderate powers.⁴ The second tension, more unique to Canada, is between seeking national security objectives through the intimate relationship with the US or through broader multilateral structures. This tension often converges with the first but is functionally distinct in the sense that either set of interests might potentially be pursued through either type of relationship.

These tensions help explain Canadian concerns for how the percolating US-China rivalry in space may impact not only Canadian national security interests but also international peace and security more broadly. Many Canadians in and out of government are interested in opportunities to contribute positively to improving this relationship through multilateral mechanisms, through Canada's unique relationship with the US and, if possible, through direct Canada-China engagement. Facilitating US-China engagement on space aiming to

1 Woo and Wang, "The Fortune in Our Future."

2 For a note on the relevance of demographic factors see Evans, "Canada, Meet Global China," 284. Following the post-1980 wave of immigration, some four percent of Canada's population is of Chinese origin (including mainland China, Taiwan and Hong Kong), constituting the largest visible minority group. See Zweig, "A Limited Engagement," and Guo and DeVoretz, "The Changing Face."

3 For contrasting assessments see Regehr, "BMD, NORAD, and Canada-US Security Relations"; Fergusson, "Shall We Dance?"; Staples, *Missile Defence*.

4 The concept of "moderate power" and its implications are elaborated in the following section.

resolve tensions and establish an environment for the secure and peaceful use of space contributes directly to addressing core Canadian interests.

This paper considers Canadian engagement of the US-China relationship on space issues. The first section briefly reviews key elements in the development of Canada's space capabilities, interests and relationships, concluding with a skeletal explanation of the sometimes contradictory nature of Canadian space policies and behaviour. The second section applies this discussion specifically to the question of how Canada can efficaciously both promote US-China space engagement and advance Canada's own interests vis-à-vis both countries.

CANADA IN SPACE

Canada enjoys a highly developed industrial/information economy and standards of living, but its relatively small population limits the absolute global impact of its qualitatively high capabilities. As such, Canada is a typical "moderate" global power.⁵ Relative to other moderate powers, Canada's space accomplishments stand out; but given its smaller absolute size relative to the large scale required for space activities, these accomplishments have depended upon continuing opportunities for cooperation with other countries, and upon the secure and peaceful space environment such cooperation requires.

The cornerstone of Canada's space activities has been effective partnerships, by far most importantly with the US.⁶ In the earliest period of space exploration, the prospect of Canada-US cooperation was much more attractive for Canada, which accordingly sought to identify activities that would both advance Canadian objectives and elicit the active interest of the US. Cooperative Arctic defense and scientific activities provided an optimal combination of benefits. Satellites offered to provide vitally needed reliable communications among the small and isolated populations in the harshest reaches of the country as well as a wealth of atmospheric and weather data. Effective communications also served the critical shared US-Canada Cold War concern to support systems providing early warning of Soviet attack.

The first fruit of this cooperation was the *Alouette-1* satellite. When it was launched into low Earth orbit in September 1962, Canada became the third state to enter outer space. Measuring electron density in the ionosphere, the satellite's mission aimed to improve communications for both military and civilian purposes.⁷ This clear dual-use function exemplified the equivalent importance of civil and security purposes for Canadian space activities which became a defining motif of Canadian space outlooks.

This early collaboration also expressed what grew into two prominent tactical features of Canadian space efforts. One was to concentrate on opportunities to cooperate with the US that fit an independent national space agenda. The second was to focus not on becoming a minimally independent space power, but on developing specific roles and excelling in "niche" capabilities that would entail significant, if selective, technology and information flows to and from larger partners. Canada sought to use this strategy to take part in advanced space achievements, stay at the leading edge of space technologies and leverage these capabilities for long-term national economic competitiveness.⁸

The "niche" strategy enabled Canada to offer tangible value in cooperation with the US in civil activities. For example, Canada's role as the developer of a remote manipulator arm for the US Space Shuttle program – the "Canadarm" – enabled Canada to become a world leader in space robotics.⁹ US-Canadian space cooperation

5 The term "moderate power" is used here for the simple typological purpose of denoting countries with advanced economies but small populations and high levels of international interdependence. Certain common tendencies toward the development of space programs flow from that position. For further articulation of the concept, see Huntley, "Moderate Space Powers." The concept is distinct from the term "middle power," which in Canadian contexts carries additional specific implications for global outlooks and policy dispositions.

6 For one review see Handberg, "Outer Space as a Shared Frontier."

7 Canadian Space Agency, "Alouette I and II."

8 Mineiro, "US Export Controls"; Canada. Canadian Space Agency, *State of the Canadian Space Sector 2000*; Kirton, "Canadian Space Policy."

9 Canada. Canadian Space Agency, "Canada's World-Renowned Space Robotics."

deepened further with Canada's development of two manipulator units for the International Space Station— the first time the US approved a Canadian role in "critical pathway" activities essential to program success.

At the same time, Canada increasingly pursued national capabilities in commercial areas. The 1972 launch of the first *Anik* satellite created a national Comsat system, Telesat Canada, independent of the then US-dominated Intelsat. Continuing efforts in this vein led to *Radarsat-1*, a remote sensing satellite launched in 1995, capable of producing military-quality, all-weather radar images across the globe. This and subsequent achievements of the *Radarsat* program provided Canada with world-leading commercially-fruitful earth observation capabilities, marking another success for the "niche" strategy.¹⁰

As Canada's commercial interests and achievements grew, however, they also generated friction with US space security concerns. In the late 1990s, worries over increasing Chinese efforts to surreptitiously obtain US high technology capabilities were a factor leading to a tightening of US export controls, including the return of US export control authority over dual-use commercial space technologies from the Commerce Department's Commerce Control List to the State Department's more restrictive Munitions List (USML) in March 1999. Satellites became the only commodities on the USML for which jurisdiction over export licensing is mandated by law, rather than regulation, and broader scientific exchanges with China were also truncated. Moreover, the following month the US withdrew its exemption for Canada, and other US allies, to the restrictions of the US International Traffic in Arms Regulations (ITAR) on the export of USML items, significantly limiting Canadian space technology exchanges with the US.¹¹

