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Norman Paterson School of International Affairs

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Letter from the Editors

The 2011–12 period has been a tumultuous one for international affairs practitioners and scholars. The Middle East and North Africa witnessed the fall of decades-long dictatorships during the Arab Spring, drug-related violence in Latin America is at an all-time high, and a new African country was created with the partition of Sudan. At the same time, climate change, the global economy, and development issues demand ever more attention, particularly with the shift of politico-economic power from the global North to global South. Critical analysis of international issues is necessary not only to make sense of them, but to suggest ways in which governments, institutions, and civil society organizations can adequately address them. Recommendations that carefully consider the problems at hand, their causes, their implications, and the distributional issues between developed and developing countries have the potential to affect policy, as well as the scholarly debate within the field of international relations. Students at the graduate level are well placed to think critically and contribute innovative ideas to policy discussions.

The *Paterson Review of International Affairs*, based out of the Norman Paterson School of International Affairs (NPSIA) at Carleton University in Ottawa, Canada, is a double-blind peer-reviewed journal that is published annually to disseminate the research of graduate students. Its focus on policy allows students interested in public and international affairs to explore practical alternatives for policy-making. Of the 44 submissions received in the summer of 2011, eight were selected for publication. The authors of these papers critically analyzed issues that are steadily gaining prominence and proposed options for moving forward.

International security, the perennial focus of international relations for practitioners and scholars alike, is examined in innovative ways. Caroline Leprince assesses the Canadian government's pan-governmental approach to fragile and failed states. She argues that the effectiveness of Canadian missions abroad can be improved by putting special emphasis on departmental cultures during pre-mission training. Justin Mohammed examines the determinants of durable peace agreements and, using the Darfur Peace Agreement as a case study, recommends the compilation of a rank-ordered index of conflict management measures and further context-specific research to guide policymakers. Nathan Sears considers the difficulties of controlling small arms and light weapons proliferation and areas for the Arms Trade Treaty to address. He recommends contingency plans, increased co-operation among and technical assistance from developed countries, and civil society action on monitoring, verification, and responding to non-compliance. Ginette Gautreau adopts a human security perspective to critique the War on Drugs, suggesting the establishment of new national research bodies, broadened socio-economic policies, judicial reforms, and a paradigmatic shift in anti-drug policy from a state-centred to a human-centred approach.

New perspectives on global development challenges highlight

promising directions for policy. In critiquing the philosophy of John Rawls, Marcel Sangsari investigates whether the better-off have a duty to provide development assistance and offers recommendations, including the provision of international aid based on novel criteria, to maximize the capabilities of the world's poorest. Juan Arellano highlights indigenous peoples' intensifying resistance to the processes of neoliberal globalization. He indicates that state recognition of these peoples' collective rights is crucial and that mutual cooperation between indigenous peoples and international organizations as well as integrated capacities enabled by information and communications technologies could garner global support for these peoples' aspirations.

Climate change continues to be perceived as the greatest collective challenge that the world faces. Natassia Ciuriak details the consequences of ocean acidification to give urgency to climate change policy-making. She recommends building advocacy coalitions, bottom-up education campaigns, cutting subsidies to fossil-fuel producers, and investment in environmental protection. Miles DePaul adopts a long-term perspective on climate-induced migration and the stresses it will place on megacities, demonstrating that comprehensive climate change mitigation and adaptation policies and a normative shift on climate-related mobility are necessary.

Volume 12 of the *Paterson Review* is the result of hard work put in by many graduate students, some who wrote the articles published in this journal and others who selected papers in a double-blind review process or helped with editing and revision. Notably, this volume marks the first time that the *Paterson Review* has published a French article, demonstrating a new commitment to publishing scholarship in both of Canada's official languages. Since 2007, the *Paterson Review* has been published in hard-copy format and circulated to public and international affairs schools around the world. The journal is also available online through *Diplomat & International Canada* magazine at www.diplomatonline.com/mag/paterson-review. Since 2009, the journal has been indexed at Library and Archives Canada.

The editors-in-chief of the *Paterson Review* would like to thank the authors, expert reviewers, contributing editors, blind reviewers, and designer who dedicated their time and expertise to this publication. We also thank the staff at NPSIA for their administrative support, *Diplomat & International Canada* for its continued partnership, and our sponsors NPSIA, the Canadian Centre for Treaty Compliance, and the Centre for Security and Defence Studies for making this journal possible.

Jeff K. Ahonoukoun, Alan Ho, and Michael Olender Editors-in-Chief

Approche pangouvernementale canadienne: Comment favoriser une intégration positive des organisations publiques impliquées dans un processus de réforme organisationnelle

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Au cours des dernières années, le gouvernement canadien a adopté une approche pangouvernementale pour intervenir dans les États fragiles ou en déroute. Compte tenu de la grande diversité des ministères et agences appelés à travailler dans un contexte pangouvernemental, des risques de résistances institutionnelles étaient prévisibles. Cet article utilise la culture organisationnelle comme angle d'analyse afin d'examiner les sensibilités des organisations publiques impliquées dans un processus de réforme organisationnelle, une facette qui fut l'objet de peu d'étude jusqu'à présent. En dernier lieu, certaines recommandations sont présentées afin de mieux encadrer le personnel qui se déploiera dans le cadre d'une mission pangouvernementale.

Introduction

Depuis quelques années déjà, le gouvernement canadien emploie une nouvelle stratégie d'intervention afin de mieux répondre aux situations complexes de crise et de reconstruction post-conflit. L'Énoncé de politique internationale du Canada de 2005 a introduit une stratégie d'intervention dite « pangouvernementale » qui est plus adaptée aux « nouvelles » réalités internationales. En adoptant une vision plus holistique des conflits, cette approche formalise une collaboration plus étroite entre les éléments de la défense, de la diplomatie et du développement (3D) afin d'intervenir dans les États fragiles ou en déroute (Canada 2005a, 23).¹

Bien que cette stratégie pangouvernementale ait été développée comme outil d'intervention optimal pour des environnements de sécurité complexes, il ne peut être présumé qu'une intégration suivra naturellement entre les parties participant à l'approche. Les diverses organisations réunies sous un effort pangouvernemental possèdent toutes une culture, des valeurs et des pratiques qui leurs sont propres. Ces différences peuvent favoriser l'émergence de tensions entre les partenaires qui partagent parfois des objectifs divergents (Flemming 2000, 39; Leslie, Gizewski et Rostek 2008, 14).

Cet article se questionne sur la manière dont ces tensions organisationnelles affectent les dynamiques d'interaction entre les principaux acteurs prenant part à l'approche pangouvernementale. Ce texte soutient que ces difficultés sont liées, en grande partie, aux contradictions présentes dans les cultures organisationnelles des ministères et agences (i.e., mandats, valeurs, pratiques d'intervention). Dès lors, ces divergences organisationnelles ont pour effet de limiter les possibilités pour les partenaires de poursuivre leur objectif de collaboration.

Afin d'examiner les sensibilités des organisations publiques réunies dans un effort pangouvernemental, cette étude utilise la culture organisationnelle comme angle d'analyse. Cette perspective a le mérite de tenir compte du point de vue des organisations dans ce processus de réforme, plutôt que de se concentrer uniquement sur une vision qui englobe l'approche dans son ensemble. Pour conclure, cet article présentera des recommandations pour mieux encadrer les acteurs gouvernementaux canadiens qui se déploieront dans un contexte pangouvernemental, en leur offrant une formation mieux adaptée à leurs besoins.

Courants de littérature critiques des processus de réforme organisationnelle

Même si la stratégie pangouvernementale repose grandement sur la collaboration entre les parties participant à l'approche, il s'avère que de nombreux obstacles nuisent à l'efficacité interministérielle (Thompson et Gill 2010).² Dans un contexte pangouvernemental, les organisations publiques traditionnellement indépendantes sont incitées à collaborer. Ces pressions peuvent indisposer certains des ministères et agences qui craignent que les rôles et fonctions qui leur sont attribués dans le cadre de cet effort conjoint ne correspondent pas aux objectifs et mandats poursuivis par leur organisation (Baumann 2008, 71). Ils peuvent réagir négativement à la restructuration non seulement parce qu'ils redoutent que la nouvelle structure réduise leur autonomie, mais aussi parce qu'ils appréhendent de se faire assimiler et que leurs valeurs et préoccupations organisationnelles ne soient plus reflétées (Christensen et Laegreid 2006, 17). D'ailleurs, cette approche est particulièrement critiquée par la communauté du développement qui craint que l'harmonisation des politiques réduise leur autonomie et leur capacité d'agir conformément à leurs objectifs de lutte contre la pauvreté (Patrick et Brown 2007, 131). Cette communauté juge que l'approche pangouvernementale instrumentalise les ressources destinées au développement international et les détourne pour servir des intérêts avant tout sécuritaires et politiques (Brown 2008).3

Dans la littérature, deux courants formulent des suggestions pour améliorer la collaboration interministérielle dans le contexte d'une approche pangouvernementale. Le premier, qui est le courant dominant, adopte une vision relativement technique du problème (Canada 2007 ; Friis et Jarmyr

2008 ; JTFA 2009 ; OECD 2006 ; Patrick et Brown 2007 ; Rintakoski et Autti 2008). Afin de pallier au déficit de collaboration, celui-ci suggère d'ajouter davantage de mécanismes de coordination, ainsi que de mettre en place des structures pour améliorer les processus d'interaction et de planification entre les ministères. Paradoxalement, la littérature portant sur la confiance organisationnelle démontre que l'ajout de structures et de mécanismes de contrôle tend plutôt à jouer l'effet contraire. En fait, ce fardeau additionnel contribuerait à diminuer la confiance entre les membres (Das et Teng 1998, 495-496). Il existe donc un seuil où plus de coordination n'engendrera pas de bénéfices additionnels. Ainsi, la poursuite de la cohérence au-delà d'une certaine limite aura plus d'effets négatifs que positifs (de Coning et Friis 2011, 14).

La seconde approche considère que le fossé entre la politique pangouvernementale et ses échecs en pratique est causé par des contradictions inhérentes aux mandats, aux intérêts et aux valeurs fondamentales des acteurs. Ces incohérences posent des contraintes quant à la collaboration possible entre les partenaires poursuivant un effort pangouvernemental (ibid., 13). Puisque chaque acteur provient d'une communauté distincte diplomatique, militaire et du développement – chacun a intégré les principes et les philosophies propres à sa profession et sphère d'activité. Il serait naïf de croire que ces différences fondamentales, qui façonnent les identités des organisations, puissent être résolues par la coordination. Ignorer ces profondes différences risque de créer de nouvelles tensions entre les acteurs internes qui soutiennent l'effort pangouvernemental. Pour qu'un processus de réforme soit réussi, il faut d'abord reconnaître la spécificité propre à chaque culture et ensuite instaurer progressivement un esprit de collectivité auprès des nouveaux partenaires (Christensen et Laegrid 2006, 13 ; Das et Teng 1998, 507).

En somme, ces deux approches – l'une basée sur l'ajout de mécanismes de coordination et l'autre axée sur la valorisation des traditions culturelles des organisations – peuvent améliorer l'efficacité de la collaboration entre les partenaires si elles sont appliquées de façon complémentaire. Une fois que les structures et mécanismes en place contribuent au bon fonctionnement de l'approche pangouvernementale, il ne faut pas non plus oublier la dimension humaine. Celle-ci est très importante pour renforcer la confiance entre les membres participant à l'approche. La sélection de personnes compétentes dans les postes clés – nommées *boundary spanners* dans la littérature⁵ – demeure essentielle afin de concilier les différents points de vue organisationnels et favoriser une collaboration interministérielle efficace.

Culture organisationnelle, habitus et ethnocentrisme

Afin d'approfondir la compréhension des tensions vécues par les ministères et agences gouvernementaux dans un contexte de réforme organisationnelle, cette étude se fonde sur le cadre d'analyse de la culture organisationnelle, développé par Edgar Schein. Jusqu'à présent, la culture a fait l'objet de très

peu d'analyse dans la littérature portant sur le maintien de la paix.⁶ Ce constat est étonnant puisque la culture organisationnelle est citée dans de nombreux articles comme étant le principal obstacle à la coordination civilo-militaire (Baumann 2008 ; Duffey 2000 ; Jenny 2001 ; Thompson et Gill 2010 ; Van der Kloet 2006). Une telle perspective a le mérite d'inspirer des alternatives aux réponses institutionnelles traditionnellement proposées pour atténuer les différences interministérielles. De plus, ce cadre d'analyse permet de tenir compte du point de vue des organisations et de démontrer que, parfois, les mentalités en « silo » peuvent également avoir leur utilité (Christensen et Laegreid 2006, 21).

Le concept de culture organisationnelle est révélateur de la raison d'être d'une organisation, duquel découle le sens des objectifs qu'elle poursuit dans son environnement (Duffey 2000, 148; Bentley 2010, 3). Larry Minear et Thomas Weiss (1993, 69) décrivent le concept de culture organisationnelle comme étant la façon dont une organisation se perçoit et désire être perçue dans son environnement : « [it is] an organization's way of approaching its tasks, its relationships with other agencies, its self-image and public image and its standard operating procedures. » En plus de guider les procédures et les routines d'une organisation, la culture organisationnelle se reflète également dans le choix des ressources et des capacités qu'elle décide d'acquérir (Baumann 2008, 72). En somme, elle s'observe dans les valeurs fondamentales, les symboles et les pratiques collectives partagés par les membres d'une organisation.

C'est à travers un processus d'enculturation⁷ que les membres d'une organisation apprennent et internalisent les règles et les modèles de conduite prescrits par leur culture organisationnelle (Duffey 2000, 148). Dans les théories sur les organisations, Schein s'est particulièrement intéressé à leur analyse culturelle. Rappelons ici sa définition de la culture organisationnelle : « La culture organisationnelle est le pattern de principes ou postulats de base qu'un groupe donné a créé, découvert, ou développé, en apprenant à traiter ses problèmes d'adaptation à l'environnement extérieur et d'intégration interne, et qui se sont avérés suffisamment efficaces pour être considérés valables et qui, par conséquent, peuvent être enseignés aux nouveaux membres comme la bonne manière de percevoir, de penser et de sentir, par rapport à ces problèmes (Schein 1991, 176). » Les valeurs et les principes sous-jacents de l'organisation sont donc intériorisés par le membre et, en retour, influencent la façon dont ce dernier perçoit, prend des décisions et se comporte quotidiennement dans son environnement (Davis 2010, 48). Bien que la culture de l'organisation n'engendrera pas de comportements prédéterminés, ce processus d'apprentissage façonnera durablement les réponses cognitives et émotives des membres de l'organisation face à leur environnement externe (Schein 1991, 191). En fait, ce processus d'enculturation se renforcera au fur et à mesure que les membres devront réagir à certaines situations. Par conséquent, « plus longue est notre vie au sein d'une culture donnée et plus cette culture est ancienne, plus elle aura d'influence sur nos perceptions, pensées et sentiments (Bélanger et Mercier 2006, 336). » Face à

des circonstances inhabituelles et sous des conditions de fortes pressions, les réactions et mécanismes d'adaptation d'un individu seront guidés par les habitudes et façons de faire inculquées par sa culture organisationnelle.

Deux concepts complémentaires à la culture organisationnelle, soient l'habitus et l'ethnocentrisme, sont utilisés dans cette analyse pour étudier les organisations publiques dans un processus de réforme institutionnelle. A. B. Fetherston et Carolyn Nordstrom (1995) sont les premiers à avoir utilisé la notion d'habitus du sociologue Pierre Bourdieu pour réexaminer la compréhension de la résolution de conflits dans les missions de paix. Le concept d'habitus a été défini par Bourdieu (2000, 261) comme un « système de dispositions durables et transposables qui, en intégrant toutes les expériences passées, fonctionne à chaque moment comme une matrice de perceptions, d'appréciation et d'actions. » Ce processus établit un cadre culturel duquel sont puisés des schèmes d'action qui permettent à un individu d'agir de façon « appropriée » dans son environnement. Or, ces dispositions socialement construites font tellement partie intégrante de la vie quotidienne qu'elles sont prises pour acquis; pour ainsi dire, l'enculturation d'un individu se fait surtout de façon inconsciente. Pierre Dasen (1993) prévient également qu'un individu ne peut se rendre compte de sa propre enculturation à moins d'être exposé à une autre culture. Paradoxalement, les personnes chez qui l'enculturation est la plus forte sont celles qui ne prendront pas conscience de l'influence gu'exerce la culture sur leur vie. Conséquemment, les individus doivent sortir de leur milieu pour comprendre leur monde. Ils ont recours à l'altérité, ce qui leur permet de voir le monde à travers des dichotomies (Mussweiler et Bodenhausen 2002), et de définir ce qu'ils sont de ce qu'ils ne sont pas (Hill 2007, 28).

Le concept d'ethnocentrisme, introduit en sociologie par William Sumner (1906), s'exprime par une tendance à comprendre le monde à travers le biais normatif des valeurs de sa propre société pour analyser les autres sociétés. Cela s'explique par les forts liens qui unissent une société et qui procurent, en retour, des sentiments de sécurité, de familiarité et d'ordre à ses membres (Kimmel 1998, 59). Tel que présenté par Roy Preiswerk et Dominique Perrot (1975, 49), l'ethnocentrisme permet d'interpréter les communautés hors-groupes (outgroup) qui sont jugées à travers les concepts, les normes et les critères de l'endogroupe (ingroup). En d'autres termes, « l'ethnocentrisme est défini comme l'attitude d'un groupe consistant à s'accorder une place centrale par rapport aux autres groupes, à valoriser positivement ses réalisations et particularismes, et menant à un comportement projectif à l'égard des horsgroupes qui sont interprétés à travers le mode de pensée de l'endogroupe (ibid.). » Ainsi, les membres de l'endogroupe utilisent leurs propres référents culturels pour conceptualiser le monde dans lequel ils vivent. Ces individus ont tendance à prendre pour acquis que les schèmes de comportements qu'ils ont appris et internalisés sont meilleurs que ceux des autres. En fait, l'adoption d'un comportement par une personne à l'extérieur de l'endogroupe, qui dévierait de ce qui est approprié dans le schème culturel d'un individu, serait jugé illogique et incompréhensible par ce dernier.

Application de la culture organisationnelle pour analyser les dynamiques interministérielles dans un contexte pangouvernemental

L'application du concept d'habitus de Bourdieu dans un contexte pangouvernemental permet d'approfondir la compréhension des schèmes culturels entre les différentes communautés qui interprètent la mission à travers les lunettes de leur propre culture organisationnelle, c'est-à-dire leur propre habitus (Fetherston et Nordstrom 1995, 95). Cette particularité propre aux opérations multidimensionnelles a été soulignée par Robert Rubinstein (1993, 553): « A peacekeeping mission may mean many different things to different people, because each may have a different political understanding of the situation. Peacekeeping operations take place in the context of the daily lives of multiple communities: diplomatic, military, and local. Each of these communities embodies culturally constituted ways of behaving and understanding the objectives and practices of operations. Sometimes the intersection of these cultural spheres is problematic. » Chaque acteur a son propre habitus qui lui fournit le contexte référentiel duquel il puise ses croyances et ses modèles de conduite. Ces références sont internalisées et construites par le biais de la culture organisationnelle et permettent à l'acteur de répondre efficacement aux exigences qui lui sont prescrites dans le cadre de la mission.

Afin d'illustrer la notion d'habitus, Fetherston et Nordstrom (1995, 107) citent en exemple le rôle de l'entraînement chez les militaires. Dans le cadre de leur formation, les soldats sont entraînés à se battre contre des ennemis ; l'entraînement tend à déshumaniser les hors-groupes et à justifier le recours à la force contre eux. Par conséquent, l'habitus du soldat vient à conceptualiser le monde sous une forte dichotomie nous/eux. Ainsi, les schèmes d'action internalisés et appris par les soldats pendant leur entraînement militaire deviennent des pratiques communes fortement enracinées dans la culture militaire – et qui se trouvent grandement renforcées en zone de conflit. Les valeurs fondamentales enseignées derrière cet entraînement sont d'importants indicateurs des hypothèses sous-jacentes de la culture militaire.

À force de se côtoyer, chaque communauté – diplomatique, militaire et du développement – a développé une culture organisationnelle unique qui s'est renforcée au contact des autres communautés. Chacune opère donc selon ses référents culturels en répondant à une situation selon sa compréhension organisationnelle et ses politiques d'intervention (Thompson et Gill 2010, 8). Dans un contexte pangouvernemental où tous les partenaires travaillent conjointement, nous avons tenté de comprendre de quelles manières les différentes cultures organisationnelles affectaient la coopération. Des études sur la coopération civilo-militaire ont révélé que le manque de familiarité entre les différentes communautés peut inciter les membres à développer une méfiance face aux autres groupes et à faire usage de stéréotypes négatifs (Duffey 2000, 149; Jenny 2001, 27). Ces pratiques ethnocentriques viennent

d'un besoin de se sécuriser face à une peur de l'autre.

Par exemple, si des militaires, des diplomates et des spécialistes en développement se voient confier la mission de sécuriser un village dans un environnement de contre-insurrection, ils auront tendance à envisager différentes approches pour arriver à leur fin. Notamment, ils auront des attentes différentes quant au temps nécessaire pour atteindre cet objectif et leurs indices de succès varieront les uns par rapport aux autres. Conséquemment, les moyens employés par les membres de différentes communautés pour mener à bien leurs objectifs peuvent devenir la source de frustration importante entre les individus (Smith 2007, 373). Cette incompréhension, éprouvée par un acteur face aux raisonnements qui façonnent les choix d'un acteur extérieur à sa communauté d'appartenance, peut effriter la confiance de ce dernier qui juge l'autre inapte à anticiper correctement la réponse à une crise.

Force est de constater qu'a priori même les partenaires provenant d'un même État tendent à sous-estimer la force de leur habitus organisationnel. Il semble qu'il ne soit pas aussi facile qu'on le laisse prétendre pour les partenaires gouvernementaux de dépasser leurs différends organisationnels.⁸ En fait, une meilleure préparation serait nécessaire pour améliorer leur aptitude à travailler conjointement. Ainsi, la prochaine section s'attardera à présenter la façon dont les acteurs peuvent outrepasser leurs comportements ethnocentriques afin de travailler efficacement sur le terrain.

Outiller les acteurs pour travailler dans un contexte pangouvernemental

Afin de favoriser une adaptation positive des organisations impliquées dans ce nouveau contexte pangouvernemental, la mise en œuvre de certaines initiatives peut aider à bâtir la confiance et les facteurs de cohésion entre les partenaires gouvernementaux. La confiance entre les partenaires est un élément essentiel à la performance générale d'une équipe pangouvernementale (Thompson et Gill 2010, 7). En effet, les membres dépendent grandement des uns et des autres pour atteindre leurs objectifs. Pour aider à consolider ces liens de confiance, il s'est révélé particulièrement bénéfique pour le personnel d'une mission pangouvernementale de recevoir une formation culturelle ainsi que d'augmenter les opportunités d'entraînement et de socialisation entre les partenaires. De telles initiatives peuvent aider les acteurs à prendre conscience des raisons pour lesquelles les barrières culturelles et institutionnelles affectent la coordination interministérielle.

Avant une affectation à l'étranger, la majorité des organisations offre une formation à leur personnel pour qu'il soit efficace sur le plan culturel. Celleci se concentre principalement sur l'approfondissement des connaissances culturelles du pays hôte ainsi que sur l'enseignement des techniques de communication interculturelle avec les populations locales. Notons qu'au Canada, ces formations culturelles sont actuellement enseignées dans un cadre de perfectionnement professionnel au sein de la fonction publique et dans le milieu de la défense. En effet, le centre d'apprentissage culturel du

ministère des Affaires étrangères et du Commerce international (MAECI) enseigne à leur personnel comment être efficace sur le plan interculturel (Vulpe et al. 2001), alors que les Forces canadiennes sensibilisent leur troupe au concept de l'intelligence culturelle (Davis 2010). 10

Pourtant, comme l'a démontré Tamara Duffey (2000), il semble que ce type de formation soit insuffisant pour outiller les personnes qui travailleront dans un contexte pangouvernemental. La contribution de l'auteure est particulièrement intéressante puisqu'elle reconnaît l'importance de préparer et d'entraîner toutes les personnes destinées à travailler dans les opérations de maintien de la paix aux autres cultures organisationnelles présentes sur le terrain : « As peacekeepers and humanitarian workers find themselves responding to the same crisis, it is imperative that these disparate components of the complex humanitarian network learn how to work effectively together in order to mutually reinforce each other's aims and objectives. This requires, first and foremost, an increased awareness and understanding of the cultures of the other (ibid., 163). » Les formations existantes sensibilisent déjà chaque participant au rôle que joue sa culture organisationnelle lorsqu'il interagit avec des personnes de cultures étrangères. L'ensemble des notions transmises lors de ces formations peut donc être appliqué aux interactions interministérielles. Dans le cadre de leur apprentissage, les participants prennent conscience de l'influence de leur propre conditionnement culturel et de la façon dont celuici a formé leur mode de pensée, leurs perceptions d'un conflit et leur façon de réagir lorsqu'ils sont confrontés à une situation difficile. Nous soutenons que les formations existantes doivent être adaptées afin qu'un cours puisse se concentrer exclusivement à la dimension des interactions interministérielles.

Une telle formation, axée sur les effets de la culture organisationnelle dans les interactions interministérielles, apporterait des bénéfices concrets à la préparation des partenaires appelés à travailler dans un contexte pangouvernemental. Ainsi, les dirigeants prendraient conscience qu'un même concept peut être interprété différemment selon les référents culturels de leurs collègues. Par exemple, Andrea Baumann (2008, 73) a illustré que la notion de sécurité pouvait prendre des significations différentes selon la culture organisationnelle qui la définit : « Security tends to be understood by the military in a kinetic way; by diplomats as a matter of law enforcement and public order; and by development experts in the sense of human security, a concept that embraces both the physical safety and well-being of individuals. » Il est nécessaire que les directeurs des différentes organisations soient capables, préalablement à leur départ en mission, de saisir les raisonnements propres à d'autres cultures organisationnelles, sans quoi ils ressentiront inévitablement une incompréhension face aux pratiques adoptées par leurs partenaires sur le terrain (Smith 2007, 373). Progressivement, la formation suggérée permettrait d'apprécier la multiplicité des réponses fournies pour répondre à un même problème et, souvent, de réaliser que ces solutions sont complémentaires les unes aux autres. Simultanément, ces enseignements culturels peuvent aider les ministères et agences gouvernementaux à développer des interactions plus efficaces, avec d'autres acteurs présents dans

l'environnement où se déroule la mission, notamment avec la population locale, les organisations non gouvernementales et les médias.

À titre d'exemple, Andy Tamas (2009, 179-180), un expert en développement qui a travaillé auprès de l'Équipe consultative stratégique en Afghanistan, a constaté que certains aspects liés à la culture militaire pouvaient être dommageables aux initiatives de reconstruction et de développement. Selon l'auteur, les militaires ont une culture fondée sur l'action ; ils sont formés pour agir et obtenir des résultats (ibid., 57). Confrontés à un vide institutionnel ou à la lenteur des travaux de reconstruction, les militaires ont tendance à vouloir prendre en charge la situation et résoudre les problèmes eux-mêmes. Toutefois, ces solutions ont souvent pour effet d'apporter leur lot de difficultés inattendues (Lane et Sky 2006, 50). Une formation s'appuyant sur l'intelligence culturelle, qui leur ferait prendre conscience des influences de leur culture sur leurs comportements, outillerait davantage les militaires (Davis 2010, 59). Ainsi, avant d'agir, ils pourraient réfléchir aux actions que poseraient d'autres acteurs dans la même situation. Pour les agents de développement, le processus d'apprentissage est plus important encore que la réussite d'un projet puisque cela renforce les capacités d'administration des autorités locales. En faisant usage de comparaisons, cela peut mener à un changement de perception du problème initial et permettre l'adoption d'un comportement mieux adapté à la situation. En effet, la meilleure solution consiste parfois à ne pas passer à l'action, ce qui est contre-intuitif pour les militaires (Tamas 2009, 180).

Afin de compléter cette formation, certaines mesures pourraient être mises en œuvre par le gouvernement canadien afin de familiariser les fonctionnaires aux autres ministères et agences fédéraux. La participation à des initiatives pangouvernementales est souvent perçue par les fonctionnaires comme une distraction de leur mandat institutionnel et un obstacle à une promotion rapide (Patrick et Brown 2007, 141). Afin de surmonter ces résistances institutionnelles, il serait nécessaire de mettre sur pied des mécanismes qui joignent la participation à l'approche pangouvernementale et l'avancement de carrière. Par exemple, la création de positions de liaison au sein des ministères et agences pourraient jouer un rôle de socialisation et ainsi aider les fonctionnaires à mieux comprendre les cultures organisationnelles de leurs partenaires.

Entraînement conjoint

Dans la littérature, il est largement reconnu que l'entraînement conjoint est l'un des meilleurs moyens pour améliorer la coordination civilo-militaire (Das et Teng 1998; Duffey 2000; Jenny 2001; Patrick et Brown 2007; Leslie, Gizewski et Rostek 2008; Thompson, Febbraro et Blais 2011). À ce titre, le Canada a exigé que tous ses employés qui se déployaient à Kandahar, en Afghanistan, participent aux activités prévues dans le programme de prédéploiement. Parmi ces activités, Maple Guardian était un exercice organisé par les Forces canadiennes qui préparait les militaires et les fonctionnaires

gouvernementaux à l'environnement opérationnel de l'Afghanistan.¹¹ Cet entraînement a permis au personnel d'acquérir une meilleure compréhension des mandats et des capacités de chaque ministère, avec lesquels ils étaient généralement peu familiers, et de mieux saisir le rôle joué par leur organisation dans le cadre de la stratégie canadienne en Afghanistan. À leur retour de mission, certains membres, qui avaient participé à Maple Guardian, ont affirmé que d'avoir rencontré leurs homologues avant leur déploiement avait aidé à améliorer significativement la coordination interministérielle en Afghanistan, particulièrement, lors de situations tendues.¹²

Depuis la fin de la mission de combat à Kandahar, il semble qu'il n'y ait plus d'entraînement destiné expressément aux ministères et agences appelés à travailler ensemble à l'étranger. L'opportunité unique d'apprentissage qu'offre un entraînement conjoint ou une formation culturelle, devrait être accessible non seulement au personnel s'apprêtant à être déployé, mais également à ceux et celles qui travaillent dans les bureaux de direction à Ottawa. En effet, il semble que les différends culturels soient encore plus présents au niveau stratégique que sur le terrain (Jenny 2001, 27; Hill 2007, 3). De telles opportunités pourraient être bénéfiques, par exemple, au Groupe de travail sur la stabilisation et la reconstruction ainsi qu'au Commandement de la Force expéditionnaire du Canada. Ces mesures aideraient à créer des liens de confiance entre les différentes organisations tout en les familiarisant avec les perspectives issues d'autres cultures organisationnelles.

Conclusion

Jusqu'à présent, les débats sur les approches pangouvernementales ont eu tendance à ne traiter que superficiellement de la dimension des cultures organisationnelles. Cet article considère que, pour améliorer la capacité opérationnelle de l'approche pangouvernementale, les processus de réforme organisationnelle devront d'abord valoriser la spécificité de chaque organisation pour ensuite instaurer progressivement un esprit de collectivité auprès de ses nouveaux membres. Cette étude préconise la culture organisationnelle comme angle d'analyse afin de mieux saisir, du point de vue des organisations, les tensions qui peuvent survenir entre les ministères et agences. L'application du concept d'habitus dans un contexte pangouvernemental permet d'approfondir la compréhension des schèmes culturels entre les différentes communautés, lesquelles interprètent la mission qui leur est assignée à travers leur propre culture organisationnelle, c'est-à-dire leur propre habitus. Le manque de familiarité entre les différentes communautés peut inciter les individus à développer une attitude de méfiance face aux autres groupes et à faire usage de stéréotypes négatifs. Ces comportements ethnocentriques viennent d'un besoin de se sécuriser face à l'inconnu.

Afin de mieux outiller le personnel appelé à travailler dans un contexte pangouvernemental, une formation, davantage centrée sur la culture, faciliterait une prise de conscience des participants vis-à-vis de leur

enculturation et de la façon dont cette dernière influence leurs interactions interpersonnelles. Simultanément, une telle sensibilisation pourrait les aider à développer des interactions plus efficaces, avec d'autres acteurs présents dans l'environnement où se déroule la mission, notamment avec la population locale, les organisations non gouvernementales et les médias. L'augmentation des opportunités de socialisation, telles que la tenue d'entraînements conjoints et les opportunités d'échange entre ministères et agences, représente d'autres moyens reconnus pour améliorer la coordination civilo-militaire. Ces initiatives aident à tisser des liens de confiance entre les différentes organisations tout en les familiarisant avec les perspectives d'autres cultures organisationnelles. Enfin, l'approche pangouvernementale est un nouveau concept qui, si l'on y accorde dès maintenant suffisamment d'importance, pourrait renforcer la qualité des interventions futures dans les situations de crise et de reconstruction post-conflit.

Notes

- 1. Cette stratégie pangouvernementale a d'abord été présentée, par le gouvernement libéral en 2005, sous son éponyme accrocheur de l'approche 3D. Elle faisait référence à l'étroite collaboration entre les éléments de défense, de diplomatie et de développement. Lorsque le gouvernement conservateur est entré au pouvoir l'année suivante, il a désormais utilisé l'appellation « approche pangouvernementale. » Essentiellement, cette approche est plus holistique ; elle se base sur l'esprit de l'approche 3D, mais intègre l'expertise additionnelle des ministères et agences jugés les plus aptes pour répondre à une situation donnée, par exemple la police, la justice, l'immigration, l'agriculture, les services correctionnels.
- 2. Megan Thompson et Ritu Gill (2010, 5) ont identifié de nombreux obstacles qui ont nuis à l'efficacité de la collaboration interministérielle. Cela inclut des agendas politiques conflictuels, ou du moins des objectifs incompatibles ; des disparités dans les structures organisationnelles (hiérarchiques et centralisés vs horizontaux et décentralisés); des systèmes de gestion et de communication inconciliables ; peu ou aucune mémoire corporative ; l'absence de mécanisme pour retenir les leçons apprises ; un manque de financement et de personnel ; et une compétition au niveau des ressources.
- 3. Stephen Brown (2008) affirme que la plus grande intégration des politiques au Canada a eu pour effet de réduire l'autonomie de l'Agence canadienne de développement international (ACDI). Entre 2001 et 2004, les enveloppes budgétaires de l'ACDI ont augmenté de façon considérable, passant de 2,6 à 4,1 milliards. Toutefois, l'accroissement des budgets et la coordination interministérielle ont créé un paradoxe : alors que les ressources augmentent et que l'agence gagne en importance, la marge de manœuvre de l'ACDI diminue. Cela peut s'expliquer par le fait que, sous le libellé de l'approche pangouvernementale, le gouvernement canadien instrumentalise les ressources de l'ACDI afin de promouvoir des intérêts de politique étrangère non reliés au développement.
- 4. Sarah Hill (2007, 20), qui a réalisé une étude sur le processus de réforme institutionnelle au sein du ministère de la Défense nationale, a observé que l'ajout de nouvelles structures organisationnelles n'était pas garante de changement dans la culture corporative. Les pratiques et les procédures, adoptées par les membres de l'organisation, ont plus d'impact sur la culture organisationnelle que les structures en elles-mêmes. Conséquemment, les membres déjoueront les nouvelles structures organisationnelles qui ne sont pas compatibles avec leurs pratiques et procédures institutionnelles. Cela signifie que les structures à elles seules ne peuvent garantir l'atteinte des objectifs poursuivis par les initiatives pangouvernementales (Christensen et Laegrid 2006, 13).
- 5. Dans la littérature portant sur les alliances organisationnelles, le *boundary spanner* a la responsabilité de s'assurer qu'un climat de confiance règne entre les membres d'une approche pangouvernementale. Cette personne doit être apte à communiquer efficacement, avoir une connaissance approfondie

des structures organisationnelles et une aptitude à la résolution de conflit (Thompson et Gill 2010, 12). Lara Olson et Hrach Gregorian (2007) ont constaté que dans les relations civilo-militaires, les *boundary spanners* provenaient autant du personnel militaire, humanitaire que diplomatique. Les habiletés de ces *boundary spanners* ont tendance à être particulièrement cruciales au début de la coordination interministérielle, avant l'établissement de structures organisationnelles plus formelles.

- 6. De façon générale, les références à la culture dans le corpus de littérature portant sur le maintien de la paix se divisent en deux catégories. La première inclut l'analyse des interactions entre les soldats de maintien de la paix et la population locale (Duffey 2000 ; Jenny 2001 ; Kimmel 1998 ; Rubinstein 1989), alors que la seconde porte sur la résolution de conflit (Black et Avruch 1998 ; Cohen 2001 ; Woodrow et Moore 2002).
- 7. L'enculturation se définit comme un processus qui transmet à un individu des représentations idéologiques (valeurs, connaissance, normes) et des modèles de conduite pour fonctionner comme membre d'une culture (Rhum 1997, 149).
- 8. La culture organisationnelle peut aider à comprendre ce phénomène. Les cultures organisationnelles des diplomates, des agents de développement et des militaires sont bien distinctes les unes des autres. Conséquemment, ces derniers risquent de partager davantage de référents culturels avec leurs homologues internationaux au niveau du langage, de leurs valeurs, des règles d'usage employées et de leur compréhension du monde qu'avec leurs partenaires de même nationalité regroupés dans une stratégie pangouvernementale. Par exemple, un diplomate canadien et un diplomate japonais partageront davantage de référents culturels qu'un militaire et un agent de développement du même pays.
- 9. La confiance est généralement définie comme le sentiment de pouvoir se fier à quelqu'un en se basant sur la supposition que l'autre se comportera d'une façon qui rencontre ou, du moins, ne trahit pas nos attentes (Thompson et Gill 2010, 7). Dès qu'une organisation est suffisamment grande, il devient impossible de contrôler chacune des activités qui ont lieu dans l'entreprise. La confiance constitue alors un élément central à la coopération. Une fois que la confiance est bien établie entre les partenaires, cela facilite leur capacité d'effectuer des ajustements et d'acquérir une plus grande souplesse dans la synchronisation de leurs tâches, lors de moments critiques (Krishnan, Martin et Noorderhaven 2006, 896).
- 10. L'intelligence culturelle se définit comme la capacité de reconnaître les croyances, les valeurs, les attitudes et les comportements qui sont communs à un groupe et, surtout, la capacité subséquente d'appliquer ces connaissances culturelles en vue d'atteindre un objectif précis (Spencer 2010, 15).
- 11. L'exercice militaire Maple Guardian a réuni une participation militaire et civile à deux reprises : le premier exercice a eu lieu en juin 2009, à la base de Wainwright en Alberta et le second, en février 2010, au Fort Irwin en Californie. Ces exercices ont regroupé environ deux milles militaires et soixante-dix fonctionnaires provenant du MAECI, de l'ACDI, du Service

correctionnel du Canada et des unités de police civile coordonnées par la Gendarmerie royale du Canada.

12. Dans le cadre d'un projet avec la Direction des concepts et schémas de la Force terrestre des Forces canadiennes, l'auteure a participé aux deux exercices Maple Guardian en 2009 et 2010 comme observatrice de l'approche pangouvernementale.

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Liste des références

- Baumann, Andrea Barbara. 2008. « Clash of Organisational Cultures? The Challenge of Integrating Civilian and Military Efforts in Stabilisation Operations. » *RUSI Journal* 153, n° 6: 70-73.
- Bélanger, Laurent et Jean Mercier. 2006. *Auteurs et textes classiques de la théorie des organisations*. St-Nicolas : Les Presses de l'Université Laval.
- Bentley, Bill. 2010. « La théorie des systèmes, la pensée systémique et la culture. » Dans *L'intelligence culturelle et le leadership*, sous la direction de Karen D. Davis, 1-9. Kingston : Presse de l'Académie canadienne de la Défense.
- Black, Peter W. et Kevin Avruch. 1998. « Culture, Power and International Negotiations: Understanding Palau US Status Negotiations. » Dans *Culture in World Politics*, sous la direction de Dominique Jacquin-Berdal, Andrew Oros et Marco Verweij, 34-60. New York: St. Martin's Press.
- Bourdieu, Pierre. 2000. Esquisse d'une théorie de la pratique, précédé de trois études d'ethnologie kabyle. Paris : Seuil.
- Brown, Stephen. 2008. « CIDA under the Gun. » Dans *Canada among Nations* 2007: What Room for Manœuvre?, sous la direction de Jean Daudelin et Daniel Schwanen, 91-107. Montreal: McGill-Queen's University Press.
- Canada. 2005. Fierté et influence : notre rôle dans le monde survol ; Énoncé de politique internationale du Canada. Ottawa : Ministère des affaires étrangères et du commerce international.
- ———. 2007. Evaluation of CF/DND Participation in the Kandahar Provincial Reconstruction Team. Ottawa: Department of National Defence.
- Christensen, Tom et Per Laegreid. 2006. « The Whole-of-Government Approach – Regulation, Performance, and Public-Sector Reform. » Working Paper, n° 6, Stein Rokkan Centre for Social Studies, Bergen.

- Cohen, Raymond. 2001. « Negotiating across Cultures. » Dans *Turbulent Peace: The Challenges of Managing International Conflict,* sous la direction de Chester A. Crocker, Fen Osler Hampson et Pamela Hall, 469-481. Washington, DC: United States Institutes of Peace Press.
- Das, T.K. et Bing-Sheng Teng. 1998. « Between Trust and Control: Developing Confidence in Partner Cooperation in Alliances. *Academy of Management Review* 23, n° 3 : 491-512.
- Dasen, Pierre R. 1993. « L'ethnocentrisme de la psychologie. » Dans Psychologie clinique et interrogations culturelles, sous la direction de Micheline Rey-Von Allmen, 155-174. Paris : L'Harmattan.
- Davis, Karen D. 2010. « Les fondements culturels. » Dans *L'intelligence culturelle et le leadership*, sous la direction de Karen D. Davis, 47-64. Kingston : Presse de l'Académie canadienne de la Défense.
- de Coning, Cedric et Karsten Friis. 2011. « Coherence and Coordination: The Limits of the Comprehensive Approach. » *Journal of International Peacekeeping* 15 : 243-272.
- Duffey, Tamara. 2000. « Cultural Issues in Contemporary Peacekeeping. » International Peacekeeping 7, n° 1:142-168.
- Fetherston, A. B. et Carolyn Nordstrom. 1995. « Overcoming *Habitus* in Conflict Management: UN Peacekeeping and War Zone Ethnography. » *Peace and Change* 20, n° 1: 94-119.
- Flemming, Jeanne M. 2000. « Intégration horizontale. » *Optimum* 30, n° 2 : 29-40.
- Friis, Karsten et Pia Jarmyr. 2008. *Comprehensive Approach: Challenges and Opportunities in Complex Crisis Management*. Oslo: Norwegian Institute of International Affairs.
- Hill, Sarah A. 2007. « Corporate Culture in the CF and DND: Descriptive Themes and Emergent Models. » DRDC CORA Technical Report 2007-19. Ottawa: Defence Research Development Canada.
- Jenny, Joëlle. 2001. « Civil-Military Cooperation in Complex Emergencies: Finding Ways to Make it Work. » *European Security* 10, n° 2 : 23-33.
- Joint Task Force Afghanistan. 2009. « Preliminary Report: Application of the Whole of Government (WoG) Approach: Afghanistan. » Kandahar Airfield: Theater Lessons Learned Report 03/09.
- Kimmel, Paul R. 1998. « Cultural and Ethnic Issues of Conflict and Peacekeeping. » Dans *The Psychology of Peacekeeping*, sous la direction de Harvey J. Langholtz, 57-71. London: Praeger.
- Krishnan, Rekha, Xavier Martin et Niels G. Noorderhaven. 2006. « When Does Trust Matter to Alliance Performance? » *Academy of Management Journal* 49, n° 5 : 894-917.
- Lane, Roger et Emma Sky. 2006. « The Role of Provincial Reconstruction Teams in Stabilization. » *RUSI Journal* 151, n°3 : 46-51.
- Leslie, Andrew, Peter Gizewski et Michael Rostek. 2008. « Developing a Comprehensive Approach to Canadian Forces Operations. » *Canadian Military Journal* 9, n° 1:11-20.
- Minear, Larry et Thomas G. Weiss. 1993. *Humanitarian Action in Times of War: A Handbook for Practitioners*. London: Lynne Rienner.

- Mussweiler, Thomas et Galen V. Bodenhausen. 2002. « I Know What You Are, but What Am I? Self-Evaluative Consequences of Judging In-Group and Out-Group Members. » *Journal of Personality and Social Psychology* 82, n° 1: 19-32.
- OECD (Organisation for Economic Co-operation and Development). 2006. « Whole of Government Approach to Fragile States. » Paris : OECD Development Assistance Committee.
- Olson, Lara et Hrach Gregorian. 2007. *Side by Side or Together? Working for Security, Development and Peace in Afghanistan and Liberia.* University of Calgary: Peacebuilding, Development and Security Program.
- Patrick, Stewart et Kaysie Brown. 2007. *Greater than the Sum of Its Parts?*Assessing "Whole of Government" Approaches to Fragile States. New York: International Peace Academy.
- Preiswerk, Roy et Dominique Perrot. 1975. *Ethnocentrisme et Histoire* : *L'Afrique, l'Amérique indienne et l'Asie dans les manuels occidentaux*. Paris : Anthropos.
- Rhum, Michael. 1997. « Enculturation. » Dans *The Dictionary of Anthropology*, sous la direction de Thomas Barfield, 149. Oxford : Blackwell.
- Rintakoski, Kristiina et Miko Autti. 2008. « Seminar Publication on Comprehensive Approach: Trends, Challenges and Possibilities for Cooperation in Crisis Prevention and Management. » Helsinki: Crisis Management Initiative.
- Rubinstein, Robert A. 1989. « Culture, International Affairs, and Multilateral Peacekeeping: Confusing Process and Pattern. » *Cultural Dynamics* 2, n° 1:41-61.
- ——. 1993. Cultural Aspects of Peacekeeping: Notes on the Substance of Symbols. *Millenium: Journal of International Studies* 22, n° 3: 547-562.
- Schein, Edgar H. 1991. « Plaidoyer pour une conscience renouvelée de ce qu'est la culture organisationnelle. » Dans *Changement planifié et développement des organisations : Pouvoirs et cultures organisationnels*, sous la direction de Roger Tessier et Yvan Tellier, 175-196. Québec : Presses de l'Université du Québec.
- Smith, Amanda. 2007. « Strategic Communication: Interagency Rhetoric and Consistent Interpretation. » Dans *The Interagency* and Counterinsurgency Warfare: Stability, Security, Transition and Reconstruction Roles, sous la direction de Joseph Cerami et Jay W. Boggs, 337-386. Charleston: CreateSpace.
- Spencer, Emily. 2010. « De la cervelle et du muscle : L'intelligence culturelle ou l'outil par excellence dans l'environnement opérationnel contemporain. » *Revue militaire canadienne* 11, n° 1 : 15-23.
- Sumner, William Graham. 1906. Folkways. Boston: Ginn & Company.
- Tamas, Andy. 2009. Warriors and Nation Builders: Development and the Military in Afghanistan. Kingston: Canadian Defence Academy Press.
- Thompson, Megan, Angela Febbraro et Anne-Renée Blais. 2011.