The following year Canada secured partial restoration of such exchanges by instituting the Controlled Goods Program (CGP), which provided parallel export controls under Canada's Controlled Goods Regulations. This arrangement, however, only partly moderated the impact of the new US controls, while also impinging on Canada's cooperation with non-US partners by restricting utilization of equipment that included US-origin technology. A focused study of this impact found that "the CGP has not improved the situation of Canadian space companies with respect to ITAR," and that while surveyed enterprises "managed to find alternative sources of technology when necessary...these workarounds do not diminish the negative impacts of ITAR."¹²

These new technology sharing obstacles, framed by US concerns over Canada's intentions to make high quality *Radarsat* imagery commercially available, became a major impediment to Canada's development of the successor *Radarsat-2*. In December 1999, at the height of disruption over tightening US restrictions, *Radarsat-2*'s Canadian contractor, MacDonald, Dettwiler and Associates (MDA), was driven to sever its contract with US-based Orbital Sciences' space systems group to provide the primary satellite platform. *Radarsat-2* was instead developed with European collaboration (Italy's Alenia Spazio provided the platform) and launched by Russia in Kazakhstan.¹³ As involved parties worked to sustain the broader relationship, some of Canada's alternate collaboration received tacit US approval, and Canada subsequently adopted legislation specifically seeking to assuage US concerns over access to *Radarsat-2*'s advanced remote sensing capabilities.¹⁴

The conflict over *Radarsat* illustrates how, as Canada's space activities developed, tensions emerged between increasing US space security concerns and Canada's emphasis on commercial opportunities and reliance on a peaceful space environment. Tensions also emerged between Canada's desires to continue deepening its US

10 Canada. Minister of Industry, "Speaking Points." On the role of Canada's niche expertise in space robotics and earth observation in building international collaborations, see Jakhu, "The Case for Enhanced," 12. Some observers suggest that the independence of Canadian accomplishments is overstated; i.e., there would have been no Canadarm or Radarsat without US collaboration. While such counterfactual claims are intrinsically untestable, it may be observed that a world in which the US and Canada lacked material interests to partner throughout the Cold War would have been different in many other ways, perhaps presenting alternative opportunities for Canadian space technology development.

11 Choi and Nicelescu, "The Impact of US Export Controls"; Mineiro, "US Export"; "SIA Supports H.R. 2410"; Moltz, "China, the United States, and Prospects," 79.

12 Choi and Nicelescu, 31 and 33; Mineiro, 101.

13 Canada. Canadian Space Agency, *Radarsat, Annual Review 1998/99*; Choi and Nicelescu, 33; Caddey, "Radarsat-2"; Bates, "Canadian Military Mulls." The loss of business to Orbital Sciences – ironically MDA's largest stockholder at the time – exemplifies how ITAR restrictions also impact the US commercial space technology community.

14 Canada. Parliament of Canada, "Bill C-25."

relationship while also broadening its global engagement. For example, Canada has maintained core involvements with a number of US military space activities, while also pursuing indigenous efforts leading toward Canada's first dedicated military satellite.¹⁵ At the same time, driven by its own interest in securing the peaceful use of space, Canada became a leader of efforts to construct a space legal regime.¹⁶ Many in Canada perceived that, in light of its otherwise close US relationship, demonstrating a measure of independence from the US military space ambitions enabled Canada to more easily take advantage of opportunities for cooperation with other states. Thus, Canada continued to face the same dilemma of many other countries in enhancing its security through both independent uses of space and multilateral arms control.

Radarsat became an issue again in 2008 with the announcement that MDA, by then Canada's largest space technology firm, had agreed to sell its space division, including rights to the data from the just-launched *Radarsat-2*, to US-based Alliant Techsystems. The proposed sale generated immediate controversy on several fronts. Some more nationalistic critics viewed the turnover of Canada's showcase independent space achievement as akin to selling off the family heirlooms – particularly given the degree of taxpayer investment in development of the satellite. More globally-oriented critics connected the sale to US military space planning, noting the role of Alliant as a US defence contractor and the high quality of *Radarsat-2*'s imaging data.¹⁷ Some observers of Canadian space activities more broadly lamented less the immediate loss of control over *Radarsat-2* than the longer-term impact that the loss of the space division as a whole represented for Canada's future space technology development capacities.¹⁸ With respect to Canadian security interests, some critics feared the sale would cost Canada sovereign control over *Radarsat-2*'s unique capacity, with its high-quality imaging and sun-synchronous orbit, to maintain near-real-time surveillance coverage of high-latitude Arctic territory.¹⁹

Supporters of the sale lamented a debate seemingly driven more by political opportunism than public policy assessment, noting that little objection had been raised when Orbital Sciences previously obtained majority control of MDA (to be later returned to Canadian ownership). But MDA had become a larger company with a larger role in the country, helping explain the emergence of diverse interests in opposition to the sale. Coalescing politically, these interests compelled the government in May 2008 to invoke the Investment Canada Act to block the sale on national interest grounds – the first such veto after some 1,600 reviews of over 10,000 foreign takeovers.²⁰ The episode once again highlighted the tension between intimate cooperation with the US and maintaining independent capabilities and policies that has defined Canadian space activities for decades.

To many US analysts, this tension inherent in the Canadian position appears puzzling, if not contradictory. But there is a consistency underlying Canada's seemingly "zig-zag" course on space activities, stemming from its interests and capabilities as a "moderate" power. Given the high costs of entry, military space, like nuclear deterrence, is a realm of principally the great powers, underscoring the salience of military uses of space and reinforcing these states' competitive and self-reliant nature in it.²¹ Other states, lacking military space capabilities, tend to prioritize civil space, a realm where potential collaborations and niche roles offer opportunities of access and advancement of interests, and fit their predisposition to relationships. Conversely, great powers are more prone to subsume civil space activities to military space concerns – security issues take priority, with civilian capabilities becoming national "assets."²²

15 Wattie, "Canada Will Launch"; "MDA Awarded Definition Phase Contract." See also Maskell and Oram, "Sapphire."

16 Canada joined in drafting the first international space treaties at the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS), and has also pressed at the UN Conference on Disarmament for work to proceed on a Prevention of an Arms Race in Outer Space (PAROS) treaty, sometimes collaborating with China and Russia. See Canada. Department of Foreign Affairs and International Trade, "Space Security."

17 For a good compendium of these arguments see Canada. Standing Committee on Industry, Science and Technology, "Evidence."

18 See, for example, Gainor, "Crash of Canada's Space Biz."

19 On the unique security utility of *Radarsat-2* in the Arctic see Dittmann, "In Defence Of Defence," 54 (n.22) and 57 and Canada. Department of National Defence, "Polar Epsilon Project." An argument against the sale on this basis is Byers, "For Sale."

20 Mayeda and Akin, "Ottawa Blocks Sale"; "Govt. Confirms Decision."

21 For a thorough overview, see Watts, "The Military Use of Space." With respect to this generalization, Israel's independent space capabilities represent in some respects the exception that proves the rule, while in other respects – the relatively small scale of its military program and its longstanding reliance on US support – not an exception at all.

22 While in the US there is political and programmatic demarcation between civil and military space activities, there is also spillover between the sectors and the generally perceived security interest flowing from any perceived threats to vital commercial capabilities. US military reliance on commercial communication bandwidth in certain circumstances is a poignant example; for assessments see Rayermann, "Exploiting Commercial SATCOM" and Forest, "An Analysis of Military Use."

Such moderate powers often regard space as a domain of all humanity, in which unrestrained conflict could easily spill over to impact their own interests. A disposition toward civil space activities, however, does not mean moderate powers such as Canada are unconcerned about space security issues. Rather, as common consumers of space-based communications and imaging products, moderate powers tend to perceive a keen sensitivity to their own vulnerabilities regarding military space activities. But the lack of indigenous capabilities to influence events in space induces such countries instead to secure their interests by developing relationships. Such relationships may include both bilateral collaboration with a greater power or multilateral participation in a global regime. Both alliances and treaties can help assure moderate powers that their interests will be recognized and served over time. Hence, Canada's collaborations with the US on space-related efforts and its active pursuit of an international agreement to prevent the weaponization of space stem from a common purpose. These seemingly contradictory policy aims both seek to advance the core view that a secure space environment is a prerequisite to Canada's ongoing space-related activities.²³

CANADA, CHINA AND SPACE

Today, China is emerging as a "great power" in the space domain. The US-China interaction on space activities expresses many typical features of a great power rivalry, though one more akin to the managed European rivalries of the nineteenth century than the ideologically oriented superpower rivalry that defined the twentieth century.²⁴ As described in the previous section, Canada brings a quite different perspective to space development generally, which informs Canadian outlooks on the emerging US-China relationship in space particularly. Canada's intimate familiarity with the US and, to a lesser extent, China, provides a unique vantage point. As the US and China seek to manage their relationship, they may find considerable value in the perspectives that Canada's government, commercial enterprises and expert communities can offer. Canada, for its part, can find new opportunities to maintain its own interests through such roles.

Possible future Canadian initiatives with respect to the US, China and space divide into two categories. The first comprises the bilateral Canada-China relationship on space, and how development of that relationship would bear on US-China engagement indirectly. The second category focuses on whether and how Canada could help facilitate the US-China relationship directly.

Across both these categories, Canada can draw on and enhance its previous relationships with these two countries. As noted above, Canada's cooperation with the US in space has a long history. Canada today also has productive collaborative relationships with ESA and other partners, such as Japan.²⁵ Canadian ties on space with China are less developed, but their prior interaction on promoting multilateral regime solutions to military and civil space challenges (such as the collaboration on PAROS proposals noted earlier) may provide a foundation for growing Canada's engagement.

One big obstacle to increasing Canada-China space cooperation is restrictions on transfers of technology and information with security-related applications tracing back to ITAR-related constraints. For Canadian private firms and civil agencies interested in developing new initiatives with any other countries, these restrictions loom large; as a recent study of this impact concluded, "US export controls place restrictions on Canada's freedom and independence to collaborate internationally if US-origin parts are involved."²⁶ Although interests in both Canada and the US have long sought to modify US restrictions to ease commercial collaboration while sustaining security objectives, China has been increasingly singled out as a "category of its own." For example, legislation introduced in the US Congress in 2009 would return to the president discretion over which space-

23 For an elaboration of these observations see Huntley, "Smaller State Perspectives," 252-257.

24 Useful contributions in this vein include Swaine, "Managing China"; Goldstein, "Power Transition"; Medeiros, "The New Security Drama"; Rosecrance, "Power and International Relations"; Johnston, "Is China a Status Quo Power?"

25 Dotto, "Canada and the European Space Agency"; Sorid, "Japan to Sign Space Accord."

26 Mineiro, 101-102.

related technologies are subject to USML listing and control – except involving any interaction with China.²⁷ Longstanding efforts to reform the ITAR regime with respect to space-related technology sharing so far have had little effect; while pressures are likely to grow and may eventually produce change, US-China space cooperation remains controversial in the US and is likely to be exempted from foreseeable reforms.²⁸ Hence, any relief from the impediments these restrictions present to Canada's international collaboration on space activities cannot be expected to apply to involvement with China.

New initiatives in China-Canada space engagement would need to focus on working around such obstacles. For example, Canada can consider supporting broader development of bilateral technology/trade safeguard agreements (TSAs) by Canada and/or the US with emerging space powers like China, India and Brazil, modeled on the US-Russia TSAs of the 1990s that now enable inclusion of US-origin technology on satellites launched on Russian vehicles in Kazakhstan.²⁹ Development of US-India space cooperation in the past decade has followed a similar model.³⁰ Although a US-China agreement of this sort seems now a distant prospect, a Canadian initiative with China in this vein (consistent with Canada's CPG and its interest in sustaining US technology exchange) could serve as a building block for reconciliation of US concerns and for broader integration of China into global technology exchange management, such as inclusion in the Missile Technology Control Regime (MTCR).³¹

There are also categories of potential Canada-China cooperation, not involving technology exchanges, which might be fruitfully pursued. One possibility is to focus on joint utilization of information already being generated from existing space-based systems rather than on the joint development of new systems. This could include creating a common collection system and database for information on environmental monitoring and ocean research and convening joint scientific panels to generate new ideas for collaboration. The 2008 Sichuan earthquake has contributed to recognition in China and elsewhere in Asia of the necessity for international cooperation on environmental monitoring and disaster relief; Canada's niche expertise in remote sensing and earth observation could contribute vitally to systematized remote-sensing data sharing.³² Initiatives could also focus on identifying collaborations leveraging comparative advantages, such as combining Canada's experience in deep space exploration and China's launching capabilities. Such initiatives would enable the two countries to develop a partnership in relatively non-controversial areas, in turn helping overcome the impediments to more fulsome engagement.