 « Interagency Training for the Canadian Comprehensive Approach in Afghanistan. » Dans Security Operations in the 21st Century: Canadian

- Perspectives on the Comprehensive Approach, sous la direction de Michael Rostek et Peter Gizewski, 203-213. Montréal et Kingston : McGill-Queen's University Press.
- Thompson, Megan M. et Ritu Gill. 2010. « The Role of Trust in Whole of Government Missions. » Dans Mission Critical: Smaller Democracies' Role in Global Stability Operations, sous la direction de Christian Leuprecht, Jodok Troy et David Last, 3-22. Montréal et Kingston: McGill-Queens University Press.
- Van der Kloet, Irene. 2006. « Building Trust in the Mission Area: A Weapon against Terrorism? » Small Wars and Insurgencies 17, n° 4: 421-436.
- Vulpe, Thomas, Daniel Kealey, David Protheroe et Doug Macdonald. 2001. Profil de la personne efficace sur le plan culturel. Ottawa: Centre d'apprentissage interculturel de l'Institut canadien du service extérieur.
- Woodrow, Peter et Christopher Moore. 2002. « Mapping Cultures: Strategies for Effective Intercultural Conflict Resolution. » Dans Second Track / Citizens' Diplomacy: Concepts and Techniques for Conflict Transformation, sous la direction de John Davies et Edward Kaufman, 149-160. Lanham: Rowman & Littlefield.

Durability in Darfur? Assessing the Darfur Peace Agreement

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The underlying factors that produce durable peace agreements have, for some time, remained elusive. Scholars have conducted both case and empirical studies in attempting to better understand the determinants of peace agreement durability, but results have been largely inconclusive. This article surveys the literature concerning the durability of peace agreements and presents three distinct hypotheses: peace agreements are epiphenomenal, successful peace agreements depend on activities of external actors, and successful peace agreements depend on their content. The article applies these three hypotheses to the Darfur Peace Agreement, concluding that this case represents a failed peace agreement. The failure of the Darfur Peace Agreement is best explained by a lack of international/regional support. In response, this article advocates for the creation of an index to help practitioners prioritize the variables that are most likely to result in durable peace. To achieve this goal, future research is needed to determine why certain mechanisms are more successful than others. In particular, it would be helpful to have a better understanding of what confluence of variables will provide the highest probability of success in a given context.

Introduction

Given the recent history of civil wars, the trend toward negotiated settlements, as opposed to decisive victories, is becoming clear. Between 2000 and 2005, the number of conflicts ended by a negotiated peace outnumbered those ended by military victory by a factor of four to one (Sisk 2008, 195). The trend toward this ratio began in the 1990s, when 41 conflicts were settled by negotiation compared to 23 ending in outright military victory (Harbom, Hogbladh, and Wallensteen 2006, 618). *Prima facie*, this trend suggests that conflict management practitioners are utilizing more effective strategies for settling conflicts. However, among the myriad of approaches that have been undertaken, it remains unclear which work best, and why.

Peace settlements are not all equally effective. While some have resulted in a permanent cessation of hostilities, others have fallen apart within months. Why is this the case? The academic literature on this question is decidedly unclear. Some scholars have argued that the contents of peace agreements

are a crucial determinant of the durability of any given agreement. Others have argued that the success of an agreement depends upon the timing of the settlement. Still others have suggested that the strongest predictor of a successful peace agreement is the degree to which one party to the conflict has been effectively eliminated; the more decisive the victory, the more durable the peace. The primary objective of this article is to test these hypotheses using the 2006 Darfur Peace Agreement (DPA) as a case study.¹

There are a number of reasons for which the DPA has been selected for this case study. First, the DPA represents one of the international community's most recent attempts to secure a peace agreement. As such, it provides a contemporary example of a peace agreement in which the details and text of the agreement are readily available. Second, because this agreement was signed in 2006, an appropriate observation period has lapsed. Thus, the degree of success attained by this particular agreement can be properly assessed. Finally, as an ongoing, contemporary, and failed agreement, the DPA is one of the few cases that present an opportunity to provide timely reflection and advice, so as to deliver present-day impact.

By understanding the determinants of a successful agreement, conflict management practitioners can focus on the elements that are most likely to result in durable peace, and thus be better able to tailor their approaches to conflict management. In the absence of such knowledge, practitioners will be left with the dismal prospect of simply applying whatever techniques are available and hoping for a positive result. In an era that ostensibly supports the primacy of evidence-based decision making, such an approach is rightfully viewed as unacceptable. This article attempts to bridge the academic/policy gap, identified by scholars such as Joseph Nye (2008, 650–51), by providing the type of systematic analysis that is often unavailable in policy circles.

The above observations inspire the research question: what explains the outcome of the DPA? The first section of this article reviews some of the contending explanations concerning the durability of peace agreements. This literature review yields three hypotheses that will be tested: (1) peace agreements are epiphenomenal; (2) successful peace agreements depend on external actors; and (3) successful peace agreements depend on their content. The article's second section evaluates the DPA, arguing that it is a failed peace agreement. The third section seeks to determine whether or not any of the hypotheses from the academic literature can account for this failure. Little support is found for the first hypothesis, but strong support is found for the second, and mixed support is found for the third. The article's final section offers policy recommendations and suggests areas for future research. Ultimately, this article advocates for the creation of an index to help practitioners prioritize the factors that are most likely to result in durable peace, necessitating future research on why certain mechanisms are more successful than others.

Literature Review and Hypotheses

The purpose of the following literature review is to outline three main explanatory categories that will eventually be tested with regard to the DPA. It should be noted that the hypotheses outlined below are not mutually exclusive; some overlap between them is possible. While a presentation of mutually exclusive hypotheses is easier to evaluate, it should be noted that such an arrangement does not accurately represent the interrelatedness of the explanatory categories, nor would it reflect the reality that durable peace is often achieved through a combination of factors. The categories only provide a general framework to logically test the hypotheses.

Hypothesis I: Peace agreements are epiphenomenal

The first hypothesis argues that peace settlements are irrelevant to the durability of peace. This hypothesis stems from the realist theory of international relations, which broadly posits that actions taken within the international system are best explained by the national interests of individual states in the context of anarchy. Realists argue that peace agreements have no intrinsic value. This assertion analogizes the argument made by John Mearsheimer (1994) that international institutions are epiphenomenal. Accordingly, peace agreements are merely "scraps of paper" which are not binding in the system of international anarchy and will not influence the behaviour of parties to a conflict (Fortna 2003, 338). Realists consequently argue that the only reason parties sign peace agreements is to further their self-interests. For example, a signatory may want to create illusions of goodwill, create a tactical opportunity to remobilize, or may fear potential sanctions from the international community. As realism is one of the dominant theories of international relations, the realist notion that peace agreements are epiphenomenal is an important hypothesis to examine.

Other scholars have demonstrated the epiphenomenal nature of peace agreements through analyses of conflicts' contextual variability. One variable concerns the notion of timing, or what William Zartman (2008, 22) calls "ripeness," whereby peace is unlikely to be durable in the absence of a "mutually hurting stalemate." According to Zartman (ibid.), this phenomenon arises when "parties find themselves locked in a conflict from which they cannot escalate to victory and this deadlock is painful to both of them (although not necessarily in equal degree or for the same reasons)." Another approach emphasizes the nature of the dispute. For example, Paul Collier and Ank Hoeffler (2002) have sought to determine whether conflict is motivated by "greed" (material resources) or "grievance" (ethnic, religious, cultural divisions). Although their research is not concerned with the durability of peace agreements, the logic of their argument suggests that peace agreements would be irrelevant when greed and/or grievance underlie a dispute. These specifications provide more nuanced explanations as to why peace agreements may be epiphenomenal to a durable settlement.

In sum, this explanatory category holds that the durability of peace

settlements depends on the relative position and abilities of the belligerents. Positions and abilities include factors such as military strength, access to resources, and the influence of domestic stakeholders or constituency groups. Common to this explanatory category is that prospects for peace depend inherently and entirely upon the positions of the parties and the motivating factors behind the conflict.

Hypothesis II: Successful peace agreements depend on outside actors

The second hypothesis posits that the durability of an agreement is determined by the involvement of external actors. Fen Hampson (1996, 19) argues that conflicts generally are part of a larger "regional security complex." According to this hypothesis, peace agreements will be most successful when a combination of international and regional actors are engaged in a concerted strategy to terminate the conflict (ibid., 206–17). Engagement may include, but is not limited to: opening diplomatic channels, hosting peace talks, or threatening the use of force in order to bring an end to hostilities. The absence of such commitments, regardless of the terms of agreement, risks a high rate of failure. This is an important hypothesis to investigate because if it holds true, then a tangible policy recommendation flows naturally: parties interested in peace should seek regional and international support.

A concept related to external engagement is the presence or absence of third-party guarantees. Barbara Walter (2002, 26–27) suggests that durable peace is most closely associated with the inclusion of a third-party guarantor. She argues that combatants will only sign a peace accord in the presence of credible commitments from international actors that ensure their safety and that guarantee them a role in the new post-conflict power structure. Therefore, the durability of an agreement depends on the demonstrable willingness of third parties to act as guarantors of the peace agreement. Although there is growing consensus among scholars that third-party guarantees are necessary for durable peace, problems of political will and capacity continue to inhibit the degree to which the requisite commitments can be achieved (Hartzell and Hoddie 2007, 88–91).

Other forms of third-party engagement, while helpful, are contingent upon different factors. For example, Michael Doyle and Nicholas Sambanis (2000) find that pure enforcement operations can end violence, but cannot promote longstanding peace. Virginia Fortna (2004, 189–93) notes that the success of peacekeeping operations depends on the timing of force deployment and the level of violence existing at the time. Although some academics have found that ongoing third-party mediation is an ineffective tool (ibid., 195), others have suggested that it is a crucial form of post-conflict dispute resolution (Hampson 1996, 227–29). In support of the latter view, scholars have pointed out that while haphazard third-party mediation may undermine a peace settlement, if done properly, it can actually help identify alternatives, modify perspectives, package and sequence issues, and generally build trust between belligerents (ibid., 12–13). Therefore, any conclusion with

respect to third-party interventions and durable peace must be tempered with the knowledge that exogenous factors may also contribute to the ultimate success or failure of a peace agreement.

Hypothesis III: Successful peace agreements depend on their content

The content of agreements is perhaps the most highly malleable factor determining the durability or fragility of peace agreements. Fortna (2004, 113), who is a central proponent of this hypothesis, argues that the content of peace and ceasefire agreements directly affects the durability of the ensuing peace. This argument is largely constructed in opposition to the arguments made in support of the first hypothesis.

Fortna's argument revolves around two main assertions. First, she states that the baseline prospects for peace, referring to those pre-existing conditions that characterize the conflict, either have little predictive value in determining whether peace will ensue or actually make peace less likely. Second, the mechanisms incorporated into a peace agreement can help predict whether or not a given agreement will succeed (ibid., 172). She uses large-N statistical methods to support her assertions and controls for baseline prospects to improve the validity of her conclusions. Her work represents one of the only attempts to quantitatively test hypotheses about the effect of peace accord provisions on the cessation of hostilities. Regarding agreement content, Fortna (2003, 342–44) finds that agreements can help ensure peace in three principal ways: changing incentives, reducing uncertainty about the actions and intentions of belligerents, and controlling accidental violations.

From her statistical analysis, Fortna finds that internal control over rogue groups and arms control measures have no effect on supporting a lasting peace. She also finds that the withdrawal of forces to ceasefire lines is generally unlikely to contribute to durable peace (ibid., 357). In contrast, there is significant evidence to suggest that the establishment of demilitarized zones and joint commissions with representatives from each side are effective measures in ensuring peace (Fortna 2004, 179; Fortna 2003, 362). Lastly, Fortna (2003, 362) finds that the more specific and formal the agreement, the more likely it is to succeed.

Other scholars have found further reasons for which the contents of peace agreements matter. Arend Lijphart (1991, 494), for example, has emphasized the importance of power-sharing provisions. It has been argued, however, that such arrangements can only endorse peace in the short term (Sisk 2008, 196). Other hypotheses concerning the content of peace agreements have been derived from Hampson's (1996, 218–20) case study of five conflict settlements. His research reveals that agreements generally require the support of all parties to the conflict, as those who do not have their interests met will have a high incentive to defect. Moreover, he finds that there must be a place for both "winners" and "losers" in any power-sharing agreement. Finally, he notes that peace agreements must be sufficiently flexible to permit some renegotiation during the implementation phase, because inflexibility can lead to breaches and

outright failure. Arguments about flexibility and robustness have been affirmed by Suzanne Werner and Amy Yuen (2005, 288–89), who find that the terms of a settlement must be flexible enough to accommodate changing realities, or must make the cost of returning to war high enough to dissuade parties from defecting. Therefore, any conclusions about the connection between the content of peace agreements and durable peace must recognize that content analysis must include both mechanisms (i.e., peacekeeping forces and demilitarized zones) and principles (i.e., inclusivity and rigidity).

Concluding remarks on the literature

The above discussion illustrates that the literature's hypotheses can be put into three distinct categories. The first hypothesis suggests that the durability of peace depends entirely upon the situations of the parties to a conflict. By contrast, the second hypothesis suggests that the involvement of regional and international actors can best predict the durability of a negotiated settlement. Finally, the third hypothesis suggests that the nature and mechanisms within the peace agreement itself are the most important factors in ensuring a sustainable peace. As illustrated above, there are a variety of nuanced arguments in support of the three general hypotheses, all of which should be taken into account when conducting a case analysis.

The following section seeks to apply the hypotheses derived from the academic literature to the case of the DPA. The analysis proceeds in three parts. First, the content of the DPA and the context in which it was signed will be presented. Second, it will be argued that the DPA is an example of an unsuccessful settlement because it failed to satisfy two conditions: the parties did not abide to the terms of the agreement and cessation of hostilities was not sustained. Lastly, the three hypotheses will be applied to the case study to assess their persuasiveness in explaining why the DPA failed.

Case Study: Sudan and the Darfur Peace Agreement

The Darfur Peace Agreement

Conflict in Darfur, Sudan, dates back to the post-independence era, when Darfuris fought on the side of the Government of Sudan during the first North-South war, and includes the Arab-Fur war of 1987, when drought caused clashes over fertile lands. It has been marked by neglect, be it by former colonial powers or the central government in Khartoum. When the National Islamic Front came to power in 1989, it operationalized its Arab supremacist ideology in Darfur by treating it "as if it were an appendage of pagan Africa . . . [resulting in the] rejection of old traditions of coexistence and the bonds of Islam" (Daly 2007, 260). In the late 1990s, the Janjaweed was created as a coalition of Arab militias, which conducted numerous attacks against the non-Arab Zaghawa and Masalit peoples of Darfur with impunity (ibid., 262–69). Protest by these non-Arab groups was ignored by the Government of Sudan,

which was complicit in their persecution, and eventually led to the unification of these groups in military opposition to their persecutors.

In February 2003, the Sudan Liberation Movement/Army (SLM/A) and the Justice and Equality Movement (JEM) rebel groups launched a successful attack on Jebel Marra province in Darfur (Toga 2007, 214). The groups demanded that the Government of Sudan end its policy of oppression and genocide against the black African population of Darfur and halt the activities of the Janjaweed militia (ibid.). Initially, fighting occurred primarily between the Darfur rebel groups and the Sudanese Armed Forces supported by their Janjaweed proxy force. Eventually the latter shifted their tactics to target civilians, in what became a well-documented division of labour: the Sudanese Armed Forces would conduct aerial attacks on villages with helicopter gunships and the Janjaweed would follow up to rape, pillage, and execute the survivors (ibid., 183). Hundreds of thousands have lost their lives as a result of the fighting, and between two and three million people have been displaced both within Darfur and across the border in neighbouring Chad.³

On 5 May 2006, the DPA was signed by Majzoub al-Khalifa, advisor to Sudanese President Omar al-Bashir, and by Minni Minnawi, chairperson of one of the SLM/A's factions (ibid., 242). Despite being parties to the negotiation, the JEM and the SLM/A's other faction rejected the DPA (Daly 2007, 310). The agreement was achieved following seven rounds of peace negotiations, known as the Abuja Talks, chaired by the African Union (ibid., 302). The document contains the following six chapters: (1) Power Sharing; (2) Wealth Sharing; (3) Comprehensive Ceasefire and Final Security Arrangements; (4) Darfur-Darfur Dialogue and Consultations; (5) General Provisions; and (6) Implementation Modalities and Timelines.

A failed settlement

Evaluation of peace agreement success is a contentious matter for scholars of conflict management. Some consider the fact that any peace agreement was signed at all, despite the rejection of the agreement's content by two parties, constitutes a success. However, a more rigorous test for the durability of peace settlements requires, at minimum, that two obvious conditions be met. First, a successful peace agreement is one where the signatories abide by the terms of the agreement. Second, a successful agreement is one that results in the cessation of violence between the parties.⁵ If these conditions are not achieved, a peace settlement cannot be qualified as successful because it will have failed to achieve both peace and agreement.

According to the criteria outlined above, the DPA clearly constitutes a failed settlement. First, signatories to the agreement have not abided by its provisions. The DPA required the Government of Sudan to completely disarm the Janjaweed within 159 days of signing the agreement. It also stipulated that the Government of Sudan would establish a US\$300 million Darfur Reconstruction and Development Fund (DRDF) available to the authorities in Darfur, along with an additional US\$200 million each year for two years after ratification. Furthermore, the DPA called for increased

patrolling and protection of internally displaced persons (IDP) camps by the African Union Mission in Sudan (AMIS). Unfortunately, the parties involved have not abided by these terms. The International Crisis Group reported in 2007 that the Janjaweed had not been disarmed, that DRDF funding had not been allocated, and that the AMIS was unable to fulfill its obligations under the DPA due to a lack of capacity and resources (ICG 2007, 22).

The level of violence in Darfur since the signing of the DPA is also indicative of the agreement's failure. Some have argued that the agreement has actually heightened conflict (Nathan 2007, 266); since May 2006, over half a million people have been displaced (ICG 2007, 6), and in September 2006, the Government of Sudan launched major offensives in Darfur, including bombing villages and terrorizing IDP camps (Nathan 2007, 246). The violence is not one-sided. Despite having signed the DPA, the SLM/A faction headed by Minnawi has been accused of carrying out many attacks (ICG 2007, 11). Violence continues to the present: in May 2010 alone, over 600 people were killed as a result of conflict in Darfur (BBC 2010a). Thus, it is clear that the DPA has failed to achieve a durable peace.

Explaining failure

Having established that the DPA represents a failed peace agreement, it is possible to critically assess to what extent the hypotheses discussed above are able to explain this outcome.

Hypothesis I

The first hypothesis argues that peace agreements have no impact on the durability of peace. The failure of the DPA would appear to provide a high degree of support for this hypothesis. Since the agreement failed, it would seem logical to conclude that it was futile and meaningless. However, in order to accept Zartman's ripeness argument, the absence of a mutually hurting stalemate should be conclusively proven. If a mutually hurting stalemate were present, the hypothesis would lead to the conclusion that peace should be durable.

Some scholars have suggested that the situation in Darfur was ripe for resolution between 2005 and 2006 (Brooks 2008, 415). In other words, the parties to the conflict were, and remain, in a mutually hurting stalemate. For the Government of Sudan, the chief pressure came from the international community. After successfully concluding the 2005 Comprehensive Peace Agreement that ended the decades-long civil war between northern and southern Sudan, the Government of Sudan faced significant pressure from the international community to focus its attention on resolving the conflict in Darfur (ibid.). Moreover, the Government of Sudan was vulnerable to the pressures of domestic politics. Upcoming national elections meant that the ruling National Congress Party needed to demonstrate to Darfuris that their concerns were being taken seriously (ibid., 422). The government was also concerned with the decision by the United Nations Security Council

(UNSC) to refer the situation in Darfur to the International Criminal Court (ICC) (UN 2005). In July 2008, the ICC's chief prosecutor brought charges against al-Bashir for war crimes, crimes against humanity, and genocide and a subsequent arrest warrant was issued in July 2010.⁶

The rebel groups were also hurting from the stalemate. Despite fighting a common enemy, they had been divided among one another, and groups themselves had been prone to splintering and factionalism. This lack of solidarity was due to competition for power and leadership, and suspicion that the government was making separate deals with individual leaders. The divide between the SLM/A and the JEM and the split of the SLM/A into two factions supports the observation that the position of the rebels was weakening. Despite their unified position early in the rebellion, patterns of violent clashes between the SLM/A and JEM continued until the signing of the DPA (Flint 2007, 159). Animosity was based, in part, on ideological divides between the secular SLM/A and the Islamist JEM, resulting in a weak tactical alliance. It has been observed that the SLM/A "was never more than a loose alliance between its two main tribal components," with Abdul Wahid al-Nur representing the Fur tribe and Minnawi representing the Zaghawa tribe (ibid., 152). Lastly, rebel leaders have also been indicted by the ICC, including former JEM commander-in-chief Abdallah Banda Abakaer Nourain (ICC 2011). Therefore, while the DPA provides support for the first hypothesis, the ripeness argument does not provide a complete explanation as to why the peace settlement failed. If the first hypothesis were correct, the hurting stalemate between the Government of Sudan and the rebels should have resulted in peace, but it clearly did not.

As mentioned above, one modification of the first hypothesis emphasizes the nature of the dispute, suggesting that peace agreements are epiphenomenal to the durability of peace agreements when hostilities are based on greed or grievance. Both greed and grievance underlie the conflict in Darfur. Similar to what was observed above, if the first hypothesis were correct, then peace in Darfur should not be achieved. Although this is indeed the outcome that was observed, the logic of the hypothesis may not be applicable in the case of the DPA because the agreement itself attempted to resolve financial and social inequalities. As such, the lack of durable peace might be attributed to dissatisfaction with the agreement itself rather than a proclivity for hostilities between the parties based on greed or grievance. This would lend support to the third hypothesis, rather than the first.

Hypothesis II

The second hypothesis predicts that successful agreements involve commitments from regional and international actors. The failure of the DPA provides strong support for this hypothesis, not only because it supports the notion that peace agreements require a guarantor, but also that negative influences from regional and international actors may contribute to the erosion of peace settlements.

The conflict in Darfur must be analyzed as part of a broader regional

security complex that is closely tied to the situation in Chad. Chad and Sudan have long been uneasy neighbours, with each country accusing the other of supporting and harbouring rebel groups in their respective territories. Khartoum is accused of supporting the United Front for Democratic Change rebels in Chad, while N'Djamena is accused of supporting the JEM and the SLM/A in Sudan. Chad allegedly supports these movements in exchange for support in fighting the Chadian rebel groups that are seeking to overthrow the government (Hanson 2007). Although the hypothesis holds that peace is most durable when regional stakeholders are actively engaged in a concerted effort to terminate the conflict, the reverse also applies. Chad's support of both the JEM and the SLM/A lends credibility to the argument that the DPA's failure can be attributed to destabilizing regional influences (Heavens 2009).7 Chad and Sudan have indicated that they will seek to normalize relations, but no concrete steps have been taken to reduce the power of proxy militias operating out of each country (BBC 2010b). Therefore, at best Chad has been indifferent to the peace process in Darfur; at worst, it has been actively undermining it.

The failure of the DPA also lends support to the hypothesis that peace agreements are most durable when the international community credibly commits to enforce their terms. In the case of the DPA, such commitments are noticeably missing. While then U.S. deputy secretary of state Robert Zoellick was present at the negotiations, the most credible support provided by the United States was a letter from then president George W. Bush claiming that any party breaking the agreement would be "held accountable" by the UNSC (Kessler 2006). This commitment, if it can be characterized as one, is not only ambiguous but incredible. The United States could not guarantee enforcement because it could not be sure that other permanent members of the UNSC would not veto any attempt to punish violations. Similarly, the African Union, which played a prominent role in negotiations, did not meet its commitments to provide AMIS with adequate resources. Finally, although Canada, Egypt, Eritrea, France, Libya, the Netherlands, Norway, and the United Kingdom were involved in the negotiations at some stage (Daly 2007, 303), the extent to which these actors were willing to underwrite the agreement is unclear. The lack of support from the international community is also reflected in the joint United Nations-African Union Mission in Darfur (UNAMID), which was reported to be lacking key capacities in 2007 (UN News Service 2007). Despite receiving five Mi-35P helicopters from Ethiopia, by February 2010 UNAMID still lacked 18 utility helicopters that it required to fully operationalize its mandate (UNAMID 2010). The absence of concrete commitments from both regional and international actors could fully explain why the JEM and part of the SLM/A refused to sign the DPA, and why the signatories were not committed to abiding by its terms.

Hypothesis III

The final hypothesis states that the content of the agreements themselves has a significant impact on the durability of peace. The failure of the DPA provides mixed support for this hypothesis. Notably, the agreement did not

contain the demarcation of demilitarized zones, which Fortna found to be an important mechanism for increasing the durability of peace. According to the agreement, the production of a final map establishing demilitarized zones, and the physical demarcation of these zones, was not to begin until 37 days after the agreement was signed. Parties were not expected to withdraw from these zones for between 47 and 82 days after the conclusion of the agreement. By not prioritizing a demilitarized zone within the agreement, the parties failed to include an element that could have significantly improved prospects for durable peace.

Other mechanisms that have been found to improve prospects for peace are present in the agreement, but did not result in durable peace. The DPA established a joint commission with representatives from both sides, a measure that the academic literature suggests should improve peace prospects (Hampson 1996). The DPA Joint Commission, mandated to examine disputes concerning the interpretation of the agreement, has met regularly and has been active in investigating violations. Twelve investigations were conducted between October 2006 and January 2007 (OAU 2007), although admittedly the parties have been recalcitrant in taking responsibility for alleged violations. Another predictor of durable peace agreements is their level of formality. The DPA bears all the hallmarks of a formal agreement: it was signed by the leaders of two key parties, resulted from multiple rounds of negotiations involving extensive preparations, and was supervised and witnessed by prominent members of the international community (Daly 2007, 302). These factors predict that peace should be durable.

The DPA also provides mixed support for other elements discussed under the third hypothesis. Since it was not signed by the JEM and one faction of the SLM/A, the agreement did not have support from all parties to the conflict. This is a highly plausible explanation for its failure. At the same time, many other mechanisms that increase peace prospects were incorporated into the DPA. For example, the agreement envisioned an elaborate mechanism for power-sharing. The agreement's first chapter specifically recognizes the importance of power-sharing as "vital for national unity" and envisions devolution of power from the Government of Sudan to a Transitional Darfur Regional Authority (TDRA). It stipulated that the chairperson of the TDRA would receive the fourth highest position within the government, a position that was granted to Minnawi (Hottinger 2006). The agreement also appears flexible: the creation of the Joint Commission indicates a pragmatic recognition that some violations might occur accidentally (Daly 2007, 312). By granting this body investigative and reporting functions, accidental violations would less likely result in repudiation. The settlement was also flexible in that it provided for ad hoc arrangements that allow non-signatories to submit declarations of commitment to its principles and hence is not restricted to signatories alone (ibid., 306).

Conclusion

This article has sought to explore some of the leading hypotheses about the determinants of peace settlement durability. To this end, it has examined the case of one demonstrably failed peace agreement, the DPA, and attempted to evaluate three hypotheses explaining its failure. Although the scope of this article could only consider the single case of the DPA, it should be recognized that the context in which this agreement was signed is based upon an ongoing, longer history of conflict that involves not only Darfur, but other regions of Sudan as well. The analysis demonstrates that while the first hypothesis might partially explain the failure of the DPA, its logic must be further refined. Since this article argued that the situation in Darfur constituted a mutually hurting stalemate, according to the ripeness argument, the DPA should have been a case in which peace was durable. The failure of the DPA does not, in and of itself, invalidate the ripeness argument. It does, however, suggest that a mutually hurting stalemate is a necessary, but not necessarily sufficient, condition for durable peace. In other words, a mutually hurting stalemate enticed the parties to enter negotiations, but was not sufficient to promote lasting peace. If this assessment is correct, then scholars and practitioners can and should accept that peace agreements are not automatically epiphenomenal. Efforts to secure peace settlements would only be in vain when one party has the ability and incentive to continue escalation. Furthermore, the greed and grievance hypothesis could not be adequately assessed because the agreement itself sought to address these problems in the context of Darfur. Further research could be conducted on ceasefire agreements that do not seek to address social and economic inequalities in order to properly assess the logic of this hypothesis.

With respect to the second hypothesis, the DPA confirms the importance of external actors in achieving durable peace. The (in)action of regional and international stakeholders involved in the Darfur conflict—Chad has caused negative interference and the United States has failed to offer credible commitments—provides a persuasive explanation for the settlement's failure. This finding has important implications for conflict management practitioners. It suggests that while attention should be focused on resolving the dispute between parties to the conflict, equal attention should be spent on securing credible commitments from the international community and ensuring that regional influences are supportive of peace efforts. Scholars should further investigate the concept of a regional security complex and explore the ways in which a supportive regional security complex can be fostered during and after peace negotiations.

Finally, there is mixed support for the third hypothesis. By not providing for the immediate use of demilitarized zones, the parties failed to include an element that has been found to improve prospects for durable peace. The utility of demilitarized zones could not be evaluated in the DPA case study because the agreement's provisions on this issue did not come into force at the time the agreement was signed. Although the Joint Commission has

highlighted violations of the settlement, it has not been able to solicit general compliance. A power-sharing mechanism, despite being clearly articulated in the agreement, has failed to pacify the parties. However, the explanation that the DPA failed because some of the participants in the conflict did not sign the agreement appears to be the most relevant. Overall, while many factors might support a durable agreement, failure to meaningfully consult all participants in a conflict presents a serious risk to any agreement.

Additional research on the third hypothesis should be conducted in order to better explain why certain mechanisms, such as demilitarized zones and joint commissions, are more successful than others. As such, process-tracing methodology should be used to determine the causal sequence between a given mechanism and a peaceful outcome. Scholars and practitioners need to know specifically how and why a mechanism influences signatories to a peace agreement. The development of a rigorous evidence base will help practitioners justify their selection of mechanisms in conflict settlement. This evidence base can be created through the compilation of a rank-ordered index of measures to indicate the most effective mechanisms contributing to a successful agreement. Such indicators could ostensibly help practitioners secure agreement on measures that would most likely result in a durable settlement, especially in time- or resource-constrained situations. Scholars could also use the index to judge peace prospects in a given situation following a negotiated settlement.

An important caveat should be observed: the creation of an index cannot supplant the value of context-specific research. Conflict origins and motivations are significantly different across cases. As such, formal tools like indexes are inferior to a context-specific approach to conflict resolution. Nevertheless, in situations where information about the conflict is unavailable or resources are limited, a list of conflict management measures ranked according to their historic track record may prove to be a useful tool for practitioners.

Although the scope of this article is limited to the case of the DPA, it should be recognized that the context in which this agreement was signed is based upon an environment that involves not only Darfur, but other regions of Sudan as well. Thus, future research could analyze other peace agreements that have been part of Sudan's history, such as the 2005 Comprehensive Peace Agreement between the North and South (which resulted in the independence of South Sudan in 2011), the 2007 Eastern Sudan Peace Agreement, or the peace agreement signed between the Government of Sudan and the Liberation and Justice Movement, another rebel group operating out of Darfur, in July 2011. This article's methodology could easily be replicated for any of these agreements and has the potential to provide greater insight into the durability of peace agreements in the Sudanese context.

Notes

- 1. In July 2011, a second Darfur Peace Agreement was signed between the Government of Sudan and the Liberation and Justice Movement. For disambiguation, generally the 2006 agreement is referred to as the Abuja Agreement and the second agreement is referred to as the Doha Agreement. This article is concerned exclusively with the 2006 Abuja Agreement.
- 2. For example, while the involvement of third parties logically fits with the second hypothesis, it is also possible that the terms of a peace agreement contain provisions that pertain exclusively to the role of third parties. Also, proponents of epiphenomenal peace agreements (hypothesis I) would assert that the need for third-party involvement (hypothesis II) supports their own claim.
- 3. Estimates on the number of deaths and displacements are impossible to report accurately because of the complexity of gathering reliable data. Refugees International (2012) reports that more than 2.6 million people have been displaced within Darfur and that another 250,000 are refugees in Chadian camps. Determining the number of deaths is even more complicated, especially because battle-related deaths are difficult to separate from deaths from other factors, like disease and malnutrition.
- 4. The JEM, along with one faction of the SLM/A (led by al-Nur), denounced the agreement, claiming that power- and wealth-sharing and compensation provisions were insufficient, and that the Government of Sudan had not provided enough guarantees to disarm the Janjaweed.
- 5. The framework utilized in this article borrows from the guidelines established by Hampson (1996, 9–10). Admittedly, this is not the only criteria by which peace settlements can be evaluated. However, these two criteria should be the minimum required to qualify any agreement as successful.
- 6. In 2007, charges were also laid against then Sudanese minister of state for humanitarian affairs Ahmad Harun and alleged Janjaweed leader Ali Kushayb. 7. Although President Idriss Déby was involved in mediating a ceasefire between the SLM/A and the Government of Sudan in September 2003, it is reasonable to assert that the Government of Chad has not, overall, been an active supporter of the peace process.

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References

BBC (British Broadcasting Corporation). 2010a. "Darfur Death Toll Rises to Two-year High in Sudan." *BBC News*, June 7. http://www.bbc.co.uk/news/10259604.

- ———. 2010b. "Sudan and Chad to End Hostilities." *BBC News*, February 10. http://news.bbc.co.uk/2/hi/8507363.stm.
- Brooks, Sean P. 2008. "Enforcing a Turning Point and Imposing a Deal: An Analysis of the Darfur Abuja Negotiations of 2006." *International Negotiation* 13 (3): 413–40.
- Collier, Paul, and Ank Hoeffler. 2002. "Greed and Grievance in Civil War." Working Paper 160, Centre for the Study of African Economies, University of Oxford, Oxford.
- Doyle, Michael W., and Nicholas Sambanis. 2000. "International Peacebuilding: A Theoretical and Qualitative Analysis." *American Political Science Review* 94 (4): 779–801.
- Daly, M. W. 2007. *Darfur's Sorrow: A History of Destruction and Genocide*. Cambridge: Cambridge University Press.
- Flint, Julie. 2007. "Darfur's Armed Movements." In *War in Darfur and the Search for Peace*, edited by Alex de Waal, 140–72. Cambridge: Harvard University Press.
- Fortna, Virginia P. 2003. "Scraps of Paper? Agreements and the Durability of Peace." *International Organization* 57 (2): 337–72.
- ———. 2004. *Peace Time: Cease-Fire Agreements and the Durability of Peace*. Princeton: Princeton University Press.
- Hampson, Fen O. 1996. *Nurturing Peace: Why Peace Settlements Succeed or Fail.*Washington, DC: United States Institute for Peace.
- Hanson, Stephanie. 2007. "Sudan, Chad and the Central African Republic." Council on Foreign Relations, January 2. http://www.cfr.org/sudan/sudan-chad-central-african-republic/p12309.
- Harbom, Lotta, Stina Hogbladh, and Peter Wallensteen. 2006. "Armed Conflict and Peace Agreements." *Journal of Peace Research* 43 (5): 617–31.
- Hartzell, Caroline A., and Mathew Hoddie. 2007. *Crafting Peace: Power-Sharing Institutions and the Negotiated Settlement of Civil Wars*. University Park: Pennsylvania State University Press.
- Heavens, Andrew. 2009. "Sudan Accuses Chad of Supplying Darfur Rebels." *Reuters*, January 29. http://af.reuters.com/article/topNews/idAFJOE50S0GS20090129.
- Hottinger, Julian Thomas. 2006. "The Darfur Peace Agreement: Expectations Unfulfilled." In *Accord*, edited by Mark Simmons and Peter Dixon, 46–49. London: Conciliation Resources.
- ICC (International Criminal Court). 2011. "Situation in Darfur, Sudan." Accessed December 17, 2011. http://www.icc-cpi.int/menus/icc/situations%20and%20cases/situations/situation%20icc%200205.
- ICG (International Crisis Group). 2007. "Darfur's New Security Reality." Africa Report No. 134. November 26. http://www.crisisgroup.org/~/media/Files/africa/horn-of-africa/sudan/Darfurs%20New%20 Security%20Reality.
- Kessler, Glenn. 2006. "Sudanese, Rebels Sign Peace Plan for Darfur." Washington Post, May 6. http://www.washingtonpost.com/wp-dyn/content/article/2006/05/05/AR2006050500305.html.

- Lijphart, Arend. 1991. "The Power-Sharing Approach." In *Conflict and Peacemaking in Multiethnic Societies*, edited by Joseph V. Montville, 491–509. New York: Lexington Books.
- Mearsheimer, John. 1994. "The False Promise of International Institutions." International Security 19 (1): 5–49.
- Nathan, Laurie. 2007. "The Making and Unmaking of the Darfur Peace Agreement." In *War in Darfur and the Search for Peace*, edited by Alex de Waal, 245–66. Cambridge: Harvard University Press.
- Nye, Joseph S., Jr. 2008. "International Relations: The Relevance of Theory to Practice." In *The Oxford Handbook of International Relations*, edited by Christian Reus-Smit and Duncan Snidal, 648–60. Oxford: Oxford University Press.
- OAU (Organization of African Unity). 2007. "Communiqué of the Fifth Meeting of the Darfur Peace Agreement Joint Commission." February 7. http://www.operationspaix.net/DATA/DOCUMENT/3196~v~Communique_de_la_5eme_reunion_de_la_Commission_Conjointe_sur_l_Accord_de_Paix_au_Darfour_en_anglais_.pdf.
- Refugees International. 2012. "Sudan." Accessed May 29, 2012. http://www.refugeesinternational.org/where-we-work/africa/sudan.
- Sisk, Timothy D. 2008. "Power Sharing after Civil Wars: Matching Problems to Solutions." In *Contemporary Peacemaking: Conflict, Peace Processes and Post-War Reconstruction*, edited by John Darby and Roger Mac Ginty, 195–209. 2nd ed. New York: Palgrave Macmillan.
- Toga, Dawit. 2007. "The African Union Mediation and the Abuja Peace Talks." In *War in Darfur and the Search for Peace*, edited by Alex de Waal, 214–44. Cambridge: Harvard University Press.
- UN (United Nations). 2005. "Secretary-General Welcomes Adoption of Security Council Resolution Referring Situation in Darfur, Sudan, to International Criminal Court Prosecutor." March 31. SG/SM/9797. http://www.un.org/News/Press/docs/2005/sgsm9797.doc.htm.
- UNAMID (African Union-United Nations Mission in Darfur). 2010. "UNAMID Celebrates Deployment of Tactical Helicopters." Press release, February 25. http://unamid.unmissions.org/Default.aspx?tabid=899&ctl=Details&mid=1072&ItemID=7898.
- UN News Service. 2007. "Joint UN-AU Peacekeeping Force in Darfur Still Missing Key Capacities." *ReliefWeb*, October 8. http://reliefweb.int/node/245552.
- Werner, Suzanne, and Amy Yuen. 2005. "Making and Keeping Peace." International Organization 59 (2): 261–92.
- Zartman, I. William. 2008. "The Timing of Peace Initiatives: Hurting Stalemates and Ripe Moments." In *Contemporary Peacemaking: Conflict, Peace Processes and Post-War Reconstruction,* edited by John Darby and Roger Mac Ginty, 22–35. 2nd ed. New York: Palgrave Macmillan.

Controlling Small Arms and Light Weapons Proliferation: The Potential of the Arms Trade Treaty

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This article examines the potential of the Arms Trade Treaty (ATT) to strengthen international control over global small arms and light weapons (SALW) proliferation. Research was based primarily on existing scholarly work on SALW control, the ATT, and arms control generally, as well as on observations of the third and fourth sessions of the ATT Preparatory Committee. The first section of this article analyzes the value of the ATT to strengthen international SALW control, looking at the development of SALW control as a global security initiative, the existing system of SALW control, its weaknesses, and how the ATT could strengthen it. The second section examines the challenges and opportunities that face the ATT with respect to negotiations, implementation, monitoring and verification, and compliance. The article argues that the ATT, while not a perfect instrument of SALW control, presents significant opportunities to increase transparency and promote a "responsible arms trade," thereby reducing the negative effects of SALW proliferation on human suffering, peace, security, and sustainable development. Moreover, the partnership that has developed between small- and medium-power states and civil society can help to address the challenges that the ATT faces from weak state capacities and control-averse states.

List of Acronyms and Abbreviations

ATT Arms Trade Treaty

ATT Prep-Com Prep-Com United Nations Arms Trade Treaty

Preparatory Committee

CCM Convention on Cluster Munitions

DDR disarmament, demobilization, and reintegration ECOWAS Economic Community of West African States

EU European Union

Firearms Protocol Protocol Against the Illicit Manufacture of, and

Trafficking in Firearms, Their Parts and Components,

and Ammunition

Inter-American Convention

Inter-American Convention Against the Illicit Manufacturing of, and Trafficking in Firearms,

Ammunition, Explosives, and Other Related-Materials

ICJ International Court of Justice
IHL International Humanitarian Law
IHRL International Human Rights Law

Interpol International Criminal Police Organization

MBT Convention of the Prohibition of the Use, Stockpiling,

Production and Transfer of Anti-Personnel Mines and

on their Destruction

NGO non-governmental organization

NISAT Norwegian Initiative on Small Arms Transfers

OSCE Organization for Security and Co-operation in Europe

PoA Programme of Action to Prevent, Combat and

Eradicate the Illicit Trade in Small Arms and Light

Weapons in All Its Aspects

SALW small arms and light weapons

SIPRI Stockholm International Peace Research Institute
The Monitor Landmine and Cluster Munition Monitor
The Register United Nations Register of Conventional Arms
Tracing Instrument International Instrument to Enable States to Identify

and Trace, in a Timely and Reliable Manner, Illicit

Small Arms and Light Weapons

UN United Nations

UNGA United National General Assembly

UNODA United Nations Office of Disarmament Affairs

UNSC United Nations Security Council

Introduction

On 6 December 2006, the United Nations (UN) General Assembly (UNGA) passed Resolution 61/89, "Towards an Arms Trade Treaty [ATT]," in a majority vote of 139 states in favour, one against (the United States), and 24 abstentions (UNGA 2006). On 2 December 2009, by another majority vote and with the support of the United States, the UNGA adopted Resolution 64/48, whereby member states agreed "to convene a UN Conference on the Arms Trade Treaty" in 2012 to negotiate a "legally binding instrument on the highest possible common international standards for the transfer of conventional arms" (UNGA 2009, para. 4). One of the main reasons behind the call for the ATT is to strengthen international control over the global proliferation of small arms and light weapons (SALW) through regulation of or restraint over the legal SALW trade and to eliminate or prevent their illicit trade. SALW kill between 500,000 and 750,000 people annually and are a "contributory factor to armed conflict, the displacement of people, organized crime and terrorism, thereby undermining peace, reconciliation,

safety, security, stability and sustainable social and economic development" (Geneva Declaration Secretariat 2011, 1–2).

This article analyzes the potential of the ATT to strengthen international control over global SALW proliferation. Part one examines the development of SALW control as a global security priority, the existing system of SALW control and its weaknesses, and the potential of the ATT to strengthen this system. It argues that the ATT is poised to become the key international instrument to control SALW proliferation. The ATT has great potential to increase transparency in arms transfers through legally binding reporting requirements and to promote a "responsible arms trade" through a normative legal framework of "transfer criteria," which have been an important part of UN member states' dialogue in the Arms Trade Treaty Preparatory Committee (ATT Prep-Com). Nevertheless, flaws with the ATT include its inability to address civilian ownership or reduce the millions of SALW already in circulation globally.

Part two considers the challenges and opportunities that the ATT faces in terms of negotiation, implementation, monitoring and verification, and compliance. The ATT is likely to face negotiation challenges from control-averse states, and implementation challenges from developing countries' weak state capacities, and is unlikely to have a treaty mandate to develop monitoring, verification, and compliance systems. Despite these state-oriented difficulties, the partnerships that have developed between small- and medium-power states and transnational non-governmental organizations (NGOs) have the potential to be a dominant force in negotiations. Moreover, civil society has the capacity to assume monitoring and verification functions and respond to instances of non-compliance. This article concludes that the ATT has the potential to strengthen the international system of control over SALW proliferation, thereby reducing the frequency and severity in which these weapons are employed in war, armed violence, crime, terrorism, and repression.

Part I: The Value of the ATT to Strengthen International SALW Control

The development of SALW control as a global security initiative

The contemporary security discourse identifies the control of SALW proliferation as a global security initiative.² Historically, however, SALW were irrelevant to the international security discourse. The original Cold War "arms control" agenda of the 1960s looked to reduce the risks, severity, and costs of war between states through legally binding, verifiable treaties of agreed military constraints in the "numbers, types, deployment or use" of nuclear weapons and related military technologies (Krause 2011, 26). SALW were neglected since they were perceived to be inconsequential to the balance of military power between the two blocs of states led by the United States and the Soviet Union, respectively.³

The Cold War was dominated by a realist, or state-centric, security paradigm, which conceived of "the state as the subject of security and anarchy the eternal condition of international relations" (Krause and Williams 1996, 232). According to this view, states seek to increase their security vis-à-vis other states by strengthening their relative military power. The end of the Cold War led to a broadening and deepening of the security discourse. Types of security threats were broadened to include non-state actors; and the subject of security was deepened, most notably to define security in terms of the protection of civilians, or "human security" (ibid., 230).4 Thus it became popular in the post-Cold War arms control discourse to talk of "humanitarian arms control and disarmament" to reduce the risks to civilians of certain "inhumane" and "indiscriminate" weapons (Cooper and Mutimer 2011, 10; Krause 2011, 35). The Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction (MBT), signed in 1997, and the Convention on Cluster Munitions (CCM), signed in 2008, are examples of this new arms control agenda.

Recently, arms control has been reconceptualized as "controlling the means of violence," implying a broader scope to address questions of "who can possess, use, develop and transfer the technologies of violence, under what circumstances, against whom, and for what ends" (ibid., 29). The objectives of this reconceptualization are as follows: "1. To reduce the likelihood that the instruments of armed violence are used against individuals, communities, or states; 2. To reduce the effects of armed violence should it be employed; and 3. To reduce the resources employed in the development, acquisition and deployment of the instruments of armed violence" (Cooper and Mutimer 2011, 11). As the threats to global security have changed, the arms control agenda has followed suit in an effort to contain the primary tools of destruction.

SALW control has thus become an issue of prominence in the contemporary security discourse (Garcia 2006, 29). In 1993, then Malian president Alpha Oumar Konaré requested that then UN secretary-general Boutros Boutros-Ghali send a UN mission to observe the effects of uncontrolled SALW proliferation in his country. At the time, scholars such as Edward Laurence (1992) were also beginning to focus on the security implications of the international arms trade, particularly the SALW trade. In 1995, Boutros-Ghali called for international attention to the need to control SALW proliferation and for the disarmament of these weapons, which "are actually killing people in the hundreds of thousands," at the ground level (UNGA 1995). By the late 1990s, SALW control became one of the most important security priorities of a large number of states (Garcia 2006, 18–19).

The existing system of SALW control

The 1990s and 2000s produced a number of multilateral political and legal agreements on SALW control.⁵ The UN Register of Conventional Arms (henceforth the Register) was established in 1991 as a voluntary reporting system by states on conventional arms transfers. Its *raison d'être* was to build

confidence among states by increasing transparency in the international arms trade (Holtom 2010, 61). The Register's framework consisted of seven categories of conventional arms that omitted SALW.⁶ It has only recently created a standardized reporting form for SALW transfers (UNODA 2011). While it is a step toward a norm of transparency in arms transfers, the Register is weakened by its voluntary nature—it has experienced low state participation in regions of tension and a decrease in reporting in recent years (ibid., 82).

In 1998, the Economic Community of West African States (ECOWAS) declared the Moratorium on Importation, Exportation and Manufacture of Light Weapons in West Africa to stop the flow of SALW into West Africa, which were exacerbating armed conflicts in countries such as Sierra Leone and Liberia (ECOWAS 1998). In 2006, ECOWAS member states signed the Convention on Small Arms and Light Weapons, Their Ammunition and Other Related Materials, which, inter alia, banned SALW transfers into, from, and through the territories of states parties in order to "prevent and combat excessive and destabilising accumulation of [SALW] within ECOWAS" (ECOWAS Executive Secretariat 2006, Article 2.1, 3.1). Moreover, ECOWAS provides a humanitarian justification for the convention as it links SALW transfers to international humanitarian law (IHL) and international human rights law (IHRL) (ibid., Article 6; Garcia 2011, 122–23). ECOWAS set the stage for the Nairobi Declaration (2000) and Nairobi Protocol (2004) for the Great Lakes and Horn of Africa regions, and the Africa-wide Bamako Declaration (2000), which reinforced the positions of the majority of African states to strengthen SALW control (ibid., 116–17).

The European Union (EU) produced a Code of Conduct on Arms Exports in 1998, which came into force in December 2008. The Code of Conduct established uniform supply-side standards for arms transfers, recognizing the "special responsibility of arms exporting states" (Council of the European Union 1998, 1). The code establishes a number of normative principles to be applied on a case-by-case basis in transfer license decisions. Criterion two requires states to assess "the respect of human rights in the country of final destination," and to "not issue an export licence if there is a clear risk that the proposed export might be used for internal repression" (ibid., 3–4). Also in 1998, the EU enacted the legally binding European Union Joint Action on Small Arms, which banned SALW transfers to non-state actors (Garcia 2011, 115). The EU has demonstrated significant leadership in SALW control, both in terms of norm creation and the fact that more rigorous EU control has dramatically reduced SALW proliferation to countries with poor human rights records (ibid., 141). In 2000, the Organization for Security and Co-operation in Europe (OSCE) adopted the "OSCE Document on Small Arms and Light Weapons" (supplemented by its 2003 Handbook of Best Practices on Small Arms and Light Weapons), a comprehensive system of SALW control, including regulations on manufacture, marking and record keeping, transfer control criteria, stockpile security, surplus weapons reduction, and transparency (OSCE 2000).

The Inter-American Convention Against the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives, and Other Related Materials (hereafter Inter-American Convention) entered into force in 1998. This legally binding agreement requires states parties to adopt measures "to prevent, combat, and eradicate the illicit manufacturing of and trafficking in firearms, ammunition, explosives, and other related materials," including, *inter alia*, the creation of domestic legislation to criminalize illicit trafficking activities and systems for firearms marking and record keeping, transfer licensing, stockpile security, and information exchange (Garcia 2011, 113; OAS 1997). It has been ratified by a majority of states in the Americas, with the noteworthy exceptions of the United States and Canada (ibid.).

The Protocol Against the Illicit Manufacturing of, and Trafficking in Firearms, Their Parts and Components and Ammunition (henceforth Firearms Protocol) entered into force in 2005 as a supplement to the United Nations Convention Against Organized Crime. The Firearms Protocol was the first international legally binding instrument on SALW. The Firearms Protocol aggregates the measures taken by various regional agreements to create a common international framework "to prevent, combat and eradicate the illicit manufacturing of and trafficking in firearms, their parts and components and ammunition" (UNGA 2001b; Garcia 2011, 117).

The UN's Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects (PoA) is the outcome document of the July 2001 UN Small Arms Conference. Edward Laurence and Rachel Stohl (2002, 5) have identified six areas in which the PoA has established the basis for policy-making on SALW control: regulating trade; marking and tracing; brokering; destruction and reduction of surplus stocks; stockpile security; and information exchange and transparency. The PoA recognizes the need for a multi-level approach to SALW control by calling on states to take action at the national, regional, and international levels (ibid., 41–42; UNGA 2001a). The consensus nature of the document has served to frame the debate on SALW control at the international level through the establishment of norms in customary international law.7 Following the 2001 SALW Conference, the legally binding International Instrument to Enable States to Identify and Trace, in a Timely and Reliable Manner, Illicit Small Arms and Light Weapons (henceforth Tracing Instrument) entered into force in 2005. The Tracing Instrument requires states parties to take more comprehensive steps in marking and record keeping; co-operate in tracing operations, information exchange, and technical assistance; create national points of contact; and co-operate with the International Criminal Police Organization (Interpol).

The UN Security Council (UNSC) is empowered to declare legally binding arms embargoes—the prohibition of arms transfers to a defined state(s). Twenty-seven arms embargoes have been declared since 1990. Embargoes are used to counter threats to global security, strengthen legitimate government authority, and achieve peaceful settlements to armed conflicts (Fruchart, Holtom, Wezeman 2007, v). However, the UNSC has a poor record

of sanctioning states that violate embargoes (Schroeder and Lamb 2006, 77). Disarmament, demobilization, and reintegration (DDR) is a strategy employed in UN peacekeeping operations to disarm ex-combatants and disband armed groups. There have been more than 60 DDR programs worldwide since the late 1980s (Krause 2011, 32). However, DDR has been criticized for being a highly political process, salient in determining post-conflict distributions of political and military power, often rewarding intransigence, and conceiving of a "Weberian monopoly of violence" as its model of state power (ibid., 32; Stavrianakis 2011, 195, 202).

Weaknesses of the existing international system of SALW control

Existing instruments of SALW control have focused on criminalizing illicit transfers, marking and record keeping, stockpile security and reductions, international co-operation and assistance, transparency and information exchange, and transfer controls. However, transparency and transfer controls remain relatively weak, as do linkages between normative doctrines, such as IHL and IHRL, and SALW control (see UNGA 2001a, II.2, II.11; Garcia 2011, 123; Laurence and Stohl 2002, viii). Apart from the regional systems established in Europe and Africa and UNSC arms embargoes, regulation of interstate SALW transfers is weak (Marsh 2002, 217). Moreover, significant areas of SALW control have been ignored at the international level. The intransigence of a few states in the 2001 Small Arms Conference, most notably the United States, prevented agreement on the regulation of civilian firearms and the ban of transfers to non-state actors in the PoA (Garcia 2006; UNGA 2001a).

The so-called "politically binding," rather than legally binding, nature of several key instruments, including the Register and PoA, is another weakness of international SALW control since these documents are unable to compel compliance (Parker 2011, 32). However, legally binding treaties are evidently insufficient in ensuring compliance, as demonstrated by the occurrence of UNSC arms embargo violations (Schroeder and Lamb 2006, 77). Arguably, a greater problem is the weakness of monitoring, verification, and compliance systems. The PoA does not have a mandate for monitoring and verification. Instead, assessments of implementation are done through a combination of biennial meetings, five-year review conferences, and the work of NGOs and the UN PoA Implementation Support System, which provides information on states' implementation efforts (UN 2012). The PoA Implementation Support System falls far short of the arms control standards set by the International Atomic Energy Agency and the Organisation for the Prohibition of Chemical Weapons, which have mandates for inspections of states' nuclear and chemical facilities.

A final problem is the narrow framing of the international SALW control agenda as the control of "illicit" SALW through preventing SALW diversion, defined as the movement of SALW from legal control by states and state-sanctioned owners to illicit control by non-state-sanctioned owners.⁸ The distinction between licit and illicit SALW is often blurred. The current

framework does not sufficiently address the fact that SALW almost always originate in legal possession before being diverted to illicit possession, hence controlling illicit SALW requires control of legal SALW as well (see Garcia 2011, 49; Marsh 2002; Small Arms Survey 2002; Stavrianakis 2011). Similarly, the focal role of states in legal SALW regulation has limited the reach of international regulations in the critical areas of state-to-state transfers and civilian firearms possession. Lastly, the narrow association of illicit SALW with non-sanctioned non-state actors fails to address the illegitimate use of SALW by state actors. As Mike Bourne (2011, 216) rightly points out, the separation of legal and illicit SALW "bear[s] only limited and partial relationships to the potential use of weapons in violence," and "de-emphasizes the violence that is often conducted with legally held and traded weapons." Control-averse states have thus succeeded in having international SALW control instruments reaffirm their "legitimate rights" to use, produce, and transfer SALW.

The potential value of the ATT

The ATT could address a number of the weaknesses of the current international system of SALW control. The UNGA conceives of the ATT as a legally binding treaty that sets the highest possible international standards of regulation governing the transfer of conventional arms (UNGA 2006, 4). Thus, the ATT is poised to become the key international instrument covering SALW transfers. Most importantly, the ATT has the potential to expand the scope of the international SALW control agenda to include broad regulation of legal trade. The hope is that the ATT can increase transparency in the international arms trade through legally binding reporting requirements and promote a "responsible arms trade" through a strong normative legal framework of "transfer criteria," whereby states parties would be required to apply thorough risk assessments when making arms transfer decisions (ATT Prep-Com 2011, V, VI).

The transfer criteria would likely be the ATT's key substantive section. There is a wide range of normative possibilities for consideration. Possibilities include: the probability that a prospective arms transfer can be diverted to an unintended end-user; that transfers could be used to commit acts of aggression, armed violence, or repression, whether domestically or internationally; the end-user state's compliance record with respect to the UN Charter, IHL, IHRL, UNSC arms embargoes, and international law in general; the end-user state's participation and implementation of existing instruments of SALW control; the end-user state's respect for democratic rights and norms; that the end-user state is not a site of armed conflict, terrorism, or organized crime; that the prospective arms transfer is proportionate to the end-user state's legitimate internal and external security needs; that the transfer would not unduly divert scarce public funds from other needed areas, such as public health and education; and an absolute ban of arms transfers to non-state actors (ATT Prep-Com 2011, V; Council of the European Union 1998; Garcia 2011, 46, 68–71; Parker 2007, 10–11; and Wallacher and da Silva 2008, 3).

This is an ambitious list of transfer criteria for the ATT. Nevertheless, the core normative principle that needs to be satisfied in order to establish a responsible arms trade is that arms should not be transferred if there exists a clear risk that they would be used to facilitate human suffering, or to undermine peace, security, or sustainable social and economic development (ibid., III, V; Garcia 2011, 37). The greatest challenge to building a norm of responsible arms trading is the need to reconcile state sovereignty with the arms trade. The ATT will have to reaffirm states' rights to acquire arms for self-defence and collective security, and to participate in peacekeeping operations (ATT Prep-Com 2011, II.2; UNGA 2009, 1). The ATT therefore needs to make clear distinctions between states' rights to acquire arms for legitimate purposes and illegitimate acquisitions that have no legal justification under the treaty's transfer criteria.

Despite its potential to increase transparency and promote a responsible arms trade, the ATT is not the perfect instrument for SALW control. First, SALW would likely be only one aspect within the scope of the ATT, which is to apply broadly to conventional arms (ATT Prep-Com 2011, IV). Therefore, it may be difficult for the ATT to cover all aspects of the SALW trade, including the trade in their parts, components, and ammunition, while simultaneously being expected to cover all aspects of the trade in other conventional weapons. Moreover, the ATT would not address key conditions enabling SALW proliferation. As it continues to be a state-centric process, it would not create international standards of control over domestic civilian possession, since those would sacrifice US support for the ATT process (Garcia 2011, 49). It also does not reduce existing stocks of SALW or limit future production (ibid., 65), although associated market restrictions reduce the economic incentives to produce arms. The easy acquisition of SALW by civilians in countries with low standards of firearms regulations, and the millions of SALW already in global circulation, will continue to fuel proliferation. Nevertheless, introducing international regulation of the ammunition trade could make millions of illicitly held and irresponsibly used SALW superfluous, if their users are denied bullets. The ATT could save more lives as a mechanism of ammunition control than arms control. Setting high international standards for the ammunition trade should therefore be a key priority for the ATT (ATT Prep-Com 2011, IV; Parker 2007, 6).

Part II: The Challenges and Opportunities for the Arms Trade Treaty

Negotiation of the ATT

Keith Krause's (2002, 247–48) description of the 2001 UN Small Arms Conference could easily be applied to the current atmosphere of the ATT Prep-Com: "The last-minute intransigence of the United States (which almost blocked final consensus), the silent opposition of states such as China, the

activism of the European Union . . . and like-minded states, the persistent resistance of the Arab League to concrete measures, and the impassioned pleas of affected states—this time mainly in Africa." Nevertheless, the Prep-Com has shown that most states envision the ATT as an instrument to strengthen SALW control (ATT Prep-Com 2011). In the debate on the scope of the ATT, a clear majority of states have supported the inclusion of SALW, with the notable exceptions of China, Egypt, Ethiopia, and Iran (see Armstreaty.org). The inclusion of ammunition and other munitions has received less support (ibid.).

Many developing countries in Africa, the Caribbean, Central and South America, and the Pacific face severe internal security threats from armed conflict and violent crime. They therefore perceive the ATT as a means of increasing security through controlling SALW proliferation, particularly with regard to non-state actors. Conversely, many states depend on foreign acquisitions of weapons and materials to supply their armed forces. For example, many states in the Middle East and North Africa, such as Algeria, Egypt, India, Iran, Iraq, Israel, Pakistan, Saudi Arabia, and Syria, consistently have military imports into the hundreds of millions of U.S. dollars annually (SIPRI 2011). These states, many of which-such as India and Pakistansuffer from acute security dilemmas (Garcia 2011, 66), are likely to resist the ATT's interference with their ability to acquire arms. At the same time, many of these states are also considered "high risk" according to potential ATT transfer criteria, which adds incentives to block successful negotiations. Not surprisingly, there has been consistent intransigence from a number of states in these regions, most notably from Algeria, Egypt, India, Iran, Pakistan, and Syria.

States also have commercial interests at stake in negotiations. Asid Efrat (2010, 122) observes a correlation between arms exporting states, particularly those with stated owned industries, and resistance to stronger SALW regulation. Russia, with a state-owned arms industry that exported over US\$60 billion worth of conventional arms between 2000 and 2010, has stated that the ATT should be limited to controlling the illicit conventional arms trade (SIPRI 2011). Furthermore, while EU states have been moral leaders in the ATT process, a number of them consistently rank within the top 10 global arms suppliers, including France, Germany, Italy, the Netherlands, Sweden, and the United Kingdom (ibid.). If states with growing arms industries such as Brazil, China, or India do not sign the ATT, then EU states' arms industries would face significant commercial handicaps, since they would be held to higher standards than states outside the ATT.

The final danger is the consensus decision-making procedures that were agreed at the end of the fourth session of the ATT Prep-Com. Operational paragraph five of Resolution 64/48 states that "the United Nations Conference on the Arms Trade Treaty will be undertaken in an open and transparent manner, on the basis of consensus, to achieve a strong and robust treaty [emphasis added]" (UNGA 2009, 5). The interpretation of this paragraph was the most contentious point of the fourth session of the Prep-Com, dividing states into

two camps. The first group held that Resolution 64/48 means that all decisions at the ATT negotiation conference, whether on substantive or procedural matters, should be taken by a consensus of states. The second group claimed that in UN practice consensus is not synonymous with unanimity, but rather a process of reaching agreement without formal objections by states. These states generally believe that consensus was an objective to be worked toward, but that veto power should not be conceded to each state (Sears 2012b, 5). The Prep-Com finally agreed on rules of procedure on decision-making for the ATT negotiation conference whereby all substantive decisions are taken by consensus and that every effort is made to ensure that procedural decisions are taken by consensus. However, a mechanism for two-thirds majority voting of all states present and voting was included for when the president of the conference decides that all efforts toward consensus have been exhausted. The president also has the authority to rule on whether a matter is substantive or procedural (ATT Prep-Com 2012, VII). The danger that intransigent states will be able to block or substantially weaken a treaty through consensus decision-making on substantive matters thus remains a real threat to the negotiation of a mechanism to strengthen international SALW control.

On the other hand, the great number of small- and medium-power states and transnational NGOs that support the ATT have the potential to become the dominant force in the 2012 ATT negotiation conference. Matthew Bolton and Thomas Nash (2010, 178) argue that small- and medium-power states and civil society generally share an interest in establishing legal international norms to "tie great and regional powers down to stable and predictable international regulations," while great and regional powers resist norms in order to maintain flexibility in their foreign policy. UN treaty negotiations in the post–Cold War world have thus seen the development of strategic partnerships between governments and transnational NGOs, also referred to as two-track diplomacy. Notably, such partnerships helped produce the MBT and CCM, despite formidable resistance from China, Russia, and the United States.

A significant body of literature has examined the successes of these state-civil society coalitions. ¹⁰ Their success is attributed to the combination of their respective strengths: states possess financial resources and authoritative status to negotiate treaties, while civil society has the capability to frame a debate in moral terms and communicate its message to a wider audience (Bolton and Nash 2010; Price 1998, 638–39; and Rutherford 2000, 96, 102–03). These coalitions can place enormous political pressure on resistant governments, which may risk damaging domestic reputations and diplomatic relations if they are seen as being on the wrong side of a moral issue. Such pressure can be decisive in democratic societies. Moreover, if negotiations get bogged down by intransigent states, like the MBT and CCM cases demonstrate, it is possible to pursue negotiations as a process between like-minded states.

This sort of strategic partnership between small- and medium-power states and transnational NGOs has already emerged within the ATT process (Garcia 2011, 66–67). A number of state coalitions have supported common

positions for a strong ATT in the Prep-Com, including the African Group, Caribbean Community, EU, and Group of Like-Minded States led by Mexico (ATT Prep-Com 2011). They have been supported by various transnational NGOs, such as the Control Arms Campaign and the International Actions Network on Small Arms. These coalitions have been able to dominate SALW discussions in the Prep-Com because their numbers give them greater speaking time compared to control-averse states. The coalitions have framed the SALW debate in terms of the challenges to security and development caused by SALW proliferation and personal tragedies of victims of SALW violence (ibid.). Control-averse states have reserved their statements to states' sovereign rights to self-defence rather than confronting the moral issues of SALW proliferation.

It is possible that in the event of deadlock, negotiations could be organized outside the UN framework through the participation of likeminded states. However, this would not be an ideal solution to the problem of state intransigence since such negotiations would exchange the ATT's universality for its comprehensiveness. This potential scenario begs the question of whether the goal of greater SALW control is better served by a treaty of high, non-universal standards on the international arms trade or by less-stringent, universal standards. Certainly losing the support of major arms-exporting states such as China, Russia, and the United States is a problem that should be avoided, and an important reason to avoid the likeminded states negotiation model.

An apparent opportunity for ATT negotiations comes from a less expected front: the European arms industry. Representatives of this industry have explained that they have a commercial interest in a treaty that promotes predictability in arms transfer laws; common standards of competition between firms, whereby the lowest moral standard does not lead to competitive advantage; and corporate social responsibility, which is important to industry investors. 11 The industry's support, as key stakeholders in the international arms trade, may be a welcome development for the ATT. However, this support should be viewed critically. Commercial interest in the ATT by definition looks to make the arms trade easier and less costly for business, but SALW control generally favours making it more difficult and costly. For example, the European arms industry may perceive the ATT as a chance to lower their comparatively high regulatory standards. Thus, the industry may have very different objectives for the ATT than, for example, NGOs that see it as an opportunity to control SALW proliferation (Sears 2012a, 4).

Notably, there was debate in the Prep-Com over how the ATT should apply to non-state actors. The African Group called for an absolute ban on arms transfers to non-state actors. However, as the Swedish delegation pointed out, industry is also a non-state actor. The key is for the ATT to carefully define "non-state actors" and the treaty to be applied in a way that will make arms transfers to violent non-state actors that concern the African Group—insurgents, terrorists, and rebels, whether acting as individuals or

groups, seeking to undermine legally constituted government authority—illegal, while not placing overly burdensome restrictions on the normal activities of transnational firms. Yet, as the Nigerian delegation suggested, if these firms decide to associate themselves with violent non-state actors, their actions should be considered illegal under the ATT (ibid.).

Implementation of the ATT

Implementation of the ATT would occur primarily at the national level. First, national authorities may be required to apply ATT transfer criteria in caseby-case risk assessments (ATT Prep-Com 2011, V; Wallacher and da Silva 2008, 14). If national governments determine there to be substantial risk that a given transfer would violate these criteria, then the transfer would be illegal under the ATT. Second, states parties may be required to adopt or refine national legislation to be consistent with the ATT, such as criminalizing arms transfers without government authorization (ATT Prep-Com 2011, VI.3). Third, states parties may need to create or refine national agencies to monitor, keep records, and enforce laws on arms transfers (ibid., VI. A). Fourth, states parties may be obligated to strengthen transit and transhipment security of conventional arms (Saferworld 2011, 11-12; Holtom and Bromley 2011b, 1). Finally, annual reporting of information on all arms transfers under a standardized framework would be a basic requirement of the ATT (ATT Prep-Com 2011, VI.B).¹² Reporting may also include information on national transfer control systems, law enforcement efforts, and other steps taken towards implementation (Holtom and Bromley 2011a, vii; Kirkham 2008, 8).

The biggest challenge for ATT implementation and for SALW control broadly is that effective national implementation requires a high level of state development. First, implementation requires sufficient human, technical, and financial resources, as well as low levels of corruption in state bureaucracies, such law enforcement and customs offices, as well as legislatures (ibid., 4; Parker 2011, 15–17, 25). Second, states require effective control over their territorial jurisdiction, including borders, coastlines, and airspace (Lamb and Schroeder 2006, 70–72; Parker 2011, 19–21). These characteristics are mainly found in developed states. While developed states are capable of implementing the ATT to reduce the cascading effect of SALW diffusion from suppliers in developed states to markets in developing states, this would not eliminate the world's SALW proliferation problems. SALW proliferation can be expected to continue between the world's less developed countries, which already have saturated SALW markets and would be incapable of effectively implementing the SALW controls of the ATT.

Sarah Parker (ibid., 15) has argued that "[f]or the most part, lack of capacity and resources is a challenge that can be addressed by international cooperation and assistance, if it is well coordinated." The Prep-Com has identified weak state capacities as a key challenge to be addressed through international co-operation and assistance. However, it is unrealistic to think that the ATT can solve this problem simply through treaty provisions. The

MBT's Article VI on international co-operation and assistance uses weak language such as "each state party in a position to do so shall provide assistance" (Mine Ban Treaty 1997, 6.3–6.5). The fact that many states parties have failed to meet their initial demining and stockpile destruction deadlines and countless landmine victims still struggle without adequate assistance demonstrates that this is an insufficient strategy for solving state capacity problems (Landmine and Cluster Munition Monitor Editorial Board 2010, 1–2). What is required is a substantial bolstering of state bureaucracies and territorial control in the world's less developed countries. To accomplish this, the ATT would require much greater financial and technical commitments from developed states than was the case with the MBT. This seems unlikely (ATT Prep-Com 2011). The PoA's problem with implementation through cooperation is demonstrative of the challenges that await the ATT (Parker 2011, 16–17).

Monitoring and verification of the ATT

Monitoring is the collection of information on states parties' treaty implementation efforts, while verification is an analytic process of determining states parties' treaty compliance (Lewis and Findlay 2003, 2–4; Tulliu and Schmalberger 2001, 185–86). Monitoring and verification systems have three basic functions: to detect non-compliance, to deter non-compliance, and to build confidence through demonstrations of compliance (ibid.; Lewis and Findlay 2003, 2–4). The ATT has a number of monitoring and verification possibilities. The first is states parties' so-called "national technical means," or the unilateral collection of information on other states parties through available means, including intelligence agencies (ibid., 6, 20). National technical means would permit committed parties to track the compliance of less-committed parties. However, this may be damaging to a treaty that seeks to build confidence and increase co-operation.

The second possibility is the creation of an independent organization with a formal monitoring and verification mandate. Arguably the best examples of this type of monitoring and verification are the roles played by the International Atomic Energy Agency in relation to the Treaty on the Non-Proliferation of Nuclear Weapons and the Organisation for the Prohibition of Chemical Weapons with regard to the Chemical Weapons Convention. These bodies have permanent executives and secretariats that collect and analyze information submitted directly by states parties, and gathered through more intrusive means, including fact-finding missions, on-site inspections, requests for clarification of compliance, and advanced monitoring technologies (Rockwood 2007, 209; Tabassi 2007, 283-86). Unfortunately, the ATT is unlikely to establish such a body because of states' cautious attitudes towards monitoring and verification. The word "inspections" has, for example, been taboo in the Prep-Com (ATT Prep-Com 2011). The best that can realistically be hoped for is that negotiations will create an Implementation Support Unit that will collect and review reports submitted by states parties on their

implementation of the ATT (ibid.).

The third opportunity is for civil society to take on the tasks of monitoring and verification. The best example of this is the Landmine and Cluster Munition Monitor (hereafter the Monitor), the de facto monitoring organization for the MBT for over 11 years and the CCM for over three years. The Monitor systematically collects, organizes, and analyzes publicly available information on states' implementation and publishes high quality annual reports available to the public. The Monitor employs an international network of in-country researchers, managed by an editorial staff, to carry out its research (Landmine Monitor Editorial Board 2009, vi–vii; Meier and Tenner 2001, 213–15). High standards are demanded of researchers, who must verify and cross-check all information, rely on open-source materials, and do extensive footnoting. Researchers are encouraged to question the reliability of their sources and to act "in a professional and dispassionate manner" with "thorough, accurate and impartial" fact finding (Landmine and Cluster Munition Monitor 2011).

However, ATT compliance is substantially more difficult to monitor because of the high volume of conventional arms transfers, complicated transit routes, and numerous transaction parties in the international arms trade. Moreover, the smaller and the more numerous the items, the more difficult they are to monitor—indicating a challenge for monitoring SALW and ammunition transfers. Moreover, state implementation of transfer criteria, through risk assessments and subsequent authorizations, would produce a substantial verification challenge for civil society.

Fortunately there are examples of NGOs that have experience monitoring the international arms trade. The Stockholm International Peace Research Institute (SIPRI) maintains an annually updated database of publicly available information on international conventional arms transfers (excluding SALW) dating back to 1950 (SIPRI 2011). SIPRI's objectives for this program are to identify suppliers and recipients of major conventional arms, increase the transparency of the international arms trade, and identify destabilizing arms buildups (Holtom and Bromley 2011a, 27). Its database can be used to check the details of specific arms transfers, or the total imports and exports by country (ibid.). The Norwegian Initiative on Small Arms Transfers (NISAT) has a database that specifically monitors SALW transfers, their ammunition, and related-materials. NISAT's database uses primarily publicly available customs data on SALW exports and imports made available through the UN Commodity Trade Statistics Database. NISAT also cross-checks the import and export data to verify its consistency (ibid., 28–29).

While the work of SIPRI, NISAT, and other NGOs provide reassuring examples that monitoring the international arms trade is possible, monitoring and verifying compliance with the ATT requires the development of a unique model. The primary function of such a civil society initiative should be to monitor and verify that national risk assessments and transfer authorizations and denials are carried out objectively, and that states' arms transfers are in accordance with the ATT's transfer criteria. Secondly, it should compare states

parties' national reports—if made public—with open source information on arms transfers to verify their accuracy. Thirdly, it could evaluate the strengths and deficiencies of states' transfer control systems (ibid., 26). This sort of monitoring and verification would be most effectively pursued as in-depth, random investigations of states' ATT implementation, including, for example, assessments of states' actual arms transfers—authorizations, denials, and deliveries—against transfer criteria to verify that national transfer control systems comply with the ATT when making transfer decisions. Verifying that transfer denials are based on objective risk assessments rather than so-called "political abuse" could help gain the support of control-averse states.

While annual evaluation of all states parties would likely be too ambitious of an agenda for a civil society initiative, random assessments of a number of states parties could still provide sufficient probability of detecting non-compliance, and therefore strengthen the deterrent from non-compliance and build confidence among states parties. A civil society initiative that focuses on these areas would also minimize its overlap with the work of existing NGOs, including SIPRI and NISAT, which measure international arms transfers irrespective of specific treaties such as the ATT.

Civil society monitoring and verification of the ATT has a number of advantages. First, NGOs have the freedom to determine their own mandate (Meier and Tenner 2001, 215–16). For example, the Monitor collects information on the activities of both states parties and non-parties, a liberty which no treaty mandate would provide (Woodward 2001, 106). Second, they can report their findings to the public, increasing accountability through greater transparency, while an official organization may be required to keep its information in confidence. Finally, they have the freedom to determine their information sources, while an official body may be forced to depend on information provided by states parties (Meier and Tenner 2001, 213-15). Conversely, civil society may not have access to confidential information or locations that may only be available to an official body, and may face greater budget constraints than an organization funded by states parties (ibid., 217). Ideally, the ATT would have a two-track monitoring and verification system, with an official intergovernmental organization and a flexible NGO. In reality states are likely to oppose the creation of an official system. Thus, the NGO community should actively engage the topic of civil society monitoring and verification. A treaty without such a system would be significantly weakened, allowing states parties substantial freedom to interpret their obligations and implement a treaty as they see fit. The Monitor offers an instructive model for a future system: it should be established from within the ATT campaign, it should be based on an international network of in-country researchers, it should have leadership capable of managing the network from a central headquarters, it should make regular and reliable public reports of a consistent quality, and it should maintain close relationships with supportive states, which can be important sources of information, funding, and political support.14

Non-compliance refers to when a states party fails to meet, or is in open violation of, its treaty obligations (Tulliu and Schmalberger 2001, 185; Lewis and Findlay 2003, 33). Failure to address non-compliance can erode states parties' confidence in a treaty and encourage further non-compliance by weakening the deterrent of expected sanctions. Compliance systems, or a system of responses to non-compliance, exist in order to weaken or eliminate the incentives for treaty defection. Effective compliance systems should be able to assess the severity of non-compliance cases, distinguish between unintentional and deliberate non-compliance, have a range of appropriate responses, and be able to respond to a high frequency of cases (ibid., 40).

A moderate compliance tool that has been suggested in the Prep-Com is to establish "consultation" and "clarification" procedures, or requests for information between states parties "regarding the implementation and operation of [the ATT]" (ATT Prep-Com 2011, I). Clarification procedures could be initiated by a state party if it believes that another state party has violated the ATT's transfer criteria. The latter party would then be required to provide information on its decision-making process for this transfer. A dispute settlement mechanism is another useful compliance tool that has been suggested in the Prep-Com (ibid., J). The referral of cases to the International Court of Justice is one possible dispute settlement mechanism for the ATT (Kirkham 2008, 24–25). Meetings of states parties and treaty review conferences are an essential part of a compliance system. They provide forums for states parties to collectively address non-compliance cases with the states of concern (ATT Prep-Com 2011, G-H; Kirkham 2008, 17). In more extreme cases, sanctions can be considered (ibid., 25). Case referrals to the UNSC carry the potential weight of an arms embargo, which is a fitting way to enforce a norm of responsible arms trading because it indicates that participation in the international arms trade is a privilege of responsible states rather than a right of all states.

Civil society provides an alternative in the likely event that the ATT does not elaborate a well-defined, robust compliance system (ATT Prep-Com 2011). Civil society has greater flexibility to be frank and forceful compared to states, which must balance goals of treaty compliance with the maintenance of good interstate relations. In the cases of the MBT and CCM, states parties have left the naming and shaming role to the International Campaign to Ban Landmines and the Cluster Munition Coalition, which use their speaking rights at meetings of states parties and review conferences to identify non-compliance, with the tacit or even direct encouragement of some states (Hansen 2011; Meier and Tenner 2001, 215-16). Similarly, the Monitor publishes the details of states parties' non-compliance in its annual reports, and identifies "non-adherence" by states that are not parties to the MBT and CCM.¹⁵ Responding to non-compliance could arguably be civil society's most important contribution to the ATT. As Jacqueline Hansen (2011) of the Monitor has said, "It is our job to hold [states] accountable . . . And we won't shy from making that a point."

Conclusion

UNGA Resolution 64/48 has set the agenda to negotiate the ATT aspiring to "the highest possible common international standards for the transfer of conventional arms" in July 2012. The ATT can strengthen the existing international system of SALW control by increasing transparency in the international arms trade through legally binding reporting requirements and, more importantly, by elaborating a strong normative legal framework of ATT transfer criteria to foster an international norm of a responsible arms trade. The key principle of a responsible arms trade is that arms should not be transferred if there is a clear risk that such weapons would be used to facilitate human suffering, undermine peace and security, or threaten sustainable social and economic development. While not tackling important areas of SALW control, such as civilian possession or disarmament, such a framework would nevertheless increase international control over SALW transfers, reducing the frequency and severity in which these weapons can be employed in war, armed violence, crime, terrorism, and repression. Moreover, the ATT that covers ammunition could have the potential to make hundreds of millions of illicit SALW superfluous by controlling the flow of bullets.

There are, however, serious challenges to realizing the ATT. The first comes from the potential of control-averse states to derail, stall, or weaken the ATT during negotiations, particularly in the event of consensus voting procedures. The strategic partnerships that have developed between small-and medium-power states and transnational NGOs will be key to overcoming this challenge. Thus far, these coalitions have been able to dominate the SALW debate in the Prep-Com, successfully framing it in moral terms, and exerting significant political pressure on democratically elected governments. In the event of failure, it remains possible that a group of like-minded states could negotiate the ATT outside of the UN.

The ATT also faces serious implementation challenges from developing countries' weak state capacities. While the ATT could be implemented by developed countries to reduce or eliminate the cascading effect of future SALW diffusion to developing countries, SALW transfers are likely to continue between the world's least developed countries. It will be difficult, but not impossible, for international co-operation and assistance to effectively address this state capacity problem.

It also seems unlikely that the ATT would elaborate well-defined, robust systems of monitoring, verification, and compliance. The absence of such systems would seriously weaken the ATT and its deterrent of detection and sanctions for non-compliance. Civil society has a critical role to play in monitoring, verification, and responding to non-compliance. The NGO community should immediately begin putting together a system based loosely on the Monitor and draw useful lessons from SIPRI's and NISAT's programs on monitoring conventional arms transfers. The ATT that covers SALW and has a group of like-minded states and transnational NGOs to enforce it offers real potential to strengthen the international system of SALW control.

Notes

- 1. SALW have been defined broadly in international law. The International Instrument to Enable States to Identify and Trace, in a Timely and Reliable Manner, Illicit Small Arms and Light Weapons defines "small arms" as weapons designed for individual use, such as revolvers, pistols, rifles and carbines, sub-machine guns, assault rifles and light machine guns. "Light weapons" are designed for use by two or three persons, such as heavy machine guns, hand-held and mounted grenade launchers, portable anti-aircraft and anti-tank guns and rocket systems, recoilless rifles, and mortars (UNGA 2005, II).
- 2. There is a long list of scholarly work that has identified uncontrolled SALW proliferation as a global security threat, and/or control of SALW proliferation as a global security initiative. See, for example, Atwood (2006), Bourne (2011), Bromley and Griffiths (2010), Cooper (2011), Cooper and Mutimer (2011), Garcia (2006), Efrat (2010), Garcia (2006; 2009; 2011), Hughes (2004), Kartchner (1996), Krause (1999; 2002; 2011), Schroeder and Lamb (2006), Laurence and Stohl (2002), Lock (1999), Marsh (2002), Rotfeld (2001), and Wallacher and da Silva (2008).
- 3. For a seminal study of the development of the initial Cold War arms control agenda, see Bull and Goold-Adams (1961). For discussion of SALW being outside the scope of the Cold War arms control agenda, see Bourne (2011, 216), Garcia (2011, 32–33), and Krause (2011, 26).
- 4. For explanations of the post–Cold War development of the human security agenda, see Cooper (2011, 140) and Garcia (2011, 12–13).
- 5. This article does not attempt to provide a comprehensive account of all existing instruments of SALW control. This has been done elsewhere (see, for instance, Garcia 2011).
- 6. The Register's seven-category framework on conventional arms includes battle tanks, armoured combat vehicles, large-calibre artillery systems, combat aircraft, attack helicopters, warships, and missiles and missile launchers. This framework reflected a focus on destabilizing buildups of larger conventional systems, mostly relevant to interstate rivalries.
- 7. For further discussion, see Garcia (2011, 118–19), Krause (2002, 249), and Laurence and Stohl (2002, ix).
- 8. The framing of the diversion problem focuses on the ways in which SALW move from legal to illicit possession (through such means as falsification of documentation, bribery of corrupt officials, redirection of flights, or simply the illegal production, purchasing, theft, looting, and smuggling of weapons) and the physical and market characteristics of SALW that facilitate their diversion (such as their size and weight, which makes them relatively easy to smuggle by land, air, or sea; their durability and low maintenance requirements, which give them long life cycles so that they often travel from armed conflict to conflict; and the enormous quantities already in illicit circulation). See, for example, Husbands (1996, 242–43), Joseph and Susiluoto (2002, 130–31), Marsh (2002, 223–24), Schroeder and Lamb (2006, 71–72), and Small Arms Survey (2002, 134–38).

- 9. The scope of an ATT refers to the types of weapons, materials, and technologies, and the types of international transactions and activities to be covered by a treaty. Suggested weapons, materials, and technologies have included tanks; military vehicles; artillery systems; military aircraft (manned or unmanned); military helicopters (manned or unmanned); naval vessels (surface and submarine vessels armed or equipped for military use); missiles and missile systems (guided or unguided); small arms; light weapons; ammunition; munitions; parts and components; technology and equipment; and dual-use goods (ATT Prep-Com 2011, IV. 1). Suggested international transactions and activities have included import; export; transfer; brokering; manufacture under foreign license; and technology transfer (ibid., IV. 2). However, the definition of "transfer," as it has been proposed, includes import and export, as well as a number of other items, such as re-export, temporary transfer, transhipment transit, transport, leases, loans, and gifts (ATT Prep-Com 2011, Annex A).
- 10. See, for instance, Bolton and Nash (2010), O'Dwyer (2006), Price (1998), Rutherford (2000), and Short (1999).
- 11. Representatives of the European arms industry spoke at a side event at the third session of the ATT Prep-Com and explained their commercial interests in the ATT (ATT Prep-Com 2011). In July 2011, 21 investors of Principles for Responsible Investment, representing US\$1.2 trillion in assets, called for a strong, legally binding, and comprehensive ATT (Principles for Responsible Investment, 2011).
- 12. A standardized reporting framework for the ATT may require information on, inter alia, suppliers and recipients, transit routes, the types and numbers of weapons, the years of order and delivery, and the value of transfers (Holtom and Bromley 2011a, vii).
- 13. Key areas that have been identified are co-operation in information exchange and law enforcement operations (with Interpol able to facilitate interstate co-operation), financial assistance and technical training, and an Implementation Support Unit to assist in the ATT's implementation (ATT Prep-Com 2011, VI; Saferworld 2011, 11–12).
- 14. On 27 July 2011, I interviewed Jacqueline Hansen, Program Manager (Canada) for Landmine and Cluster Munition Monitor, to learn about how the Monitor monitors, verifies, and responds to non-compliance with the MBT and CCM. The objective of this interview was to draw lessons from the Monitor that could be applied in the creation of a similar civil society function with respect to the ATT.
- 15. As a result, beyond the gradual increase in the number of signatories to these treaties, non-parties—such as the United States, Russia, and China—have made real moves to demonstrate their adherence to treaty norms, declaring moratoriums on the use or transfer of landmines, halting production, destroying stockpiles, and providing assistance for demining activities and to landmine victims (Landmine Monitor Editorial Board 2009, 1–2).

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References

- ATT Prep-Com (Preparatory Committee on the Arms Trade Treaty). 2011. "Chair's Draft Paper." July 14. http://www.adh-geneve.ch/RULAC/pdf/Chairman-Draft-ATT-blog.pdf.
- ---. 2012. "Revised Provisional Rules of Procedure of the Conference."
 February 17. http://www.reachingcriticalwill.org/legal/att/prepcom4/docs/ROP.pdf.
- Armstreaty.org. 2012. "Tracking States' Positions on Key Issues Concerning the Arms Trade Treaty." http://armstreaty.org.
- Atwood, David C. 1999. "Implementing Ottawa: Continuity and Change in the Roles of NGOs." *Disarmament Forum* 4: 19–31.
- — . 2006. "NGOs and Multilateral Disarmament Diplomacy: Limits and Possibilities." In *Thinking Outside the Box in Multilateral Disarmament and Arms Control Negotiations*, edited by John Borrie and Vanessa Martin Randin, 33–54. Geneva: United Nations Institute for Disarmament Research.
- Bolton, Matthew, and Thomas Nash. 2010. "The Role of Middle Power–NGO Coalitions in Global Policy: The Case of the Cluster Munitions Ban." *Global Policy* 1 (2): 172–84.
- Bourne, Mike. 2011. "Controlling the Shadow Trade." Contemporary Security Policy 32 (1): 215–40.
- Bromley, Mark, and Hugh Griffiths. 2010. "End-User Certificates: Improving Standards to Prevent Diversion." SIPRI Insights on Peace and Security No. 2010/3, Stockholm International Peace Research Institute, Stockholm.
- Bull, Hedley, and Richard Goold-Adams. 1961. *The Control of the Arms Race: Disarmament and Arms Control in the Missile Age.* London: Weidenfeld & Nicolson for the Institute for Strategic Studies.
- Cooper, Neil. 2011. "Humanitarian Arms Control and Processes of Securitization: Moving Weapons along the Security Continuum." Contemporary Security Policy 32 (1): 134–58. Cooper, Neil, and David Mutimer. 2011. "Arms Control for the 21st Century: Controlling the

- Means of Violence." Contemporary Security Policy 32 (1): 3–19.
- Council of the European Union. 1998. "European Union Code of Conduct on Arms Exports." 8675/2/98. June 5. http://www.consilium.europa.eu/ uedocs/cmsUpload/08675r2en8.pdf.
- ECOWAS (Economic Community of West African States). 1998. "Declaration of a Moratorium on Importation, Exportation and Manufacture of Light Weapons in West Africa." October 31. http://www.iss.co.za/AF/Arms/ECOWASmora.pdf.
- ECOWAS Executive Secretariat. 2006. "ECOWAS Convention on Small Arms and Light Weapons, Their Ammunition and Other Related Materials." June 14. http://www.iag-agi.org/bdf/docs/ecowas_convention_small_arms.pdf.
- Efrat, Asif. 2010. "Toward Internationally Regulated Goods: Controlling the Trade inSmall Arms and Light Weapons." *International Organization* 64 (1): 97–131.
- Fruchart, Damien, Paul Holtom, and Siemon T. Wezeman. 2007. *United Nations Arms Embargoes: Their Impact on Arms Flows and Target Behaviour*. Stockholm: Stockholm International Peace Research Institute.
- Garcia, Denise. 2006. Small Arms and Security: New Emerging International Norms. Abingdon: Routledge.
- — . 2009. "Arms Restraint and Regional International Law Making: The Case of the Economic Community of West African States." *African Security Review* 18 (2): 78–91.
- ———. 2011. Disarmament Diplomacy and Human Security: Regimes, Norms, and Moral Progress in International Relations. New York: Routledge.
- Geneva Declaration Secretariat. 2011. *Global Burden of Armed Violence* 2011: *Lethal Encounters*. Cambridge: Cambridge University Press.
- Hansen, Jacqueline (Program Manager [Canada] for Landmine and Cluster Munition Monitor). 2011. In discussion with the author, Ottawa, July 27.
- Holtom, Paul. 2010. "Nothing to Report: The Lost Promise of the UN Register of Conventional Arms." *Contemporary Security Policy* 31 (1): 61–87
- Holtom, Paul, and Mark Bromley. 2011a. "Implementing an Arms Trade Treaty: Lessons on Reporting and Monitoring from Existing Mechanisms." SIPRI Policy Paper 28, Stockholm International Peace Research Institute, Stockholm. http://books.sipri.org/files/PP/SIPRIPP28.pdf.
- ——. 2011b. "Transit and Trans-Shipment Control in an Arms Trade Treaty." SIPRI Background Paper, July. Stockholm: Stockholm Peace Research Institute. http://books.sipri.org/files/misc/SIPRIBP1107a.pdf.
- Hughes, Helen. 2004. "Small Arms: Monitoring the UN Action Programme." In *Verification Yearbook* 2004, edited by Trevor Findlay, 127–42. London: Verification Research, Information and Training Centre.
- Husbands, Jo L. 1996. "Preventing the Spread of Arms: Delivery Means and

- Conventional Weapons." In *Arms Control Toward the 21st Century*, edited by Jeffrey A. Larsen and Gregory J. Rattray, 228–250. Boulder: Lynne Rienner Press.
- Joseph, Kate, and Taina Susiluoto. 2002. "A Role for Verification and Monitoring in Small Arms Control?" In *Verification Yearbook* 2002, edited by Trevor Findlay and Oliver Meler, 129–44. London: Verification Research, Information and Training Centre.
- Kartchner, Kerry M. 1996. "The Objectives of Arms Control." In *Arms Control Toward the 21st Century*, edited by Jeffrey A. Larsen and Gregory J. Rattray, 19–34. Boulder: Lynne Rienner Press.
- Kirkham, Elizabeth. 2008. *Making it Work: Monitoring and Verifying Implementation of an Arms Trade Treaty*. United Kingdom: Saferworld.
- Krause, Keith. 2002. "Multilateral Diplomacy, Norm Building, and UN Conferences: The Case of Small Arms and Light Weapons." *Global Governance* 8 (2): 247–63.
- ——. 2011. "Leashing the Dogs of War: Arms Control from Sovereignty to Governmentality." *Contemporary Security Policy* 32 (1): 20–39.
- Krause, Keith, and Michael C. Williams. 1996. "Broadening the Agenda of Security Studies: Politics and Methods." Mershon International Studies Review 40 (2): 229–54.
- Landmine and Cluster Munition Monitor. 2011. "Research Orientation Guide." http://www.the-monitor.org/index.php/LM/Resources-for-Monitor-Researchers/Research-resources/Monitor-2011-Research-Orientation-Guide-PDF.
- Landmine and Cluster Munition Monitor Editorial Board. 2010. *Landmine Monitor* 2010. Canada: Mines Action Canada.
- Landmine Monitor Editorial Board. 2009. *Landmine Monitor Report 2009: Toward a Mine-Free World*. Canada: Mines Action Canada.
- Laurence, Edward. 1992. *The International Arms Trade*. New York: Lexington Books.
- Laurence, Edward, and Rachel Stohl. 2002. "Making Global Public Policy:
 The Case of Small Arms and Light Weapons." Small Arms Survey
 Occasional Paper No. 7. http://faculty.maxwell.syr.edu/rdenever/PPA-730-27/Laurance%20and%20Stohl.pdf.
- Lewis, Patricia, and Trevor Findlay, eds. 2003. *Coming to Terms with Security: A Handbook of Verification and Compliance*. Geneva: United Nations Institute for Disarmament Research.
- Lock, Peter. 1999. *Pervasive Illicit Small Arms Availability: A Global Threat*. Helsinki:
 European Institute for Crime Prevention and Control.
- Marsh, Nicholas. 2002. "Two Sides of the Same Coin? The Legal and Illegal Trade in Small Arms." *Brown Journal of World Affairs* 19 (1): 217–28.
- Meier, Oliver, and Clare Tenner. 2001. "Non-Governmental Monitoring and International Agreements." In *Verification Yearbook* 2002, edited by Trevor Findlay and Oliver Meier, 207–227. London: Verification Research, Information and Training Centre.
- OAS (Organization of American States). 1997. "The Inter-American

- Convention Against the Illicit Manufacturing of and Trafficking in Firearms, Ammunition, Explosives, and Other Related Materials." November 14. http://www.oas.org/juridico/english/treaties/a-63.html.
- O'Dwyer, Diana. 2006. "First Landmines, Now Small Arms? The International Campaign to Ban Landmines as a Model for Small-Arms Advocacy." Irish Studies in International Affairs 17: 77–97.
- OSCE (Organization for Security and Co-operation in Europe). 2002. "OSCE Document on Small Arms and Light Weapons." FSC.JOUR/314. November 24. http://www.osce.org/fsc/36735.
- Parker, Sarah. 2007. Analysis of States' Views on an Arms Trade Treaty. New York: United Nations.
- — . 2011. Improving the Effectiveness of the Programme of Action on Small
 Arms: Implementation Challenges and Opportunities. Geneva: United
 Nations Institute for Disarmament Research.
- Price, Richard. 1998. "Reversing the Guns Sights: Transnational Civil Society Targets Land Mines." *International Organization* 52 (3): 613–44.
- Principles for Responsible Investment. 2011. "Global Investor Statement on the Arms Trade: Statement Calls for a Strong, Legally Binding and Comprehensive Arms Trade Treaty." July. http://www.unpri.org/files/2011-07-13_ATT_second_investor_statement_final.pdf.
- Rockwood, Laura. 2007. "The Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the IAEA Safeguards Agreements." In *Making Treaties Work: Human Rights, Environment and Arms Control*, edited by Geir Ulfstein, 301–23. Cambridge: Cambridge University Press.
- Rotfeld, Adam Daniel. 2001. "The Future of Arms Control and International Security." In *A Future Arms Control Agenda: Proceedings of Novel Symposium 118, 1999,* edited by Ian Anthony and Adam Daniel Rotfeld, 3–14. Oxford: Oxford University Press.
- Rutherford, Ken R. 2000. "The Evolving Arms Control Agenda: Implications of the Role of NGOs in Banning Antipersonnel Landmines." World Politics 53 (1): 74–114.
- Saferworld. 2011. An Implementation Framework for the Arms Trade Treaty. London: Saferworld. http://www.saferworld.org.uk/ downloads/An%20Implementation%20Framework%20for%20the%20 ATT.pdf.
- Schroeder, Matt, and Guy Lamb. 2006. "The Illicit Arms Trade in Africa: A Global Enterprise." *African Analyst* 1 (3): 69–78.
- Sears, Nathan A. 2012a. "Not-State Actors, the Arms Industry and an Arms Trade Treaty." *Arms Trade Treaty Monitor* 4 (5): 4. http://www.reachingcriticalwill.org/disarmament-fora/att/prepcom4/att-monitor?catid[0]=68.
- ———. 2012b. "Operative Paragraph 5." *Arms Trade Treaty Monitor* 4 (3): 5. http://www.reachingcriticalwill.org/disarmament-fora/att/prepcom4/att-monitor?catid[0]=68.
- Short, Nicola. 1999. "The Role of NGOs in the Ottawa Process to Ban Landmines." *International Negotiation* 4 (3): 481–500.
- SIPRI (Stockholm International Peace Research Institute). 2011. "SIPRI Arms

- Transfers Database." Accessed 2011. http://www.sipri.org/databases/armstransfers.
- Small Arms Survey. 2002. *Small Arms Survey 2002: Counting the Human Cost.* Geneva: Small Arms Survey.
- Stavrianakis, Anna. 2011. "Small Arms Control and the Reproduction of Imperial Relations." *Contemporary Security Policy* 32 (1): 193–214.
- Tabassi, Lisa. 2007. "The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (Chemical Weapons Convention)." In *Making Treaties Work: Human Rights, Environment and Arms Control*, edited by Geir Ulfstein, 273–300. Cambridge: Cambridge University Press.
- Tulliu, Steve, and Thomas Schmalberger. 2001. *Coming to Terms with Security: A Lexicon for Arms Control, Disarmament and Confidence-Building.* Geneva: United Nations Institute for Disarmament Research.
- UN (United Nations). 2012. "Programme of Action Implementation Support System: PoA-ISS." http://www.poa-iss.org/poa/poa.aspx.
- UNGA (United Nations General Assembly). 1995. "Supplement to an Agenda for Peace: Position Paper of the Secretary-General on the Occasion of the Fiftieth Anniversary of the United Nations." January 3. http://www.un.org/Docs/SG/agsupp.html.
- ———. 2001a. "Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects." July 20. http://www.poa-iss.org/poa/poahtml.aspx.
- ——. 2001b. "Protocol against the Illicit Manufacturing of and Trafficking in Firearms, Their Parts and Components and Ammunition, Supplementing the United Nations Convention against Transnational Organized Crime." A/Res/55/255. June 8. http://www.unodc.org/pdf/ crime/a_res_55/255e.pdf.
- — . 2006. "Towards an Arms Trade Treaty: Establishing Common International Standards for the Import, Export and Transfer of Conventional Arms." A/Res/61/89. December 18. http://www.ony.unu. edu/Resolution_61_89.pdf.
- ——. 2009. "The Arms Trade Treaty." A/Res/64/48. December 2. http://www.un.org/Docs/journal/asp/ws.asp?m=A/RES/64/48.
- UNODA (United Nations Office of Disarmament Affairs). 2011. "UN Register of Conventional Arms." http://www.un.org/disarmament/convarms/Register.
- Wallacher, Hilde, and Clare da Silva. 2008. *Progressing Towards an Arms Trade Treaty*. Oslo: International Peace Research Institute.
- Woodward, Angela. 2001. "Verifying the Ottawa Treaty." In *Verification Yearbook* 2001, edited by Trevor Findlay and Oliver Meier, 99–115. London: Verification Research, Training and Information Centre.