Of course, any Canada-China cooperative effort on space-related activities would need to serve the aims of each country's own programs. But building cooperative linkages on space, either bilaterally or in a multilateral institutional context, would also serve to bolster the broader bilateral relationship, which is itself an inducement supplementing specific project benefits. Expanding space cooperation between these two countries could also produce benefits for Chinese engagement on space with the US and other countries.

One area in which such broadly applicable benefits might be generated is the issue of transparency. Many observers experience frustration over China's reticence to release information concerning its military and security capabilities and behaviour, notably in the area of space activities. This opacity is particularly perplexing when the information in question is relatively innocuous and/or already in the public domain through non-Chinese sources, and even cited by Chinese analysts themselves. In such cases, some suggest, China's unwillingness to

27 Two bills (H.R. 2410 §826 and H.R. 3840) contain similar provisions, including the exclusion of China. See Mineiro, 102.

28 See Moltz, 79-80 and Choi and Nicelescu, 34. As of December 2010, neither of the two reform measures under consideration in the current Congress, despite their exclusion of China, appears likely to receive approval. See "H.R. 2410" and "H.R. 3840."

29 See Mineiro, 102-103.

30 Jakhu, 14. A limited 2009 US-India TSA reportedly was pivotal in a subsequent Canadian decision to launch a government satellite on an Indian launch vehicle. See Mineiro, 103.

31 The conclusion here is more moderate than that offered by Mineiro, who advocates Canada pursue a TSA with China more actively in the context of a broader effort to "remove Canadian reliance on U.S. suppliers." See Mineiro, 103. Mineiro's approach would commit limited resources broadly rather than deeply, and so mark a significant deviation from the "niche excellence development" strategy. The more limited initiative suggested here would aim instead to bridge the tension between expanding Canadian collaboration with emerging space powers and sustaining unfettered technological engagement with the US. On bringing China into the MTCR, see Moltz, 82.

32 On the opportunity for Chinese participation in establishment of an Asia-wide remote-sensing data centre, see Moltz, 83.

validate and/or clarify information serves no strategic purpose and fuels an atmosphere of suspicion. Defenders of China in various settings have offered a number of answers to these contentions: China does not want to confirm information that might still be uncertain or that would be embarrassing domestically; China sometimes sees the call to “transparency” as a guise for intrusiveness or espionage; and, in any event, China is slowly getting better.³³

The focus on information, however, obscures a potentially more fruitful dimension for promoting transparency – people. Learning more accurately how Chinese space activities are bureaucratically organized and identifying key decision makers, both formal and informal, can enhance transparency as much or more than sharing detailed technical data or sensitive policy directions. Focusing transparency-oriented initiatives on “who” rather than “what” would also facilitate the development of personal relationships in specific sectors. A deeper Canada-China relationship on space activities would doubtlessly expand linkages in civil and commercial sectors, but would likely also facilitate exchanges on security matters, increasing knowledge of Chinese actors and perspectives in that area as well.

Attention to this interpersonal dimension of building a better understanding of China’s space interests and behavior reflects the penchant for relationship development that typifies moderate powers’ approaches to international relations. In other words, the Canadian proclivity for relationship building can be an important asset to successfully engaging China on space issues in ways that not only realize the specific interests of the two countries directly, but also yield benefits valuable more generally, such as enhancing Chinese transparency and generating the normative consensus for successful multilateral regimes for space. Such engagement can be productively undertaken through quasi-governmental forums involving unofficial participation by governmental representatives, as some US initiatives demonstrate.³⁴

Beyond pursuing the prospects of developing its own relationship with China on space matters, the role that Canada might play in facilitating the US-China relationship on space is ambiguous. If the US-China relationship is increasingly the central axis of space security, the purposes that would be served by a direct Canadian link to that relationship are unclear. Nor does Canada typically seek a “seat at the table” in circumstances where such a role would not be efficacious.

Instead, Canada might contribute more productively to support positive directions in the US-China relationship in a facilitative role. Such a role would take into account both the advantages and limitations given by its unique relationship to the US. This history leaves Canada at once familiar and independent. Canada’s intimate familiarity with the US provides a unique opportunity for Canadian interlocutors (governmental or civil) to help build better Chinese understanding of US motives and actions, while also conveying (not representing) Chinese viewpoints along Canada’s unique lines of communication with US policy elites. Such opportunities, if manifest, would present China with a concrete interest in engaging Canada specifically across a range of space-related issues. Canada’s relative independence from the US supports these opportunities by further establishing Canada’s credibility with China, beyond that given by the countries’ long shared goal of a legally binding treaty restraining the military uses of space and periodic collaboration in promoting such a treaty (as noted above). Having demonstrated that it is independent, but not neutral, and able to speak and act on its own behalf on all matters of space activities, Canada is well positioned to facilitate improved US-China engagement across a range of issues.

A window of opportunity for such facilitation on core security issues is now opening. China has responded receptively to the new prominence of collective security and arms control expressed in the Obama administration’s 2010 National Space Policy. Improved atmospherics, however, have not mended all divisions. In particular, for

³³ For a more extensive discussion of the transparency issue as an obstacle to collaboration see “Engaging China on Space.”