To Rid the World of the Drug Scourge: A Human Security Perspective on the War on Drugs in Colombia and Mexico

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> When then U.S. president Richard Nixon declared the War on Drugs in 1971, Colombia and Mexico became the first countries to experience American-led crop eradication campaigns. This was the beginning of 40 years of warfare against drug trafficking organizations in Latin America. Since then, prohibitive drug policies have been responsible for widespread human rights violations and the displacement and deaths of thousands of individuals, while persistently ignoring many of the fundamental social, economic, and political roots of the drug trade. This article explores the human security implications of the War on Drugs in Colombia and Mexico, as carried out under Plan Colombia and the Mérida Initiative. By applying a human security perspective to the War on Drugs, it highlights the ways the War on Drugs adversely affects the populations of Colombia and Mexico and seeks to challenge traditional notions of security that dominate current drug policies and debates. It reiterates the need to adopt more progressive drug policies in Colombia and Mexico and concludes with a reflection on alternative policy proposals as both countries try to move forward from their lengthy drug wars.

Introduction

The War on Drugs has undercut civil liberties and human rights, strengthened the armed forces in countries with a history of harsh military rule, supported militarization of local police forces, spread the use of torture by law enforcement, provided support to powerful leaders who are themselves heavily implicated in the drug trade, contributed to a significant social conflict and political instability, and undercut the native means of making a living. (Singer 2008, 83)

When then U.S. president Richard Nixon declared the "War on Drugs" on Mexican drug traffickers in 1971, he argued that drug abuse had become the country's "public enemy No. 1" and drugs presented a lethal threat to the United States (Jelsma 2011, 6). From the beginning, the War on Drugs¹ had

the ambitious goal to "rid the world of the drug scourge," specifically aiming at the eradication of cannabis, heroin, and cocaine (Seccombe 1997, 287). U.S. anti-drug policies have since served to justify widespread crop eradication campaigns and military interventions in several countries.

Forty years later, it has become increasingly clear that the War on Drugs has failed in numerous ways. As journalist Charles Bowden notes, it is not difficult to see that all of the drugs that were available in 1971 are still available today in larger quantities, of better quality, and for much cheaper (Bowden 2010). Despite reductions in drug cultivation consumption, and the capture of cartel leaders and drug shipments, as cited by the United Nations Office on Drugs and Crime (UNODC) and the U.S. government, the War on Drugs has been unable to prevent the growth of complex transnational drug trafficking networks and protect millions of individuals from harm (UNODC 2010c). With over 50,000 casualties from the drug war in Mexico since 2007 (Molzahn, Ríos, and Shirk 2012, 1) and over 200,000 individuals fleeing their homes every year because of drug-related violence in Colombia (IDMC 2010a), it has become clear to a growing number of policy-makers, scholars, and civil society actors that the War on Drugs has been lost. Yet, despite growing attention to its harmful human security implications, the War on Drugs continues to compromise the security of countless individuals worldwide.

The questions that guide this article are: What are the human security implications of the War on Drugs in Colombia and Mexico? And in which ways can a human security perspective influence policies to better address these implications? To answer these questions, it is necessary to first define human security and identify the main debates on this concept to provide a comprehensive framework for the research that follows. Second, a brief overview of the War on Drugs outlines the important role played by the United States in the Colombian and Mexican drug conflicts through its controversial military assistance agreements, Plan Colombia and the Mérida Initiative. Subsequently, by drawing on examples from both countries, this article analyzes the impacts and consequences of the War on Drugs with respect to human security. The article concludes with a reflection on policy implications and reiterates the need for the U.S. to adopt policies better geared to address consumption within its borders and to reduce violence and adverse impacts of the War on Drugs in Colombia and Mexico.

To achieve these objectives, this article draws from an array of relevant research, including media sources because of the current and dynamic nature of the topic. Reports from civil society organizations and international organizations, mainly the UNODC, help support the arguments with relevant data. Recent reviews by American, Colombian, and Mexican scholars complemented with older analyses provide a comprehensive analysis of the War on Drugs in Colombia and Mexico.

Overall, this article argues that the very policies put in place to ensure security for Colombian and Mexican populations have not only failed but have exacerbated certain forms of human insecurity, thus highlighting

the need to challenge conventional notions of security that drive the War on Drugs and adopt more progressive drug policies. A human security approach can complement traditional notions of security and contribute to the development of the policies needed to overcome some of the most blatant failures of the War on Drugs in Colombia and Mexico. Current policies focus on law enforcement and combating drug trafficking organizations (DTOs), but face powerful, wealthy cartels and an expansive transnational drug market, leading to minimal, if any, progress. Rather, drug policies should focus above all on reducing violence and addressing the underlying conditions that allow narcotrafficking to persist.²

Human Security: A Contested Concept

The highly regarded Global Commission on Drug Policy (2011, 2) recently stated that "[t]he war on drugs has failed," echoing what numerous politicians, including former presidents Vicente Fox (Mexico, 2000-06), Ernesto Zedillo (Mexico, 1994–2000), and César Gaviria (Colombia, 1990–94), activists, such as Javier Sicilia of the Movimiento por la Paz in Mexico, academics, and thousands of concerned citizens have been affirming for years. The commission (ibid.), made up of 19 high-level individuals, including former presidents Zedillo and Gaviria, notes that "[v]ast expenditures on criminalization and repressive measures directed at producers, traffickers and consumers of illegal drugs have clearly failed to effectively curtail supply or consumption. Apparent victories in eliminating one source or trafficking organization are negated almost instantly by the emergence of other sources and traffickers." Despite these failures, American-backed anti-drug policies in Colombia and Mexico continue to ignore how these policies impact human security. By challenging this security focus, this article builds on the growing acknowledgement of the failures of the War on Drugs and demonstrates how the narrow notion of security that steers current drug policies is counter-productive for addressing the complex security issues in drug conflicts and aggravates problems of human insecurity.

The concept of human security emerged in the 1990s from the roots of human rights, humanitarian relief, human development, and conflict resolution discourse (Owen 2004, 377). The concept extends beyond these realms to challenge traditional notions of state security that dominate international relations. Human security has been widely contested; there is still no consensus on a comprehensive definition of the term and its policy applications (Balzacq 2003-2004; Duffield and Waddell 2006; Paris 2001). In its broadest form, human security is defined as "prioritizing the security of people, especially their welfare and well-being, rather than that of state . . . [and] implies a broadening and re-prioritization of determinants of security" (Duffield and Waddell 2006, 1). Evidently, the comprehensiveness of the term leads to ambiguity. Roland Paris (2001, 90) notes that, being one of the earliest prominent documents to define the concept, the definition of human security in the United Nations Development Programme's (UNDP) *Human*

Development Report 1994 remains the most cited and "authoritative." In its report, the UNDP (1994, 24) broadly defines the concept as freedom from fear and freedom from want. It identifies seven specific components of human security which this article uses to assess the breadth of human security implications of the War on Drugs: economic, political, environmental, health, food, personal, and community security.

The ambiguous definition has left policy-makers divided on how best to apply human security principles to policy. As Fen Hampson notes (2004, 350), while many human security problems are caused by specific actors, such as drug cartels or military officials in the context of the War on Drugs, there are larger political and social structures that impede policy effectiveness. In other words, changing the behaviour of actors may improve human security conditions, but may not be sufficient. In fact, Hampson (ibid.) adds, "there are [other] conditions for change that need to be met: the restructuring of legal and political institutions, the reconstruction of the economic basis for livelihoods, and the redefinition of prevailing social norms. Only in this way is it possible to create a sustainable basis for human security."

This article will demonstrate how the War on Drugs has focused almost exclusively on combating DTOs, which is a legitimate endeavour supported by both policy-makers and citizens (Ai Camp 2010), but, because of its narrow focus on state security, has failed to address significant underlying conditions. Better human security can only be achieved by broadening the focus of security.

From the U.S. War on Drugs to the Colombian and Mexican Drug Wars: A Brief Overview of American Anti-drug Policies

The rapid expansion of drug use in the United States during the 1960s and 1970s threatened U.S. conservative doctrine and moral society (Carpenter 2003, 11-15). With thousands of heroin addicts returning from Vietnam, drug abuse became the U.S. government's top priority, and if it could not curtail demand, its solution was to eradicate the supply (ibid.). Nixon first declared a "war" on drugs in 1971 and targeted Mexico, which supplied over 80 per cent of the U.S. heroin market at the time (Smith 1999, 194), and became the first country where aerial crop spraying was applied in 1976 (Ai Camp 2010, 298). In 1983, the first U.S. anti-drug military deployment took place under the Ronald Reagan administration in the Andean region, where most of the cocaine that reached the United States originated (Carpenter 2003, 18-22). Despite these efforts to eradicate the illicit drug trade, the industry quickly developed into a complex multi-billion dollar transnational market; by the 1980s, the U.S. drug market was valued at US\$80 billion (ibid., 20). The implementation of drug-related policies in both Mexico and Colombia has since been largely intertwined because of the complex interrelation of drug production and DTOs between these two countries (Jelsma 2011; Smith 1999; Carpenter 2003). Two recent policy agreements are analyzed in this article: (1) Plan Colombia, a US\$7.5 billion bilateral assistance package adopted in 2000 by then Colombian president Andrés Pastraña Arango and then U.S. president Bill Clinton; and (2) the Mérida Initiative, a US\$1.5 billion assistance package agreed upon by then U.S. president George W. Bush and Mexican President Felipe Calderón in 2007 (Olson and Wilson 2010, 3).

Plan Colombia⁵

Colombia witnessed a boom in its lucrative cocaine industry throughout the 1980s and 1990s, with various guerrilla groups and paramilitaries exploiting the drug trade to obtain more power and control (Leech 2002, 13–18). Colombia's largest guerrilla groups include the Revolutionary Armed Forces of Colombia (FARC) and the National Liberation Army. The paramilitaries, such as the United Self-Defence Forces of Colombia (AUC), are responsible for much of Colombia's political tensions and the growth of the narcotics industry, accountable for an estimated 76 per cent of the country's political and drug-related homicides between 1995 and 2001 (Colombian Commission of Jurists data cited in Livingstone 2003, 6). To this day, guerrilla groups and paramilitaries control large areas of the country including much of the southeastern highlands and portions of its Pacific coast. As of 2009, Colombian coca cultivation spread over approximately 62,000 hectares and cocaine trafficking to the United States alone is estimated to be worth nearly US\$500 million annually (UNODC 2011b, 245).

The Colombian government has unsuccessfully attempted to contain the narcotics industry by proposing peace accords, capturing lead DTO members, destroying coca plantations, and engaging in direct military action against DTOs (Leech 2002, 41-44). Sarah Peterson (2002, 431) notes that Plan Colombia was a response to years of "scant success" and the government's commitment to "get serious about coca eradication." The Plan's primary objective was to "push into Southern Colombia" and gain control of the drug-producing regions within the country (ibid.; Ramírez 2011, 216). According to Martin Jelsma (2011, 7), Plan Colombia was essentially a "combined counterdrug and counterinsurgency strategy, including the highly controversial policy of mass aerial herbicidal spraying of coca and poppy fields." In addition, María Clemencia Ramírez (2011, 215) stresses that "the plan became a military strategy to break up alliances that were said to be destabilizing the state and threatening continental security." Only 26 per cent of Plan Colombia's budget was reserved for socio-economic programs, such as alternative development and human rights promotion (ibid., 216). The remaining funds were primarily invested in military and police activities and aerial spraying campaigns (ibid., 432). Furthermore, although clauses within Plan Colombia existed to ensure that the military and police respected human rights, the result remains deplorable: an estimated three million to five million individuals have been forcibly displaced by the drug war in the past 25 years (Amnesty International 2011).

Plan Colombia came to an end in 2007 with mixed results. For instance, the Uribe government managed to shrink the FARC to around 9,000 insurgents and push them out of the most populated areas, and the AUC was demobilized (Isacson and Poe 2009). As a result, the rates of extortion, violence, and kidnappings were greatly reduced. However, the environmental and humanitarian damage of the campaign left thousands frustrated and in dire socio-economic conditions, and Colombia is now facing new generations of insurgency groups ranging from 4,000 to 9,000 individuals in different regions of the country (ibid.). Finally, Plan Colombia only led to a slight drop in coca cultivation in the Andes. Upon realizing that military action alone could not address Colombia's narcotics trade and insurgencies, the U.S. and Colombian governments shifted toward more integrated actions and broader consultation with the public, including more investment in human rights protection and humanitarian aid (ibid.). These are significant improvements and align with the human security approach described in this article. However, security intervention, drug-related crimes, and widespread violence and displacements still occur in rural Colombia ensuring that the conflict continues to be very relevant today. In addition, Colombia's policy shift has failed to moderate Mexico's approach, as explained in the following section, where military intervention still prevails.

Mérida Initiative⁶

The drug trade in Mexico grew steadily from the 1930s to 1970s, prompting aggressive crop eradication campaigns by the U.S. and Mexican governments, which led to plummeting supplies of illicit drugs. However, despite the apparent success of these operations, crop eradication in Mexico was matched with a boost in drug production in Colombia (Smith 1999, 195). The growth of the Colombian cocaine industry quickly turned Mexican territory into the most important trafficking route to the United States and strengthened connections between Mexican and Colombian DTOs. This new role for Mexican DTOs as cocaine traffickers increased the stakes of territorial control, leading to violent tensions among cartels and today's gruesome drug war (ibid.; Carpenter 2003). The moment Calderón took office in December 2006, he was explicit about one of his highest priorities: to confront the cartels and end their control over much of Mexico's landscape.

Calderón's strategy was to mobilize the country's army and security forces with the goal of dismantling the cartels. Within months of assuming his presidency, he deployed 45,000 troops in the most affected states, including Chihuahua, Michoacán, and Sinaloa (Olson and Wilson 2010, 3). Instead of reducing crime and violence, increased tensions among DTOs and government officials led to an explosion of drug-related deaths, the number of which has grown dramatically since the Mérida Initiative was launched. Since 2007, there have been over 50,000 drug related deaths in Mexico, mostly along northern border towns (Molzahn, Ríos, and Shirk 2012, 1). This violence represents a direct threat to state security and U.S.–Mexican relations. Eric

Olson and Christopher Wilson (2010, 3) explain that "as violence increased, so did U.S. concern about its neighbor and most important trading partner, as well as trepidation about the impact of violence on communities along the U.S. side of the border." This fear led Bush and Calderón to develop the Mérida Initiative to combat drug trafficking. This commitment provides military and law enforcement equipment, training, and assistance in technical operations, among other things, over a three-year period. Since entering office in January 2009, U.S. President Barack Obama has expanded the discussion into what is called "Beyond Mérida," which continues the initial strategy and includes four pillars: disrupting and dismantling DTOs; institutionalizing the rule of law; building a 21st-century border; and building strong and resilient communities (ibid., 4–5).

In essence, despite improvements aspired to in "Beyond Mérida," both of these agreements still suggest a prioritization of state security over human security. In both instances, the majority of funds are directed toward military assistance, crop eradication, and narcotics control, whereas only a small percentage is dedicated to social programs and assistance. By increasing the role of the military in anti-drug missions, both Colombia and Mexico have created militarized societies in which the security of civilians is compromised. As Simon Wells (2006, 52) argues: "Not only did the dealers not fear the war on drugs, but they positively counted on it in order to increase market prices and weed out smaller rivals. We therefore have a classic example of how excessive militarization of security is counterproductive both relative to its stated objectives and in that it makes the safety of individuals ever more precarious." He (ibid.) elaborates that this militaristic approach to illicit drugs continues to ignore the mobility and flexibility of drug cultivation illustrated by the interconnectedness of the drug trade between Colombia, Mexico, and their neighbours. Contrary to its goals, the War on Drugs has contributed to the development of more decentralized, complex, and ruthless DTOs, rendering the role of identifying and confronting them all the more difficult and dangerous for military officials and civilians.

A Failed War: Human Security Implications of the War on Drugs

The drug trade in both Colombia and Mexico is linked to a complex web of factors that have allowed the industry to grow and fester as a violent and debilitating war, including issues of underdevelopment and weak institutions. As Ralph Seccombe (1997, 288) writes, "[T]he illegality of crops like coca, opium poppy and marijuana tends to push their production into territories where law enforcement is weak. This generally means developing countries – typically poor countries which have significant internal security problems." Echoing Hampson's above-mentioned "other conditions" argument, it can therefore be deduced that the insecurity, which has led to thousands of casualties in Colombia and Mexico, is exacerbated by these

countries' underlying socio-economic and political conditions.⁷ The policies of the War on Drugs have failed to address the underlying factors of the drug trade, instead focusing on combating DTOs, a worthy though incomplete approach. By adopting a human security approach to the War on Drugs and drawing on the categories described by the UNDP report, the following section questions the effectiveness of the current policies and highlights the ways they have failed to ensure human security in Colombia and Mexico by inadequately addressing the countries' underlying conditions that allow the drug industry to grow.

Economic and political security

Both Colombia and Mexico bear high levels of poverty, unemployment, and economic inequality. These socio-economic conditions, along with weak political and judicial institutions, foster an environment in which drug cultivation and trafficking are not only possible, but for many have become attractive or necessary options to meet basic needs. It is estimated that over 80,000 Colombian families rely on illicit crop cultivation for their livelihoods (UNODC 2011a). The economic incentive is clear: "[A]s long as the price for coca leaves is ten times as high as that for cocoa, coffee, and rice for Andean farmers, they will continue to cultivate it" (Diego Garcia Savan in Wells 2006, 60). In this sense, drug trafficking effectively provides economic security, simply defined in the UNDP report as "assured basic income" (UNDP 1994, 25). Those without economic security often accept any work they can find, including informal work, badly paid, or unproductive work. Informal employment could be as high as 50 per cent in Colombia and 30 per cent in Mexico (World Bank 2012), which undoubtedly leads to increased economic insecurity and related problems such as criminal activity and migration.

In its effort to eradicate drug trafficking, the War on Drugs threatens the economic security of thousands of individuals in Colombia and Mexico who depend on the illegal but profitable drug industry for their livelihoods. As Peterson (2002, 437) explains, attempts to implement crop substitution programs through alternative development initiatives in Colombia have been met with numerous geographical, ecological, and climate-related obstacles. Many villages are too far removed from market access points, a situation made worse by the mountainous topography, making it difficult to sell alternative crops, and there are few profitable types of legal crops that can grow in the rocky soil of the Andes. Conversely, coca plants can grow very easily—they become productive within two years—and the expertly established drug trafficking channels allow products to move very quickly (ibid., 428, 437). Plan Colombia failed to take these factors into account in its crop eradication campaigns and many drug-producing regions in Mexico continue to lack sufficient funding for alternative development initiatives. As such, the cultivation of illicit crops and the salaries of *sicarios* (cartel hit men) continue to be very attractive in the face of unemployment and poverty (Kelly, Maghan, and Serio 2005; Hill 2010). However, as Wells (2006, 57) indicates,

"this does not necessarily imply that the US should support these industries . . . [rather,] they should be aware of the extent to which people's economic security is linked to drug cultivation and . . . the importance of offering them [viable] alternative economic opportunities."

In this light, it is clear that drug policies should focus more on economic security by addressing problems of poverty, inequality, and unemployment. By maintaining a narrow perspective on the drug industry as a threat to state security, rather than a problem related to underdevelopment or socioeconomic conditions, the War on Drugs continues to neglect the roots of the drug industry. Writing about the Mexican context, Vanda Felbab-Brown (2010, 7) supports this reconceptualization of security: "Addressing the socioeconomic needs of the marginalized areas of both the northern urban belt as well as southern rural areas is critical for reducing the recruitment pool for the DTOs, severing the bonds between marginalized communities and criminal elements, and resurrecting the hope of many Mexican citizens that the Mexican State and legal behavior can best advance their future." Felbab-Brown also underscores one of the most important factors in Mexico's strategy: the bulk of the anti-drug activities are taking place in northern Mexico's troubled states, but little action is being addressed in the southern states or poorer communities of the country. A similar situation occurred in Colombia, where security conditions improved in major cities, but rural communities particularly in the Puntomayo region—have seen little progress.

Much like economic insecurity, political insecurity contributes to the drug trade and is exacerbated as a consequence of the War on Drugs. Political security is defined as a person's ability to "live in a society that honours their basic rights" (UNDP 1994, 32), meaning the protection of human rights and the absence of political repression. According to UNDP (ibid., 33), one of the most important indicators of political insecurity is the "priority the government accords military strength." Both Colombia and Mexico opted to address the drug war with military intervention, resulting in the emergence of a range of issues such as corruption and human rights violations. The report also adds that political insecurity is most common in periods of unrest (ibid., 32). Colombia faced decades of political violence and instability until the 1980s, while in Mexico the Partido Revolucionario Institucional dominated Mexican politics for 71 years until the election of Fox in 2000. Both countries experienced an unstable transition to democracy, which allowed space for crime to grow (Carpenter 2003; Melo 1998). Seccombe (1997, 291) argues that it is common for fragile democracies to experience "significant conflict between the illegal drug industry's goals and behaviours and . . . government's attempts to democratize the political and social systems, leading to violence and increased ungovernability." Upon democratization, both Colombia and Mexico had no choice but to confront DTOs and in both cases the countries entered into conflicts that have increased instability. This argument is echoed by James Fearon and David Laitin (2003, 76), who hypothesize that "financially, organizationally, and politically weak central governments render insurgency more feasible and attractive due to weak local policing or inept and corrupt counterinsurgency practices." Aggressive policies implemented by both countries, then, are actually a reflection of structural weaknesses in the face of powerful DTOs and popular discontent (Felbab-Brown 2010, 6, 21). In this sense, military intervention, as a reflection of political insecurity, is contributing to the very existence of the narcotics industry by bolstering political discontent within its borders, further weakening the state. Conversely, a human security approach built on prioritizing basic rights and strengthening government institutions could help address some of the issues associated with political insecurity.

It is impossible to deny that DTOs are the first cause of political insecurity in this context. Their presence and the violent conflicts they provoke greatly impede government functions while also aggravating persistent problems of transparency and impunity in relation to crime, human rights abuses, and corruption. Despite efforts by the Colombian and Mexican governments to reduce corruption, numerous government officials, police officers, and military personnel continue to collaborate with DTOs. Governments have not sufficiently focused on the problem of corruption and its role in exacerbating the drug trade (Seccombe 1997, 28). Corruption has tremendous impacts on a population's domestic political security and severely infringes upon Colombia and Mexico's civil rights by rendering the political system tainted and undemocratic as individuals affiliated with the drug trade could enter into politics through threats, money laundering, or even meddling with electoral campaigns. Furthermore, it undermines confidence in the state judicial system and aggravates impunity as a growing number of crimes and human rights abuses go unaddressed (Amnesty International 2009). Corruption also threatens the population's right to information when journalists face either censorship by the government or bribes by cartels to alter information about drug-related crimes in favour of their respective interests (Estévez 2010, 6–7). The seriousness of corruption leads Ted Carpenter (2003, 180) to argue that "the degree of penetration of law enforcement by [DTOs renders] supposed antidrug efforts in Mexico farcical."

Like corruption, drug trafficking permeates national borders and impacts Colombia and Mexico's relations with other countries. As Seccombe (1997, 292–93) argues, in addition to the harm done by conflict, U.S. anti-drug policies can have international ramifications through impacts on economic, political, and strategic affairs. For instance, Roderic Ai Camp (2010) and Carpenter (2003) discuss the formidable challenge of reconciling U.S. demands with Mexican interests in the War on Drugs due to the complex and tense history between the two countries. The authors note that this history, distinguished by the supremacy of U.S. interests over Mexican interests, results in mistrust and animosity between the Mexican and U.S. militaries, and that many Mexicans perceive the War on Drugs to be an American war against drug consumption being fought in Mexico with Mexican resources and against the Mexican people. The same can be argued about Colombians (ibid., 22). In effect, the War on Drugs also has severe domestic policy implications by eroding state funds and shifting focus away from

social services and programs, including rural development policies, toward increased militarization of the country. This constitutes one of the main paradoxes of current anti-drug policies: they demand sacrifices to the human component, including human rights, when these problems are at the root of the drug war. The human security approach, on the other hand, complements national security policies with social policies by taking into account the human component of the drug war.

The War on Drugs is compromising economic security through its crop eradication campaigns, high security costs, and underfunded alternative development programs. In addition, corruption, national and international political tensions, and the neglect of larger social and political conditions are eroding political security in both Colombia and Mexico. It is crucial for the governments of both countries to collaborate with the United States to address their weaknesses by strengthening institutions and re-evaluating the alternative development component of their drug policies. In doing so, they could better target deeper issues that allow the drug trade to succeed within their borders.

Environmental, health, and food security

Environmental, health, and food security are inextricably linked to economic, personal, and community security as each inherently feeds into healthy living and sustainable livelihoods. Crop eradication campaigns not only compromise the economic security of crop cultivators and small-scale farmers in Colombia and Mexico, but also have widespread ramifications that severely undermine these three forms of human security by causing forced displacement of farming communities, environmental damage, and disruption of traditional livelihoods. Since aerial crop spraying is not a component of the Mérida Initiative in Mexico, this section will focus on the devastating environmental and social impacts of crop eradication campaigns in Colombia.

Environmental security means having access to a "healthy physical environment" (UNDP 1994, 28). The biggest threats to environmental security, presented by crop eradication, include water scarcity, environmental degradation, contamination, deforestation, and access to land. Peterson (2002, 433) provides extensive details on the environmental impacts of a nonselective toxic herbicide called glyphosate, commonly known as Monsanto's Roundup, used in aerial crop spraying under Plan Colombia (UNODC 2008, 101). Targeting illicit crops when sprayed, the herbicide is often carried by wind and water streams, destroying thousands of hectares of legal crops along the way. For example, officials in the Colombian state of Puntomayo note that more than 30,000 hectares of legal crops were destroyed within six weeks of aerial spraying in 2001 (Peterson 2002, 431). The destruction of both legal and illicit crops forces farmers to seek new, uncontaminated land. In the case of illicit plants like coca, the displacement of crops often leads DTOs to seek more distant and hidden spaces in forests and isolated areas of the country. David Olsen, director of the World Wildlife Fund conservation

science program, states that "for every hectare of forest sprayed, another is lost to pesticide drift and another to additional clearing to compensate for displaced crops" (cited in ibid., 433). It is estimated that over 81,000 hectares of land are dedicated to coca cultivation in Colombia alone (UNODC 2010b, 228), potentially infringing on one of the world's most beautiful landscapes endowed with rich and varied biodiversity among the Amazon Forest, Andes mountains, and Caribbean and Pacific coastlines. This displacement threatens wildlife and the livelihoods of more individuals, and hinders other, more productive uses of the land such as agriculture and tourism. A human security approach would eliminate harmful crop eradication techniques and could include greater environmental protection policies.

In addition to deforestation and contamination, toxic herbicides such as glyphosate have damaging effects on human health security, defined as a life free from disease and access to good nutrition, health services, and a safe environment (UNDP 1994, 27). Human exposure to the spray can cause "headaches and dizziness as well as eye, respiratory, skin and digestive problems . . . and ingestion may cause diarrhea, shortness of breath, vomiting, and weakness" (Peterson 2002, 433). People are undoubtedly exposed to this herbicide through soil and water contamination and food sources such as dairy products. The Colombian government downplayed these damaging impacts on health and, despite evidence of glyphosate's toxicity, continued to use the product throughout Plan Colombia with the highest concentration of aerial spraying campaigns occurring in the Puntomayo region between 1998 and 2007 (UNODC 2008). According to UNODC's World Drug Report 2011, over 100,000 hectares of Colombian coca fields are still sprayed every year (UNODC 2011b, 245). In addition, other means of crop eradication in both Colombia and Mexico, including field burning, persist and continue to jeopardize the economic security of those who depend on these crops. Crop spraying should never have been part of the plan, as it was an expensive and harmful initiative with trivial impacts on the global drug trade.

Aside from water and land contamination and widespread deforestation, crop eradication also negatively impacts food security (Peterson 2002, 430; Ramírez 2011, 222; Wells 2006, 55). Food security is understood here as "all people at all times [having] both physical and economic access to food" (UNDP 1994, 27). Crop eradication destroys some of the Andean region's most important food sources, including fish, livestock, and plants valuable to surrounding communities. For instance, the coca plant is nutritionally, medicinally, and spiritually important for Andean indigenous communities who consume it by chewing the leaves or ingesting it in the form of tea (Peterson 2002, 430; Ramírez 2011, 55).8 The dangers of the drug conflicts have compromised many regions' access to health care, markets, and stable employment, forcing populations to rely on indigenous traditions and local food supplies for their health and well-being. As mentioned above, many profitable legal crops cannot grow in the rocky soil of mountainous terrain. Furthermore, accessing markets to sell crops is complicated by distance and inadequate infrastructure, such as a lack of communications technology

and poor road conditions. Rather than investing in crop eradication, the government should increase investment in infrastructure development that facilitates access to markets and health care, as well as increase investment in social safety nets, alternative development programs, and local agriculture that together enhance economic, environmental, health, and food security.

By threatening environmental, health, and food security, the War on Drugs threatens livelihoods and exacerbates problems of poor market access, poverty, and internal displacement. Therefore, crop eradication as promoted by the War on Drugs cannot be divorced from economic security. By stopping crop eradication policies, particularly with toxic herbicides such as glyphosate, governments can support these essential forms of security and ensure a healthier environment for various communities. By prioritizing these forms of human security over the unsustainable destruction of illicit crops, governments can focus on developing real, long-term alternatives based on licit crop cultivation and better market access. By improving livelihoods, countries would have fewer families relying on or turning to the drug trade for subsistence, thus abating the intensity of the drug conflicts. To this day, the state security approach has failed to generate such results.

Personal and community security

Over 50,000 people have lost their lives in Mexico since 2007 (Molzahn, Ríos, and Shirk 2012, 1) and an estimated 230,000 individuals have fled the gunridden northern border towns (IDMC 2010a). In Colombia, approximately 16,000 lives were lost in 2008 because of drug-related violence (UNODC 2010a, 10), the lowest tally in over two decades—still far too many—and over 200,000 individuals are leaving their homes every year, with total estimates ranging from three million to five million people in the past 25 years (IDMC 2010b). The primary cause of these casualties and displacements is the violence brought on by the drug wars, yet the impact of crop eradication and the failure of the War on Drugs to improve personal and community security in Colombia and Mexico are also to blame. This section will focus mainly on Mexico due to the contemporary nature of the conflict, but it should be noted that Colombia continues to deal with human rights violations, displacements, and violence to this day.

Personal security refers to freedom from physical harm, including political violence and human rights abuses, while community security is defined as the freedom of association to a group that can provide cultural identity, support, and protection (UNDP 1994, 30–31). A report by the Internal Displacement Monitoring Centre (IDMC 2010a) demonstrates how the War on Drugs can impact these forms of security by arguing that Mexican authorities are failing to "acknowledge, assess or document the needs of the people displaced, instead focusing their efforts on fighting the drug cartels." These displacements present severe threats to personal and community security since violence tears apart or destroys entire families and communities. Governments' inability to provide for their needs and to prevent

displacements further jeopardizes these forms of human security. As Peterson (2002, 435) argues, the "destabilization of Colombian [and Mexican] society and culture through the escalation of civil war and the inflation of an already enormous internal refugee population are further consequences of drug war policy." The human security approach would aim to reduce the number of displacements through less militarized and more socio-economically aimed policies and bolster state institutions to embody programs that help and protect the displaced.

The main actors responsible for a climate of personal insecurity in this context are undoubtedly DTOs; however, this insecurity is worsened by the militarization of civic affairs. Recent reports by Human Rights Watch (2011) and Amnesty International (2009) denounce the rise in human rights violations by the Mexican military participating in the fight against DTOs, echoing similar concerns earlier in Colombia. According to Amnesty International (ibid., 5), "there are increasing reports of serious human rights violations, such as enforced disappearance, unlawful and extrajudicial killings, torture, other ill-treatment and arbitrary detention being committed by members of the Mexican military." These abuses are committed against citizens across Mexico believed to be directly involved or linked to the narcotics industry; unfortunately, innocent civilians are often also victims. The report explains that a growing number of complaints have been filed in Ciudad Juárez and that "[t]hese new reports of human rights violations by the military . . . occurred in the context of military law enforcement activities to support civilian efforts to combat organized crime and drug cartels" (ibid., 6).

Similarly, Seccombe (1997, 291) reiterates that human rights are frequent casualties of the War on Drugs, adding that, "the cultivation of the illicit crop [like coca] may bring the farmers [who cultivate the crops] into conflict with the authorities, who are under pressure to eradicate it. Human rights abuses can then occur." While security forces face some of the most ruthless drug cartels in Latin America, working in dangerous conditions in order to protect the Colombian and Mexican populations and integrity of the state, they are also responsible for perpetuating abuses and overlooking their investigations. A longstanding culture of impunity and the weakness of state judicial systems mean that abuses are rarely investigated and perpetrators seldom convicted. This leads to the continuation of criminality and growing frustration against the government, thus fuelling the drug trade. A human security approach would prioritize human rights protection and justice for crimes committed.

The presence of military forces in the drug wars has also intensified tensions between cartels and government officials. Increasing pressure from the security forces and rival cartels has made DTOs more ruthless, violent, and willing to resort to kidnappings, torture, and terrorism across Mexico, such as the 2011 bomb attack in Monterrey, in order to create an environment of fear and to gain territorial control. Furthermore, pressures in certain areas of the country have resulted in DTOs invading other, more peaceful areas such as Aguascalientes (Kellner and Pipitone 2010). The military may not be

directly responsible for these crimes, but its presence provokes conflict by inviting more frequent and aggressive confrontations with DTOs. In the end, civilians continue to suffer the burden of the War on Drugs.

Many individuals, including government officials, police officers, farmers and ordinary civilians, tend to face dual pressures in this battle for information and power. As Seccombe (1997, 292) writes, they face "the threat of assassination or other violence, coupled with the offer of financial reward for a favourable decision [in favour of cartel demands]." As a result, Colombia and Mexico are left with corrupt, weak, untrusted governments and societies paralyzed by impunity, crime, and associated social problems, all of which compromise the security and well-being of individuals and communities. A growing sense of fear, frustration, and mistrust is felt by Colombians and Mexicans. The inability of the War on Drugs to assuage such feelings results in personal and community insecurity. The current approach is so focused on military action that it has failed to ensure these forms of security and has actually led to human rights abuses, displacements, and deaths. A human security approach in Colombia and Mexico would prioritize the safety of populations and address socio-economic concerns and violence first.

Conclusion: Alternative Policy Options and the Need to Admit Defeat

This article challenged common conceptions of security that guide the War on Drugs as encapsulated in the two bilateral U.S. military assistance packages, Plan Colombia and the Mérida Initiative. Anti-drug policies, which are qualitatively very different but inexorably linked, need to be reconsidered in Colombia, Mexico, and the United States, and there are countless suggestions coming from every direction as to what the governments of these countries should do. Organizations such as the International Narcotics Control Board and many politicians in the United States have argued for more aggressive military action and the enforcement of prohibition laws (Seccombe 1997, 295). Others like the Netherlands, Australia, Portugal, and human rights organizations are increasingly promoting more progressive policies ranging from the "conventional" harm reduction policies and alternative development programs (Obokata 2007; Peterson 2002) to the "radical" free trade and full legalization of all illicit drugs (Wells 2006). There are logical rationales for each alternative, yet there is no clear solution to this complex transnational problem. A limiting factor in the development of alternative policies is that prohibition is deeply rooted in U.S. public discourse dating back over a century (Jelsma 2011). Consequently, it will be difficult to promote any momentous changes in policy, and whatever progress takes place will certainly happen gradually.

In spite of this, and given the urgent nature of drug-related violence, a growing number of experts, academics, and concerned individuals are promoting accelerated policy changes. As seen in the June 2011 War on Drugs: Report of the Global Commission on Drug Policy, recent attempts by U.S. states

such as California to legalize cannabis (McKinley 2010), and the emergence of organizations like the *Red por la Paz con Justicia y Dignidad*¹⁰ in Mexico and Common Sense for Drug Policy in Colombia, demand for an end to the War on Drugs and the adoption of alternative anti-drug policies is increasing. While the Obama administration continues to advance a prohibitionist and militaristic approach on drugs, there have been significant steps forward in drug policy approaches in both Colombia and Mexico (Jelsma 2011). Recently, for example, Calderón adopted an anti-corruption initiative that the Colombian government initiated in 2000 by dismissing hundreds of allegedly corrupt individuals and increasing police officers' salaries to minimize the incentives of corruption (ibid.; Kellner and Pipitone 2010). Numerous media reports show that government officials are beginning to acknowledge the weaknesses of the War on Drugs and are engaging more with civil society and experts to explore alternative policies. Although these are important developments, they are incomplete, mostly rhetorical, and insufficient.

Daily media coverage of drug-related violence, especially in Mexico, means that anti-drug policies have become a leading political issue and were undoubtedly a deciding factor in the July 2012 Mexican and will be, though to a lesser degree, in the U.S. elections. Anti-drug policies certainly played a pivotal role in the 2010 Colombian presidential election, when Colombians elected Juan Manuel Santos, former president Alvaro Uribe's minister of national defense, as president with 69 per cent of the vote. Much like his predecessor, Santos will continue taking a hard-line approach against rebels and DTOs (McDermott 2010), demonstrating that this approach still appeals to a large portion of the population. This is explained by the fact that crime rates in Colombian cities have fallen drastically since Uribe's entry into office because of increased military presence in those cities (UNODC 2010a). However, crime reduction in cities does not translate into crime reduction in rural parts of Colombia, such as the still violent Puntomayo region, and much less into a victory over crime, violence, and other factors such as poverty and corruption nationwide. In addition, the UNODC notes that despite a 58 per cent reduction in Colombian coca production between 2000 and 2009, production has increased by 112 per cent in Bolivia and 38 per cent in Peru, negating much of the progress in Colombia (UNODC 2010c, 20). This example demonstrates the need for better coordinated regional strategies.

To effectively combat drug crime within their borders, Colombia and Mexico also need to broaden and diversify their national strategies. Given the success in reducing crime in Colombian cities, a continuation of multifaceted action, including the establishment of a national research, analysis, and strategic bodies, such as the Government of Colombia's *Dirección de Justicia, Seguridad y Gobierno*, to better understand DTOs and the drug trade, could contribute to safer cities in Mexico and be replicated in different settings in Latin America. To avoid the balloon effect, whereby drug production and violence are merely displaced to other territories, military efforts must be matched with national socio-economic policies along the lines of improvements in education, economic productivity, small-scale agriculture, and employment

opportunities, all well-known concerns in Mexican society. By addressing issues of economic and food security and improving standards of living and capacity building in rural communities, there will be fewer incentives to be or get involved in criminal activities, and personal and community security will improve. For instance, investments in crop substitution, small-scale farming, and the elimination of aerial spraying campaigns could help prevent the future growth of the drug trade. Moreover, the Colombian and Mexican governments need to continue their efforts to combat corruption and better address problems of impunity and human rights violations by adopting a human security approach to drug policies. The establishment of effective judicial reforms¹¹ to bring crimes to justice create a stronger sense of confidence, trust, and security across those countries.

It has become increasingly clear that the United States and other consuming countries need to acknowledge their pivotal role in the drug trade. As long as demand remains high, supply will continue to flow to these markets and the violence will not stop (Wells 2006; Global Commission on Drug Policy 2011). As Zedillo argued at the 20th Special Session of the UN General Assembly in 1998: "The human, social, and institutional costs in meeting [demands for illicit drugs] are paid for by the producing and transit countries. It is our men and women who die first in combating drug trafficking. It is our communities that are first to suffer from violence, our institutions that are first to be undermined by corruption. It is our governments that are the first bulwark in this war" (Carpenter 2003, 213). Indeed, the United States accounts for nearly 40 per cent of the global demand for cocaine, worth approximately US\$37 billion (UNODC 2010c, 20). If the U.S. government is going to wage war against DTOs across its border, it is imperative that efforts be matched with initiatives on U.S. soil. Programs such as Hope, adopted in a number of states, including Hawaii, Alaska, Arizona, California, and Washington, have delivered positive outcomes and shown proven reductions in drug use, criminal activity and incarceration (Kleiman 2011, 97).¹² Mark Kleiman (ibid.) argues that "if Hope were to be [systematically] implemented ... the resulting reduction in drug use could shrink the market—and thus the revenue of Mexico's [DTOs]—by as much as 40 percent." The United States could reduce demand at home through such evidence-based treatment and engage more freely with the decriminalization and legalization debates and policy alternatives, looking at Europe for inspiration, where Portugal and the Netherlands have successfully implemented drug decriminalization policies. Since decriminalizing drugs, Portugal has effectively solved its problem of overcrowded prisons and dramatically reduced the country's drug consumption levels (Jelsma 2011, 9). Unfortunately, legalization is not on the political agenda due to a range of social conventions and security concerns that dominate the U.S. Congress. However, what the United States could feasibly do, according to Kleiman, is better focus its security efforts on the most violent cartel, largely agreed to be the Zetas, or violence players within the cartels. In other words, promote differential law enforcement. Kleiman (2011, 98) argues that "[b]y focusing drug-dealing arrests, prosecutions, and

prison terms on the most violent individuals and groups, governments can achieve the double benefit of incapacitating the worst actors and deterring the rest—not from drug dealing (an incarcerated or deterred dealer will merely be replaced) but from violence, or from the flagrant dealing practices that give rise to violence and disorder." These are two valid examples of how the United States can act as a world leader on drug policies that other countries around the world could emulate. The United States should collaborate with a greater number of countries and civil society organizations to find the best combination of military, economic, political, and social policies. At the core of the drug trade are profound social, economic, and political issues that are beyond the range of crop spraying or soldiers in the streets of Ciudad Juárez. The United States has been fighting the War on Drugs for 40 years and for 40 years it has failed. It is time to implement new policies rooted in human security principles and geared above all to end the brutal violence suffered across Colombia and Mexico.

Notes

- 1. The "War on Drugs" refers to the specific U.S. anti-drug policies carried out in Colombia and Mexico, while "drug war" refers to the battle between cartels for power and control in these countries, encapsulating all the violence, terrorism, and criminal activities associated with "turf wars."
- 2. By focusing on U.S. policies, this article seeks to emphasize the powerful role of the United States as the main proponent of prohibition and author of the War on Drugs. It also focuses on Colombia and Mexico because they have been the main theatre of the War on Drugs. Their experiences and policies are deeply interlinked, and they both serve to demonstrate the adverse effects of aggressive policies originating from the War on Drugs. However, it is important to note that the War on Drugs expands beyond these three countries. Since the 1970s, the United States has pressured countries around the world such as Jamaica, Nigeria, Burma, Haiti, and Venezuela. U.S. anti-drug policies have included military missions, efforts to tighten drug laws, increasing arrest quotas, and applying sanctions to countries which have adopted more relaxed policies. Currently, the country is implementing similarly aggressive policies against poppy cultivation in Afghanistan. Europe, Canada, and Australia were all reluctant to join the War on Drugs and have generally more relaxed policies, particularly in recent years (Jelsma 2011).
- 3. Other key documents include former UN secretary-general Boutros Boutros-Ghali's 1992 report *An Agenda for Peace*, the International Commission on Intervention and State Sovereignty's 2001 report, *The Responsibility to Protect*, and the Commission on Human Security's 2003 report *Human Security Now*.
- 4. Carpenter (2003, 114–18) refers to "push-down, pop up" policies, also known as the "balloon effect," whereby declines in Mexican marijuana production during the 1980s were matched with an increase in Colombian production of marijuana. In other words, no matter how efficient policies are in one region, the production of drugs tends to relocate elsewhere. Following this logic, many are sceptical about the Mérida Initiative's success in Mexico. 5. Plan Colombia's breakdown in 2001: US\$1.02 billion for bilateral economic assistance; US\$184 million for defense operations; US\$180 million for assistance to Peru, Bolivia, and Ecuador; US\$70 million for the regional operations of the U.S. Treasury Department and U.S. Customs and Border Protection; approximately 75 per cent of the rest of the aid was directed toward the Colombian military and police, including US\$330 million in aid allocations; the remaining 25 per cent was earmarked for alternative
- 6. The 2011 Mérida Initiative budget requested US\$346 million in foreign assistance to Mexico. Its breakdown is as follows: US\$26.3 million for development assistance; US\$10 million in economic support; US\$8 million in military financing; US\$3.5 million in global health and child survival; US\$1.1 million in military education and training; US\$292 million in International Narcotics Control and Law Enforcement programs; and US\$5.7 million for

development, refugee aid, human rights protection, judicial reform, law

enforcement, and the peace process (Peterson 2002, 431).

non-proliferation, antiterrorism, demining, and related programs (Olson and Wilson 2010, 4).