³⁴ Examples include the regular US-China Strategic Dialogue convened by the US Naval Postgraduate School’s Center on Contemporary Conflict (see Lamar, “CCC’s Informal Diplomacy”) and the meeting-based process leading to development of the “English-Chinese, Chinese-English Nuclear Security Glossary.” See Committee on International Security and Arms Control, “English-Chinese.” An example of a Canada-based initiative with similar intentions is the 2008 workshop, convened under this author’s direction at the University of British Columbia, exploring specifically what initiatives Canada could undertake to facilitate positive growth in the US-China relationship on space. See “Engaging China on Space,” (Workshop Report).

both political and security reasons, China (and Russia) continue to embrace proposals for formal treaty-based restraints on space-based armaments that still engender deep resistance in the US.³⁵ Canada's experience, policy record and credibility in this area would enable Canada to play an active and contributory role in translating current convergence into lasting accord. In short, Canada has an opportunity to make a potentially decisive difference at a critical time.

Canada could productively operate in two facilitative modes: as a convening force and as an innovation source. To operate as a convening force means to provide the venue and forum within which the principal agents may better advance their engagement. It does not mean to be a "mediator," which would be a direct rather than facilitative role. It may mean providing a nurturing environment for low-key meetings or other expert exchanges at either official or Track Two diplomatic levels.³⁶ But operating as a convening force can be less direct as well. For example, in pursuing project cooperation with China, Canada might prioritize initiatives that would also enable a US role (perhaps more remotely, perhaps not immediately) or at least have Canada-US counterpart initiatives. Such a focus would be especially useful in areas in which direct US-China engagement is most problematic, such as in inter-military contacts or analysis of longer-term prospects for military uses of space.

Canada can be an innovation source with respect to facilitating the US-China relationship by synthesizing the perspectives garnered through civil, commercial, military and diplomatic encounters with both countries to highlight viewpoints less visible to the US and China themselves. These viewpoints could generate specific proposals for enhancing US-China space engagement, which could be specific to a particular sector or issue, or general and long term. One focus might be to facilitate incipient US-China work on erecting confidence-building measures.

Canada's success in serving this facilitative role, in either of these modes, would depend in part on the US and China positively reinforcing that role. Such reinforcement would likely be more forthcoming if activities were undertaken through the accumulated activities of independently operating non-governmental agents – such as companies, universities and civil society organizations – rather than from a singular Canadian government posture. Many forums and innovations could also have independent impact, while sensitivity to the feedback from the efforts would be further data to the ongoing analysis of the US-China dynamic.

As the preceding discussion shows, opportunities and prospects for Canadian initiatives to engage China on space activities (either directly or by facilitating US-China interaction) are limited but not absent. Realizing current opportunities – and developing new prospects – will require direction and commitment. Are such initiatives worth the effort? Answering this question requires assessing the relative merit of such initiatives across the range of Canadian civil, commercial and security space interests, and in terms of impact on both Canada-China and Canada-US relations. If a complete answer is beyond the scope of this paper, several points inform Canadian interests in pursuing these potentialities.

First, space activities are already vital to each of these countries, and certain to grow more central over time; hence, small initiatives now may have a much larger impact in the future. Economic and demographic linkages dominate the current Canada-China relationship, but the scope of China's impact on Canadian relations with more longstanding partners is growing dramatically,³⁷ and space activities are a cutting edge of that growth.

Secondly, as noted earlier, the US-China space relationship has in recent years begun to swing back toward accommodation. In part in reaction to developments such as China's 2007 ASAT test and the 2009 collision of two satellites over Siberia, the US has made new overtures to China, principally on the topic of space debris

³⁵ On these prospects see Moltz, 82.

³⁶ One example of this mode includes this author's direction of Canada-based facilitation of the earlier-referenced US-China strategic engagement in development of a nuclear security glossary (collaborating with the Committee on International Security and Arms Control at the US National Academy of Sciences; see "NAS / China Collaboration."). A second example focused on space security is the earlier-referenced workshop on Canadian engagement of China on space, organized with Canadian government support and linked to the annual "China, Space, and Strategy" workshops in collaboration with the Eisenhower Center for Space and Defense Studies, US Air Force Academy; see "Engaging China on Space," (Project Summary).

³⁷ Evans, "Canada, Meet Global China," 284.

but also including talks on remote sensing, space science and even human spaceflight cooperation.³⁸ As James Clay Moltz observes, "The recent willingness of the US Air Force to expand its international data sharing on conjunction analysis regarding space debris and satellite collisions marks a significant evolution in American thinking. China's restraint from conducting additional kinetic ASAT tests since 2007 may be part of the same learning curve."³⁹ If such trends continue, Ottawa policymakers wary of getting too far out in front of Washington should also be attentive not to be left too far behind.⁴⁰

This observation underscores a third point, drawn directly from the preceding discussion: productive initiatives need not be in the first instance governmental. Indeed, given the circumscribed state of current Canada-China relations on space, the sensitivity of the issues vis-à-vis US relations, and Canada's relatively limited capacities, non-governmental initiatives (including civil, commercial and Track Two policy engagement) are likely to be more fruitful in terms of both tangible outcomes and foundation building for improved inter-governmental collaboration. This is particularly the case regarding possibilities for facilitating current embryonic US-China space cooperation.

CONCLUSION

The future of the US-China relationship on space activities – and for that matter the US-China security relationship more broadly – revolves around resolving two basic elements. The first is that the US and China face a sharp security dilemma with respect to their encounters on military uses of space. The second is that the US and China sometimes dangerously misunderstand each others' intentions and fail to communicate effectively. The dynamics of the US-China relationship on space security today comprise a combination of both elements, in varying degrees across issues and time.

Because degradation of relations and the potential for crises involve both real conflicts of interest and intensifying mistrust, stabilization of relations and constructive engagement require both improved understanding and practical reconciliations. The future of the US-China relationship depends upon mitigating both the actual and perceived elements of conflict across both the military/security and civil/commercial sides of space activity.