- 7. It is important to note that drug production does not only take place in developing countries and there are high rates of drug cultivation and production in developed countries. For example, Canada is the world leader in methamphetamine production (UNODC 2008, 127).
- 8. Peterson (2002, 430) highlights some of the important nutritional values of the coca plant: "It contains an abundance of certain vitamins and minerals, including calcium, and its mastication provides an important supplement to many local diets, which may be deficient of vital nutrients . . . Chewing the coca leafs also suppresses the appetite, which is important in societies with unstable food supplies, and helps to mitigate the deleterious effects of high altitude on the human body. [Many] indigenous societies have also recognized and utilized its psychotropic qualities in medicinal and religious activities."
- 9. According to Amnesty International's (2011) report, in 2008 there were 1,230 official complaints of human rights abuses by the military filed to the National Human Rights Commission, a significant rise from 367 complaints in 2007 and 182 complaints in 2006. Countless more abuses go unreported. Also, the number of complaints that have been investigated and individuals that have been convicted remains alarmingly low.
- 10. The *Red por la Paz con Justicia y Dignidad* is a Mexican civil society organization, which includes concerned individuals like Javier Sicilia, a renowned Mexican poet who works to raise awareness about human security implications of the War on Drugs and advocates for alternative drug policies. The movement's motto is "*No Mas Sangre*" ("No More Blood").
- 12. Judicial reforms are currently under way in Mexico, being carried through with the assistance of the United States, Canada, and the European Union and in collaboration with the Organization of American States. There has been some progress in training judges and lawyers, but real change remains a much deeper cultural and long-term challenge.
- 13. The Hope program involves random drug testing with guaranteed short jail sentences (a few days) for detected use and includes positive incentives (reduction in testing frequency) for those with repeatedly clean tests. Those who test positive are forced to stop using drugs or face longer incarceration periods. In Hawaii, the program succeeded in getting 80 per cent its long-term methamphetamine users clean and out of confinement in one year. By reducing incarceration rates, the program effectively pays for itself (Kleiman 2011).

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References

- Ai Camp, Roderic. 2010. "Armed Forces and Drugs: Public Perceptions and Institutional Challenges." In Shared Responsibility: U.S.-Mexico Policy Options for Confronting Organized Crime, edited by Eric L. Olson, David A. Shirk, and Andrew Selee, 291–326. Washington, DC: Woodrow Wilson Press.
- Amnesty International. 2009. Mexico: New Reports of Human Rights Violation by the Military. London: Amnesty International Publications.
- ———. 2011. "Columbia." In *Annual Report 2011: The State of the World's Human Rights*, 108–112. London: Amnesty International Publications. http://www.amnesty.org/en/region/colombia/report-2011.
- Balzacq, Thierry. 2003-2004. « Qu'est-ce que la sécurité nationale? » *Revue internationale et stratégique* 52 : 33-50.
- Bowden, Charles. 2010. "Charles Bowden on 'Murder City: Ciudad Juarez and the Global Economy's New Killing Fields." Interview by Democracy Now, April 14. http://www.democracynow.org/2010/4/14/charles_bowden_murder_city_ciudad_jurez.
- Carpenter, Ted. 2003. Bad Neighbor Policy: Washington's Futile War on Drugs in Latin America. New York: Palgrave MacMillan.
- Duffield, Mark, and Nicholas Waddell. 2006. "Securing Humans in a Dangerous World." *International Politics* 43 (1): 1–23.
- Estévez, Dolia. 2010. "Protecting Press Freedom in an Environment of Violence and Impunity." In *Shared Responsibility: U.S.-Mexico Policy Options for Confronting Organized Crime*, edited by Eric L. Olson, David A. Shirk, and Andrew Selee, 271–289. Washington DC: Mexico Institute, Woodrow Wilson Center for International Scholars.
- Fearon, James, and David Laitin. 2003. "Ethnicity, Insurgency, and Civil War." American Political Science Review 97 (1): 75–90.
- Felbab-Brown, Vanda. 2010. "Stemming the Violence in Mexico, but Breaking the Cartels." *George Mason University Center for Infrastructure* Protection and Human Security Report 9 (3): 5–7.
- Global Commission on Drug Policy. 2011. *War on Drugs: Report of the Global Commission on Drug Policy*. Rio de Janeiro: Centro Edelstein Publications.
- Hampson, Fen. 2004. "A Concept in Need of Global Policy Response." Security Dialogue 35 (3): 349–50.
- Hill, Sarah. 2010. "The World for Drugs: How Juarez became the Deadliest City." *Boston Review*, July/August. http://bostonreview.net/BR35.4/hill.php.
- Human Rights Watch. 2011. "Mexico." World Report 2011: Events of 2010. New York: Human Rights Watch. http://www.hrw.org/en/world-report-2011/mexico.
- IDMC (Internal Displacement Monitoring Centre). 2010a. "Briefing Paper by the Norwegian Refugee Council's Internal Displacement Monitoring Centre on Forced Displacement in Mexico due to Drug

- Cartel Violence." IDMC Briefing, December. http://www.internal-displacement.org/briefing/mexico.
- — . 2010b. "Colombia: Government Response Improves but Still Fails to Meet Needs of Growing IDP population." December 10. http://www. internal-displacement.org/8025708F004BE3B1/(httpInfoFiles)/4BCA7D F31521CC16C12577F5002CED98/\$file/Colombia_Overview_Dec2010. pdf.
- Isacson, Adam, and Abigail Poe. 2009. "After Plan Colombia: Evaluating 'Integrated Action,' the Next Phase of U.S. Assistance." *International Policy Report*. December. Washington, DC: Center for International Policy. http://justf.org/files/pubs/091203_col.pdf.
- Jelsma, Martin. 2011. "The Development of International Drug Control: Lessons Learned and Strategic Challenges for the Future." Working paper prepared for the First Meeting of the Commission, Global Commission on Drug Policy, Geneva, January 24–25. http://www.globalcommissionondrugs.org/wp-content/themes/gcdp_v1/pdf/Global_Com_Martin_Jelsma.pdf.
- Kellner, Tomas, and Francesco Pipitone. 2010. "Inside Mexico's Drug War." World Policy Journal 27 (1): 30.
- Kelly, Robert J., Jess Maghan, and Joseph D. Serio. 2005. *Illicit Trafficking: A Reference Handbook*. Santa Barbara: ABC-CLIO.
- Kleiman, Mark. 2011. "Surgical Strikes in the Drug Wars: Smarter Policies for Both Sides of the Border." *Foreign Affairs* 90 (5): 89–101.
- Leech, Garry M. 2002. Killing Peace: Colombia's Conflict and the Failure of U.S. Intervention. New York: Information Network of the Americas.
- Livingstone, Grace. 2003. *Inside Colombia: Drugs, Democracy and War*. London: Latin American Bureau.
- McDermott, Jeremy. 2010. "Government Candidate Santos Wins Colombia Election." *BBC News*, June 21. http://www.bbc.co.uk/news/10362250.
- McKinley, Jesse. 2010. "Battle Over California Marijuana Initiative Goes Down to the Wire." *New York Times*, October 30. http://www.nytimes.com/2010/10/31/us/politics/31pot.html.
- Melo, Jorge Orlando. 1998. "The Drug Trade, Politics and the Economy: The Colombian Experience." In *Latin America the Multinational Drug Trade*, edited by Elizabeth Joyce and Carlos Malamud, 63–98. New York: MacMillan Press.
- Molzahn, Cory, Viridiana Ríos, and David A. Shirk. 2012. "Drug Violence in Mexico: Data and Analysis Through 2011." San Diego: Trans-Border Institute, University of San Diego.
- Obokata, Tom. 2007. "Illicit Cycle of Narcotics from a Human Rights Perspective." Netherlands Quarterly of Human Rights 25 (2): 159–88.
- Olson, Eric L., and Christopher E. Wilson. 2010. "Beyond Merida: The Evolving Approach to Security Cooperation." Working Paper on U.S.-Mexico Security Cooperation, May. Washington, DC: Woodrow Wilson Center for International Scholars. http://www.wilsoncenter.org/sites/default/files/Beyond%20Merida.pdf.

- Owen, Taylor. 2004. "Human Security Conflict, Critique and Consensus: Colloquial Remarks and a Proposal for Threshold-Based Definition." Security Dialogue 35 (3): 373–87.
- Paris, Roland. 2001. "Human Security: Paradigm Shift or Hot Air?" International Security 26 (2): 87–102.
- Peterson, Sarah. 2002. "People and Ecosystems in Colombia: Casualties of the Drug War." *Independent Review* 6 (3): 427–40.
- Ramírez, María Clemencia. 2011. Between the Guerrillas and the State: The Cocalero Movement, Citizenship, and Identity in the Colombian Amazon. Durham: Duke University Press.
- Seccombe, Ralph. 1997. "Troublesome Boomerang: Illicit Drug Policy and Security." *Security Dialogue* 28 (3): 287–99.
- Singer, Merill. 2008. *Drugs and Development: The Global Impact on Sustainable Growth and Human Rights.* Long Grove: Waveland Press.
- Smith, Peter H. 1999. "Semiorganized International Crime: Drug Trafficking in Mexico." In *Transnational Crime in the Americas*, edited by Tom Farer, 193–216. New York: Routledge.
- UNDP (United Nations Development Programme). 1994. *Human Development Report 1994: New Dimensions of Human Security*. New York: Oxford University Press.
- UNODC (United Nations Office on Drugs And Crime). 2008. *Coca Cultivation in the Andean Region: A Survey of Colombia, Bolivia and Peru*. Vienna: UNODC Publications.
- ———. 2009. *World Drug Report* 2009. Vienna: United Nations Publications.
- — . 2010a. Crime and Instability: Case Studies of Transnational Threat.
 Vienna: United Nations Publications.
- ———. 2010b. The Globalization of Crime A Transnational Organized Crime Threat Assessment.
- Vienna: United Nations Publications.
- ———. 2010c. *World Drug Report* 2010. Vienna: United Nations Publications.
- — . 2011a. Colombia: From Illicit Drugs to Sustainable Livelihoods. Accessed February 2012. http://www.unodc.org/unodc/en/frontpage/2011/ September/colombia_-from-illicit-drugs-to-sustainable-livelihoods. html
- ———. 2011b. *World Drug Report 2011*. Vienna: United Nations Publications.
- Wells, Simon. 2006. "A Human Security Approach to US Illegal Drugs Policy." *Human Security Journal* 1: 51–64.
- World Bank. 2012. "Data: Vulnerable Employment, Total (% of Total Employment)." Accessed March 2012. http://data.worldbank.org/indicator/SL.EMP.VULN.ZS.

Beyond Rawls's Law of Peoples: Freedom, Capabilities, and Human Security

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This article considers whether the better-off have a duty of assistance toward impoverished individuals or, from another angle, whether the poorest are entitled to better conditions. The article looks through normative and theoretical lenses to provide practical replies to "why?", "how (by what means)?", and "how much?" international assistance should be provided to individuals living in the least developed countries. The article compares the requirements of global justice from Rawls's The Law of Peoples to those of the capabilities approach developed by Nussbaum and Sen. It argues that Rawls's duty of assistance and human rights requirements are too limited given the needs of the bottom billion, that shifting focus to capabilities centred on the freedom of the individual helps to bridge the gap, and that ultimately, concurrent advancement of human development, human rights, and human security—what is referred to as a "capabilities-plus" approach—is required to raise the capabilities of individuals within least developed countries and of these countries. Guided by this approach, the article offers policy recommendations, including the provision of international aid based on the criteria of aid effectiveness, optimal aid allocation, and practicality.

Introduction

While the gap in the United Nations Development Programme's (UNDP) Human Development Index (HDI)¹ between developed and developing countries narrowed by about a fifth between 1990 and 2010 and all but three (the Democratic Republic of the Congo [DRC], Zambia, and Zimbabwe) of the 135 countries with available data had higher levels of human development in 2010 than in 1970, the "bottom movers" remain aplenty (UNDP 2010, 29–30). This article focuses on the countries with low levels of human development, or the "bottom billion" of humanity—70 per cent of whom live in Africa, a smaller portion in Central Asia, and a scattering elsewhere (Collier 2007, 11). It has three objectives. First it will assess whether the better-off have a duty of assistance toward impoverished individuals or, from another angle, whether the poorest are entitled to better conditions. Secondly, it will develop an approach to guide policy-making in international assistance efforts. Finally, it will recommend policies informed by this approach. This article looks through

normative and theoretical lenses and seeks to reconcile ethical, political, and economic dimensions in replying to "why?", "how (by what means)?", and "how much?" international assistance should be provided to individuals, institutions, or governing bodies within the least developed countries (LDCs). From an ethical dimension, it compares the requirements of global justice from the Rawlsian and capability approaches. From the political and economic dimensions, it seeks to match philosophical theory to the limits of practicable possibility (Rawls 1999, 11) and to efficient outcomes, respectively. The article begins by examining the duty of assistance and human rights requirements from John Rawls's *The Law of Peoples*. It then compares these to arguments from Martha Nussbaum's Frontiers of Justice: Disability, Nationality, Species Membership and Amartya Sen's Development as Freedom and The Idea of *Justice*. It argues that although *The Law of Peoples* presents important insights, Rawls's duty of assistance and human rights requirements are too limited to address the needs of the bottom billion and, moreover, his international social contract contains irreconcilable procedural problems. Focus should be shifted to capabilities centred on the freedom of the individual. Ultimately, concurrent advancement of human development, human rights, and human security-what is here referred to as a "capabilities-plus" approach-is required to raise the capabilities of individuals within LDCs and of LDCs. The article recommends a robust duty of assistance as part of the solution for LDCs, including the provision of international aid based on the criteria of aid effectiveness, optimal aid allocation, and practicality.

Rawls's Law of Peoples

Building on his landmark works² on justice for a liberal democratic society, Rawls provides principles that he believes well-ordered, reasonable, and rational peoples³ (a type of idealized, enlightened nation-state) would choose to underpin international justice in his 1993 essay "The Law of Peoples," which are further developed in his 1999 book The Law of Peoples.4 He (1993, 32) defines a "well-ordered" people as one that (1) is peaceful and not expansionist, (2) retains a system of law that is legitimate in the eyes of its own citizens, and (3) honours basic human rights. To arrive at these principles, he uses a two-stage hypothetical social contract in his "ideal" theory. In the first stage, representatives of well-ordered, liberal peoples are placed in an original position behind a "veil of ignorance" that limits their information base, thus providing fair conditions and an impartial starting point.⁵ These liberal peoples consider familiar and traditional principles from the history and practice of international law (Rawls 1999, 41). In the second stage, wellordered, non-liberal, decent⁶ peoples engage in their own social contract by considering the principles to which well-ordered, liberal peoples have already agreed. He (ibid., 69) concludes that liberal and non-liberal (but decent) peoples would accept the same principles. According to Rawls (ibid., 37), the final agreement, or the "Law of Peoples," would be similar to the principles currently underlying public international law: there would be a central focus

on state (or a people's) rights, including the right to independence and nonintervention, prohibitions on war, and agreement to observe international treaties and to honour basic human rights.

Rawls then considers two cases of "non-ideal" theory: non-compliance and unfavourable conditions. In the case of non-compliance with the agreedupon global principles, he (ibid., 81) writes that "an outlaw state that violates these rights is to be condemned and in grave cases may be subjected to forceful sanctions and even to intervention." In the case of unfavourable conditions faced by developing countries (or what he calls "burdened societies"7), he proposes a duty of assistance. Non-ideal theory and the duty of assistance are the primary concerns of this article. In the world as is, a country may be an outlaw state (e.g., an aggressor state), a burdened society (e.g., a wellgoverned LDC), or both (e.g., some failed or fragile states). For Rawls (ibid., 3), the long-term objective is to bring outlaw states and burdened societies into the "Society of Peoples," envisioned as a global community of wellordered, cooperative peoples that follows the ideals and principles of the Law of Peoples. The breadth and depth of his theory, its relevance to the world as is, and its attempt to establish a fair process for selecting principles of global justice make this work of scholarship an excellent starting point to analyze and inform development policies.

Rawls's Duty of Assistance

The duty of assistance and the needs of LDCs

Rawls's duty of assistance obligates peoples "to assist other peoples living under unfavourable conditions that prevent their having a just or decent political and social regime" (ibid., 37). The form of the duty of assistance is vague, underdeveloped, and limited. He (ibid., 108–10) only notes his skepticism of the ability of funds to rectify political and social injustices and expresses his preference for offering "certain kinds of advice" to influence change within ineffective regimes and to promote human rights, such as equal justice for women to relieve population pressures. The limited scope and form of the duty of assistance is explained by Rawls's views on the aim of international assistance, the causes of deprivation, and the need to define limits to international distributive justice. He (ibid., 107) writes that the aim of international assistance is "to realize and preserve just (or decent) institutions, and not simply to increase, much less maximize indefinitely, the average level of wealth." But why is he satisfied with ensuring that each people is "well-ordered"?

Rawls's answer is that a people in the international original position has fundamental interests that rest on its ability to freely realize its own reasonable conception of political justice; each society is only able to do this once it is well-ordered (ibid., 34–35). And once well-ordered, a people is accepted into the Society of Peoples. On the main cause of deprivation, Rawls (ibid., 108) writes that "the causes of the wealth of a people . . . lie in their political

culture and in the religious, philosophical, and moral traditions that support the basic structure of their political and social institutions, as well as in the industriousness and cooperative talents of its members, all supported by their political virtues . . . [T]here is no society anywhere in the world—except for marginal cases—with resources so scarce that it could not, were it reasonably and rationally organized and governed, become well-ordered." For Rawls, every people is endowed with sufficient human capacities and resources to become well-ordered and for it to realize just or decent institutions. His view is that being well-ordered does not require great resources, but rather a political culture that advances citizens' interests. Rawls views the largely selfsufficient basic structure of a people as the most important arena for regulating citizens' life prospects over time. Hence, he rejects calls for more egalitarian international distributive justice. 10 There is no target in The Law of Peoples to raise the standard of living of individuals in other countries beyond what is necessary to sustain good institutions (ibid., 119). Once a people is wellordered, Rawls believes that it should be free to pursue its own conception of the good, with whatever standard of living or quality of life this might entail. It is important to reiterate that the focus here is on LDCs. In Rawls's ideal theory, well-ordered liberal and non-liberal peoples have sufficient resources and sufficiently functional institutions to remedy social injustices. Therefore, he is justified in rejecting a global distributive principle that raises the least well-off individual of a well-ordered people which is more pastoral or less hard-working relative to others, or embodies religious and social values that lead to a higher rate of population growth (ibid., 117–18). However, this article will show that in non-ideal theory Rawls's duty of assistance is insufficient.

The first shortcoming of Rawls's duty of assistance is its inadequacy to address the needs of the bottom billion. To assess whether or not Rawls's duty of assistance is sufficient and to determine areas to focus policy, the causes of deprivation in LDCs can be assessed. As a first principle, the primary goal for LDCs and the core challenge of development should be economic growth, the sine qua non for poverty reduction (Collier 2007, 11). It is necessary to supplement this goal with additional goals such as growth with equity, social progress, and sustainable development.¹¹ On this point, development economics features a debate on the "poverty trap" and "bad government" as alternative causal explanations for the persistence of low, stagnant, or negative economic growth in LDCs. On the one hand, Jeffrey Sachs (2005) argues that a large number of the extreme poor are unable to escape from material deprivation because they are "trapped" by disease, climate stress, environmental degradation, and extreme poverty itself. The poverty trap, he contends, is the result of low domestic savings—self-sustained economic growth cannot be spurred without investment to fund the accumulation of physical and human capital. He understands that the "financing gap" 12 can be addressed with international aid. In the "big push" aid theory, which assumes that aid will lead to investment and subsequently to growth, sufficient levels of aid will break the poverty trap.

It is clear that LDCs lack the capital required for economic development,

yet the empirical validity of the existence of a poverty trap and the utility of the financing gap model have recently come under scrutiny. William Easterly (2006b) finds that there are problems with the poverty trap explanation because there is no compelling evidence that countries are stuck at lowincome levels. He notes that the poorest countries have not had stationary income streams, regardless of the presence of international aid. Moreover, poor countries' economic performance has fluctuated, which implies that they are not in poverty traps (ibid., 19–21). Regarding the financing gap model, it is not clear that there is a link between aid and investment, that aid goes toward investment one for one, or that there is a statistically significant link between investment and growth (Easterly 1999, 430-33). Easterly argues that it is not a useful model¹³ because if aid is seen as permanent income, recipients have incentives to consume rather than invest and to maintain or increase the financing gap, which promotes moral hazard. Given the challenge of inferring causality in the poverty trap explanation and the difficulties with the financing gap model, an alternative explanatory theory is needed.

Easterly (2006b) finds that bad government is a significant factor in explaining low growth rates in low-income countries—the result holds only when corruption is taken into consideration. He (ibid., 23-30) defines bad government as reflective of scoring poorly on corruption (using data from the International Country Risk Guide) and democracy (using data from Polity IV) measures. Hence, he and Dambisa Moyo,14 among others, are skeptical of the provision of aid to poorly governed countries. They suggest bottomup, micro-level solutions (Easterly 2006a) and alternative ways 15 of financing investment for development (Moyo 2009). Given the many dimensions of bad government, it is necessary to broaden and deepen Easterly's definition to discern the quality of overall governance. To do this, the six dimensions of governance in the World Bank's Worldwide Governance Indicators project could be considered: political stability and absence of violence, voice and accountability, government effectiveness, rule of law, control of corruption, and regulatory quality. For economists in the governance camp, reasonably good scores on these dimensions are a prerequisite for growth. The views of Easterly and Moyo align with those of Rawls in suggesting that growth is made possible if there is good governance (here it can be assumed that a "decent social and political culture" includes good governance). These are important insights in development economics; however, they only provide a partial account of the causes of poverty. More is needed to inform solutions for LDCs.

Just or decent institutions and good governance are important considerations, but there are additional factors that lead to the deprivation of LDCs. Even some of Rawls's supporters agree that his duty of assistance and arguments in *The Law of Peoples* require either reworking or elaboration. Huw Lloyd Williams (2011) extends the capability approach that Rawls later adopts in his domestic non-ideal theory to enable individuals to meet the social minimum. He (ibid., 156) argues that there are additional obstacles to freedom that affect "state capability," defined as the substantive freedom of peoples

and extent of their actions. Such obstacles include resources, civil society, and the global economy (ibid., 128). Williams sees Rawls's position as open to incorporating a multi-level analysis that conceptualizes a more robust duty of assistance to build state capability (ibid., 154). Such incorporation would help elaborate Rawls's duty of assistance, though it is questionable whether he would accept such proposals. His overwhelming emphasis on political culture and domestic institutions, rejection of the application of capabilities to peoples (Rawls 1999, 13), and skepticism regarding international aid all suggest that he would not. Williams recognizes this, noting: "[T]he extent to which we can attribute this view to Rawls . . . is a question of interpretation. . . . I would submit that this approach to burdened societies is in the spirit of his work" (ibid., 156). Rawls and Williams, however, both focus too narrowly on states, a point that will be later revisited.

Paul Collier presents (2007, 5) another explanatory theory: LDCs are stuck in poverty because they face one or a combination of four traps—the natural resources trap, the conflict trap, the trap of being landlocked with bad neighbours, and the trap of being a small country with bad governance. This theory is the most likely explanation for the persistence of low, stagnant, or negative growth in LDCs. Crucially, it goes beyond simplistic mono-causal explanations and recognizes that contextual differences, the role of external state and non-state actors, and the international economic structure may affect the quality of governance, policies, and institutions. Collier's (2007, 201) broad policy prescriptions are to promote good governance, harness natural resources for equitable benefit, reform internal and external economic and trade policies, provide effective development aid, and implement international laws and charters that promote transparency and accountability. These policies tackle the realities facing LDCs.

It is also necessary to consider aid effectiveness to determine whether or not Rawls is justified in minimizing the role of international aid. While macro studies of the impact of aid on growth are fiercely debated, evaluations of micro aid projects have yielded more positive results. Paul Mosley (1986, 22) coined the term "micro-macro paradox" to highlight the observation that micro or project evaluations tend to show that aid has a positive impact, which is not or cannot be confirmed by macro studies. Accordingly, some policymakers only support aid that funds, for instance, vaccination campaigns, cash transfers for school attendance, and investments in infrastructure. However, the problem of aggregation—positive results from micro aid projects often do not add up to macroeconomic growth and may not be replicable in other contexts—indicates that micro projects cannot be the sole focus. Scholars are split on whether aid boosts growth and it is evident that "every aid effort is a calculated risk or . . . experiment" (Roodman 2007, 3), but there is a general (not universal) consensus in the development community that policies matter for aid effectiveness (see, for example, Burnside and Dollar 2000; Collier and Dollar 2004). Aid may lead to growth in recipient countries with good fiscal, monetary, and trade policies, including sound budget management, low debt levels, low levels of inflation, a relatively open economy, and secure property

rights and enforceable contracts (ibid.). Recognizing this, Collier (1997, 64) advises donors to adopt a policy of selectivity or ex-post conditionality in the allocation of aid to recipient countries, whereby governments are rewarded with aid if they pursue good policies.

Rawls's duty of assistance sees little to no role for international aid, not even on a selective basis. Although it may be argued, in the spirit of Rawls, that conditionality erodes sovereignty and therefore undermines burdened societies, this can only be accepted to a certain extent. Donors are accountable to their citizens for how and where they provide aid and it is reasonable to expect that aid is facilitating growth and consequently alleviating poverty. While the intrusion on sovereignty should be minimized, certain conditions for aid-especially those related to a select group of indisputably sound economic policies-may be necessary. In cases where there is progress in a recipient country though macroeconomic "slippage" on some conditions, perhaps due to a shock to the economy, the aid framework should be flexible enough so that donors refrain from cutting off aid, an action which might jeopardize reforms that have already been implemented (Leandro, Schafer, and Frontini 1999, 289). Furthermore, donor conditionality, if used, should align with the recipient-led long-term poverty reduction plan. Taken together, sound political and economic policies, just or decent institutions, and good governance should provide fertile conditions for sustained economic growth. To address the additional goals of growth with equity, social progress, and sustainable development and challenges such as multidimensional poverty and the four traps into which an LDC may fall, international aid needs to go beyond Rawls's duty of assistance and Williams's elaboration. To address these goals and challenges, this article examines Rawls's human rights requirements before turning to capability ethics.

The duty of assistance and human rights

In The Law of Peoples, well-ordered peoples agree to honour basic human rights, which include the right to life (i.e., to the means of subsistence and security), to liberty (i.e., to freedom from slavery, serfdom, and forced occupation, and to a sufficient-not necessarily equal-measure of liberty of conscience to ensure freedom of religion and thought), and to personal property (Rawls 1999, 65). Rawls's "special class of urgent rights" ensures the security of ethnic groups from mass murder and genocide (ibid., 78–79). These rights are preconditions for becoming well-ordered and subsequently joining the Society of Peoples. His duty of assistance aims to secure human rights in burdened societies, including subsistence needs such as health care, food, clothing, shelter, and minimum economic security (ibid., 65). Importantly, Rawls (ibid., 80) refers to the Universal Declaration of Human Rights (UDHR), stating that his group of rights includes Articles 3 to 18 (although it cannot fully include Article 7, which covers equality before the law); all other rights in the UDHR are discounted as "liberal aspirations" or rights that presuppose certain institutions. Notably, he omits certain civil and political rights such

as the right to democracy in the institutional and deliberative sense, ¹⁶ the right to full equality under the law (since unequal liberty is permitted), freedom of speech and expression, and freedom of assembly. All societies that ensure at minimum associationist or hierarchical forms of governmental consultations, he judges, are to be tolerated and accepted as members in the Society of Peoples. In addition, Rawls excludes many economic and social rights such as the right to social security (UDHR Article 22), the free choice of employment and the right to equal pay for equal work (Article 23), and the right to education (Article 26). He concedes that his list of rights is relatively limited. In a footnote, Rawls (ibid., 75) acknowledges the argument that "full democratic and liberal rights are necessary to prevent violations of human rights . . . , an empirical fact supported by historical experience," but since he views decent peoples in a conceptual way, he narrows his concern to whether or not liberal peoples should tolerate these non-liberal peoples politically and accept them in the Society of Peoples.

Rawls's commitment to a limited selection of human rights is related to his notion of a "realistic utopia"—he understands that a Law of Peoples must "depict an achievable social world" (ibid., 6). His realistic utopia is characterized by reasonable pluralism and self-determination for each people, both requiring a liberal toleration and an absence of paternalism, hence Rawls concludes that the protection of "urgent rights" makes his Law of Peoples sufficiently liberal (ibid., 79). To this end, the principles underlying international relations must achieve an overlapping consensus of liberal and non-liberal peoples. In addition, Rawls (ibid., 68) asserts that the agreement to honour human rights derives not from any particular comprehensive moral, religious, or philosophical doctrine, but rather from peoples' recognition that the fulfillment of these rights is a necessary condition of any domestic system of social co-operation. He (ibid.) makes this important distinction in an attempt to safeguard against viewing human rights as liberal or democratic, or a Western political tradition biased against other cultures. If decent peoples saw human rights in that light, Rawls believes that his principles of justice would not achieve an overlapping consensus. Furthermore, the limited list of human rights is a result of these rights' specific role in the Law of Peoples: they serve to narrow and restrict justifications for war and to specify limits to a regime's internal autonomy (ibid., 79). Thus, these rights hold political (and moral) force for all peoples; if an outlaw state violates them, condemnation and, in grave cases, forceful sanctions and intervention are justified (ibid., 81).

To his credit, Rawls recognizes the need for the international community to take moral responsibility for ensuring the fulfillment of human rights in all societies. Erin Kelly (2004, 177) argues further that human rights must be conceived narrowly if they are to play their required role in the Law of Peoples. She extends Rawls's theory by committing countries to a broader set of foreign policy imperatives, including prohibitions on engagement (e.g., profiting in relations with regimes that violate human rights), support of international efforts and provision of reparations in cases where countries are directly implicated in human rights violations, and duties for wealthier states

to offer aid in a variety of forms to poor states, if doing so will further the cause of human rights (ibid., 177–80). Kelly elaborates Rawls's duty of assistance in a helpful way, yet she adheres to a limited list of human rights because of the "normative requirement of joint acceptability" (ibid., 179). In effect, this echoes Rawls's valuable insights on the need for reasonable pluralism and on the importance of self-determination. However, it is not necessary to proceed so timidly with a limited list of rights.

Rawls's and Kelly's starting point needs to be recast: a liberal foreign policy should not be encumbered by what non-liberal, decent peoples would accept in a social contract. Policy-makers may go beyond such a limited selection of human rights. There is sufficient space to safeguard reasonable pluralism and respect self-determination while striving to make all human rights universal,¹⁷ indivisible,¹⁸ and interdependent.¹⁹ For instance, liberal and non-liberal peoples may disagree on whether full democratic, economic, and social rights are universal; however, liberal peoples can still tolerate non-liberal peoples' principles (but not those of outlaw states) and actively encourage all human rights, without intervention or resorting to sanctions. Rawls (1999, 82–83) views this as amounting to a foreign policy that aims to impose on all societies the liberal rights of citizens in liberal constitutional democracies in order to gradually liberalize non-liberal peoples. Granted, but why would this be wrong if the rights are grounded in basic shared interests such as human dignity (Buchanan 2006, 159)? For Rawls, this kind of moral conception of human nature is incompatible with his political conception of justice because, as noted, human rights in the Law of Peoples are grounded in social co-operation, not in comprehensive doctrines, which are precluded in the social contract. But this is an inadequate approach toward international justice, and an alternative grounding for human rights-in individuals' capabilities to do what they value—will be discussed. When rights are agreed upon as inherent to basic human needs and aspirations, the debate moves beyond whether human rights are "liberal aspirations" or just "rights talk." Agreement on various human rights declarations and covenants has been achieved—of course with some reservations—proving that peoples may strive toward a more ambitious "realistic utopia."

Whether or not all human rights can be enshrined in law is not the most important issue. They should be used as normative claims that give rise to state obligations. Human rights should serve as strong moral claims for spearheading legislation and increasing public attention toward individuals subject to violations of their rights (Sen 2009, 364–65). If states do not protect and enforce these rights, they should be persuaded—and in the worst cases coerced—by the international community to live up to their obligations. On this point, Nussbaum (2006) makes an important distinction between the justification and the implementation of norms. *The Law of Peoples* treats the question of whether or not a people is worthy of toleration in the Society of Peoples (based on whether it implements relevant norms and human rights standards) as equivalent to whether or not the international community should intervene, either militarily or with economic or political sanctions.

However, the international community may simultaneously promote a wider set of aspirational human rights, make justified criticisms of peoples who are not adhering to their obligations, and refrain from intervening militarily or imposing sanctions. In such instances, the international community could use other means to seek compliance such as persuasion through public campaigns, diplomatic exchanges, international covenants, and targeted aid (ibid., 256-59). For example, Nussbaum (ibid., 256) highlights international campaigns against the use of the death penalty in the United States. Furthermore, intervention is not always the best option and there may be prudential arguments against it in even the gravest cases (ibid., 259). For instance, in consideration of the genocide and mass rapes in Gujarat, India, in March 2002, Nussbaum (ibid., 259) judges that intervention would have likely created more problems than it would have solved and that there were adequate domestic democratic accountability processes in place, hence the international community was right not to intervene. States can evidently justify a wider set of human rights as applicable to each people and implement that set in a variety of ways, without resorting to intervention in a people's affairs.

In addition to the shortcomings of Rawls's duty of assistance and human rights requirements, the Rawlsian social contract approach contains irreconcilable procedural problems. Nussbaum (2006, 250) indicates that Rawls's international social contract excludes burdened societies, which therefore have no say in setting the political and economic rules of the game and take existing rules as given. This cannot be considered a just state of global affairs because it undermines the Rawlsian notions of "equal peoples" and "justice as fairness," or the notion that if the process is fair, the outcome will be just. The Law of Peoples cannot answer a crucial question about Rawls's process: how can justice for LDCs be derived if they are excluded from the process? It is unfair to exclude burdened societies from the social contract, but a dilemma exists: since those societies may not be symmetrically situated or able to represent themselves fairly, they may not have the political power and capacity to enter into a binding agreement. For that reason, a contract for mutual advantage cannot include them as equal participants (ibid.). What is needed is a complete redesign of the system of global justice to fairly and fully include LDCs. This would require a significant departure from Rawls's Society of Peoples and a different account of the purposes of social co-operation, mutual advantage, and reciprocity and of a realistic utopia (ibid.). The international community thus stands at a frontier of justice that the Rawlsian approach cannot cross.

Rawls's exclusion of burdened societies from the social contract is similar to the reality of decision making within the current global political and economic architecture. The International Monetary Fund, World Bank, World Trade Organization (WTO), Group of Eight, and United Nations Security Council have traditionally been dominated by developed countries, though recently there have been certain moderate reforms.²⁰ As Thomas Pogge (2004, 278–79) argues, considering that developed countries set the rules to their advantage,

their dominance of the international order gives them a moral (negative) duty to reduce the harm caused to developing countries and not to take advantage of injustice at the expense of the poor. He suggests that developed countries reform the inequitable international structure to better favour developing countries. The Rawlsian insight on burden sharing is important to keep in mind, however, if not for purely practical reasons. Wealthier countries that make larger contributions to international organizations and confederations can reasonably expect to receive greater returns and have more input into operations and resource allocation (Rawls 1999, 115). In the world as is, there is room to preserve this situation while giving poorer countries a greater say in matters that affect their development. From another angle, the Rawlsian approach focuses too narrowly on states and, to a lesser extent, multilateral organizations. Onora O'Neill (2005, 246) argues that policy-makers need to recognize and engage non-state actors that also play an important role in providing economic justice. A more equitable global order would see both Pogge's and O'Neill's suggestions implemented. Firstly, developed countries would include developing countries in global economic governance forums (e.g., the Group of Twenty and the Bretton Woods institutions) and offer them preferential terms in the WTO and in regional and bilateral trade negotiations. Secondly, the full range of state and non-state actors—including civil society, non-governmental organizations (NGOs), entrepreneurs, multinational corporations, religious and charitable groups, academia, research centres, and the media-in developed and developing countries would help the bottom billion overcome multidimensional poverty and the four traps.

Capabilities without Borders

Given the shortcomings of Rawls's duty of assistance, human rights requirements, and social contract approach, policy-makers require an alternative ethical approach. The capabilities approach, as developed on different tracks by Nussbaum and Sen, provides an ethical basis for achieving global justice. Before moving on, it is important to make clear two first principles that underpin the arguments that follow. One is the Kantian notion that all moral agents are equally free to determine their own ends and all moral agents are ends in themselves. The other is that, assuming fundamental human nature involves motivations of gratitude and reciprocity and consideration of loved ones and those in closer proximity first, a reasoned approach to global justice values impartial notions of need, rather than familiarity or moral desert (Singer 2005). The location of the needy is irrelevant—if one can help, one ought to do so (even if one does not) (ibid., 28). These principles are sufficient in scope and can replace Rawls's starting point, the original position. In contrast to the Rawlsian framework, it seems reasonable to draw upon these principles if they are grounded in basic human interests and if doing so achieves just outcomes.

The capabilities approach better addresses the needs of LDCs than Rawls's duty of assistance and his use of primary goods. The capabilities approach aims to expand the freedoms of each individual and has human development as its primary objective. "Capability" is a power to do or to have something, rather than the actual "doing" or "having." Sen is concerned with those capabilities that individuals would have reason to value while Nussbaum considers those necessary to achieve a life worthy of human dignity. An important distinction between Rawlsian and capability theorists relates to the metric of justice and the distinction between means and ends for inequality. According to Sen (1980), the appropriate metric of justice can be determined by asking: "Equality of what?" In The Idea of Justice, he distinguishes "utility-based" or "resource-based" approaches focused on inequalities of primary goods from the "freedom-based" approach focused on inequalities of capabilities. Rawls (2001, 58-59) remedies inequalities within a society through the use of primary goods, chief among which are the "all-purpose means" of wealth and income.²¹ Aside from his limited duty of assistance, Rawls does not endorse a redistribution principle in his international theory. While she also does not endorse a specific redistribution principle, Nussbaum (2006, 74, 316) argues that prosperous countries have a responsibility to provide a substantial portion of their gross domestic product to poorer countries in order to realize capabilities that are necessary for a life worthy of human dignity. She (ibid., 17) suggests a figure of 2 per cent of gross domestic product, acknowledging that it is arbitrary and debatable but maintaining that the principle is not. Space constraints preclude an analysis of Nussbaum's open-ended list of capabilities,²² but they are generally accepted in this article because they capture the core elements of human development. Rawls's narrow list of human rights and preference for primary goods, on the other hand, do not.

The most effective way for policy-makers to measure progress toward goals for LDCs, such as growth with equity, social progress, and sustainable development, is to utilize the capabilities lens. As recognized by the UNDP in its human development concept,23 income alone is an incomplete and crude measure of an individual's well-being. Moreover, primary goods have difficulty addressing the problem of interpersonal variation, the fact that conversion of primary goods into freedom differs from individual to individual. For example, a disabled person with the same level of income as a non-disabled person may not possess a similar level of freedom. The UNDP uses income, health, and educational indicators. However, to fully represent an individual's well-being in terms of freedom, policy-makers should look at the capabilities available to various individuals. A final reason why capabilities are a more useful metric than primary goods is the distinction between means and ends highlighted by Sen in *The Idea of Justice* and *Development as Freedom*. Primary goods are an indirect means toward other things, perhaps increasing an individual's freedom, while capabilities directly impact an individual's

freedom, his or her actual opportunities for living well. For these reasons, policy-makers should focus on capabilities rather than primary goods.

This new focus can result in more effective policies. In contrast to Rawls's focus on states (or peoples), individuals deserve greater attention, and the maximization of capabilities, or "substantive freedoms," should be seen as both the means and ends of development (Sen 2000, 3). By focusing on individuals' capabilities, policy-makers can better recognize that poverty is multi-faceted and that the poor face overlapping deprivations. They can, in turn, better address multidimensional poverty. In the short term, the bottom billion care most about securing basic necessities such as food, clean water and sanitation, primary and secondary education, treatment for illnesses, and jobs. In the medium to long term, capabilities such as political control over one's environment may become a priority in order to ensure the preservation of self-determination. The UNDP's HDI is a useful tool to measure the various aspects of multidimensional poverty and compare countries' conditions. Policy-makers may use HDI data to identify similarly situated countries (in geographic, climatic, and historical terms), single out those with higher levels of human development, and then learn from those countries' policies. In 2010, the UNDP introduced the Multidimensional Poverty Index, which considers multiple deprivations and their overlap. Additional instruments introduced by the UNDP that year include the inequality-adjusted HDI, a measure of the level of human development that accounts for inequality, and the Gender Inequality Index, which measures disadvantages facing women and girls. These new indices go further in measuring the effects of policies on human development and are equally useful for the formation of country-specific policies.

The nexus between development, freedom, and human rights

If the focus of development should be maximizing capabilities and the main objective should be achieving equitable, sustainable economic growth alongside social progress, then what is the link between development, freedom, and human rights? Human rights are derived from normative notions of the freedom of the individual. In other words, human rights can be derived from capabilities since different capabilities allow an individual to strive toward different freedoms. For instance, from Nussbaum's capability of control over one's environment, the human rights of freedom of speech and freedom of assembly can be derived. From her capability of senses, imagination, and thought, the right to education can be derived. It is important to recognize, however, that although all human rights can be derived from capabilities, capabilities cannot always be translated into rights, nor would this be desirable. Considering Nussbaum's capability of affiliation, for example, it is not reasonable to obligate each individual to show concern for and engage with every other individual, but it is reasonable to protect the rights to freedom of assembly and freedom of expression.

The advancement of civil, political, economic, social, and cultural rights

in the second half of the 20th century has been fundamental in increasing the freedom of all individuals. The legal and normative underpinnings of individuals' different freedoms are found in the international human rights architecture, which includes the Charter of the United Nations, the UDHR, the International Covenant on Civil and Political Rights and its two optional protocols, and the International Covenant on Economic, Social and Cultural Rights and its optional protocol. Within these and other instruments there are various normative proclamations that the international community can use to increase individuals' freedom. For example, Article 25 of the UDHR states that "Everyone has the right to a standard of living adequate for health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or lack of livelihood in circumstances beyond his control" (UN 2012). Likewise, Article 26 affirms the right to free and compulsory elementary education and indicates that higher education should be made equally accessible to all on the basis of merit (ibid.). The crucial point is that human rights which improve individuals' capabilities should be promoted, though one must remain realistic about which rights official state actors may reasonably be expected to promote publicly. Moreover, for human rights to be enforceable, instruments like those mentioned above should be made binding through ratification. Liberal rights need not necessarily be forced by peoples upon other peoples. Peoples can promote a wider set of human rights and aim to have protections legislated and then enforced through monitoring bodies and courts. Such actions are a necessary check on state power and impunity and should ultimately improve individuals' capabilities. A liberal foreign policy should be confident and have purpose—the promotion of fundamental human rights and the advancement of human development are causes that are worthy of effort. In this conception, Rawls's "urgent" human rights are supplemented with the promotion of a wider set of rights that create opportunities—and hence improve capabilities and the freely determined development of all individuals.

How far should governments and other actors go in improving the capabilities of the bottom billion? Nussbaum (2006, 293–94) argues that to construct a minimally just world the international community should secure her 10 central capabilities up to an appropriate threshold level for all of the world's peoples. Thresholds, she says, are different for different capabilities. First of all, political, religious, and civil liberties should be secured equally for all individuals. For capabilities related to property and instrumental goods, "what seems appropriate is enough." For capabilities linked to the idea of equal human dignity such as primary and secondary education and access to basic health care, the international community should "aggressively pursue equality between nations." These threshold targets are practicable. Policymakers can use them as a starting point and then consider the maximization of all capabilities as the end goal (Sen 2009, 232–33). Furthermore, what should be the role of international aid? Aid can kick-start development and help to provide the conditions for sustained economic growth, but it is not a

panacea, as evidenced by the Sachs/Easterly/Collier debate. Aid is one part of a poverty reduction strategy and it is critical to find ways to make aid more effective. Aid effectiveness can be increased by providing aid through various channels depending on whether a people is well-ordered or not (Radelet 2004) and whether aid modalities match a country's needs. Rawls's duty of assistance, with little to no role for aid, removes an important financing option for LDCs, especially in cases where peoples are well-ordered but stuck in one of the four aforementioned traps. The construction of a global ethics based on the capabilities approach and the promotion of a wide set of human rights is the best way to increase the freedom of the bottom billion and facilitate development. A holistic human development approach should be complemented by moral and legal justification found in human rights treaties and instruments. To achieve global justice for the bottom billion, policies should be informed by a novel "capabilities-plus" approach.

Toward a "Capabilities-Plus" Approach: Human Development, Human Rights, and Human Security

A "capabilities-plus" approach supports the concurrent advancement of human development, human rights, and human security and encourages policy-makers to conduct policy with the maximization of Nussbaum's central capabilities and the promotion of freedoms as end goals. It is morally justifiable and strongly protects and empowers individuals in LDCs, in turn facilitating equitable, sustainable economic growth alongside social progress. The approach's human security component is critical because it proposes a paradigm shift from a focus on state security to a focus on individual security; it complements, not replaces, traditional notions of state security.²⁴ In its 2003 report Human Security Now, the independent Commission on Human Security (CHS), on which Sen was a co-chair, defines human security as the protection of "the vital core of all human lives in ways that enhance human freedoms and human fulfillment" (CHS 2003, 4). Like capability ethics, the human security paradigm aims to protect fundamental freedoms by promoting human rights and ensuring good governance and access to basic services (ibid.). Its added value is its enlarged focus on protecting individuals from all severe and pervasive threats and situations including "downside risks" such as external shocks (ibid.). Examples of shocks include natural disasters, regional and global financial crises, commodity price changes, political and civil unrest, and assassinations. The CHS report explores several conflictrelated aspects of human security, including violence, refugees and internally displaced persons, and post-conflict situations, and several poverty-related aspects such as economic insecurity, ill health, and lack of education. It is important to recognize that these aspects are often two sides of the same coin: conflict perpetuates poverty and poverty sows the seeds of conflict. Outlaw states and burdened societies may be one and the same, and suffer from both conflict and poverty. Examples include failing or failed states such as Afghanistan, Côte d'Ivoire, the DRC, Myanmar, North Korea, Sudan, and

Yemen. It is the bottom billion who feel the greatest impact of downside risks and are most prone to external shocks because of weak state capacity, relatively high internal and external risk factors for instability, and relatively weak external stabilizing factors.25

Policy-makers should complement human development and human rights policies that expand individuals' freedoms with a focus on human security. The CHS (ibid., 130-43) proposes a framework to take action on the protection and empowerment of all individuals. To protect individuals, policy-makers must focus on the development or reform of norms, processes, and institutions needed to build state capacity and increase resilience. Based on the preceding arguments, this could roughly be categorized as a moral negative duty for developed countries to reform the international economic architecture so as not to harm the poorest living in LDCs and a moral positive duty for all countries to assist the bottom billion and help LDCs develop just institutions, adopt good policies, and practice good governance. To empower individuals, the CHS says, policy-makers should enhance human capabilities and enable individuals to make their own informed choices. Based on prior arguments, this may roughly be categorized as a moral positive duty for developed countries and relevant non-state actors to address the challenges related to the four traps facing LDCs, and for LDCs to develop just institutions, adopt good policies, and practice good governance.

In practice, the protection and empowerment of individuals has yielded notable results. For instance, the United Nations Trust Fund for Human Security plays an important role in coordinating and channelling financial resources to field-based human security projects. An example is its support for a community empowerment and peace-building project in the Ituri region of the DRC that combines the efforts of various United Nations agencies (the UNDP, Food and Agriculture Organization, United Nations Children's Fund, United Nations Population Fund, United Nations High Commissioner for Refugees, and World Food Programme), the United Nations Organization Mission in the Democratic Republic of the Congo, and the World Health Organization. Their efforts are alongside those of the provincial government and local, national, and international NGOs. The project places communities at the centre of post-conflict recovery and addresses the full range of insecurities faced by individuals (UNGA 2010, 16). The project has an integrated and holistic approach to meeting basic human needs in the region. Specifically, it is strengthening public safety, improving health and education, supporting economic recovery, and promoting a culture of peaceful coexistence between diverse groups (ibid.). As to its impact on individuals' lives, "efforts provide opportunities to decrease inequalities, strengthen social networks and improve State-society relations, all of which are required to produce the peace dividend needed to bolster confidence in consolidating peace and transitioning to sustainable development" (ibid.). International participation in such projects must ensure equal respect for internal processes and indigenous-led development in order to preserve self-determination.

Achieving global justice requires the protection and empowerment of

all individuals offered by a "capabilities-plus" approach, which recognizes that every individual matters equally. Rawls's Law of Peoples cannot support such an approach because his duty of assistance calls for the termination of international assistance for burdened societies once peoples become wellordered. Although he supports the humanitarian protection of individuals from downside risks such as famine, Rawls does not advocate striving toward a wide range of civil, political, economic, social, and cultural rights. This is inadequate in attempts to address multidimensional poverty and the four traps that LDCs may fall into. The bottom billion—the poorest and most vulnerable—require remedies prescribed by a "capabilities-plus approach" that has a focus on human security at its core. Crucially, the approach retains the Rawlsian emphasis on the development of institutions and state capacity building, which are necessary to protect individuals to an extent, but prioritizes the protection of individuals from shocks, conflict, and poverty and the empowerment of individuals through human development and promotion of a wide set of human rights.

Policy Recommendations

- 1. The goal of the duty of assistance should be to maximize the capabilities of the bottom billion
- Utilize the ethical lens of a "capabilities-plus" approach—the concurrent advancement of human development, human rights, and human security
- Channel a greater share of resources to human security projects
 that align with LDCs' domestically-led poverty reduction plans
 and include, where appropriate, United Nations agencies,
 multiple donors, NGOs, and local governments, communities, and
 entrepreneurs in LDCs; consider using the United Nations Trust Fund
 for Human Security as a central coordinator
- Allocate the majority of international assistance to LDCs
- Provide aid to governments that adopt good economic policies and practice good governance
- Provide aid in the form of general and sector budget support and/or technical co-operation to LDCs with just institutions
- Focus on specific projects and interventions in badly governed LDCs and channel aid through NGOs
- Use discretion in cases where peoples are not well-ordered
- Ensure that aid effectiveness is a key consideration in choosing modality
- Provide advice on sound monetary, fiscal, trade, and macroeconomic policies to ensure aid effectiveness
- Assist LDCs in trade capacity building and trade facilitation
- Encourage regional and global economic integration if it is for LDCs' benefit

- 2. The international economic architecture should reflect an equality of peoples
- Include LDCs in decision-making processes that affect their development
- Provide trade preferences for LDCs through the World Trade Organization
- Initiate or encourage preferential bilateral and regional trade negotiations in areas that LDCs have existing or potential comparative advantage

Notes

- 1. An alternative to gross domestic product, the HDI captures progress in three basic capabilities: to live a long and healthy life, to be educated and knowledgeable, and to enjoy a decent standard of living (see UNDP 2012b).
- 2. Arguably, the strongest contemporary political conception of justice within a liberal democratic society is John Rawls's *A Theory of Justice* (1971). The conception was refined in *Political Liberalism* (1993). His final statement on the subject is *Justice as Fairness: A Restatement* (2001).
- 3. In *The Law of Peoples*, Rawls uses the term "peoples" and not states or nations because he recognizes their political and cultural nature and assigns to them a certain moral character. He understands that peoples are reasonable, rational, and decent. They are not, as per the traditional conceptualization of states, solely guided by rational self-interest (in the pursuit of war and economic dealings, for example) and they respect limitations to sovereignty (for instance, in cases of human rights violations and crimes against humanity). Each "people" consists of representatives of a single society in the Society of Peoples. For more on the difference between peoples and states, see Rawls (1999, 23–30).
- 4. Rawls aims to develop a reasonably just foreign policy for a liberal society, though the principles are also intended to govern relations between peoples in the Society of Peoples.
- 5. For instance, they know that they are liberal or not liberal and that they have a resource base sufficient for them to be well-ordered, but they do not know the size of their territory or population, or their strength and level of economic development relative to other well-ordered societies (Rawls 1999, 32–33).
- 6. Rawls (1999, 59–60) defines a decent people as one whose "basic institutions meet certain specified conditions of political right and justice and lead its people to honor a reasonable and just law for the Society of Peoples." Liberal peoples are to tolerate and accept non-liberal, decent peoples in the Society of Peoples.
- 7. Burdened societies are those that, while "not expansive or aggressive, lack the political and cultural conditions, the human capital and know-how, and, often, the material and technological resources needed to be well-ordered" (Rawls 1999, 106).
- 8. Rawls (1999, 109–10) mentions reducing gender inequalities and reforming a people's population policies through domestic action, but this is not a requirement of the human rights principle of the Law of Peoples.
- 9. Rawls's demand for international distributive justice is less egalitarian than his difference principle in the domestic case. In *Justice as Fairness: A Restatement*, Rawls's second principle of justice, the difference principle, reads: "Social and economic inequalities are to satisfy two conditions: first, they are to be attached to offices and positions open to all under conditions of fair equality of opportunity; and second, they are to be to the greatest benefit of the least-advantaged members of society" (Rawls 2001, 42–43).

- 10. The limitations have inspired cosmopolitan theorists to attempt to improve Rawls's duty of assistance. Other scholars view justice as first being owed to a national community. Rawls (1999, 115–20) replies to Charles Beitz and Thomas Pogge in *The Law of Peoples*. Given the need for a "realistic utopia," it is reasonable to accept Rawls's argument that there is reason to question the practicality and necessity of such far-reaching schemes without targets such as global difference and resource distribution principles (Beitz 1975; 1979) or a global resource dividend (Pogge 1994; 2008).
- 11. For more information on these goals, see UNDP (2012a).
- 12. The "financing gap" is the difference between (low) domestic savings and (even lower) domestic investment in a developing country. Foreign aid can help in the accumulation of physical and human capital, which can spur economic growth.
- 13. Variations of the financing gap model are used by international financial institutions, regional development banks, and most aid agencies to calculate the investment necessary to achieve a desired growth rate.
- 14. Moyo (2009, 48–49) argues that aid itself is the cause of poverty and corruption because it has instilled a culture of dependency in LDCs and leads to "unlimited opportunities for personal wealth accumulation and self-aggrandizement." Aid itself is almost surely not the cause. Rather, the cause of poverty and corruption is most likely aid that is provided either to already corrupt governments or to governments lacking just institutions and adequate accountability mechanisms needed to prevent corruption.
- 15. Moyo (2009) seeks alternative ways to finance investment in LDCs, such as placing emphasis on the private sector, foreign direct investment, government bonds, trade liberalization, and banking solutions (microfinance and remittances). However, whether or not the first three options would be viable depends heavily on the trust in LDC governments to honour and enforce contracts and property rights and to provide stable regulatory environments and policies conducive to high returns. LDCs secure such trust in rare cases.
- 16. In the narrow institutional sense, democracy is tantamount to elections and public balloting. In the broader deliberative sense, democracy is seen as "government by discussion" and an exercise of public reason; that is, it is inclusive of political participation, dialogue, and public interaction. See Sen (2009, 324–27, 345–48) for more on this distinction and the relationship between democracy and development.
- 17. The universality of human rights acknowledges that human rights apply to all human beings independent of specific cultural, historical, or other backgrounds.
- 18. The indivisibility of human rights refers to the claim that human rights from different classes (and even within classes) cannot be separated because all human rights are of equal importance.
- 19. The interdependency of human rights affirms that the realization (or the violation) of one human right is affected by the realization or violation of others.

 20. Recent reforms include the emergence of the Group of Twenty in 2008 and efforts to make the international financial institutions more inclusive and

thereby more legitimate.

- 21. Rawls (2001, 58–59) describes five categories of primary goods: basic rights and liberties, freedom of movement and free choice of occupation against a background of diverse opportunities, powers and prerogatives of offices and positions of authority and responsibility, income and wealth, and the social bases of self-respect.
- 22. Nussbaum's 10 central capabilities are: life; bodily health; bodily integrity; senses, imagination, and thought; emotions; practical reason; affiliation; other species; play; and control over one's environment (political and material). See Nussbaum (2006) for elaboration.
- 23. See UNDP (2012a) for more information.
- 24. The CHS (2003) recognizes that human security differs from state security in four ways: its concern is the individual and the community rather than the state, it includes "menaces" (threats or conditions) to people's security that have not always been classified as threats to state security, its range of actors is expanded beyond the state, and it prioritizes both protecting people and empowering them to fend for themselves.
- 25. For more information, see Prime Minister's Strategy Unit (2005).

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References

- Beitz, Charles R. 1975. "Justice and International Relations." *Philosophy and Public Affairs* 4 (4): 360–89.
- ———. 1979. *Political Theory and International Relations*. Princeton: Princeton University Press.
- Buchanan, Allen. 2006. "Taking the Human out of Human Rights." In *Rawls's Law of Peoples: A Realistic Utopia?*, edited by Rex Martin and David A. Reidy, 150–67. Williston, VT: Wiley-Blackwell.
- Burnside, Craig, and David Dollar. 2000. "Aid Policies, and Growth." American Economic Review 90 (4): 847–68.
- CHS (Commission on Human Security). 2003. *Human Security Now*. New York: Commission on Human Security.
- Collier, Paul. 1997. "The Failure of Conditionality." In *Perspectives on Aid and Development*, edited by Catherine Gwyn and Joan M. Nelson. Washington, DC: Overseas Development Council.
- ———. 2007. The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It. New York: Oxford University Press.
- ———. 2011. Catching Up: What LDCs Can Do, and How Others Can Help. London: Commonwealth Secretariat.

- Collier, Paul, and David Dollar. 2004. "Development Effectiveness: What Have We Learnt?" *The Economic Journal* 114 (496): F244–71.
- Easterly, William. 1999. "The Ghost of the Financing Gap: Testing the Growth Model Used in International Financial Institutions." *Journal of Development Economics* 60 (2): 423–38.
- ———. 2006a. The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done So Much Ill and So Little Good. New York: Penguin Press.
- ——. 2006b. "Planners versus Searchers in Foreign Aid." *Asian Development Review* 23 (2): 1–35.
- Kelly, Erin. 2004. "Human Rights as Foreign Policy Imperatives." In *The Ethics of Assistance: Morality and the Distant Needy*, edited by Deen K. Chatterjee, 177–92. Cambridge: Cambridge University Press.
- Leandro, José E., Hartwig Schafer, and Gaspar Frontini. 1999. "Towards a More Effective Conditionality: An Operational Framework." World Development 27 (2): 285–99.
- Mosley, Paul. 1986. "Aid Effectiveness: The Micro-Macro Paradox." *Institute of Development Studies Bulletin* 17 (2): 214–25.
- Moyo, Dambisa. 2009. *Dead Aid: Why Aid Is Not Working and How There Is a Better Way for Africa*. New York: Farrar, Straus and Giroux.
- Nussbaum, Martha C. 2006. Frontiers of Justice: Disabilities, Nationalities, Species Membership. Cambridge, MA: Harvard University Press.
- O'Neill, Onora. 2004. "Global Justice: Whose Obligations?" In *The Ethics of Assistance: Morality and the Distant Needy*, edited by Deen K. Chatterjee, 242–59. Cambridge: Cambridge University Press.
- Pogge, Thomas. 1994. "An Egalitarian Law of Peoples." *Philosophy and Public Affairs* 23 (3): 195–224.
- — . 2004. "Assisting the Global Poor." In *The Ethics of Assistance:* Morality and the Distant Needy, edited by Deen K. Chatterjee, 260–88.
 Cambridge: Cambridge University Press.
- ——. 2008. "Eradicating Systemic Poverty: Brief for a Global Resource Dividend." Chap. 8 in World Poverty and Human Rights. 2nd ed. Cambridge: Polity Press.
- Prime Minister's Strategy Unit. 2005. *Investing in Prevention: An International Strategy to Manage Risks of Instability and Improve Crisis Response*.

 London: Cabinet Office.
- Radelet, Steven. 2004. "Aid Effectiveness and the Millennium Development Goals." Working Paper No. 39, Centre for Global Development, Washington, DC.
- Rawls, John. 1993. "The Law of Peoples." Critical Inquiry 20 (1): 36–68.
- ———. 1999. The Law of Peoples: with "The Idea of Public Reason Revisited". Cambridge, MA: Harvard University Press.
- ———. 2001. *Justice as Fairness: A Restatement*. Edited by Erin Kelly. Cambridge, MA: Harvard University Press.
- Roodman, David. 2007. "Macro Aid Effectiveness Research: A Guide for the Perplexed." Working Paper No. 134, Center for Global Development, Washington, DC.

- Sachs, Jeffrey D. 2005. The End of Poverty: Economic Possibilities for Our Time. New York: Penguin Press.
- Sen, Amartya. 1980. "Equality of What?" Vol. 1 of *Tanner Lectures on Human Values*. Edited by Sterling McMurrin. Cambridge: Cambridge University Press.
- ———. 2000. *Development as Freedom*. New York: Anchor Books.
- ———. 2009. *The Idea of Justice*. Cambridge, MA: Harvard University Press.
- Singer, Peter. 2004. "Outsiders: Our Obligations to Those beyond Our Borders." In *The Ethics of Assistance: Morality and the Distant Needy*, edited by Deen K. Chatterjee, 11–32. Cambridge: Cambridge University Press.
- UN (United Nations). 2012. "The Universal Declaration of Human Rights." http://www.un.org/en/documents/udhr/.
- UNDP (United Nations Development Programme). 2010. *Human Development Report 2010; The Real Wealth of Nations: Pathways to Human Development*. New York: United Nations Development Programme.
- ———. 2012a. "About Human Development." Accessed June 4, 2012. http://hdr.undp.org/en/humandev.
- ——. 2012b. "Human Development Index." Accessed May 27, 2012. http:// hdr.undp.org/en/statistics/hdi.
- UNGA (United Nations General Assembly). 2010. "Human Security: Report of the Secretary-General." A/64/701. March 8.
- Williams, Huw Lloyd. 2011. On Rawls, Development and Global Justice: The Freedom of Peoples. Basingstoke: Palgrave Macmillan.

Indigenous Peoples' Struggles for Autonomy: The Case of the U'wa People

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Latin American indigenous peoples are demanding recognition of their collective rights to self-determination on their territories. Conflicts over the past two decades have centred on land and autonomy. Indigenous peoples' history and sense of identity are contained in their territories, which also ensure their economic viability as independent peoples. In the fight for their cultural survival, they are finding new means of asserting their collective rights in the face of threats posed by neoliberal globalization. This article explores the negative and positive effects that neoliberal globalization has had on indigenous peoples. The article applies Santos's sociology of absences and sociology of emergences to explain the emergence of indigenous peoples' social movements in Latin America. The U'wa people's struggle for autonomy in Colombia is used as a case study.

Introduction

"We are seeking an explanation for this 'progress' that goes against life. We are demanding that this kind of progress stop. That oil exploration in the heart of the Earth is halted, that the deliberate bleeding of the Earth stops."

-Statement of the U'wa people, August 1998 (Reinsborough 2002)

Indigenous groups around the world face increasing political, economic, and social discrimination from the dominant societies in which they live. No communities have been impacted more negatively by the current global economic system than the world's remaining 370 million indigenous peoples (Mander 2005, 3). Those in Latin America are among the most disadvantaged and discriminated communities in that region. As Latin American economies continue to grow, more natural resources are needed to fuel economic growth, which threatens these peoples' livelihoods since most of the region's remaining resources are found on these peoples' lands (ibid., 3). Indigenous peoples' territories contain their history and sense of identity and ensure their economic viability as independent peoples (Burger 1987, 14). For many groups, their territories, including everything on them and beneath them, have sacred value. For the U'wa people of Colombia, oil (ruiría) means the blood of Mother Earth and to extract it violates their most sacred beliefs

(Reinsborough 2002). For multinational corporations, oil is a commodity that generates lucrative profits. These epistemological differences have led indigenous groups to demand respect for their cultures through recognition of their collective rights to self-determination on their territories. To forcibly relocate these groups is to separate them from their histories. If such separation occurs, they "will either perish in body or . . . mind and [their] spirits will be altered so that [they] end up mimicking foreign ways" (Burger 1987, 4). Self-determination is necessary for them to ensure cultural survival. Notably, Latin American indigenous peoples are finding new ways of asserting their collective rights in the face of threats posed by neoliberal globalization.

This article explores the negative and positive effects that globalization has had on indigenous peoples in Latin America. It builds on the academic globalization literature and applies Boaventura de Sousa Santos's theories of the sociology of absences and sociology of emergences to explain the emergence of indigenous peoples' movements demanding autonomy. First, it assesses the effects of neoliberal globalization on Latin American indigenous peoples. It then explains the emergence of these peoples' movements. The case of the U'wa people is then presented. This article concludes with recommendations for how governments should approach their indigenous populations to address demands for autonomy and recognition of rights and traditional territories.

Globalization and Its Effects on Indigenous Peoples

There is little consensus among academics on globalization's contemporary effects because of differences in interpretations of globalization. According to Jan Aart Scholte (2000, 41), "debates on this subject are littered with all manner of definitions, chronologies, explanations and evaluations." Indeed, no definition of globalization can be completely unambiguous, objective, fixed, and final (ibid., 42). Moreover, the term may be misleading if taken literally because some of the processes that it purports to describe may not be new at all (Dirlik 2006). Scholte (2000, 41) argues that contemporary globalization can best be described as "deterritorialization," or as the growth of "supraterritorial relations" among people. This reconfiguration of time and space is unprecedented. The growing extensiveness and intensity of global interconnectedness is the result of the continued increase and speeding up of global interactions and processes. The evolution of worldwide transportation systems and information and communications technologies (ICTs) has increased the velocity of the diffusion of information, ideas, goods, people, and technological innovations. Although these changes have benefited many, they have had negative implications for others, such as indigenous peoples who rarely benefit from global processes or participate in global interactions.

In Latin America, the integration of global economic forces increased with the spread of neoliberal reforms during the 1980s and the implementation of the Washington Consensus throughout the 1990s. In the 1980s, indebted developing countries were offered loans by the International Monetary Fund

and the World Bank on the condition that they follow these institutions' Structural Adjustment Programs, which included neoliberal policies such as trade liberalization, financial deregulation, and privatization of public enterprises. In 1989, John Williamson listed 10 reforms that many policymakers in Washington thought were needed in Latin America at that time. This set of reforms, known as the Washington Consensus, included fiscal discipline, reordering public expenditure priorities, tax reform, liberalizing interest rates, a competitive exchange rate, trade liberalization, liberalizing foreign direct investment, privatization, deregulation, and provision of secure property rights (Williamson 2006). These reforms were intended to address the macroeconomic deficiencies and debt problems that many developing countries were facing. However, their results were not as planned. Paul Cooney (2006) indicates that during the last two decades, "the neoliberal model has dominated economic policies in Latin America and in general, has produced lower wages, an increase in unemployment and poverty for the majority of Latin Americans, as well as financial crises and depressions." The overall level of poverty in Latin America increased from 40.5 per cent in 1980 to 48.3 per cent in 1990, while in rural areas poverty levels increased from 59.9 per cent in 1980 to 65.4 per cent a decade later. The overall level of extreme poverty rose from 18.6 per cent in 1980 to 22.5 per cent in 1990 (ibid.).

During the 1980s and 1990s, Latin America experienced a period of globalization, which Cooney understands was in fact a period of neoliberal globalization. He (ibid.) describes neoliberal globalization as the "renovation of economic liberalism" in response to the global economic crisis of the late 1960s and early 1970s. It not only changed the structure of the international system but also the lives of people all over the world. Neoliberal globalization introduced "the privatization of public enterprises; the liberalization of trade and financial flows; the deregulation of product, capital and labor markets; and the downsizing of the state, particularly with regards to economic and social programming" (Veltmeyer 2005, 6). It cannot, however, be reduced to its economic aspect. It must be understood to include ecological, political, social, and cultural aspects as well. The growth and reach of these aspects is a consequence of the growing extensiveness and intensity of global interactions and processes, that is, a consequence of the deterritorialization of time and space, as Scholte has it.

Scholte (2000, 9) explains that supraterritorial relations between people have had negative consequences such as ecological degradation, persistent poverty, worsened working conditions, arbitrary inequalities, democratic deficits, and cultural destruction. Similarly, some observers see neoliberal globalization as responsible for the loss of cultural diversity and autonomy. Globalization being the development of a single global culture follows from the argument that since globalization began in the West, it mainly encourages the diffusion of Western ideas, values, lifestyles, technologies, and epistemologies. Proponents of this argument contend that globalization's epistemologies are informed by hegemonic Americentric and Eurocentric knowledge and ideologies that are naturalized and universalized (Seabrook 2004; Santos

2003). They also argue that Western knowledge discredits other knowledges by portraying them as incoherent and inefficient compared to the scientific method prominent in Western thinking. For Santos, this stigmatization of non-Western knowledges is the sociology of absences. He (ibid., 238) explains that the sociology of absences consists of an inquiry that aims to explain that which does not exist; things that cannot be proven through the application of the scientific method are considered to be non-existent or non-credible alternatives to what exists. An example is how the Western ideals of modernity and globalization deny the sophistication and rationality of indigenous worlds by categorizing bodies of indigenous knowledge as beliefs or superstitions based on myths (Blaser, Feit, and McRae 2008). Such categorization of non-Western knowledges further marginalizes indigenous peoples.

Neoliberal globalization also threatens to accelerate processes of recolonization in Latin America. Debates on globalization have rarely considered indigenous peoples' knowledges and experiences when discussing the nature of change and related experiences in a globalized world. Resources found on or beneath these peoples' territories are often appropriated without compensation or even consultation. Indigenous peoples' reluctance to sacrifice their traditional lands and cultures as governments and multinational corporations appropriate their territories and resources in the name of development projects from which they will not benefit exposes them to further oppression (Beauclerk and Narby with Townsend 1988, 6). As a result, when these peoples describe their experiences in a globalized world and conceptualize their understandings of globalization, they emphasize a continuation of the exercise of power and subjugation that extends over many centuries (Blaser, Feit, and McRae 2008). They talk about globalization with a sense of apathy, from a perspective of having seen the physical, psychological, and spiritual damage it has brought, and with fears that domination will continue undermining their cultures (ibid.). As such, globalization has encouraged the growth of loci of governance besides the state, the spread of forms of community other than the nation, and the development of knowledges besides modern rationality (Scholte 2000, 8). The Zapatista movement in the Mexican state of Chiapas since 1994 is an example. The Zapatistas do not seek to seize state power. Rather, they want to build a different, non-hierarchical world based on the rotation of representatives by emphasizing the importance of building communities from the bottom up (Zibechi 2010, 3).

The Emergence of Indigenous Peoples' Movements

Indigenous peoples' movements emerged according to what Santos (2003, 238) calls the sociology of emergences, which aims "to identify and enlarge the signs of possible future experiences" that are actively ignored by hegemonic knowledge and rationality. As the sociology of absences explains why indigenous peoples' experiences, knowledges, and realities have been largely non-existent in the past, the sociology of emergences illustrates how these experiences, knowledges, and realities are now emerging as counter-

hegemonic forces against Western knowledge and rationality. The rise of these peoples' movements is a response to the expansion of globalization's frontiers into their territories (Rodríguez-Garavito and Arenas 2005, 242). According to César Rodríguez-Garavito and Luis Carlos Arenas (ibid.), indigenous groups' struggles against global economic forces have been shaped by three related core demands: self-determination, land rights, and cultural survival. Their movements are repudiating the Westernized mapping of the world as a single economic entity and resisting the erasures of the past and assimilations of the present.

As the frontiers of globalization expand, indigenous peoples and their demands are becoming more visible. Anthony Giddens (2000, 31) argues that globalization is the reason for the revival of local cultural identities in different parts of the world. Instead of facilitating cultural assimilation, globalization is intensifying cultural attitudes and reinforcing differences. Indigenous peoples in Latin America are resisting global economic forces and demanding autonomy and recognition of their collective rights to self-determination on their territories. The peasant identity is losing its political traction and being gradually supplanted by political organization around indigenous identity (Jung 2008, 147). This is a result of governments' failed recolonization and assimilation policies. Indigenous peoples' resistance movements rest upon "the recapturing of their self-concepts and their cultural roots to re/create spaces of consciousness, possibility, and presence through the re/construction and mobilization of indigenous discourses, identities, and claims in a variety of social, legal and political arenas" (Feldman 2002, 34). The most prominent example of success is the new Bolivian constitution, which was approved in a constitutional referendum in 2009. It seeks to end the oppression of indigenous communities which has been going on for centuries. The constitution grants 36 previously marginalized groups rights to territory, language, and their own community justice systems and declares coca a part of the nation's heritage. Upon signing the new constitution, Bolivian President Evo Morales said: "This is the second independence, the true liberation of Bolivia" (Al Jazeera 2009).

Latin American indigenous peoples' movements have gained prominence because of globalization. The dependence of worldwide economic growth on a continuous resource supply causes natural resources to become scarcer. Exploration for new resources includes surveying unexplored and still-pristine lands, many of which belong to indigenous peoples. Consequently, indigenous peoples, governments, and multinational corporations are clashing in what Jerry Mander (2005, 4) alternatively calls "resource wars," "worldview wars," or "'paradigm wars' . . . deeply based in opposite understandings of how human beings should live on the earth." In Latin America, the globalization of the region's economies has provoked active resistance from peasant populations and indigenous communities who see their survival being threatened by the economic, political, and cultural effects of neoliberal globalization (Harris 2002, 142). For Roberto Perez, president of the U'wa governing council and de facto leader of the U'wa people, neoliberal policies introduced in the 1980s and 1990s were Western ways of thinking and

a politic of the government and multinational corporations that was imposed on the U'wa on their own territories. The resources that have been exploited have benefited a few groups that hold economic power (Cox 2002). Indigenous peoples in Latin America have emerged from their shared experiences of marginalization to combat the forces of neoliberal globalization (Niezen 2003, 9). Their movements are often vigorous and effective. The Zapatistas in Mexico, the Confederation of Indigenous Nationalities of Ecuador, and the Aymara in Bolivia are among the most active opponents of neoliberal reforms and their consequences (Korten 1995, 295).

These movements involve ongoing engagement strategies to create new relations with broader publics and institutions and new practices. Dorothy Hodgson (2002, 1040) argues that the formation of visible and effective movements has been facilitated by an array of transnational connections. Coalitions between indigenous peoples and non-governmental organizations (NGOs) have enabled the international promotion of indigenous peoples' demands for self-determination.1 At the same time, human rights, legal developments, and peace commissions have played a significant role in the consolidation of these peoples' rights. Notably, improvements in ICTs have allowed indigenous peoples to mobilize beyond the local level and build strong sub-national, national, regional, and international alliances with other indigenous and non-indigenous groups. Using ICTs, these peoples are establishing and maintaining international connections that strengthen their political voice locally, nationally, and internationally. Alliances are becoming increasingly important in achieving recognition of indigenous peoples' rights at both the national and international levels.

Until recently, most indigenous peoples had no legal protection against multinational corporations that enter their traditional territories to gain access to resources. Over the past two decades, international organizations, especially the United Nations (UN) and International Labour Organization (ILO), have become gradually more interested in protecting indigenous peoples' rights. One of the main outcomes of this interest was the inclusion of Article 14 in ILO Convention No. 169, which obligates signatory countries to recognize indigenous peoples' property rights (Silva 2011, 2). Colombia's indigenous peoples have been very successful in protesting against local governments and multinational corporations by utilizing Article 14 (Ulloa 2005, 47).

More and more, indigenous peoples are shifting their focus to the international arena, striving to be involved at the highest level possible. International law now accepts that these peoples enjoy collective rights to ownership and control of their territories, to exercise their customary laws, and to represent themselves through their own representative institutions. In this context, indigenous peoples' movements have become a form of empowerment that allows groups to freely establish relations with international agencies as equal, autonomous social agents that have control over their territories and resources (Ulloa 2003).

One of indigenous peoples' main demands is the preservation of their ability to make all decisions about their ancestral lands. Their goals are to defend their traditional territories and, in many cases, the historical beliefs and customs associated with their ways of living. They are effectively seeking to retain their autonomy. Autonomy refers to the capacity of individuals and groups to shape the conditions under which they live. Regarding groups, autonomy usually means something closer to the Greek roots *autos* (self) and *nomos* (law)—the capacity to give oneself laws (Blaser, Feit, and McRae 2008).

As indigenous peoples demand autonomy and respect for local forms of governance, they challenge the historical racist and stereotypical representation of the "Native" as backwards and primitive. These peoples' movements have embraced indigenous epistemologies when challenging Western ideals and beliefs (Yashar 1998, 23). The concerns of contemporary movements extend beyond the material concern for land as a productive resource. Land is central to the definition of self and crucial for the survival of indigenous identities. The potential and real loss of land affects indigenous peoples' autonomy and viability as well as their histories, cultures, and spiritual lives. When non-indigenous people assume that indigenous peoples' demands for land primarily reflect economic or political interests and secondarily reflect spiritual and emotional concerns, they fail to recognize the application of Western epistemologies that indigenous peoples' movements try to resist (Blaser, Feit, and McRae 2008). These movements are effectively resisting global economic forces by challenging Western epistemologies, demanding respect, and claiming autonomy over their lands and lives. Santos's sociology of emergences explains the emergence of indigenous peoples' movements as a counter-hegemonic force opposing neoliberal globalization. One thriving group is the U'wa, who for more than two decades have asserted their claims for ownership and control over their territories.

The Case of the U'wa People

The U'wa, a name that means "people who think, people who know how to speak," are a community of approximately 8,000 indigenous people who live in the forests of northeastern Colombia in the departments of Arauca, Boyacá, Santander, and North Santander (Rodríguez-Garavito and Arenas 2005; Mander and Tauli-Corpuz 2003; Niezen 2003). The original territories of the U'wa, once a tribe of 20,000, stretched from southern Venezuela into northeastern Colombia. The U'wa have no written language and their culture is preserved through songs. Their existence throughout the centuries has depended on their ancestral lands, resources, and religious practices, all of which are inextricably intertwined elements of their culture (Rodríguez-Garavito and Arenas 2005, 245). Their religion dictates that they maintain harmony among all the layers of creation: earth, water, oil, mountains, and sky (ibid.). The U'wa believe that they are the sole guardians of the forests and species on their traditional territories. In fact, they prohibit human access, including their own, in some areas. Many outsiders marvel at the ability of the U'wa to sustain themselves without scarring their lands.

Having survived periods of invasion, conquest, and colonization,

the U'wa are now again struggling against incursions and subsequent militarization of their territories related to oil exploration and drilling (ibid., 243). While oil installations attract armed conflict between guerillas and Colombian government forces, the main concern of the U'wa is that oil exploration on their territories will lead to environmental disasters and the demise of their culture, which will threaten the existence of the tribe as a cohesive group (Ulloa 2005, 52). One cultural belief of the U'wa is that Mother Earth, which has sustained them for centuries, is sacred. They believe that Earth is a living organism and, just as blood runs through the human body to keep it alive, oil is Earth's blood that keeps her alive. Their myths of origin tell that oil must not be extracted since the extraction of oil will only result in greediness, disorder, and illness, and subsequently the destruction of the environment and humankind. For the U'wa, "oil is the blood of Mother Earth . . . [T]o take the oil is, for [them], worse than killing your own mother. If you kill the Earth, then no one will live" (ibid., 53). They understand that if oil exploration is allowed on their lands, the balance of their entire world will be disturbed. As such, the value of economic projects does not exceed the value of humankind and planet Earth. They believe that pumping oil will lead to deforestation and oil spills, as well as ecological degradation, which accompanies the laying of roads in virgin forests. For these reasons, the U'wa oppose oil exploration on their territories (Rodríguez-Garavito and Arenas 2005, 250). They informed the Colombian government of the significance of oil in their culture and the ecological consequences that they expect oil exploration to bring to their lands. Regardless, the Colombian government granted Occidental Petroleum Corporation (Oxy) a license in 1992 to drill for oil on U'wa territories.

To defend their property rights, the U'wa turned to the Constitutional Court of Colombia, which guards the integrity and supremacy of the constitution and rules on the constitutionality of laws, amendments to the constitution, and international treaties. They claimed that a royal warrant granted by the Spanish Crown to the Tuneba Nation, ancestors of the U'wa people, in 1802 ratified and delimited the jurisdiction of their territories and gave them the absolute right to all soil and subsoil on their territories in present-day Arauca, Boyacá, Casanare, Santander, North Santander, and a part of southwestern Venezuela. These rights were ratified in Colombian Law 153 of 1887 and Article 332 of the 1991 constitution. In 1997 the Constitutional Court ruled in favour of the U'wa, invoking the 1991 constitution and ILO Convention No. 169. The court concluded that indigenous collective rights stand on a par with individual human rights (ibid., 252). However, the more powerful Council of State of Colombia, the highest court of administrative law, overthrew the Constitutional Court's ruling. The council focused on national law rather than constitutional or international law on indigenous rights. It found that the Colombian government was not legally obligated to consult indigenous communities before granting licenses for oil drilling. Informing the affected groups about extraction plans and eliciting feedback, as the government had done, satisfied the standards set by national law, according to the council (ibid.).

The U'wa were baffled that both the Constitutional Court and Council of State had focused on their rights to participate in the consultation process rather than on the substance of their opposition to oil drilling on principled, as opposed to procedural, grounds, which they considered to be non-negotiable (ibid.). The decisions demonstrated that neither the court nor the council understood the opposition of the U'wa to the drilling of oil. In this case, the views of the U'wa were not taken into account in the decision-making process for granting licenses for oil drilling, effectively making their epistemologies non-existent, according to Santos's theory of absences.

Nevertheless, the U'wa have continued to denounce oil exploration on their traditional territories at the national and international levels. The first U'wa protest against Oxy was launched in March 1993 with a non-violent campaign involving rallies (ibid., 257). The rallies did not affect the Colombian government's stance or stop Oxy's oil exploration, however. The U'wa then called three general peasant strikes, which saw approximately 5,000 people from 48 indigenous groups join together to support their cause (Ulloa 2005, 47). To press the Colombian government to revoke Oxy's drilling license, the mobilization effort involved road blockades, which brought the local economy to a halt, and hunger strikes by indigenous members of Colombia's Congress during legislative periods (ibid., 53). The opposition of the U'wa was so strong that their protest strategy included a pact among themselves to commit mass suicide² by jumping off a cliff if Oxy's exploration plans were not halted (Rodríguez-Garavito and Arenas 2005; Tebtebba Foundation and International Forum on Globalization 2005; Ulloa 2005; Niezen 2003). For the U'wa, suicide is preferable to the desecration of their ancestral lands. In the words of Berito Kuwaru'wa, an influential U'wa leader who played an instrumental role in an international campaign to stop oil drilling: "We would rather die, protecting everything that we hold sacred, than lose everything that makes us U'wa" (Ulloa 2005, 47). The threat of mass suicide has made the U'wa a symbol of worldwide resistance to neoliberal globalization by indigenous peoples (Rodríguez-Garavito and Arenas 2005, 251).

U'wa leaders assert that their people want to continue their way of life on their own territories. Such a view does not apply only in situations such as incursions and oil exploration—it is also being adapted as the foundation of a different development model that responds to environmental crises caused by resource extraction. The U'wa are just one indigenous group among many that wants to preserve the planet for future generations. In accordance with Santos's sociology of emergences, such signs of possible future experiences ignored by the current global economic model are beginning to emerge as alternatives to the current hegemonic system.

What is more, the U'wa have earned the support of many NGOs such as Rainforest Action Network, Amazon Defense Coalition, and Oilwatch, which have helped them campaign against Oxy. The case of the U'wa people has been prominently featured at several events, in particular the protests against the International Monetary Fund and World Bank in Washington, DC, in 2000, the 2004 Social Forum of the Americas held in Ouito, and the annual World

Social Forum (ibid., 255). The U'wa movement is evidently growing through strategies of engagement with broader publics and institutions, giving rise to new relations with supporters and new practices. The extensive and speedy capabilities of ICTs have allowed the movement to go global. For instance, the U'wa and their supporters have initiated negative publicity campaigns through mass media and protests in front of Oxy's headquarters in Los Angeles, which turned the Colombian project into a public relations nightmare for the company. The actions of the U'wa and their supporters forced Oxy to leave the traditional territories of the U'wa in 2002 and return its oil concession to the Colombian government (Tebtebba Foundation and International Forum on Globalization 2005, 164). Nonetheless, Ecopetrol, a Colombian state-owned enterprise, started drilling oil on U'wa lands in 2003, forcing the U'wa people to again resist (ibid.). Their resistance continues until today.

The U'wa want to retain control over their traditional territories and ensure cultural survival. As Perez asserts: "[W]hat we're saying is respect our territory" (Semple 2002). The U'wa are demanding not only respect for their rights, as stipulated in the 1991 constitution and ILO Convention No. 169, but their autonomy. In response to the decision by the Council of State, the U'wa have gone to the Inter-American Commission on Human Rights of the Organization of American States (OAS) to present their grievances. At the time of writing, the case is still in process.

Conclusion

The U'wa people's actions against Oxy and the Colombian government illustrate that resistance against multinational corporations and national governments is possible. Their relative success is a result of the combination of grassroots mobilization at the local level with national and international support, and the simultaneous pursuit of political and legal strategies both nationally and internationally. In many instances, actions by Latin American indigenous peoples are being legitimized throughout the region. The U'wa movement has been effective insofar as it has managed to: (1) bring the issue of indigenous rights $vis-\grave{a}-vis$ resource extraction in Colombia to the fore; (2) influence discourses on indigenous cultural significance; and (3) change target actors' policies (Rodríguez-Garavito and Arenas 2005, 261). However, the key issue is control, whether over land, knowledge, the past, the present, or the future.

Through resistance, indigenous peoples vindicate their right to exist and remain distinct from the dominant societies in which they live. The U'wa resist the Colombian government, which remains committed to the neoliberal model and characterized by exclusions and inequalities. Throughout Latin America, indigenous peoples' resistance movements and ways of life will continue to demonstrate that there exist contemporary economic, political, and social alternatives to the commodification of all resources (Harry 2005, 76). The U'wa have interpreted appropriate and often necessary modes of economic behaviour through songs, myths, and beliefs, which affirm and reinforce their

relationship with the Earth. The U'wa cosmogony goes beyond its locality—it is part of the reframing of the relations between society and nature imposed by the Western world. The slogan of the World Social Forum is "Another world is possible." To achieve another world, this world needs to imagine both "other worlds" and "worlds otherwise"; that is, "worlds that are more just and sustainable and, at the same time, worlds that are defined through principles other than those of Eurocentric modernity" (Escobar 2004, 220). Resistance to neoliberal globalization is not just an ecological and political necessity, but a cultural necessity as well.

Latin American governments are encountering resistance from their indigenous populations, who are demanding recognition of their collective rights to self-determination on their territories. State recognition of these populations' rights to land and resources is one approach to rebalancing the distribution of property rights and implementing certain self-government forms of territorial jurisdiction that retain or restore indigenous peoples' control over their traditional territories. It is crucial that indigenous peoples' rights, as enshrined in national laws and international agreements, are implemented and not merely paid lip service. In this regard, signatory countries of ILO Convention No. 1693 and the UN Declaration on the Rights of Indigenous Peoples⁴ must fulfill their obligations outlined in these documents. It is likely that Latin American governments will only fully embrace their obligations if they are pressured to do so by their own populations, other governments, and international actors such as NGOs. Therefore, mutual co-operation between indigenous peoples around the world and international organizations, such as the UN, ILO, OAS, and specialized NGOs, and integrated capacities enabled by ICTs are needed to help shape global public opinion, which can support indigenous peoples in realizing their aspirations.

Notes

- 1. NGOs such as Amazon Watch, Oxfam International, and Cultural Survival have been strong supporters of Latin American indigenous peoples.
- 2. Some U'wa communities committed mass suicide several centuries earlier to avoid being enslaved by Spanish conquistadors.
- 3. Fourteen out of the 22 signatory countries to ILO Convention No. 169 are from Latin America.
- 4. Bolivia was the first country to approve the United Nations Declaration on the Rights of Indigenous Peoples.

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References

- Al Jazeera. 2009. "Bolivia Enacts New Constitution." *Al Jazeera*, February 7. http://www.aljazeera.com/news/americas/2009/02/2009271736487938 18.html
- Beauclerk, John, and Jeremy Narby, with Janet Townsend. 1988. *Indigenous Peoples: A Field Guide for Development*. Oxford: Oxfam.
- Blaser, Mario, Harvey A. Feit, and Glenn McRae, eds. 2008. *In Way of Development: Indigenous Peoples, Life Projects and Globalization*. London: Zed Books.
- Burger, Julian. 1987. Report From the Frontier: The State of the World's Indigenous Peoples. London: Zed Books.
- Cooney, Paul. 2006. "The Decline of Neoliberalism and the Role of Social Movements in Latin America." Paper presented at the X Jornadas de Economía Crítica, ¿Alternativas al capitalismo?, Barcelona, Spain, March 23–25.
- Cox, Karen. 2002. "Questions Gerry Adams Could Have Asked the US Congress about the 'Andean Regional Initiative'." *The Blanket: A Journal of Protest and Dissent*, May 4. http://indiamond6.ulib.iupui.edu:81/questionsga.html.
- Dirlik, Arif. 2006. "Globalization as the End and the Beginning of History: The Contradictory Implications of a New Paradigm." Working Paper, Duke University, Durham, NC.
- Escobar, Arturo. 2004. "Beyond the Third World: Imperial Globality, Global Coloniality and Anti-Globalization Social Movements." *Third World Quarterly* 25 (1): 207–30.
- Feldman, Alice. 2002. "Making Space at the Nations' Table: Mapping the Transformative Geographies of the International Indigenous Peoples' Movement." Social Movement Studies 1 (1): 31–46.

- Giddens, Anthony. 2000. Runaway World: How Globalization is Reshaping Our Lives. New York: Routledge.
- Harris, Richard L. 2002. "Resistance and Alternatives to Globalization in Latin America and the Caribbean." *Latin American Perspectives* 20 (6): 136–51.
- Harry, Debra. 2005. "High-Tech Invasion: Biocolonialism." In Paradigm Wars: Indigenous Peoples' Resistance to Globalization, edited by Terry Mander and Victoria Tauli-Corpuz, 71–76. San Francisco: Sierra Club Books.
- Hodgson, Dorothy L. 2002. "Introduction: Comparative Perspective on the Indigenous Rights Movement in Africa and the Americas." *American Anthropologist* 104 (4): 1037–49.
- Jung, Courtney. 2008. *The Moral Force of Indigenous Politics: Critical Liberalism and the Zapatistas*. Cambridge: Cambridge University Press.
- Korten, David. 1995. When Corporations Rule the World. San Francisco: Berrett-Koehler.
- Mander, Jerry. 2005. "Introduction: Globalization and the Assault on Indigenous Resources." In *Paradigm Wars: Indigenous Peoples'*Resistance to Globalization, edited by Terry Mander and Victoria Tauli-Corpuz, 3–10. San Francisco: Sierra Club Books.
- Niezen, Ronald. 2003. *The Origins of Indigenism: Human Rights and the Politics of Identity*. Berkeley: University of California Press.
- Reinsborough, Patrick. 2002. "Victory for the U'wa." *Earth First! Journal*. http://www.earthfirstjournal.org/article.php?id=130.
- Rodríguez-Garavito, César A., and Luis Carlos Arenas. 2005. "Indigenous Rights, Transnational Activism, and Legal Mobilization: The Struggle of the U'wa People in Colombia." In *Law and Globalization from Below: Towards a Cosmopolitan Legality*, edited by Boaventura de Sousa Santos and César A. Rodríguez-Garavito, 241–66. New York: Cambridge University Press.
- Santos, Boaventura de Sousa. 2003. "The World Social Forum: Toward a Counter-Hegemonic Globalization (Part I and II)." In *World Social Forum: Challenging Empires*, edited by Jai Sen, Anita Anand, Arturo Escobar, and Peter Waterman, 235–45. New Delhi: Viveka Foundation.
- Scholte, Jan Aart. 2000. Globalization: A Critical Introduction. New York: St. Martin's Press.
- Seabrook, Jeremy. 2004. "Localizing Cultures." *Korea Herald*, January 13. http://www.globalpolicy.org/globaliz/cultural/2004/0113jeremyseabrook.htm.
- Semple, Kirk. 2002. "The U'was' Last Stand: Colombian Indians vs. Occidental Petroleum." *U.S. News & World Report*, February 6. http://www.usnews.com/usnews/news/articles/000214/archive_032984.htm.
- Silva, Diego. 2011. "Going Beyond Recognition: Building an Effective and Sustainable Property Rights Systems for Indigenous Territories." International Affairs Review XX (1): 1–20.
- Tebtebba Foundation and International Forum on Globalization. 2005. "Briefing Reports." In *Paradigm Wars: Indigenous Peoples' Resistance*

- to Globalization, edited by Jerry Mander and Victoria Tauli-Corpuz, 163–77. San Francisco: Sierra Club Books.
- Ulloa, Astrid. 2003. "The Ecological Native: Indigenous Peoples' Movements and Eco-Governmentality in Colombia." Paper presented at the 2003 meeting of the Latin American Studies Association, Dallas, Texas, March 27–29.
- ———. 2005. The Ecological Native: Indigenous People's Movements and Eco Governmentality in Colombia. New York: Routledge.
- Veltmeyer, Henry. 2005. "Development and Globalization as Imperialism." Canadian Journal of Development Studies 26 (1): 89–106.
- Williamson, John. 2006. "After the Washington Consensus: Latin American Growth and Sustainable Development." Keynote speech at the Seminar on Latin American Financing and the Role of Development Banks organized by the IDB, BDMG, and ALIDE, Belo Horizonte, Brazil, March 30–31.
- Yashar, Deborah J. 1998. "Contesting Citizenship: Indigenous Movements and Democracy in Latin America." Comparative Politics 31 (1): 23–42.
- Zibechi, Raul. 2010. *Dispersing Power: Social Movements as Anti-State Forces*. Translated by Ramor Ryan. Oakland: AK Press.