Both countries approach their encounters with one another with the disposition of great powers – established in the one case, rising in the other. These dispositions incline them to approach their relationship as independent and self-sufficient agents. But managing the relationship in the context of the rapid change and interdependence that characterizes space activities today will be difficult for policymakers in the US and China to do on their own. Here is where the contribution of countries such as Canada can be most contributory. Moderate powers are as well acquainted with managing security dilemmas as they are with overcoming communication obstacles. More experienced with having the vicissitudes of international power thrust upon them, they are more attuned to the value of well-formed relationships to surviving and thriving in an anarchic world.

Canada's own relationship with China is naturally its primary concern. As noted in the introduction, Canada has deepening economic and demographic ties to China, in addition to security interests. The extensive ties between the countries led to their 2005 stated recognition of their "strategic partnership."⁴¹ Subsequently, tensions over issues such as human rights balanced deepening economic engagement, leading to a period of "cool politics, warm economics." Prime Minister Stephen Harper's December 2009 visit to China augured a re-warming of the broader relationship.⁴²

38 Moltz, 79-81.

39 Ibid., 81.

40 Jakhu makes a similar observation concerning Canada-India space cooperation. See Jakhu, 17-18.

41 See Evans, 288.

42 For an early accounting, see Beltrame, "Harper to China."

However the Canada-China bilateral relationship evolves in coming years, the US-China relationship is more than ever a central feature in the Canadian conception of its own dealings with China. As the interactions between the United States and China intensify and increasingly draw the attentions of policymakers on both sides, Canadian policymakers are likely to be increasingly concerned that Canada's own interests will be impacted. As one recent assessment noted, "Canadian policy is made in Ottawa but is greatly affected by the very fact of US policies and attitudes toward China."⁴³

Whether cooperative or confrontational, an intensifying US-China relationship poses a challenge to Canada. But Canada's deep capacity for international relationship building presents opportunities to meet this challenge. Enhancing its role in facilitating the US-China relationship can be a mechanism to retain visibility and so a pillar in advancing Canada's own particular interests vis-à-vis both these larger powers.

These observations hold especially in the realm of space security. If the US-China relationship is the axis for the future of space security, Canada orbits it closely, and is suited to help the world understand how that axis spins. Contributing to stabilizing that axis would support Canada's specific interests as well as the world's. As the human presence in space develops into an integral aspect of global life, stabilizing that space axis may prove to be the center of gravity of a stable future for life on Earth as well.

43 Evans, 291.

BIBLIOGRAPHY

- Bates, J. "Canadian Military Mulls Tandem Radarsat Mission." *Space News*, May 13, 2002.
- Beltrame, Julian. "Harper to China: Canada Won't Be Silent on Human Rights." *The Canadian Press*, December 4, 2009.
- Byers, Michael. "For Sale: Arctic Sovereignty? How Losing a Canadian Satellite to the US Would Be Like Losing Our Eyes on the North." *The Walrus*, June 2008. Accessed December 23, 2010. <http://www.walrusmagazine.com/articles/2008.06-technology-for-sale-arctic-sovereignty-radarsat-mda-michael-byers/>.
- Caddey, Dave. "Radarsat-2: A Cautionary Tale." *Aerospace America*, January 2001. Accessed December 23, 2010. <http://www.aiaa.org/Aerospace/Article.cfm?issuetocid=45&ArchiveIssueID=9>.
- Canada. Canadian Space Agency. "Alouette I and II." Accessed December 23, 2010. <http://www.asc-csa.gc.ca/eng/satellites/alouette.asp>.
- _____. "Canada's World-Renowned Space Robotics." Accessed December 23, 2010. <http://www.asc-csa.gc.ca/eng/publications/success10.asp>.
- _____. *Radarsat*, Annual Review 1998/99. Saint-Hubert: Author, 1999.
- _____. *State of the Canadian Space Sector 2000*. Saint-Hubert: Author, External Relations Directorate, 2002.
- Canada. Department of Foreign Affairs and International Trade. "Space Security." July 15, 2008. Accessed December 29, 2010. http://www.international.gc.ca/arms-armes/non_nuclear-non_nucleaire/space_security-securite_spatiale.aspx?lang=en&menu_id=120&menu=R.
- Canada. Department of National Defence. "Polar Epsilon Project." January 10, 2008. Accessed December 23, 2010. <http://www.forces.gc.ca/site/news-nouvelles/news-nouvelles-eng.asp?cat=00&id=2546>.
- Canada. Minister of Industry. "Speaking Points: Radarsat-2 Launch Event." Colin Carrie, Parliamentary Secretary to the Minister of Industry, on Behalf of the Honourable Jim Prentice, Minister of Industry and Minister Responsible for the Canadian Space Agency. December 14, 2007. Accessed December 23, 2010. http://www.colincarriemp.ca/pdfmedia/Speaking%20Points_Colin%20Carrie%20on%20behalf%20of%20the%20Minsiter%20of%20Industry,%20RADARSAT-2%20Launch%20Event,%2014%20Dec%202007.pdf.
- Canada. Parliament of Canada. "Bill C-25: An Act Governing the Operation of Remote Sensing Space Systems." Prepared by Lalita Acharya, Science and Technology Division, Library of Parliament, Government of Canada, December 20, 2004. December 23, 2010. http://www.parl.gc.ca/common/Bills_Is.asp?Parl=38&Ses=1&Is=C25.
- Canada. Standing Committee on Industry, Science and Technology. "Evidence." 39th Parliament, 2nd Session. Wednesday, March 5, 2008. Accessed December 29, 2010. <http://www2.parl.gc.ca/HousePublications/Publication.aspx?DocId=3330167&Language=E&Mode=1&Parl=39&Ses=2>.
- Choi, Eric, and Sorin Nicelescu. "The Impact of US Export Controls on the Canadian Space Industry." *Space Policy* 22 (2006): 29-34.
- Committee on International Security and Arms Control. "English-Chinese, Chinese-English Nuclear Security Glossary (2008)." Accessed December 29, 2010. http://www.nap.edu/openbook.php?record_id=12186&page=R1.
- Dittmann, LCol. Paul. "In Defence Of Defence: Canadian Arctic Sovereignty and Security." *Journal of Military and Strategic Studies* 11, No. 3 (Spring 2009). Accessed December 23, 2010. www.jmss.org/jmss/index.php/jmss/article/download/67/325.