The Quiet Tsunami: The Ecological, Economic, Social, and Political Consequences of Ocean Acidification

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A large portion of the carbon dioxide emitted into the atmosphere is absorbed by the world's oceans. They become more acidic as they absorb the gas. This has far-reaching implications for the oceanic food web, biodiversity, and the global economy, particularly fishing and ecotourism industries in developing countries. This article briefly outlines the scientific evidence of ocean acidification and the implications of anthropogenic carbon emissions for marine ecosystems. It then assesses the economic, social, and political ramifications of ocean acidification and suggests a new strategy for the promotion of climate change policy. The "quiet tsunami" of oceanic climate change necessitates a policy shift away from the business-as-usual approach to reducing carbon emissions. The high stakes involved in this looming crisis may prompt unwilling governments to act in order to ensure food security and protect key economic markets around the world.

Introduction

Marine food resources have supported human civilizations from time immemorial. However, humanity's path to economic development over the past century has created a newly emerging threat to oceanic health. Humans have been dramatically increasing their emissions of carbon dioxide (CO_2) and other greenhouse gases into the atmosphere as population, industrial activity, and international trade and travel have grown. Emissions, which increase the atmospheric concentration of CO_2 , continue unabated, driven in good measure by rising income levels and related energy-intensive privileges in some of the world's most populous countries, notably China and India. This reinforces the ongoing problem of global warming, which raises the temperature of ocean waters, the sea level (by melting continental glaciers), and, importantly for this discussion, the acidity of oceans. In fact, up to half of the total amount of CO_2 released because of human activities over the past two centuries has been absorbed by oceans (Royal Society 2005, 5).

A rapid increase in the absorption of CO₂ lowers the pH level of seawater—this is a phenomenon commonly known as ocean acidification—and decreases carbonate-ion concentration (Zeebe and Wolf-Gladrow 2001).

Of course, oceans are neither homogeneous nor static. The pH level of seawater varies with pressure and temperature, and thus is influenced by depth and latitude. Polar waters differ from temperate waters, coastal regions differ from open oceans, and different regions of oceans are affected differently by particular patterns of water circulation. For example, the pH level can be affected by horizontal flows such as the Gulf Stream, vertical interchanges in which surface waters sink in some places and nutrient rich waters upwell from the depths in others, and the influx of alkaline river waters. There are also diurnal, seasonal, and multi-year cycles. Over sufficiently long periods of time, measured in thousands of years, the equilibrium pH level of seawater is restored by kinetic, chemical, and biological processes (Caldeira et al. 2007).

The impact of $\rm CO_2$ absorption on key parts of the oceanic food web is well established. As Richard Feely et al. (2008, 1490) explain: "The reaction of $\rm CO_2$ with seawater reduces the availability of carbonate ions that are necessary for calcium carbonate ($\rm CaCO_3$) skeleton and shell formation for marine organisms such as corals, marine plankton, and shellfish." Once formed, calcium carbonate dissolves if seawater is not sufficiently saturated with carbonate ions ($\rm CO_3^2$). Since calcium carbonate is more soluble at lower temperatures and at higher pressures, there is a saturation horizon below which calcium carbonate dissolves. Marine organisms that produce calcium carbonate, referred to as calcifiers, inhabit waters above the saturation horizon, the depth of which varies from place to place. Increased absorption of $\rm CO_2$ by oceans thus both reduces the availability of the building blocks used by coral, plankton, shellfish, and other calcifiers and modifies the depth and temperature of the water at which these organisms can exist.

A large and fast change to the chemistry of oceans caused by anthropogenic carbon emissions threatens important oceanic ecosystems. Damage to plankton, which underpins the oceanic food web, and coral reefs, which house much of the planet's marine biodiversity, will have repercussions throughout the entire marine ecosystem. This is described by the Secretariat of the Convention on Biological Diversity (2009, 49): "Many calcifying species are located at the bottom or middle of global ocean food webs, therefore loss of shelled organisms to ocean acidification will alter predator–prey relationships and the effects will be transmitted throughout the ecosystem [emphasis added]."

Recognition that global warming is not detrimental everywhere in the world (UNFCCC 2011) has served to weaken national and international political responses to climate change, but there are no similar offsetting benefits when it comes to ocean acidification. Moreover, unlike with global warming, there is no debate about the anthropogenic cause of ocean acidification.¹

Ocean acidification provides a unique opportunity for people who advocate for action on climate change to reinforce their demands on governments to take action. It is a direct and incontrovertible result of anthropogenic carbon emissions and will affect fishing and ecotourism industries. Accordingly, an emphasis on the major observable effects of climate change on the world's oceans, collectively described as the "quiet

tsunami" (NRDC 2009, 1), can result in political action on climate change mitigation. To give but one example, concerns about the ramifications of ocean acidification on the Great Barrier Reef helped tilt the balance of votes in Australia toward the implementation of a carbon tax.²

The Government of Canada has thus far avoided action that would allow it to meet emissions reduction targets under the Kyoto Protocol, from which it withdrew in December 2011 citing costs and probable disruption of certain economic sectors (Delacourt 2010). All the while the government has ignored the cost of inaction (see McLaughlin 2011). This article demonstrates that while action on climate change may be perceived as costly, inaction will be costlier in the long run. It argues that there is a definite need for immediate action, since national and global problems related to climate change will only increase in number and severity should climate change and ocean acidification be allowed to continue unabated.

Literature Review

Research on ocean acidification is in its relative infancy. In 2009, 62 per cent of research papers on ocean acidification had been published since 2004 (Hood et al. 2009, 7). The 2005 report on ocean acidification by the Royal Society developed by a nine-member working group, which drew on submissions from 33 professionals in the field, provided a comprehensive review of the then-extant literature. It serves as a baseline assessment of the state of knowledge on the causes and effects of ocean acidification as well as marine organism and ecosystem responses and adaptation to elevated levels of acidity. The Royal Society (2005, 39–41) reached eight main conclusions:

- Oceans are absorbing the CO2 that is released into the atmosphere by human activities and this is causing chemical changes which make seawater more acidic.
- These changes in ocean chemistry will impact marine organisms and ecosystems.
- Oceans play a very important role in the global carbon cycle and Earth's climate system.
- The socio-economic consequences of ocean acidification could be substantial, given the effects on coral reefs and fisheries.
- The scale of future changes to the chemistry and acidity of oceans can only be reduced by preventing the accumulation of CO2 in the atmosphere.
- Unless global emissions of CO2 are reduced by twice their 2005 levels by the year 2100, the Southern Ocean will become under-saturated for aragonite, which is required by some organisms to make calcium carbonate skeletons and shells.
- The magnitude of ocean acidification can be predicted with a high level of confidence. Assessments of its impacts, particularly on marine organisms, are much less certain and require additional research efforts.

 Ocean acidification is a powerful reason, in addition to climate change, to reduce global CO2 emissions.

In 2009, the Secretariat of the Convention on Biological Diversity provided additional grounds for concern. It (2009, 9) confirmed that ocean acidification is a result of anthropogenic CO₂ emissions and that many of its effects on marine ecosystems will be variable and complex. Although evidence found that a few species, such as some phytoplankton, fungi, and bacteria, may experience certain benefits, the Secretariat (ibid.) warned that most ecosystems in acidified seawater are less diverse and missing those species that form their skeletons and shells from calcium carbonate. Further, it documented various sub-lethal effects of exposure to low pH on various organisms' developmental and adult phases. These effects vary depending on a species' genetics, pre-existing capabilities to adapt to changing conditions, and environmental factors.³ Importantly, the Secretariat (ibid., 5) outlined the following:

By 2100, 70% of cold-water corals, key refuges and feeding grounds for commercial fish species, will be exposed to corrosive waters. Furthermore, given current emission rates, it is predicted that the surface waters of the highly productive Arctic Ocean will become undersaturated with respect to essential carbonate minerals by the year 2032, and the Southern Ocean by 2050, with disruptions to large components of the marine food web.

The Secretariat (ibid., 9) concluded that acidification is "irreversible on timescales of at least tens of thousands of years, and substantial damage to ocean ecosystems can only be avoided by urgent and rapid reductions in global emissions of CO₂."

The amount of CO2 that will be released by the end of the century under a business-as-usual scenario will be large and extremely rapid in the geological time scale. Data from Antarctic ice cores show that the concentration of CO₂ in the atmosphere over the past 650,000 years varied between a low of 180 parts per million (ppm) during cold glacial periods to a high of 300 ppm during warm inter-glacial periods (IPCC 2007, 465). By 2010, the mean concentration of atmospheric CO, at sea level was measured to be 389.78 parts per million by volume (ppmv) (NOAA 2011b). Current CO₂ concentration is in the range last recorded during the Pliocene (circa five to three million years ago), a period in which the global temperature was substantially warmer and sea levels were much higher (Pagani et al. 2010). The amount of CO₂ that will be released during this century will likely be greater than any amount recorded since the Palaeocene-Eocene Thermal Maximum (PETM) some 55 million years ago (Dickens, Castillo, and Walker 1997). That event caused widespread dissolution of seafloor carbonates (Zachos et al. 2005) and a mass extermination of seafloor ("benthic") species (Ridgwell and Schmidt 2010). Notably, the buildup of CO, during the PETM was much more gradual than

the present buildup (Kump, Bralower, and Ridgwell 2009).

John Veron (2008) shows that the five mass extinction events which Earth has experienced so far were each associated with "reef gaps" in the geological record—extended periods during which there is no evidence of living reefs. These periods were linked to changes in ocean chemistry associated with atmospheric CO_2 levels. Veron (ibid., 459) argues that "The prospect of ocean acidification is potentially the most serious of all predicted outcomes of anthropogenic carbon dioxide increase . . . [and] has the potential to trigger a sixth mass extinction event." Similarly, an extensive literature review conducted by Scott Doney et al. (2009, 184) concluded that "[a] cidification impacts on processes so fundamental to the overall structure and function of marine ecosystems that any significant changes could have farreaching consequences for the oceans of the future and the millions of people that depend on its [sic] food and other resources for their livelihoods."⁴ Comparing the PETM to the current buildup, Andy Ridgwell and Daniela Schmidt (2010, 5) observe as follows:

We infer a future rate of surface-ocean acidification and environmental pressure on marine calcifiers unprecedented in the past 65 [million years], and one that challenges the potential for surface-ocean plankton to adapt. For benthic organisms, rapid and extreme undersaturation of the deep ocean would make their situation precarious, and the occurrence of widespread extinction of these organisms during the PETM greenhouse warming and acidification event raises the possibility of similar extinction in the future.

Economic and Social Impacts of Ocean Acidification

Research on the economic impact of ocean acidification remains limited. Attempts at overall economic assessments of climate change either ignore this phenomenon (Tol 2002a; 2002b) or give it only a passing mention without incorporating its costs into the analysis (Stern 2006; Nordhaus 2008; Tol 2009). Accordingly, drawing attention to the economic impacts of ocean acidification is crucial when informing public opinion and, by extension, public policy.

The fishing industry is a small but significant component of the global economy. The total contribution of commercial capture fisheries, including marine and inland harvest and post-harvest subsectors, to global gross domestic product (GDP) was estimated at approximately US\$274 billion in 2007 (World Bank, FAO, and WorldFish Center 2010), of which about 90 per cent can be attributed to marine fisheries, based on the value share of the capture. This figure is small in the context of a global economy valued at approximately US\$62 trillion (IMF 2010), but it is not negligible. Aquaculture is the fastest growing animal food-producing sector and currently accounts for almost half of total food fish supply; approximately one-third of aquaculture production is marine-based (FAO 2011). While studies of ocean acidification have mainly focused on natural marine ecosystems, the issue

has registered on the aquaculture industry's radar. In 2010, a brief session on ocean acidification was held at the triennial meeting of the World Aquaculture Society together with the U.S. National Shellfisheries Association.

The overall economic impact of ocean acidification on marine fisheries and aquaculture has not yet been systematically evaluated. Studies of specific types of marine organisms such as shellfish, on which aquaculture depends, demonstrate that the costs are substantial (Talmage and Gobler 2009; Narita, Rehdanz, and Tol 2011). Relative to the risks posed by climate change, however, the impact on any specific type of fishery is small in dollar value, commensurate with the share of fisheries in global GDP. For instance, the cost to shellfish production in 2100 would be about US\$100 billion, which represents up to 1.5 per cent of the total expected damage caused by climate change and around 0.025 per cent of global GDP (ibid., 14).

Specific economic impacts matter in politics. On average, the United States annually derives US\$4 billion of primary value from commercial harvests from American waters and at-sea processing (NOAA 2011a). Approximately 24 per cent of this figure comes from harvesting fish that depend directly on calcifiers (Cooley and Doney 2009). Aquaculture, which also depends heavily on calcifiers, accounted for over US\$1.2 billion in additional income in 2007. The National Oceanic and Atmospheric Administration calculated that one million jobs are associated with the American commercial fishing industry, which accounts for about US\$32 billion in income annually (NOAA 2011a). Ocean acidification will negatively affect these figures and may have tangible political ramifications.

Impacts will certainly be felt in recreational fishing and marine tourism. While commercial fishing, including international trade, in the United States was valued at US\$70 billion in 2009 (ibid.), recreational fishing contributed US\$50 billion in sales impacts, US\$23 billion in value-added impacts, and supported 327,000 jobs (National Marine Fisheries Service 2011, 8). Marine tourism has become one of the fastest-growing areas of the world's tourism industry (Hall 2001, 602). Australia's Great Barrier Reef receives roughly two million visits each year and generates about US\$5.7 billion in tourism and fishing revenue, which sustains 53,800 full-time jobs (McCook et al. 2010). Tourism around the Hawaiian coral reefs accounts for about US\$364 million annually in value-added economic activity, 84 per cent of which is generated from snorkelling and diving on reefs. Further added value from property accounts for US\$40 million each year, generated by rising property values near healthy reefs (Royal Society 2005, 33).

The effects of ocean acidification on these industries could inform potent arguments that may prove to convince reluctant governments to act on climate change. For example, the Royal Society concluded that even under modest emissions scenarios, which predict an atmospheric concentration of 600 ppmv of $\rm CO_2$ by 2100, climate change is predicted to cost the economy around the Great Barrier Reef a minimum of US\$2.6 billion over 19 years to 2020 (ibid.). Under higher emissions scenarios with an atmospheric $\rm CO_2$ concentration of 800 ppmv, losses will rise to over US\$14.6 billion (ibid.). More recent estimates

place the net present value of the Great Barrier Reef at US\$51.5 billion and the cost of serious degradation of the reef system at US\$39.2 billion, of which US\$15.8 billion represents intrinsic value (Oxford Economics 2009).

Although these figures may seem small relative to the value of the global economy and costs thought to be associated with a shift from fossil fuels to renewable energies, they belie the importance of fishing and ecotourism to certain regions. Narrow sectoral impacts can have disproportionately large influences on national policies. For instance, Canada and Spain almost went to war over illegal overfishing on the Grand Banks in 1995 (Schaefer 1995). Furthermore, the roots of piracy in Somalia can be traced to concerns about fishing rights. As Patrick Lennox (2008, 8) writes: "[Somalian pirates] were acting at first to protect their territorial waters from illegal fishing and dumping by foreigners, which became progressively significant as it became more and more evident to outsiders that Somalia was not capable of patrolling its exclusive economic zone." Although these two examples are unrelated to ocean acidification, they highlight the value of the fishing industry to those that rely on it and the lengths that governments and individuals are willing to go in order to protect resources.

Ocean acidification, unlike illegal trawling or disputes over fishing rights, will affect every country that trades fish or fishery products because no waters will be exempt from this phenomenon, though the distribution of effects will by no means be even. Importantly, the countries with the greatest interest in marine fisheries include leading developed countries, such as the United States, the European Union, and Japan, and major developing countries, such as India and China, the latter of which accounts for about 16 per cent of total catch—by far the largest share (European Commission 2010, 16). The health of the fishing industry thus impacts most, if not all, countries with a coastline and threatens local economic activity and food security.

Challenges Faced by Developing Countries

The problem of ocean acidification has implications for global equity. Seafood makes up more than 20 per cent of consumed animal protein for 2.6 billion people worldwide and over 30 per cent in the developing world (Gupta 2006, 4). Coral reefs provide habitat for 25 per cent of total catch, increasing food security for one billion people in Asia alone (CDNN 2009). Developing countries provided approximately half of the total export value of trade in seafood products in 2006, with 80 per cent of all imports going to developed countries. Throughout the developing world, the fishing industry directly employs about 150 million people (Hauge, Cleeland, and Wilson 2009, 2).

In addition, fishing is a particularly important source of support for many households at the subsistence level. A Vietnamese case study showed that when subsistence fishing was taken into account, total marine capture was about 58 per cent higher compared to official statistics (which do not take into account subsistence fishing) (World Bank, FAO, and WorldFish Center 2010, 43). The study found that in 10 provinces adjacent to the Mekong

Delta more than eight million people relied directly on the capture of fish and aquatic animals to meet their nutritional needs. Disruption or collapse of the fishing industry would thus put considerable strains on social support networks and intensify urbanization pressures.

Southeast Asia and the Caribbean depend greatly on oceans for nutrition and incomes and are located near some of the most vulnerable waters in the world. The Philippines provides an illustrative case study of the impact of deteriorating coral reefs on developing countries, since the country is found in one of the world's most prolific coral-producing, though most acidic, areas. The Coral Triangle covers 1.6 billion acres of Southeast Asia and is the planet's most biologically diverse region in terms of marine biota (Hoegh-Guldberg et al. 2009, 5). Coral reefs are important to the Filipino people for nutritional and economic reasons, among others. Reefs provide habitat for fish species upon which the Filipino population depends for 50 per cent of its animal protein intake (White, Vogt, and Arin 2000, 598). These reefs provide livelihoods for over one million small-scale fishermen and contribute almost US\$1 billion annually to the Filipino economy (ibid.). It is estimated that reef fish account for 20 per cent of total catch in the country (ibid., 599). A loss of fisheries-related incomes and employment would significantly stress national organizations and international bodies concerned with humanitarian needs, such as the United Nations World Food Programme. Furthermore, there would be a huge, albeit immeasurable, loss in the intrinsic value of a unique culture, a way of life, and some of the world's largest and most beautiful coral reefs.

Coral reefs are also crucial for the ecotourism industry, which encourages sustainable practices in local host economies while providing governments with additional tourism-derived tax revenue. Ecotourism has been shown to address certain dimensions of poverty and complement conservation efforts (Ministry of Population and the Environment of Nepal 2004, 209). Estimates suggest that ecotourism associated with coral reefs generates US\$300,800/ km² per year in revenue for the Filipino government (White, Vogt, and Arin 2000, 600). With a total reef area of 26,000 km², the Philippines could lose an important source of revenue because of ocean acidification.

Coral reefs are worth conserving because of the tangible nutritional and economic benefits that coastal communities derive from them as well as their intrinsic value. These fragile systems are under a variety of anthropogenic stresses, including dangerous fishing practices, effluent runoff, and most recently ocean acidification. Additional stresses hinder ecosystems' abilities to recover and remain productive. The reefs have been deteriorating over the past 30 years. In 2001, the United Nations Environment Programme reported that 97 per cent of Filipino reefs were under threat (Spalding, Ravilious, and Green 2001). By 2007, Reef Check, an international organization that assesses the health of reefs in 82 countries, stated that only 5 per cent of the Philippines' coral reefs were doing well, with the rest being damaged, diseased, or dead (Agriculture Business Week 2008).

The case study of the Philippines is just the tip of the iceberg. Coral $\,$

reefs around the world are deteriorating because of anthropogenic stresses. Losses in economic value, among other things, are a main result. For example, Lauretta Burke et al. (2011, 78) found that the projected degradation of Caribbean reefs will result in relatively large annual economic losses: by 2015, reef-associated fisheries will lose between US\$95 million and US\$140 million in net revenues while ecotourism will suffer losses between US\$100 million and US\$300 million. Southeast Asia as a whole is extremely vulnerable to reef loss and consequent economic losses (ibid., 73). It bears repeating that ocean acidification causes much damage to coral reefs by corroding them and, due to the reduction in the availability of calcium carbonate, preventing new structural growth.

Global Equity and Climate Change

Global equity is a central aspect of the international climate change debate. While developed countries' carbon-intensive development is responsible for much of the climate change to date, developing countries are left to suffer many of the consequences with relatively little adaptive capacity. It is true that the contemporary carbon-based development of some populous developing countries is contributing to this problem, but as South African Minister of Environmental Affairs and Tourism Marthinus van Schalkwyk (2009) said: "[W]e cannot wish away historical responsibility for the problem. The fact of the matter is that the carbon space is finite and 70% of the 'safe' carbon space has already been used up, largely by industrialized countries." Most of the responsibility to act therefore lies with developed countries. They have the capacity and technologies to adapt to a warming planet and the duty to help developing countries adapt. Not only is this the right path to take environmentally, but economically there are benefits to the proliferation of clean-energy technologies.

The phenomenon of ocean acidification raises the stakes for action on climate change. The choice is not one of comfort and convenience but rather one of survival because "[t]he harm is against humans, it is largely other-inflicted, and it is not life-style-, but life-threatening" (Müller 2002, 2). Damage done by ocean acidification will threaten the food security and incomes of billions of people. Many of those people live in developing countries that do not have the organizational, technological, or financial capabilities to handle food distribution and economic dislocation. Stresses will further slow development in key parts of the world, namely Southeast Asia and the Caribbean.

Ocean Acidification and Climate Change Policy

There is a disconnect between polluters and pollution victims when it comes to the issue of global equity in the context of a changing climate. Developed countries first acknowledged their obligation to provide financial support for developing countries' climate change mitigation and adaption efforts in the 1992 United Nations Framework Convention on Climate Change (UNFCCC)

(Demerse 2009, 1). Their sense of obligation is informed by two principles: (1) the polluter pays principle, which dictates that the polluter should bear the financial burden of repairing damage caused by pollution and preventing further pollution; and (2) common but differentiated responsibility, which refers to the globally shared responsibility to protect shared resources, with the caveat that responsibility is different depending on a country's contribution to an environmental problem and its capacity to address that problem (ibid., 5). Governments and firms tend to offer economic explanations for their adoption of a wait-and-see approach to climate change, often arguing that climate change mitigation is simply too expensive. Such arguments are baseless and hypocritical. Ocean acidification may prove to be the missing puzzle piece that enables local, national, and international climate change advocates to promote change in climate change policy-making.

The costs of ocean acidification have largely been ignored. North America in particular has been unwilling to change its business-as-usual approach. The United States has rejected internationally coordinated climate change policies, arguing that any deal that does not include large emitters such as China is not fair and the economic impact on Americans is unacceptable. In 2006, Canadian Prime Minister Stephen Harper emphasized industry worries that meeting emissions reduction targets would cost too much (Suzuki and Taylor 2009, 95–96) and has since pulled out of the Kyoto Protocol to avoid heavy penalties for his country's failure to act. However, as Ken Thompson (2010) argues, the cost argument hardly stands since unnecessarily high military budgets could be reworked to make more money available for spending to tackle climate change. Nicholas Stern (2006, xvii) demonstrates that inaction will raise the costs of adaptation and annual revenues of up to US\$2.5 trillion can be generated by taking a low-carbon path.

The international movement for global co-operative action on climate change has also been hindered by denialism by conservative political parties, think tanks, and media corporations often funded to some degree by fossil fuel-related corporations (Suzuki and Taylor 2009; Dunlap and McCright 2010; Hoggan and Littlemore 2009; Monbiot 2006; Gutstein 2009). Among major political parties in developed countries, the Republican Party in the United States and the Harper Conservatives now stand practically alone in their refusal to address the problem of climate change. Anti-science and antiintellectual trends are unfortunately gaining ground in the Republican Party, which, as Elisabeth Rosenthal (2011) argues, "has managed to turn skepticism about man-made global warming into a requirement for electability." The Harper Conservatives may not deny science, but their policy is the same: little, if any, action to reduce emissions. The United States and Canada have both pledged to reduce their emissions by 17 per cent from 2005 levels by 2020, an increase of 3 per cent from 1990 levels. Comparatively, the European Union has pledged a 20 per cent reduction from 1990 levels by 2020. Developing countries' pledges cover a wide range: China aims to reduce its emissions by about 7 per cent from 1990 levels, India is set to increase emissions by 30 per cent from 1990 levels, and Brazil, being the role model, pledged to reduce

emissions by 36 per cent from 1990 levels (Climate Action Tracker 2011).

The international community continues to meet periodically as the Conference of the Parties (COP) to the UNFCCC. The 15th COP, which took place in 2009 in Copenhagen, did not live up to expectations that it would produce a successor agreement to the Kyoto Protocol. Countries agreed to the weak Copenhagen Accord which encourages signatories of the UNFCCC "to cap the global temperature rise by committing to significant emission reductions and to raise funds to help the developing world address climate change" (European Environment Agency 2010). The accord recognizes that climate change is "one of the greatest challenges of our time" and something must be done, but it does not require countries to abide by reporting mechanisms or binding targets for 2020 or 2050 (UNFCCC 2011). Oxfam International (2009, 9) indicates that, "[the accord] bundles the adaptation needs of the world's poorest people together with calls for compensation . . . for oil-producing countries that claim they will lose revenue when the world shifts away from fossil fuels." Global equity concerns played a large role in Copenhagen. Some developing countries refused to sign on to the accord, which would require poor and vulnerable developing countries to follow international procedures in order to gain financial support for their mitigation efforts, a process that has proven to be difficult for these lowcapacity countries (Chandani 2010, 222).

A year later, the 16th COP in Cancún was under pressure to lay the groundwork for binding targets for all countries, including the United States, which many countries insisted must be brought into an agreement (Pew Center on Global Climate Change 2010, 2). The meeting was also expected to develop a multilateral financing mechanism to channel hundreds of billions of dollars to developing countries to help them mitigate emissions and adapt to the effects of climate change (Snegaroff and Cuenca 2010). The meeting resulted in the Cancún Agreements, a deal which does not obligate governments to take new steps, though provided a foundation for a deal with binding targets to be reached at the next meeting.

In 2011, signatories of the UNFCCC met in Durban for the 17th COP, which resulted in the Durban Platform outlining a course of action that would see the development of a new treaty which covers all major emitters. In addition to extending the Kyoto Protocol's first commitment period, the parties "explicitly recognised the global gap between countries' existing emissions reduction pledges out to 2020, and the global goal of limiting average temperature increases to below 2 degrees [Celsius] above preindustrial levels" (The Carbon Report 2011). The Durban Platform stated that a new treaty must be finalized by 2015 and come into force in 2020.

Despite countries' acknowledgment that there is a need to shift toward low-carbon societies, a timely agreement that significantly and rapidly curbs emissions is unlikely because fossil fuel-related interests have substantial influence on political decisions in key countries. Global fossil fuel subsidies in 2008 amounted to \$557 billion (IEA 2010, 1) and continue to be high. For instance, the Pembina Institute estimated that the Government of

Canada provides CAD\$2 billion per year in financial support to the fossil fuel industry (Demerse 2010). Politicians in North America tend not to cut support to this industry since fossil fuel-related corporations have a history of funding political parties that pander to their interests (Gutstein 2009; McQuaig 2004). This reduces the probability that countries will act to address ocean acidification.

The fact that ocean acidification is an observable direct result of CO_2 emissions is fortunate because that may be important in motivating governments to act. The U.S. government passed the Federal Ocean Acidification Research And Monitoring Act of 2009 to develop research and monitoring capabilities within the National Oceanic and Atmospheric Administration (Buck and Folger 2009). Fisheries and Oceans Canada is examining the issue, though no specific policy actions have been taken (Fisheries and Oceans Canada 2011). The Oslo and Paris (OSPAR) Commission, administrator of the OSPAR Convention for the Protection of the Marine Environment of the North-East Atlantic, addresses fisheries issues for the European Union and lists ocean acidification as a concern (OSPAR Commission 2011). Ocean acidification is evidently under consideration by key governments, but action appears to be restricted to research and discussion.

The lack of consensus and concerted global action indicates that advocacy is necessary. A driver for action on climate change is co-operation by multiple stakeholders to counter industrial lobbies. The Advocacy Coalition Framework argues that stakeholders want to convert their convictions into policy and will seek allies and form advocacy coalitions to do so (Weible 2006, 99). A number of stakeholders that have been or will soon be affected by ocean acidification have been identified. First, there are activists and educators-environmentalists, conservationists, and marine scientists-who are committed to public education on ocean acidification. Second, there are direct economic stakeholders, such as capture fisheries, aquaculturists, and the marine ecotourism industry. Third, there are myriad stakeholders in the alternative energy industry, who are keen to secure government subsidies and tax exemptions to help develop economies of scale for their technologies. Fourth, there are those who have a desire to maintain oceanic biodiversity for its intrinsic beauty and interest, including snorkelers, divers, scientists, and members of the general public. Finally, there are certain governments that are confronted with sectoral or regional pressures because of ocean acidification, such as those which depend on fisheries for nutrition, incomes, and economic growth. Many stakeholders are willing to advocate on this issue, whether it be for financial, humanitarian, or symbolic reasons.

The Advocacy Coalition Framework identifies two conditions that facilitate policy change: "changes in beliefs of a dominant coalition or changes in available resources and venues [that] are brought about by external shocks, policy-oriented learning, or hurting stalemate" (Weible 2006, 101). Given the far-reaching consequences of climate change and ocean acidification, policy change driven by external shocks, such as widespread coral death and fisheries collapse, is not desirable. The focus must be on influencing the beliefs

of the dominant coalition, currently formed by reluctant governments and the general public. Although research on and high-level acknowledgment of ocean acidification have increased attention to the problem, the need for immediate action has yet to be accepted by key countries. The salience of the issue must be elevated in the minds of the public with education campaigns through the media and at the national level.

Advocacy coalitions and educational efforts are in nascent stages. An international network of research and environmental stakeholders has already been formed and is active in policy advocacy. Two symposia on oceans in a high-CO₂ world, organized by the Scientific Committee on Ocean Research, United Nations Educational, Scientific and Cultural Organization, and International Geosphere-Biosphere Programme have been held since 2004 and a third is set to take place in September 2012 in California. Ocean acidification has been raised as a major issue by the United Nations Environment Programme, which cites it as a threat to food security (UNEP 2010), and briefs aimed at policy-makers have been issued. The issue of ocean acidification was also raised at the 16th COP, where the point was made that targets for limiting atmospheric CO₂ concentrations are dangerously in excess of the amount that causes oceanic damage (Harrould-Kolieb 2010). Although the issue is relatively new on the international scene, action evidently must not be delayed.

Education campaigns will not be effective until governments eliminate subsidies and tax exemptions for fossil fuel-related corporations. In particular, Canada should remove subsidies to corporations that operate in Alberta's tar sands, since oil production is responsible for a significant increase in Canada's greenhouse gas emissions (Environment Canada 2011, 19–20). Subsidies should instead be provided to clean and renewable energy companies to ensure that inexpensive alternative energy options exist. Funds can also be put toward protecting coastlines and reducing or eliminating harmful fishing practices. Such actions would send an important message to Canadian citizens and corporations that the government is taking climate change seriously.

Conclusion

After completing the Millennium Ecosystem Assessment, 1,360 leading experts in a variety of scientific fields concluded in 2005 that "over the past 50 years, humans have changed ecosystems more rapidly and extensively than in any comparable period of time in human history This has resulted in a substantial and largely irreversible loss in the diversity of life on Earth" (Hoggan and Littlemore 2009, 11). Ocean acidification is just one problem caused by climate change, but it is a problem that a policy of adaptation will not sufficiently address. Addressing it requires direct confrontation with ${\rm CO_2}$ emissions. In addition to the threat that ocean acidification poses to the global biosphere, oceanic biodiversity, and humans' food security, the potential of the phenomenon to inspire action by governments should make it an integral part of efforts to address climate change more generally.

Notes

- 1. Some observers argue that oceanic ecosystems have the capacity to cope with future climate change. See, for example, Maynard, Baird, and Pratchett (2008) and a response by Hoegh-Guldberg (2009). Hendriks, Duarte, and Álvarez (2010) argue that biological processes allow marine organisms to handle pH changes. See Dupont, Dorey, and Thorndyke (2010) for a response.
- 2. The Australian Parliament voted 74-72 in favour. Prior to the vote, the government had received a report that documented damage to the Great Barrier Reef by uncontrolled CO2 emissions.
- 3. Many effects of lower pH on marine biota have been documented in the literature. These include stunted growth (Bechmann et al. 2011), weakened reproductive performance (Havenhand et al. 2008; Kurihara 2008), and weakened immune system responses (Bibby et al. 2008). Hofmann et al. (2010) identify impacts of ocean acidification on photosynthesis, respiration, acid-base regulation, aspects of behaviour, and tolerance of other stressors. Kroeker et al. (2010) conclude that "[o]cean acidification is a pervasive stressor that could affect many marine organisms and cause profound ecological shifts . . . [T]he biological effects of ocean acidification are generally large and negative, but the variation in sensitivity amongst organisms has important implications for ecosystem responses." Albright (2011) finds that ocean acidification has "the potential to impact multiple life history stages of corals, including critical processes independent of calcification." Examining the effects of ocean acidification on early life history of invertebrates, Dupont and Thorndyke (2009, 3122) conclude that "many species and ecosystems will experience profound modifications with severe socio-economic consequences." Compounding the effects of ocean acidification are various pressures such as pollution and exploitation of resources (Secretariat of the Convention on Biological Diversity 2009, 53).
- 4. Other studies also conclude that there exists a threat of massive disruption to oceanic ecosystems. See Dupont, Dorey, and Thorndyke (2010), Barnard and Grekin (2010), Hofmann et al. (2010), Beman et al. (2011), and Veron (2011).

References

- Agriculture Business Week. 2008. "Philippines' Coral Reefs on the Verge of Extinction." *Agribusiness Week*, July 12. http://www.agribusinessweek. com/philippines-coral-reefs-on-the-verge-of-extinction.
- Albright, Rebecca. 2011. "Reviewing the Effects of Ocean Acidification on Sexual Reproduction and Early Life History Stages of Reef-Building Corals." *Journal of Marine Biology* 2011. http://downloads.hindawi.com/journals/jmb/2011/473615.pdf.
- Barnard, Nicola, and Jacqueline Grekin. 2010. "Issue Paper No. 7: Ocean Acidification." In *Biodiversity and Climate Change Series*, edited by Tim Christophersen, Jacqueline Grekin, and Balakrishna Pisupati.

- Convention on Biological Diversity and the United Nations Environmental Programme. http://www.cbd.int/doc/publications/unep-cbd-issue-papers/unep-cbd-issue-papers-07-en.pdf.
- Bechmann, Reneé K., Ingrid C. Taban, Stig Westerlund, Brit F. Godal, Maj Arnberg, Sjur Vingen, Anna Ingvarsdottir, and Thierry Baussant.
 2011. "Effects of Ocean Acidification on Early Life Stages of Shrimp (Pandalus borealis) and Mussel (Mytilus edulis)." Journal of Toxicology and Environmental Health 74 (7-9): 424–38.
- Beman, J. Michael, Cheryl-Emiliane Chow, Andrew L. King, Yuanyuan Feng, Jed A. Fuhrman, Andreas Andersson, Nicholas R. Bates, Brian N. Popp, and David A. Hutchins. 2011. "Global Declines in Oceanic Nitrification Rates as a Consequence of Ocean Acidification." Proceedings of the National Academy of Sciences of the United States of America 108 (1): 208–13.
- Bibby, Ruth, Steve Widdicombe, Helen Parry, John Spicer, and Richard Pipe. 2008. "Effects of Ocean Acidification on the Immune Response of the Blue Mussel *Mytilus edulis." Aquatic Biology* 2: 67–74.
- Buck, Eugene H. and Peter Folger. 2009. "Ocean Acidification." Congressional Research Service Report to Congress, April 24. http://docs.lib.noaa.gov/noaa_documents/NOAA_related_docs/CRS_reports/R40143.pdf.
- Burke, Lauretta, Kathleen Reytar, Mark Spalding, and Allison Perry. 2011. *Reefs at Risk: Revisited.* Washington, DC: World Resources Institute.
- Caldeira, Ken, David Archer, James P. Barry, Richard G. J. Bellerby, Peter G. Brewer, Long Cao, Andrew G. Dickson, et al. 2007. "Comment on 'Modern-Age Buildup of CO₂ and its Effects on Seawater Acidity and Salinity' by Hugo A. Loáiciga." *Geophysical Research Letters* 34 (18): L18608.
- CDNN (Cyber Diver News Network). 2009. "Coastal Development, Human Population Increase Killing Coral Reefs." January 9. http://www.cdnn.info/news/eco/e090109.html.
- Chandani, Achala. 2010. "Expectations, Reality, and Future: A Negotiator's Reflections on COP 15." Climate Law 1: 207–25.
- Climate Action Tracker. 2011. "Climate Action Tracker." Accessed December 29, 2011. http://www.climateactiontracker.org.
- Cooley, Sarah R., and Scott C. Doney. 2009. "Ocean Acidification's Impact on Fisheries and Societies: A U.S. Perspective." *Current: The Journal of Marine Education* 25 (1): 15–19.
- Delacourt, Susan. 2010. "Climate Bill, Commons Crushed in One Blow." Toronto Star, November 17. http://www.thestar.com/news/sciencetech/environment/article/892053.
- Demerse, Clare. 2009. Our Fair Share: Canada's Role in Supporting Global Climate Solutions. Drayton Valley: Pembina Institute.
- — . 2010. "Leaked Government Document Says Canada Should End Fossil Fuel Subsidies." Pembina Institute, May 26. http://www. pembina.org/blog/339.

- Dickens, Gerald R., Maria M. Castillo, and James C. G. Walker. 1997. "A Blast of Gas in the Latest Paleocene: Simulating First-Order Effects of Massive Dissociation of Oceanic Methane Hydrate." *Geology* 25: 259–62.
- Diringer, Elliot. 2010. "Sixteenth Session of "A Blast of Gas in the Latest Paleocene: Simulating First-Order Effects of Massive Dissociation of Oceanic Methane Hydrate." *Geology* 25 the Conference of the Parties to the United Nations Framework Convention on Climate Change and Sixth Session of the Meeting of the Parties to the Kyoto Protocol." Pew Center for Global Climate Change, December. http://www.pewclimate.org/docUploads/cancun-climate-conference-cop16-summary.pdf.
- Doney, Scott C., Victoria J. Fabry, Richard A. Feely, and Joan A. Kleypas. 2009. "Ocean Acidification: The Other CO₂ Problem." *Annual Review of Marine Science* 1: 169–92.
- Dunlap, Riley E., and Aaron M. McCright. 2010. "Climate Change Denial: Sources, Actors and Strategies." In *Routledge Handbook of Climate Change and Society*, edited by Constance Lever-Tracy, 240–60. New York: Routledge.
- Dupont, S., and M. C. Thorndyke. 2009. "Impact of CO₂-Driven Ocean Acidification on Invertebrates Early Life-History What We Know, What We Need to Know and What We Can Do." *Biogeosciences Discussions* 6: 3109–31.
- Dupont, Sam, Nathan Dorey, and Michael Thorndyke. 2010. "What Metaanalysis Can Tell Us about Vulnerability of Marine Biodiversity to Ocean Acidification?" *Estuarine, Coastal and Shelf Science* 89: 182–85.
- Environment Canada. 2011. *Canada's Emissions Trends*. Ottawa: Public Works and Government Services of Canada.
- European Commission. 2010. Facts and Figures on the Common Fisheries Policy. Luxembourg: Publication Office of the European Union.
- European Environment Agency. 2010. "COP15: Outcomes and the Way Forward." European Environment Agency, January 20. http://www.eea.europa.eu/highlights/cop15-outcomes-and-the-way-forward.
- FAO (Food and Agriculture Organization). 2011. *The State of World Fisheries and Aquaculture 2010*. Rome: Food and Agriculture Organization.
- Feely, Richard A., Christopher L. Sabine, J. Martin Hernandez-Ayon, Debby Ianson, and Burke Hales. 2008. "Evidence for Upwelling of Corrosive 'Acidified' Water onto the Continental Shelf." *Science* 320 (5882): 1490–92.
- Fisheries and Oceans Canada. 2011. "Ocean Acidification." March 7. http://www.dfo-mpo.gc.ca/science/oceanography-oceanographie/impacts/acidification-eng.html.
- Gupta, M.V. 2006. "Challenges in Sustaining and Increasing Fish Production to Combat Hunger and Poverty in Asia." NAGA, WorldFish Center Quarterly 29 (1-2): 4–10.
- Gutstein, Donald. 2009. Not a Conspiracy Theory. Toronto: Key Porter Books.

- Hall, C. Michael. 2001. "Trends in Ocean and Coastal Tourism: The End of the Last Frontier?" *Ocean & Coastal Management* 44 (9-10): 601–18.
- Harrould-Kolieb, Ellycia. 2010. "COP16: Targeting Ocean Acidification." *OCEANA: The Beacon* (blog), December 9. http://na.oceana.org/en/blog/2010/12/cop16-targeting-ocean-acidification.
- Hauge, Kjellrun Hiis, Belinda Cleeland, and Douglas Clyde Wilson. 2009. Fisheries Depletion and Collapse. Geneva: International Risk Governance Council.
- Havenhand, Jon N., Fenina-Raphaela Buttler, Michael C. Thorndyke, and Jane E. Williamson. 2008. "Near-Future Levels of Ocean Acidification Reduce Fertilization Success in a Sea Urchin." *Current Biology* 18 (15): 651–52.
- Hendriks, Iris E., Carlos M. Duarte, and Marta Álvarez. 2010. "Vulnerability of Marine Biodiversity to Ocean Acidification: A Meta-analysis." *Estuarine, Coastal and Shelf Science* 86 (2): 157–64.
- Hoegh-Guldberg, Ove. 2009. "Climate Change and Coral Reefs: Trojan Horse or False Prophecy? A Response to Maynard et al. (2008)." *Coral Reefs* 28: 569–575.
- Hoegh-Guldberg, Ove, Hans Hoegth-Guldberg, J. E. N. Veron, Alison Green, Ed Gomez, Melanie King, Janice Lough, et al. 2009. *The Coral Triangle and Climate Change: Ecosystems, People and at Risk*. Brisbane: World Wildlife Fund.
- Hofmann, Gretchen E., James P. Barry, Peter J. Edmunds, Ruth D. Gates, David A. Hutchins, Terrie Klinger, and Mary A. Sewell. 2010. "The Effect of Ocean Acidification on Calcifying Organisms in Marine Ecosystems: An Organism to Ecosystem Perspective." *Annual Review of Ecology, Evolution, and Systematics* 41: 127–47.
- Hoggan, James, and Richard Littlemore. 2009. Climate Cover-Up: The Crusade to Deny Global Warming. Vancouver: Greystone Books.
- Hood, Maria, Wendy Broadgate, Ed Urban, and Owen Gaffney. 2009. *Ocean Acidification: A Summary for Policymakers from the Second Symposium on the Ocean in a High-CO₂ World.* Sweden: Second Symposium on the Ocean in a High-CO₂ World. http://www.ocean-acidification.net/OAdocs/SPM-lorezv2.pdf.
- IEA (International Energy Agency). 2010. "Energy Subsidies: Getting the Prices Right." Office of the Chief Economist, June 7. http://www.iea.org/files/energy_subsidies.pdf.
- IMF (International Monetary Fund). 2010. "World Economic Outlook Database." http://www.imf.org/external/pubs/ft/weo/2010/02/ weodata/index.aspx.
- IPCC (Intergovernmental Panel on Climate Change). 2007. "Ocean Acidification Due to Increasing Atmospheric Carbon Dioxide." In Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007, edited by S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, and H.L. Miller. Cambridge: Cambridge University Press. http:// www.ipcc.ch/publications_and_data/ar4/wg1/en/ch10s10-4-2.html.

- Kroeker, Kristy J., Rebecca L. Kordas, Ryan N. Crim, and Gerald G. Singh. 2010. "Meta-analysis Reveals Negative Yet Variable Effects of Ocean Acidification on Marine Organisms." Ecology Letters 13 (11): 1419–34.
- Kump, Lee R., Timothy J. Bralower, and Andy Ridgwell. 2009. "Ocean Acidification in Deep Time." *Oceanography* 22 (4): 94–107.
- Kurihara, Haruko. 2008. "Effects of CO₂-Driven Ocean Acidification on the Early Developmental Stages of Invertebrates." *Marine Ecology Progress Series* 373: 275–84.
- Lennox, Patrick. 2008. Contemporary Piracy off the Horn of Africa. Calgary: Canadian Defence and Foreign Affairs Institute.
- Maynard, Jeffrey A., Andrew H. Baird, and Morgan S. Pratchett. 2008. "Revisiting the Cassandra Syndrome: The Changing Climate of Coral Reef Research." *Coral Reefs* 27 (4): 745–49.
- McCook, Laurence J., Tony Ayling, Mike Chappo, J. Howard Choat, Richard D. Evans, Debora M. De Freitas, Michelle Heupel, et al. 2010. "Adaptive Management of the Great Barrier Reef: A Globally Significant Demonstration of the Benefits of Networks of Marine Reserves." Proceedings of the National Academy of Sciences of the United States of America 107: 18278–85. http://www.pnas.org/content/107/43/18278.full.pdf+html.
- McLaughlin, David. 2011. "Message from the President and CEO." In *Paying the Price: The Economic Impacts of Climate Change for Canada*, by the National Round Table on the Environment and the Economy, 5. Ottawa: National Round Table on the Environment and the Economy.
- McQuaig, Linda. 2006. War, Big Oil and the Fight for the Planet: It's the Crude, Dude. Toronto: Anchor Canada.
- Ministry of Population and the Environment. 2004. "Ecotourism and Poverty Alleviation: Contribution of Tourism in Developing Countries." In *State of the Environment* 2004. Nepal: Ministry of Population and the Environment of Nepal.
- Monbiot, George. 2006. Heat. Toronto: Doubleday Canada.
- Müller, Benito. 2002. *Equity in Climate Change: The Great Divide*. Oxford: Oxford Institute for Energy Studies.
- Narita, Daiju, Katrin Rehdanz, and Richard S.J. Tol. 2011. "Economic Costs of Ocean Acidification: A Look into the Impacts on Shellfish Production." ESRI Working Paper No. 391, Economic and Social Research Institute, Dublin. http://www.esri.ie/UserFiles/publications/WP391/WP391.pdf.
- National Marine Fisheries Service. 2011. Fisheries Economics of the United States 2009. Maryland: U.S. Department of Commerce. http://www.st.nmfs.noaa.gov/st5/publication/econ/2009/FEUS%202009%20ALL.pdf.
- NOAA (National Oceanic and Atmospheric Administration). 2011a. "Commercial Fishing A Cultural Tradition." http://stateofthecoast. noaa.gov/com_fishing/welcome.html.
- ———. 2011b. "Mauna Loa CO₂ Annual Mean Data." ftp://ftp.cmdl.noaa. gov/ccg/co2/trends/co2_annmean_mlo.txt.

- Nordhaus, William. 2008. A Question of Balance: Weighing the Options on Global Warming Policies. New Haven: Yale University Press.
- NRDC (National Resources Defense Council). 2009. Ocean Acidification: The Other CO₂ Problem. New York: National Resources Defense Council. http://www.nrdc.org/oceans/acidification/files/NRDC-OceanAcidFSWeb.pdf.
- OSPAR (Oslo and Paris) Commission. 2011. "Climate Change." http://www.ospar.org/content/content.asp?menu=00230307000000_000000_000000.
- Oxfam International. 2009. *Climate Shame: Get Back to the Table*. Oxfam Briefing Note, December 21. http://www.oxfam.org/sites/www.oxfam.org/files/briefing-note-climate-shame-get-back-to-the-table.pdf.
- Oxford Economics. 2009. Valuing the Effects of Great Barrier Reef Bleaching. Australia: Great Barrier Reef Foundation.
- Pagani, Mark, Zhonghui Liu, Jonathan LaRiviere, and Ana Christina Ravelo. 2010. "High Earth-System Climate Sensitivity Determined from Pliocene Carbon Dioxide Concentrations." *Nature Geoscience* 3: 27–30.
- Ridgwell, Andy, and Daniela N. Schmidt. 2010. "Past Constraints on the Vulnerability of Marine Calcifiers to Massive Carbon Dioxide Release." *Nature Geoscience* 3: 196–200.
- Rosenthal, Elisabeth. 2011. "Where Did Global Warming Go?" New York Times, October 15. http://www.nytimes.com/2011/10/16/sunday-review/whatever-happened-to-global-warming.html?_r=2&pagewanted=all.
- Royal Society. 2005. Ocean Acidification due to Increasing Atmospheric Carbon Dioxide. Policy document 12/05. June. http://royalsociety.org/uploadedFiles/Royal_Society_Content/policy/publications/2005/9634.pdf.
- Schaefer, Andrew. 1996. "1995 Canada-Spain Fishing Dispute (The Turbot War)." Georgetown International Environmental Law Review VIII (3): 437–49.
- Secretariat of the Convention on Biological Diversity. 2009. Scientific Synthesis of the Impacts of Ocean Acidification on Marine Biodiversity.

 CBD Technical Series No. 46. Montreal: Secretariat of the Convention on Biological Diversity. http://coralreef.noaa.gov/education/oa/resources/cbd_ts46_oceanacidification-web.pdf.
- Snegaroff, Claire, and Anna Cuenca. 2010. "Cancun Climate Talks Enter Final Stretch." *Agence France-Presse*, December 15. http://www.thejakartaglobe.com/afp/cancun-climate-talks-enter-final-stretch/410173.
- Spalding, Mark D., Corinna Ravilious, and Edmund P. Green. 2001. *The World Atlas of Coral Reefs*. Cambridge: United Nations Environment Programme World Conservation Monitoring Centre.
- Stern, Nicholas. 2006. *The Economics of Climate Change: The Stern Review*. Cambridge: Cambridge University Press.
- Suzuki, David, and Dave Robert Taylor. 2009. *The Big Picture: Reflections on Science, Humanity, and a Quickly Changing Planet*. Vancouver: Greystone Books.

- Talmage, Stephanie C., and Christopher J. Gobler. 2009. "The Effects of Elevated Carbon Dioxide Concentrations on the Metamorphosis, Size, and Survival of Larval Hard Clams (Mercenaria mercenaria), Bay Scallops (Argopecten irradians), and Eastern Oysters (Crassostrea virginica)." Limnology and Oceanography 54 (6): 2072–80.
- The Carbon Report. 2011. "What is COP 17?" http://www.thecarbonreport. com/what-is-cop-17.
- Thompson, Ken. 2010. *Do We Need Pandas? The Uncomfortable Truth about Biodiversity*. London: Green Books.
- Tol, Richard S.J. 2002a. "New Estimates of the Damage Costs of Climate Change, Part I: Benchmark Estimates." *Environmental and Resource Economics* 21 (1): 47–73.
- — . 2002b. "New Estimates of the Damage Costs of Climate Change, Part II: Dynamic Estimates." Environmental and Resource Economics 21 (2): 135–60.
- ———. 2009. *An Analysis of Mitigation as a Response to Climate Change*. Frederiksberg: Copenhagen Consensus Center. http://fixtheclimate.com/uploads/tx_templavoila/AP_Mitigation_Tol_v_3.0.pdf.
- UNEP (United Nations Environment Programme). 2010. UNEP Emerging Issues: Environmental Consequences of Ocean Acidification: A Threat to Food Security. Nairobi: United Nations Environment Programme. http://www.unep.org/dewa/pdf/Environmental_Consequences_of_Ocean_Acidification.pdf.
- UNFCCC (United Nations Framework Convention on Climate Change). 2011. "Climate Change Information Sheet 10: Agriculture and Food Security." http://unfccc.int/essential_background/background_publications_htmlpdf/climate_change_information_kit/items/288.php.
- Van Schalkwyk, Marthinus. 2009. "Marthinus Van Schalkwyk Addresses High Level Climate Change Seminar in Washington." Climate Action Partnership, January 30. http://www.cap.org.za/view.asp?ItemID=32&tname=tblComponent1&oname=&flt=&pg=front.
- Veron, John E. N. 2008. "Mass Extinctions and Ocean Acidification: Biological Constraints on Geological Dilemmas." *Coral Reefs* 27: 459–72.
- ———. 2011. "Ocean Acidification and Coral Reefs: An Emerging Big Picture." *Diversity* 3 (2): 262–74.
- Weible, Christopher M. 2006. "An Advocacy Coalition Framework Approach to Stakeholder Analysis: Understanding the Political Context of California Marine Protected Area Policy." *Journal of Public Administration Research and Theory* 17 (1): 95–117.
- White, Alan T., Helge P. Vogt, and Tijen Arin. 2000. "Philippine Coral Reefs under Threat: The Economic Losses Caused by Reef Destruction." *Marine Pollution Bulletin* 40 (7): 598–605.
- World Bank, FAO (Food and Agriculture Organization), and WorldFish Center. 2010. *The Hidden Harvests: The Global Contribution of Capture Fisheries*. Washington, DC: World Bank. http://siteresources.

- worldbank.org/EXTARD/Resources/336681-1224775570533/TheHiddenHarvestsConferenceEdition.pdf.
- Zachos, James C., Ursula Röhl, Stephen A. Schellenberg, Appy Sluijs, David A. Hodell, Daniel C. Kelly, Ellen Thomas, et al. 2005. "Rapid Acidification of the Ocean During the Paleocene-Eocene Thermal Maximum." *Science* 308 (5728): 1611–15.
- Zeebe, Richard E., and Dieter A. Wolf-Gladrow. 2001. CO₂ in Seawater: Equilibrium, Kinetics, Isotopes. New York: Elsevier.

Climate Change, Migration, and Megacities: Addressing the Dual Stresses of Mass Urbanization and Climate Vulnerability

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This article assesses the dual stresses that climate change and climate-induced migration are imposing on megacities in developing and emerging market countries. While cities in these countries are experiencing unprecedented urbanization, impacts of climate change such as desertification, flooding, and sea level rise will likely further increase urbanization and put additional pressure on physical and social infrastructure. Cities are not impervious to the impacts of climate change and as populations grow, these stresses will become more pronounced, especially if infrastructure and regulations remain underdeveloped. This article draws on two cases, Bangladesh and India, to illustrate the forces that are causing involuntary mobility from rural to urban areas and the consequent stresses that megacities like Mumbai will experience. It concludes with recommendations to develop comprehensive climate adaptation policies in order to limit the impacts of short- and long-term climate change on cities and the economic cost of such investments in the future, and to seek a normative shift on the issue of climate-induced migration to ensure that those victimized by anthropogenic and natural climate change are met with a compassionate, coordinated global regime.

Introduction

As evidence on the implications of a changing climate builds, migration is becoming a salient consequence of unabated greenhouse gas (GHG) emissions and poor climate risk adaptation. The scientific consensus is that warming of the climate system is "unequivocal" (IPCC 2007)—a term not freely used in the scientific community. With an increase in global temperatures and climatic variability, there is a higher risk of an increase in migration-inducing events, such as droughts, desertification, flooding, soil erosion, and transmission of airborne diseases, and other societal and ecological incidents. Megacities, defined as metropolitan areas with a total population in excess of 10 million people (Rana 2011, 240), are becoming focal points for climate change impacts and mass urbanization that in turn result in growing vulnerability to environmental and social change. The intersection of climate

change impacts and mass urbanization creates dual stresses on megacities: the stress of mass urbanization hinders the ability of megacities to adapt to the stress of climate change. This creates a negative feedback loop whereby climate change adaptation becomes progressively more difficult because of inadequate housing, infrastructure, resource supplies, and social services.

There are prominent examples of the severe impacts of climate change, particularly in developing and emerging market countries where poor health is often exacerbated. The World Health Organization (2008, 2) reported that a warmer and more volatile climate is expected to increase the already high instances of annual deaths related to natural disasters (60,000), urban air pollution (800,000), diarrhea (1.8 million), and malnutrition (3.5 million). The Intergovernmental Panel on Climate Change (IPCC), the leading international body for the assessment of climate change established by the United Nations Environment Programme and the World Meteorological Organization in 1988, indicates that there is "high confidence" in the scientific community that anthropogenic climate change is contributing to sea level rise and consequent high-risk scenarios for coastal cities without proper infrastructure (IPCC 2007, 7). Megacities such as Dhaka, Bangladesh, and Calcutta, India, typically rank among the most vulnerable coastal cities (WWF 2009, 2). Furthermore, as Priyanka Anand and Kallidaikurichi Seetharam (2011, 28) suggest, "when we consider that currently 13 out of the largest 20 megacities in the world are coastal cities, the grave situation facing urban populations around the world becomes poignantly apparent." Climate change is undoubtedly a global problem, one that becomes more challenging over time as it continues and more people move to cities.

While estimates vary, a conservative estimate is that annual migration to urban centres because of environmental change currently totals approximately 50 million people (Warner 2010, 697). Reasonable estimates by the International Organization for Migration suggest that the annual migration total could reach 200 million by 2050 (ibid.). If meaningful global action on climate change is not taken by 2020, there is a high likelihood that Earth will experience a series of tipping points, or irreversible events whereby the required mitigation becomes nearly impossible, causing significant yet unpredictable impacts on human mobility patterns. Nick Mabey (2009, 2) assesses that "these 'worst-case scenarios' are not low probability, but largely inevitable under current momentum of economic behaviour. As atmospheric concentrations [of carbon dioxide] increase, there is little uncertainty over whether extreme impacts will occur, only when they will happen." Migration will likely become a necessary survival option for individuals in an increasing number of vulnerable regions.

Most affected by climate impacts and climate-induced migration are highly vulnerable cities, notably megacities in developing and, to a lesser degree, emerging market countries where the physical, social, and regulatory infrastructure is typically insufficient to address these emergent stresses. As of 2007, more people live in cities than in rural areas for the first time in history, while more and more cities are growing past the population mark of

10 million (Bhagat and Mohanty 2009, 7). Meanwhile, cities are increasingly vulnerable to climate impacts because of "coastal location, exposure to the urban heat-island effect, high levels of outdoor and indoor pollution, high population density, and poor sanitation" (Campbell-Lendrum and Corvalan 2007, 1). These concurring trends have resulted in unprecedented pressure on megacities.

Research on the intersection of climate change and migration and their combined impact on megacities is still in its infancy and hence insufficient in the face of critical policy questions on the subjects of mitigating climate change and building resilience to impacts. Scholars, such as Alex de Sherbinin, Andrew Schiller, and Alex Pulsipher (2007), Diarmid Campbell-Lendrum and Carlos Corvalan (2007), Mobarak Khan, Alexander Kramer, and Luise Prufer-Kramer (2011), and Hilary Bambrick et al. (2011) assess the health and social impacts of climate change on cities and megacities, broadly concluding that climate change should be seen as a significant issue for cities and policies at all levels of government need to be designed to reflect this. These studies fall short of mentioning the added stresses that mass urbanization could impose on cities. Scholars such as Imtiaz Ahmed (2009), Cecelia Tacoli (2009), and Nicola Ranger et al. (2011) look at migration patterns and climateinduced urbanization in developing and emerging market countries. Their studies suggest that physical and social infrastructure currently cannot cope with mass urbanization. These scholars neglect to consider the stresses that climate change will impose on overpopulated regions. Only Susana Adamo (2010) considers the interrelation of migration, climate change, and cities, though she investigates theoretical implications rather than evaluating specific national and regional policies. Institutions, like the United Nations Population Fund, conduct extensive research on trends in population, climate change, and urban density (see, for instance, Dodman 2009), but the connection to migration is seldom made.

In order to assess the coinciding effects of climate change and climateinduced migration on megacities, this article will first outline a typology of climate migrants and refugees by considering the impacts of climate change as multipliers to current push factors of migration. It will then analyze the stresses that climate change imposes on megacities, particularly the dual stresses of mass urbanization and increasing climate vulnerability. It will then utilize a case-specific analysis of the interconnectedness of developing and emerging market countries to illustrate the forces that drive involuntary international and intranational mobility from rural to urban settings, and the subsequent stresses megacities experience and will continue to experience in upcoming decades. The case of Bangladesh is examined because the country is especially vulnerable to climate change and Bangladeshis have a history of migration to safer regions in Bangladesh and neighbouring India. Climateinduced migration within India demonstrates the physical, economic, ecological, and cultural shocks that megacities such as Mumbai will likely experience in the future. Case methodology shows how climate-induced migration has many facets, both international and intranational, and suggests

that major urban centres are disproportionately impacted. This article concludes by arguing that there is a need to move past the stifled debate on the inclusion of climate migrants in the international migration regime and acknowledge that climate change is having real impacts on migration patterns and, in turn, the capabilities of megacities to accommodate influxes of people. Two policy recommendations are proposed. First, the development of local policies, predominantly related to adaptation projects and mitigation initiatives, is necessary to build resilience to climate change. Second, a normative shift on the issue of climate-induced migration is needed to ensure that those victimized by anthropogenic and natural climate change are met with a compassionate, coordinated global regime rather than strict national immigration policies, like those currently employed in India.

Climate Refugees as Victims: A Typology

Maggie Ibrahim (2005, 171) cautions against the use of the term "threat" when discussing migration because doing so "lays the foundation for an increasingly interventionist style of international relations ... By shrouding migrants within a context of threat and insecurity, a dichotomy forms between host states (us) and migrants (them)." This line of thinking is likely what influenced Lester Brown, founder of the Worldwatch Institute and Earth Policy Institute, to introduce the term "environmental refugee" into the international migration lexicon, a term which puts the onus on states to be compassionate to victims of environmental volatility (Brown 1977, 1). The terms "environmental refugee" and "climate refugee" are often met with reservations from agencies such as the Office of the United Nations High Commissioner for Refugees (UNHCR), which prefers the term "environmentally displaced persons" because of the historical and legal weight that the term "refugee" holds in the international system (Biermann and Boas 2010, 66). But the refusal to be flexible with the term "refugee" in order to account for current and predicted future migration forces is the refusal to acknowledge a changing global dynamic.

Climate change creates three parallel categories of push factors that induce migration and there are three corresponding conceptions of migrants: traditional migrants, traditional refugees, and climate refugees. First, suddenonset climate-related disasters such as floods and hurricanes are push factors that are already resulting in forced migration from disaster areas. Many scholars argue that individuals who are temporarily or permanently forced off of their land "because of a marked environmental disruption" should be considered "climate refugees" (Warner 2010, 694). Such disasters are identifiable fear-and-consequence-driven push factors. Whereas the 1967 Refugee Protocol relating to the Status of Refugees focused on "fear from persecution" for reasons of "race, nationality, religion, membership in a particular social group, or political opinion" (ibid.), modern conceptions of fear, and thus of refugees, include fear of otherwise unavoidable natural forces. Fear in both cases is rooted in the desire for survival and security from threats—predominantly political threats in the former case and natural threats in the latter. The definition of "refugee"

needs to remain clear so as to maintain the effectiveness of the Refugee Protocol. Yet, the definition, as well as the review process, also needs to be flexible in order to adapt to ever-changing threats. A definition that equates "fear from persecution" with the very real fear from climate-related natural disasters would create new migration norms and simultaneously advance the urgency of mitigating climate change risks.

Second, slow-onset climate impacts such as soil erosion and desertification are push factors which magnify current "interacting physical and social variables, including agricultural and economic decline that ultimately force people from their homelands" (Homer-Dixon 1991, 1). These indirect, aggregated phenomena are largely unaccounted for by states, hence individuals on the move tend to be classified as migrants rather than refugees. Climate refugees' claims-for example, the lack of employment opportunities and unacceptable socio-economic conditions—are often similar if not identical to traditional migrants' claims. Individuals are eventually forced to migrate because of exogenous threats to housing and sustenance; moving is often a decision of last resort. The distinction between traditional migrants and climate refugees helps to understand the contemporary factors influencing migration, particularly as climate-induced migration becomes a more prominent issue. Embedding climate-induced migration within traditional migration definitions eliminates the nuance that is required to better address causes and effects, and thus limits the potential for effective solutions.

A third climate-related push factor category marries the first two categories above: slow-onset climate impacts and sudden forced migration. A changing climate's impact on agricultural production and natural resources will lead to what Thomas Homer-Dixon (1991, 1) calls "acute national and international conflict." He (ibid.) explains that "countries may fight over dwindling supplies of water and the effects of upstream pollution. In developing countries, a sharp drop in food crop production could lead to internal strife across urban-rural and nomadic-sedentary cleavages. If environmental degradation makes food supplies increasingly tight, exporters may be tempted to use food as a weapon." This third category remains under-researched. There is some disconnection between climate and conflict models. These predictions indicate that in the event of mass migration, states must avoid costly and irresponsible militarization and instead implement more rational and compassionate policies. Conflict in populous regions like Southeast Asia and sub-Saharan Africa would likely lead to forced migration and individuals forced from their lands would be classified as traditional refugees according to UNHCR.

Given these three categories, one of the fundamental challenges for the current international migration regime is to reconcile the likely trend of climate-related migration with the global shift to stricter border controls and immigration policies in light of the perceived threats of terrorism and illegal immigration. The international community is approaching a crossroads where a country's national immigration policies will determine many of its future development and security outcomes. As Tacoli (2009, 515) argues, "[p] olicies that support and accommodate mobility and migration are important for adaptation and the achievement of broader development goals. However, in most cases migration is still seen by many governments and international agency staff as disruptive and requiring control and restrictive measures." In short, there is a need to reconceptualize strict national immigration policies in the face of climate-induced migration and this need has larger social and developmental justifications.

Having outlined push factors, a typology of migrants, and the need for flexible definition of "refugee," this article now turns to how the dual stresses of mass urbanization and increasing climate vulnerability are putting previously unseen stresses on cities around the world. It will investigate how appropriate evidence-based policy-making on climate change mitigation and adaptation will help limit instances of the aforementioned push factors.

The Dual Stresses of Climate Change on Cities

Large cities are experiencing both mass urbanization and increasing vulnerability to climate change impacts, dual stresses that are unique to the 21st century. These stresses are putting pressure on the abilities of cities, primarily megacities in developing and emerging market countries, to provide basic services and support for their populations. Accelerated population growth in cities means that local governments must deal with residence overflow, diminished sanitation, high transit demand, and other social and welfare pressures. At the same time, cities are increasingly vulnerable to climate impacts such as floods and heat waves, which can exacerbate these varying pressures. Ranger et al. (2011, 140) argue that "many of the world's cities are hotspots of risk from extreme weather events and levels of risks in many cities are likely to grow due to a combination of population growth and development and rising intensities of extreme weather events." If the dual stresses, which cities will continue to experience, are not fully acknowledged and properly addressed, all levels of government and international governance structures will put populations and basic physical and social infrastructure at undue risk. As mass urbanization continues, climate refugees will be leaving one vulnerable zone for another.

By comparing the contemporary reality that more people live in cities than rural areas to the fact that only 13 per cent of the world's population lived in cities during the early 20th century, it is evident that mass urbanization will impose societal, economic, and cultural pressures on urban centres, since there is currently less space and fewer resources to be shared or distributed (Bhagat and Mohanty 2009, 6). Pressures include new burdens on transit infrastructure, increased competition for jobs, and reduced provision of social services. Instances of xenophobia may increase because some people might make a connection between migration and deteriorating conditions. Furthermore, over 900 million people—more than 70 per cent of urban populations in developing countries—currently live in slum-like conditions,

with this number expected to increase to two billion over the next 30 years (Little and Cocklin 2009, 77). Slum-like conditions are characterized by "low incomes, poor housing and provision of basic services, and no effective regulation of pollution or ecosystem degradation" (Campbell-Lendrum and Corvalan 2007, 111). While some studies suggest that urbanization can be a "positive force in overall poverty reduction" (Ravallion, Chen, and Sangraula 2007, 5), this is only possible if urbanization is met with robust social and physical urban infrastructure. Masud Rana (2011, 243) suggests that "urbanization and rapid urban change may be a negative sign of development provided the urban problems arise due to improper management and unplanned growth." Given the poor infrastructure conditions in a number of impoverished regions, like Bangladesh, climate-induced migration will likely lead to unplanned growth in megacities and management of this growth will probably be inadequate. If natural disasters, land degradation, or conflict result in sudden mass movements of people, megacities may experience the "urbanization of poverty," which would send shocks through societies and the global economy as prospects for equitable economic growth deteriorate. While it would be wrong to generalize that these claims apply to all of the world's 26 megacities, the policy issues at hand could certainly become salient in megacities like São Paolo, New York City, and London, where mass urbanization and climate change are already major concerns for local governments.

As cities begin to grapple with the prospects of increased urbanization, they are becoming increasingly vulnerable to the impacts of climate change. As Adamo (2010, 162) points out, "a large proportion of urban expansion is taking place in areas exposed to environmental hazards, [for example] low lying plains, coastal zones, stepped slopes and drylands." Notably, while coastal zones represent only 2 per cent of total land in the world, they are inhabited by 14 per cent of the world's overall population and 23 per cent of its urban population (ibid.). Inherent vulnerabilities like proximity to coasts and low river deltas are exacerbated by lax building codes, poor sanitation and waste policies, and the lack of resilience systems such as dams and dykes (de Sherbinin, Schiller, and Pulsipher 2007, 45-47). De Sherbinin, Schiller, and Pulsipher (ibid., 41) best explain this mix of stress and vulnerability: different pressures across scales come together in various sequences to create unique "stress bundles" that affect local systems. Significant consequences can result when stresses emanating from the environment coalesce with those arising from society. The concurrence of stresses synergistically enlarges the vulnerability of a system and risks then emerge from multiple sources and at different scales.

The dual stresses of mass urbanization and increasing vulnerability to climate impacts create stress bundles. To illustrate the consequences of these dual stresses for megacities, the next section will examine two complementary cases. One is a case of international migration from Bangladesh to India and the other is a case of intranational migration from rural regions in southern India to Mumbai.

Dual Cases: Bangladesh and India

This section analyzes historical trends in and future projections for Bangladesh, a developing country, and India, an emerging market country. The instances of the dual stresses and their consequences in these two cases are examples of a global problem. Many countries in Africa and South America are experiencing similar challenges. For example, ActionAid (2006, 2) looks closely at the impact of climate change on six African cities while frequently commenting on the added pressure that urbanization puts on flood resistance and public safety. Adamo (2010, 163) discusses an example in northeastern Brazil where "regional rural-urban migration and urban growth have also been related to the negative effects of droughts in agriculture, while growing populations in cities generate a concentrated demand for water that surpasses local availability." The dual stresses are evidently not unique to specific cities and regions, especially when trends and future prospects are considered.

In choosing cases to exemplify aforementioned statistics and arguments, this article needed to select a region that has recently dealt with mass urbanization and climate-related pressures so as to offer a historical perspective that is instructive in indicating likely future occurrences in other regions. The criteria used to select a case were: (1) presence of a megacity, defined as a metropolitan area with a population in excess of 10 million; (2) proximity to common climate risk zones such as coasts, deserts, and lowlying plains; and (3) historical trends of migration between neighbouring countries. The cases of Bangladesh and India were ultimately selected because of the presence of Mumbai, a coastal city that has been experiencing mass urbanization. This trend suggests that a migration channel exists; there is a history of migration between Bangladesh and India typically due to economic push factors. These factors will likely be exacerbated by climate change. The cases also satisfy the criterion of vulnerability given proximity to coasts and deserts, characteristics that are quite common among the world's 26 megacities. It is important to note that specific conclusions drawn from these cases, including exact climate risks, numbers of expected climate refugees, and overall risks, cannot be applied to other megacities. However, the resulting policy recommendations, which are transferable, should be applied globally.

According to the IPCC (2007, 7–22), the main climate change impacts in the India–Bangladesh region are increased frequency of droughts and floods negatively affecting local production, sea level rise exposing coasts to risks such as coastal erosion, and glacier melt in the Himalayas with more flooding and rock avalanches. The convergence of these impacts would likely lead to consequences for migration patterns and, subsequently, substantial pressures on societies in the region. Following discussions of historical trends, this section outlines the potential impacts that climate change will have on migration by first looking at international migration from rural Bangladesh to urban India and then at internal migration from rural to urban India.

Migration from Bangladesh to India has historically been a prominent issue because of the persistent economic inequality and related differences in social well-being between the two countries. The impending impacts of climate change, particularly in southern Bangladesh, are expected to aggravate tensions on the highly sensitive India-Bangladesh border. Bangladesh is one of the countries most vulnerable to climate change because of exposure to climate-related natural disasters, agriculture dependency, and its government's inability to adapt (Maplecroft 2010). Expected impacts include poor soil, water, and air quality and natural disasters such as floods, droughts, and tropical storms (Poncelet et al. 2010, 212). According to Maplecroft (2010), a British global risks analysis company, the Southeast Asian region and in particular India and Bangladesh are most vulnerable to climate change, and in fact are already experiencing elevated risks: "Throughout 2010, changes in weather patterns have resulted in a series of devastating natural disasters, especially in South Asia, where heavy floods in Pakistan affected more than 20 million people (over 10% of the total population) and killed more than 1,700 people. There is growing evidence climate change is increasing the intensity and frequency of climatic events."

Migration patterns will be especially affected by sea level rise and riverbank erosion, which are already contributing to "impoverishment and marginalization of rural families due to the loss of productive agricultural lands" (Poncelet et al. 2010, 213). Some scholars predict that environmental calamities in Bangladesh will primarily result in internal migration from rural to urban areas (ibid.), while others predict that in the medium to long term, more precarious scenarios will result in migration to its most affluent neighbour, India (Ahmed 2009, 297). A key observation is that "even a meter rise in sea level would inundate half of Bangladesh's riceland, forcing the relocation of easily 40 million people. In a densely populated country . . . internal relocation would not be easy" (ibid.). Bangladesh's population has in fact increased from 144 million at the time of Ahmed's 2009 study to roughly 158 million (CIA World Factbook 2011). Notably, Richard Black, Dominic Kniveton, and Kerestin Schmidt-Verkerk (2011, 445) argue that, given the economic inequality between Bangladesh and India, "it is likely that a significant proportion of any growth in migration that might result from rural impoverishment associated with the negative impacts of climate change could be seen in international migration to India; indeed, such crossborder migration is already arguably the largest bilateral migration flow in the world, larger even than flows from Mexico to the United States." Climate change is catalyzing additional international migration, which is straining relations between the countries. An estimated 20 million Bangladeshis are living illegally in India, a situation that has become "a major source of tension between the two countries" and has generated "a host of destabilising political, social, economic, ethnic, and communal tensions in many states and union territories of [India]" (Alam 2003, 423). Climate-related pressures in

Bangladesh may put India–Bangladesh relations under even greater strain in the coming decades. As such, India is pursuing stricter border security policies, which include the construction of a three-metre-tall barbed-wire fence along nearly the entire India–Bangladesh border (Ahmed 2009, 303). India has so far fenced over 4,000 kilometres of the border and constructed roads and floodlights to prevent illegal migration (Jones 2009, 293).

India's strict border security policies, coupled with the Bangladeshi government's consistent denial of "any illegal movement of people from Bangladesh to India," are producing "stateless persons" in this region (Ahmed 2009, 302). Ahmed (ibid.) explains that "in the midst of governmental politicking, with the Bangladesh government disowning the environmental refugees as 'citizens' of the country and the Indian government calling them 'illegal migrants' and taking measures to push them out of India, the victims of environmental disruptions, including (mal)development, end up losing protection from both countries." That is, these victims lose protection of their basic rights and face the constant threat of deportation and abuse from local police and residents.

In addition to political and often cultural exile, these migrants tend to be relegated to live in slum-like conditions. Alice Poncelet et al. (2010, 216) discuss the vicious cycle for climate refugees as it pertains to India:

Many slums where migrants had settled have been destroyed by the government, because they were illegal. The government is not implementing any resettlement or rehabilitation plans, but has closed down several slums. In such situations, people move from one slum to the other. At first, these people are determined not to move back to their original places, unless there are possibilities to earn a decent living. However, people are tired of moving all the time without achieving any improvement in quality of life, so when they are faced with this additional and unexpected difficulty (closing of the slums), some migrants chose to return to their place of origin.

The individuals least responsible for climate change—the poor and vulnerable in developing and emerging market countries—are most affected by the consequences of a changing climate. Without a substantive mix of adaptation policies and more-open borders in contexts of forced migration, climate change could result in further impoverishment of the poor, exacerbated stresses on megacities, and violent conflict.

Internal migration in India and its impact on Mumbai

Climate-induced international migration will likely be problematic, but research on the link between climate change and migration indicates that internal migration, or retreatment, is going to be the most significant aspect of climate-induced migration in all regions of the world. In India, climate-related desertification in the south is catalyzing migration to many of the

country's megacities, including Delhi, Kolkata, and Mumbai. One study on desertification and land degradation in India concluded that a 105.5 megahectare area of the country, or 37 per cent of the country's total geographic area, is undergoing processes of land degradation and of this, the area undergoing desertification is 81.4 mega hectares (Ajai et al. 2009, 1478). Much of this land is agricultural land in the rural south. The implications for global food security aside, desertification is reducing job opportunities and catalyzing mass migration from the rural south to India's urban centre (Leighton 2006, 48).

Mumbai is an exemplary case of climate-induced mass urbanization and the consequent urbanization of poverty. India's most populous city, Mumbai has a population of approximately 12.5 million residents; its population has increased by one-quarter in the past 20 years (India Online Pages 2011). Much of this population growth is a result of internal migration from the south and international migration from neighbouring countries. These trends are and will continue to be amplified by a changing climate.

Climate change has exacerbated Mumbai's many geographical and infrastructural vulnerabilities. The climate-related July 2005 monsoon flooding that killed more than 1,000 people demonstrated how vulnerable Mumbai really is. Flat topography, low river deltas, poor drainage systems, and lax building codes make the city particularly vulnerable to climaterelated pressures (de Sherbinin, Schiller, and Pulsipher 2007, 49). Mass urbanization is a problem on top of these vulnerabilities. According to the Munich Re Foundation (2007), those who died were disproportionately people living in slum settlements, with leading causes of death being drowning, wall collapse, and various diseases. Since over half of Mumbai's population lives in "squatter communities," characterized by single-storey buildings made of salvaged materials and suffering from poor sanitation and restricted access to water, vulnerabilities are only compounded (de Sherbinin, Schiller, and Pulsipher 2007, 49–50). This creates stress bundles. For instance, poorly designed and maintained buildings are damaged by extreme weather events. Local governments, which prioritize urgent capacity concerns like transportation provision, have limited abilities to improve disaster preparedness because of increased pressure on their resources. Local economies slow as more and more individuals become impoverished and are forced into slums. Policy at all levels of government has thus far been ineffective in the face of compounded vulnerabilities and stress bundles. Local governments' underdeveloped adaptation strategies, alongside the federal government's restrictive immigration policies and the international community's general disregard for climate-induced migration, are resulting in worsening living conditions. De Sherbinin, Schiller, and Pulsipher (ibid., 50) argue that "the challenges posed by climate change, especially flooding and sub-surface shifting in landfill areas, are unlikely to be met effectively."

As instances of climate-related pressures increase, life in Indian megacities will continue to be distinguished by vulnerability and poverty, and urbanization will likely continue unabated. The convergence of the

Indian federal government's lax climate change mitigation policies, its attitude toward Bangladeshi migrants, and local governments' ineffectual adaptation strategies make these trends highly likely. Desertification will force many Bangladeshis to seek refuge in India. As desertification continues and water scarcity becomes a reality in India's south, extreme weather patterns, especially flooding, will worsen already precarious socio-economic conditions in Mumbai. India and its major cities will become increasingly vulnerable.

Finding Solutions

The fundamental solution is for all countries to pursue rigorous climate change mitigation policies, given that there is an "unequivocal" scientific consensus that "[m]ost of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic GHG concentrations" (IPCC 2007, 5) and that the stresses and vulnerabilities outlined above are respectively climate-related and exacerbated by climate change. Developed countries and countries that benefit disproportionately from oil and coal industries must accept more responsibility for reducing emissions since they are responsible for the majority of emissions currently in the atmosphere. There are many policy options to choose from. Climate change can be addressed through emissions pricing (introducing a carbon tax), emissions caps (establishing a cap-and-trade system), voluntary emissions reduction targets and incentives for industry, and research funding for and development of new emission-reducing technologies.

Coordinating a global response to climate change has to date been difficult because of obstruction by key countries, particularly the United States and China, which results in lowest-common-denominator agreements. Leading up to the 15th Conference of the Parties to the United Nations (UN) Framework Convention on Climate Change in Copenhagen in 2009, the international climate regime was seen as "digging itself into ever deeper holes of rancorous relationships, stagnating issues, and stifled debates" (Depledge 2006, 1). The most recent meeting held in Durban, the 17th Conference of the Parties, produced an agreement that delayed the finalization of a successor treaty to the Kyoto Protocol until 2015 and stated that the new treaty would come into effect in 2020. Reform of the international climate regime has been proposed countless times since its conception in 1992. Trade sanctions and financial penalties, among other compliance mechanisms, have been discussed. The political backlash against such proposals has significantly tempered expectations on reforming the regime, not to mention the persistent tensions between developed and developing countries over the responsibility to reduce emissions. John Drexhage (2008, 1) argues that "to address the multi-faceted climate challenge we face, governance efforts must evolve beyond the current global regime-building model and . . . environmental and development policies must become much better integrated." Global fora are not the only means of addressing climate change. Matthew Hoffman (2011, 5) suggests that "the

center of gravity in the global response to climate change is shifting from the multilateral treaty-making process to the diverse activities found beyond the negotiating halls in cities, provinces and states, citizen groups, and corporations." It is impossible to remove state actors from the equation, but Hoffman makes an important point: since climate impacts are local, securing local-led and community-owned solutions is a promising way forward.

Since meaningful state action has not been taken at recent UN meetings, grassroots movements promoting mitigation and adaptation strategies must continue to be mobilized worldwide. These movements should promote investment in transportation, renewable energy, and infrastructure and engage individuals, corporations, and not-for-profit organizations. For local and municipal governments, climate change is becoming a real risk factor and policy priority. The C40 Cities Climate Leadership Group, a network of the world's megacities committed to addressing climate change, has emerged to reduce emissions and climate risks. Local action plans can be much more fluid and collaborative, whereas national and international plans have historically been slow-moving and competitive. If national governments do not reconsider their policy stances, the well-being of cities and prospects for sustainable economic and social development are at risk. Governments could help scale up local initiatives through funding and strategic support for transformative ideas and by opening up the regulatory environment to better mobilize capital for impactful work. For example, social and environmental finance could make a difference by funding local solutions to global challenges, but regulatory provisions, such as lending rules, stall action.

Even if all countries reduced GHG emissions to zero tomorrow, the impact humankind has already had on natural systems will continue causing detrimental climate change. As such, resilience policies must be pursued in all countries, particularly those with megacities. The three characteristics of resilience are: (1) the amount of disturbance a society can absorb and "still remain within the state of the domain of attraction;" (2) the degree to which the society is capable of self-organization or adjustment; and (3) the degree to which the society can build and increase the capacity for learning and adaptation (Prasad et al. 2009, 32). Policies include early warning systems, contingency plans, and relief measures. Notably, Singapore has increased the ground level in all reclamation programs and the City of London has redesigned the Thames Barrier flood control system to factor in likely sea level rise due to climate change (ibid., 30). In the pursuit of climate resilience in Mumbai, the Tata Energy Research Institute, an Indian environmental nongovernmental organization, conducted a study which concluded that "US\$24million invested in protection against sea-level rise would reduce the economic impact by US\$33-billion dollars" (de Sherbinin, Schiller, and Pulsipher 2007, 49). There are uncertainties about what the exact climate impacts on cities and particularly megacities will be, hence scholars such as Bambrick et al. (2011, 71) call for a focus on improving health and quality of life "no matter what climate impacts eventuate" as a more appropriate means of adapting to change. Policy goals include: reducing air pollution contributing to smog,

which will only worsen respiratory conditions as temperatures increase; leveraging community engagement and local solutions to improve early warning systems; and ensuring that adequate health care and preventative measures are available in the event of flooding, resource scarcity, and heat waves (ibid., 72–75). This focus necessitates providing public health clinics for respiratory illnesses, establishing adequate building codes in high-risk regions, and integrating health and well-being into municipal transit policies. In the cities of many developing and emerging market countries, inadequate resilience strategies and poor physical and social infrastructure mean that migration remains the most attractive option.

The prevalence of migration as a means of adapting in the short term suggests that there is a need for a normative shift in the international understanding of and global response to climate-related mobility. Tacoli (2009, 515) argues that "what is needed urgently is a radical change in perceptions of migration, and a better understanding of the role that local and national institutions need to play in making mobility be seen as part of the solution rather than the problem." Most immigration policies try to "influence the volume, direction and types of population movement," hence there is a need to reconceptualize the focus of immigration policies in order to "accommodate changes in migration patterns that result from environmental degradation, economic growth or crisis" (ibid., 523).

A normative shift would mean change at the India-Bangladesh border-it would mean moving away from strict border security, which treats climate refugees as threats, toward developing policies that treat them as victims of an inherently global problem. This perspective would change the international understanding of what is threatening. The events that induce forced migration, like climate change and conflict, would be seen as the real threats. Kim Rygiel (2010, 5) argues that "the increased implementation of border controls on the part of governing authorities has enabled the greater segregation (and differential treatment) of 'legitimate' mobilities such as leisure and business, from 'illegitimate' mobilities such as terrorism and illegal immigration." In order to move beyond the "us" and "them" dichotomy and redefine what is threatening, the root challenges facing the international migration regime must be addressed. Rygiel (ibid., 14-15) highlights an emerging politics of resistance, which involves, for example, the No One is Illegal and No Border movements, which are challenging the securitization of citizenship. Dispelling the notion of the securitized and legalized individual whose rights can be withheld and to whom resources can be denied, which had significant momentum prior to the modern era in border enforcement that linked low security to the risk of terrorist attacks, would lead to changes in border controls in climate-sensitive regions such as the India-Bangladesh border. An example of effective policy would be to divert the abundant resources spent on keeping people out, like on fences, guards, and biometric technologies, toward increasing the resilience of megacities so that they have the capacity to provide for victims of climate change and avoid the perpetuation of slum-like conditions.

Conclusion

With global temperatures and climatic variability increasing, and a corresponding higher risk of an increase in migration-inducing events, 40 million Bangladeshis could be forced to find refuge in nearby safer regions. Historical trends and empirical research suggest that the densely populated cities of India are not only the preferred option, but often the only option for climate refugees. Major cities in Africa, South America, and Asia are similarly vulnerable to many of the climate change impacts discussed above. Stress bundles may emerge to put pressure on governments and perpetuate poverty.

Rigorous climate change mitigation and adaptation policies are needed to avoid such scenarios all around the world. Likewise, a normative shift is needed, particularly in climate-sensitive regions and security discourse, to redefine what is threatening. The cases of Bangladesh and India indicate that the real threat is climate change, not migrants. Without addressing the causes and effects of climate change, what many people perceive as threats from migration will never be resolved.

The problem at hand is undoubtedly global and so systemic change is necessary. The potential implications of mass migration increase the urgency of the situation—all countries may be faced with the consequences of climate-induced migration. Given the prioritization of immigration issues in North America, Europe, and increasingly Southeast Asia, ignoring the empirical evidence suggesting that mass migration is a very likely consequence of climate change would be incompetent policy-making.

The policy recommendations in this article are only the tip of the iceberg and only an initial step in the right direction. Much research is still needed on policy on climate-induced migration to megacities and much more attention is needed from all levels of government. Specifically, there are gaps in knowledge when it comes to understanding the impacts that climate-induced mass migration will have on local economies, food security, education services, and cultures. A better understanding of the potential impacts on each of these areas could lead to even greater urgency on the issue of climate change mitigation and adaptation.

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References

- ActionAid. 2006. Climate Change, Urban Flooding and the Rights of the Urban Poor in Africa: Key Findings from Six African Cities. London: ActionAid International.
- Adamo, Susana. 2010. "Environmental Migration and Cities in the Context of Global Environmental Change." *Current Opinions in Environmental Sustainability* 2 (3): 161–65.
- Ahmed, Imtiaz. 2009. "Environmental Refugees and Environmental Distress Migration as a Security Challenge for India and Bangladesh." In Facing Global Environmental Change: Environmental, Human, Energy, Food, Health and Water Security Concepts, edited by Hans Günter Brauch, Úrsula Oswald Spring, John Grin, Czeslaw Mesjasz, Patricia Kameri-Mbote, Navnita Chadha Behera, Béchir Chourou, and Heinz Krummenacher, 295–308. Berlin: Springer.
- Ajai, A. S. Arya, P. S. Dhinwa, S. K. Pathan, and K. Ganesh Raj. 2009. "Desertification/Land Degradation Status Mapping in India." *Current Science* 97 (10): 1478–83.
- Alam, Sarfaraz. 2003. "Environmentally Induced Migration from Bangladesh to India." *Strategic Analysis* 27 (3): 422–28.
- Anand, Priyanka, and Kallidaikurichi Seetharam. 2011. "Climate Change and Living Cities: Global Problems with Local Solution." In *Climate Change and Sustainable Urban Development in Africa and Asia*, edited by Belinda Yuen and Asfaw Kumssa, 21–35. New York: Springer.
- Bambrick, Hilary Jane, Anthony Guy Capon, Guy Bruce Barnett, R. Matthew Beaty, and Anthony John Burton. 2011. "Climate Change and Health in the Urban Environment: Adaptation Opportunities in Australian Cities." *Asia-Pacific Journal of Public Health* 23 (2): 67–79.
- Bhagat, R. B., and Soumya Mohanty. 2009. "Emerging Patterns of Urbanization and the Contribution of Migration in Urban Growth in India." *Asian Population Studies* 6 (1): 5–20.
- Biermann, Frank, and Ingrid Boas. 2010. "Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees." *Global Environmental Politics* 10 (1): 60–88.
- Black, Richard, Dominic Kniveton, and Kerestin Schmidt-Verkerk. 2011. "Migration and Climate Change: Towards an Integrated Assessment of Sensitivity." *Environment and Planning A* 43 (1): 431–50.
- Brown, Lester. 1977. "Redefining National Security." World Watch Institute: 1.
- Campbell-Lendrum, Diarmid, and Carlos Corvalan. 2007. "Climate Change and Developing Country Cities: Implications for Environmental Health and Equity." *Journal of Urban Health* 84 (1): 109–17.

- CIA World Factbook. 2012. "South Asia Bangladesh." https://www.cia. gov/library/publications/the-world-factbook/geos/bg.html.
- Depledge, Joanna. 2006. "The Opposite of Learning: Ossification in the Climate Change Regime." *Global Environmental Politics* 6 (1): 1–22.
- de Sherbinin, Alex, Andrew Schiller, and Alex Pulsipher. 2007. "The Vulnerabilities of Global Cities to Climate Hazards." *Environment and Urbanization* 19 (1): 39–64.
- Dodman, David. 2009. "Urban Density and Climate Change." April 2. http://www.unfpa.org/webdav/site/global/users/schensul/public/CCPD/papers/Dodman%20Paper.pdf.
- Drexhage, John. 2008. "Climate Change and Global Governance: Which Way Ahead." IISD Global Environmental Governance Briefing Paper No. 2, International Institute for Sustainable Development, Winnipeg.
- Hoffman, Matthew J. 2011. *Climate Governance at the Crossroads: Experimenting with a Global Response after Kyoto*. New York: Oxford University Press.
- Homer-Dixon, Thomas. 1991. "On the Threshold: Environmental Changes as Causes of Acute Conflict." *International Security* 16 (2): 1–4.
- Ibrahim, Maggie. 2005. "The Securitization of Migration: A Racial Discourse." *International Migration* 43 (5): 171.
- India Online Pages. 2011. "Mumbai's Population." Accessed August 2011. http://www.indiaonlinepages.com/population/mumbai-population. html.
- IPCC (Intergovernmental Panel on Climate Change). 2007. "Climate Change 2007: Synthesis Report; Summary for Policymakers." http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf.
- Jones, Reese. 2009. "Geopolitical Boundary Narratives, the Global War on Terror and Border Fencing in India." *Transactions of the Institute of British Geographers* 34 (3): 290–304.
- Khan, Md. Mobarak Hossain, Alexander Kramer, and Luise Prufer-Kramer. 2011. "Climate Change and Infectious Disease in Megacities of the Indian Subcontinent: A Literature Review." In *Health in Megacities and Urban Areas*, edited by Alexander Krämer, Mobarak Hossain Khan, and Frauke Kraas, 135–152. New York: Springer.
- Leighton, Michelle. 2006. "Desertification and Migration." In *Governing Global Desertification: Linking Environmental Degradation, Poverty, and Participation*, edited by Pierre Marc Johnson, Karel Mayrand, and Marc Paquin, 43–58. Burtlington: Ashgate.
- Little, Laura, and Chris Cocklin. 2009. "The Vulnerability of Urban Slum Dwellers to Global Environmental Change." In *Global Environmental Change and Human Security*, edited by Richard A. Matthew, Jon Barnett, Bryan MacDonald, and Karen L. O'Brien, 77–96. Cambridge, MA: MIT Press.
- Mabey, Nick. 2009. "What Does the Security Community Need from a Global Climate Regime." E3G Briefing, November. http://www.e3g.org/images/uploads/E3G_What_does_the_Security_Community_need_from_a_Global_Climate_Regime.pdf.

- Maplecroft. 2010. "Big Economies of the Future Bangladesh, India, Philippines, Vietnam and Pakistan - Most at Risk from Climate Change." October 21. http://maplecroft.com/about/news/ccvi.html.
- Munich Re Foundation. 2007. "Vulnerability in Megacities: A Case Study of Events in Mumbai and Paris." http://www.munichre-foundation.org/NR/rdonlyres/5A2170A5-FED4-47AE-B2C7-A2C6A9055B39/0/PosterWolfMumbaiandParis.pdf.
- Poncelet, Alice, François Gemenne, Marco Martiniello, and Hassan Bousetta. 2010. "A Country Made for Disasters: Environmental Vulnerability and Forced Migration in Bangladesh." In *Environment, Forced Migration and Social Vulnerability*, edited by Tamer Afifi and Jill Jäger, 211–22. Berlin: Springer.
- Prasad, Neeraj, Federica Ranghieri, Fatima Shah, Zoe Trohanis, Earl Kessler, and Ravi Sinha. 2009. *Climate Resilient Cities: A Primer on Reducing Vulnerabilities to Disasters*. Washington, DC: World Bank.
- Rana, Masud P. 2011. "Urbanization and Sustainability: Challenges and Strategies for Sustainable Urban Development in Bangladesh." *Environment, Development, and Sustainability* 13 (1): 237–56.
- Ranger, Nicola, Stéphane Hallegatte, Sumana Bhattacharya, Murhty Bachu, Satya Priya, K. Dhore, Farhat Rafique, et al. 2011. "An Assessment of the Potential Impact of Climate Change on Flood Risk in Mumbai." *Climatic Change* 104 (1): 139–67.
- Ravallion, Martin, Shaohua Chen, and Prem Sangraula. 2007. "New Evidence on the Urbanisation of Global Poverty." World Bank Policy Research Working Paper No. 4199, World Bank, Washington, DC.
- Rygiel, Kim. 2010. Globalizing Citizenship. Vancouver: UBC Press.
- Tacoli, Cecelia. 2009. "Crisis or Adaptation? Migration and Climate Change in a Context of High Mobility." *Environment and Urbanization* 21 (2): 513–25.
- Warner, K., M. Hamza, A. Oliver-Smith, F. Renaud, and A. Julca. 2010. "Climate Change, Environmental Degradation and Migration." Natural Hazards 55 (3): 689–715.
- World Health Organization. 2008. *Protecting Health from Climate Change:* World Health Day 2008. Geneva: World Health Organization.
- WWF (World Wildlife Fund). 2009. Mega-Stress for Mega-Cities: A Climate Vulnerability Ranking of Major Coastal Cities in Asia. Gland: WWF International.

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