- Dotto, Lydia. *Canada and the European Space Agency: Three Decades of Cooperation*. Norodwijk, Netherlands: European Space Agency Publications Division, 2002.
- "Engaging China on Space: Implications for Canada." Conference Report, Liu Institute for Global Issues, University of British Columbia, Vancouver, September 5, 2008. Accessed December 23, 2010. http://www.ligi.ubc.ca/sites/liu/files/Simons/Canada_China_Space_ConfRpt_Sept08.pdf.
- "Engaging China on Space: Implications for Canada." Project Summary, Liu Institute for Global Issues, University of British Columbia. Accessed December 23, 2010. <http://www.ligi.ubc.ca/page244.htm>.
- Evans, Paul. "Canada, Meet Global China." *International Journal* 61, No. 2 (Spring 2006): 283-97.
- Fergusson, James. "Shall We Dance? The Missile Defence Decision, NORAD Renewal, and the Future of Canada-US Defence Relations." *Canadian Military Journal*, Summer 2005. Accessed December 23, 2010. <http://www.journal.forces.gc.ca/vo6/no2/inter-01-eng.asp>.
- Forest, Benjamin D. "An Analysis of Military Use of Commercial Satellite Communications." Master's Thesis, Naval Postgraduate School, September 2008. Accessed December 23, 2010. <http://oai.dtic.mil/oai/oai?verb=getRecord&metadataPrefix=html&identifier=ADA488621>.
- Gainor, Chris. "Crash of Canada's Space Biz: Why BC Firm's Sale to Americans Leaves Huge Crater." *The Tyee.ca*, January 28, 2008. Accessed December 23, 2010. <http://thetyee.ca/Views/2008/01/28/MDASale/>.
- Goldstein, Avery. "Power Transition, Institutions, and China's Rise in East Asia." In *The United States and Northeast Asia: Debates, Issues, and New Order*, edited by G. John Ikenberry and Chung-In Moon. Lanham, MD: Rowman and Littlefield, 2008.
- "Govt. Confirms Decision to Block Sale of MDA Space Division." *CBC News*, May 9, 2008. Accessed December 23, 2010. <http://www.cbc.ca/money/story/2008/05/09/alliant-sale.html>.
- Guo, Shibao, and Don J. DeVoretz. "The Changing Face of Chinese Immigrants in Canada." *IZA Discussion Paper* No. 3018, August 2007. Accessed December 23, 2010. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1012808#.
- Handberg, Roger. "Outer Space as a Shared Frontier: Canada and the United States, Cooperation between Unequal Partners." *American Behavioral Scientist* 47, No.10 (June 2004).
- "H.R. 2410: Foreign Relations Authorization Act, Fiscal Years 2010 and 2010." *Govtrack.us*. Accessed December 29, 2010. <http://www.govtrack.us/congress/bill.xpd?bill=h111-2410>.
- "H.R. 3840: Strengthening America's Satellite Industry Act." *Govtrack.us*. Accessed December 29, 2010. <http://www.govtrack.us/congress/bill.xpd?bill=h111-3840>.
- Huntley, Wade L. "Moderate Space Powers." In *The Politics of Space: A Survey*, edited by Eligar Sadeh. London and New York: Routledge, 2011.
- _____. "Smaller State Perspectives on the Future of Space Governance." *Astropolitics* 5, No. 3 (Fall 2007): 237-71.
- Jakhu, Ram. "The Case for Enhanced India-Canada Space Cooperation." *Space Policy* 25 (2009): 9-19.
- Johnston, Alastair Iain. "Is China a Status Quo Power?" *International Security* 27, No. 4 (Spring 2003): 5-56.
- Kirton, John. "Canadian Space Policy." *Space Policy* 6, No. 1 (1990): 61-71.
- Lamar, Kate. "CCC's Informal Diplomacy Keeps Dialogue with China Open." Naval Postgraduate School, June 29, 2010. Accessed December 29, 2010. http://www.nps.edu/Academics/Schools/SIGS/News/CCC_China_MAY2010.html.

- Maskell, Paul, and Lorne Oram. "Sapphire: Canada's Answer to Space-Based Surveillance of Orbital Objects." *Technical Papers* 2008. Accessed December 23, 2010. http://www.amostech.com/TechnicalPapers/2008/SSA_and_SSA_Architecture/Maskell.pdf.
- Mayeda, Andrew, and David Akin. "Ottawa Blocks Sale of Space Agency to U.S. Firm." *Canwest News Service*, April 10, 2008. Accessed December 23, 2010. <http://www2.canada.com/montrealgazette/news/story.html?id=6426dd8d-ab10-426b-9f60-358c1fea7b9b&k=35463>.
- "MDA Awarded Definition Phase Contract for Canadian Space Surveillance System." Press Release. January 11, 2005. Accessed December 23, 2010. <http://www.mda.ca/corporate/news/pr/pr2005011101.html>.
- Medeiros, Evan S. "The New Security Drama In East Asia: The Responses of U.S. Allies and Security Partners to China's Rise." *Naval War College Review* 62, No. 4 (Autumn 2009).
- Mineiro, Michael. "US export Controls and Canadian Autonomy to Collaborate on International Space Missions." *Space Policy* 26 (2010): 99-104.
- Moltz, James Clay. "China, the United States, and Prospects for Asian Space Cooperation." *Journal of Contemporary China* 20, No. 68 (2011): 69-87.
- "NAS / China Collaboration." Liu Institute of Global Issues. Accessed December 29, 2010. <http://www.ligi.ubc.ca/page233.htm>.
- Rayermann, Patrick. "Exploiting Commercial SATCOM: A Better Way." *Parameters*, (Winter 2003-2004): 54-66.
- Regehr, Ernie. "BMD, NORAD, and Canada-US Security Relations." *Project Ploughshares Briefing* 4, No. 4 (March 2004). Accessed December 29, 2010. www.ploughshares.ca/libraries/Briefings/brf044.pdf.
- Rosecrance, Richard N. "Power and International Relations: The Rise of China and Its Effects." *International Studies Perspectives* 7, No. 1 (2006): 31-35.
- "SIA Supports H.R. 2410: Satellite Tech Export Changes." *Satnews Daily*, June 10, 2009. Accessed December 29, 2010. <http://www.satnews.com/cgi-bin/story.cgi?number=704964936>.
- Sorid, Daniel. "Japan to Sign Space Accord with Canada." *Space.com News*, September 10, 1999. Accessed December 29, 2010. http://www.space.com/news/japan_canada.html.
- Staples, Steven. *Missile Defence: Round One*. Toronto: James Lorimer and Company Ltd., 2006.
- Swaine, Michael D. "Managing China as a Strategic Challenge." In *Strategic Asia 2008-09: Challenges and Choices*, edited by Ashley J. Tellis, Mercy Kuo, and Andrew Marble. Seattle: National Bureau of Asian Research, 2008.
- Wattie, Chris. "Canada Will Launch Own Spy Satellite: Project Sapphire." *National Post*, November 14, 2006.
- Watts, Barry D. "The Military Use of Space: A Diagnostic Assessment." Center for Strategic and Budgetary Assessments, February 2001. Accessed December 29, 2010. http://www.csbaonline.org/4Publications/PubLibrary/R.20010201.The_Military_Use_o/R.20010201.The_Military_Use_o.pdf.
- Woo, Yuen Pau, and Wang Huiyao. "The Fortune in our Future." *Globe and Mail*, June 22, 2009. Accessed December 29, 2010. <http://www.asiapacific.ca/editorials/canada-asia-viewpoints/editorials/fortune-our-future>.
- Zweig, David. "A Limited Engagement: Mainland Returnees from Canada." *Research Reports*, Asia Pacific Foundation of Canada, December, 2008. Accessed December 29, 2010. <http://www.asiapacific.ca/research-report/limited-engagement-mainland-returnees-canada>.

THE CIC CANADA-CHINA RELATIONS PROJECT

Bilateral relations between the governments of Canada and the People's Republic of China are a matter of strategic interest to Canada. Recent changes in the frequency of high-level visits, the effective style and content of bilateral communications and perspectives held about each country by various sectors of each other's society all suggest that the Canada-China relationship has changed significantly in recent years. Yet China remains vitally important to Canada for a variety of reasons and in a variety of sectors. Political and diplomatic cooperation on issues of direct bilateral concern and also on issues of global import remains critically important. Commercial and trade ties linking Canada with the world's third largest and fastest growing economy are of obvious importance. Cultural and civil society ties, including immigration patterns and the ancillary effects they generate, are also important. In these and other matters, the Canada-China relationship will likely grow in importance in the years to come. While the diversity of links between Canada and China militates in favour of giving due attention to a multiplicity of commercial, academic and civil society links, bilateral cooperation at the federal/central government level remains important.

In keeping with CIC objectives to advance research and dialogue on international affairs issues of importance and interest to Canadians, the CIC Canada-China Relations Project has focused on supporting research and analysis toward building a policy framework for Canada's relationship with China. The project's activities have been developed along three thematic areas that reflect issues of common concern: a) Chinese domestic institutional and normative contexts for engagement; b) Economic relations; c) Collaboration on global issues such as environment, health and security.

- a) Domestic Context for Engagement: The Canada-China relationship can be most effective when it is grounded on complementarity of interests, which in turn requires mutual understanding of domestic normative and institutional conditions in both countries. Canadian initiatives with China, ranging from WTO compliance and business regulation to human rights, can be effective only if they are designed and implemented in light of China's domestic conditions, ranging from popular norms to governmental structures and policy priorities. Similarly, China's success in nurturing productive relationships with Canada will require appreciation of Canadian domestic conditions. The papers for this thematic area were commissioned and directed by Professor Jeremy Paltiel of Carleton University.
- b) Economic Relations: Economic relations between Canada and China are critically important. Economic relations include bilateral trade and investment relations, and also extend to local effects of economic conditions and behaviour. In the trade area, Canada's strengths match up extremely well with China's needs. In trade and investment relations, efforts to promote normative and institutional accommodation in China for Canadian business objectives are consistent with Chinese development policies and also serve important Canadian interests in the areas of good governance. As well, national economic behavior by the two countries in response to changing economic conditions at the global, regional and local level have important effects on the Canada-China relationship. The papers for this thematic area were commissioned and directed by Yuen Pau Woo, President of the Asia Pacific Foundation of Canada.
- c) Collaboration on Global Issues: The importance of China's responsible participation in systems for addressing global policy concerns in areas such as environment, health and security cannot be overstated. Yet China's participation in the global community can be distorted by its responses to apprehension and competition from other global actors, particularly the United States, the European Union and Japan. Canada has a significant role to play in supporting China's responsible participation, not only through direct bilateral programming but also through our capacity to deploy good offices, legitimation and other soft power resources both bilaterally and globally. The papers for this thematic area were commissioned and directed by Professor Brian Job of the University of British Columbia.

The papers here presented in connection with the CIC Canada-China Relations Project offer informed, nonpartisan recommendations for a variety of stakeholders in Canada, including the government and private and public sector institutions and individuals, with a view toward furthering the development of healthy long-term relations between Canada and China. While historical and current conditions may result in disagreement as to how best to manage the Canada-China relationship, China's importance to the world requires our attention. We hope that the papers presented here can further the process of understanding and effective engagement that will strengthen the foundation for productive relations for the long-term interests of both countries.

Dr. Pitman B. Potter

Chair

CIC China Working Group

The Canadian International Council (CIC) is a non-partisan, nationwide council established to strengthen Canada's role in international affairs. With local branches nationwide, the CIC seeks to advance research, discussion and debate on international issues by supporting a Canadian foreign policy network that crosses academic disciplines, policy areas and economic sectors.

The CIC features a privately funded fellowship program and a network of issue-specific Working Groups. The goal of the CIC Working Groups is to identify major issues and challenges in their respective areas of study and to suggest and outline the best possible solutions to Canada's strategic foreign policy position on those issues. The CIC aims to generate rigorous foreign policy research and advice.

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