

Policy Failure, Policy Learning and
Policy Development in a Context of Internationalization

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Introduction

Accounts of policy development have often cited policy failure and policy learning as catalysts to policy change, including paradigmatic change. Policy makers, it is argued, draw lessons from their own policy failures as well as those of other jurisdictions (Hecló 1974; Bennett and Howlett 1992; Rose 1993).¹ Armed with this knowledge, they redesign programs so that they can better achieve their goals (Sabatier and Jenkins-Smith 1993). Besides its role in 'lesson drawing,' policy failure can induce policy change by virtue of creating uncertainty. At these junctures where decision makers are unclear as to what to do next, and the past appears to provide few reliable lessons, long-established policies barricaded by vested interests can be dislodged, political authority shifted to new locales, new policy goals embraced, and policy development moved on to a new path (Hall 1993; Blyth 2002).

Attention to the role of policy failure and policy learning in not simply incremental policy changes, but in more radical, paradigmatic change, undoubtedly owes much to Peter Hall's (1993) celebrated account of the transition in Britain from Keynesian to monetarist macro-economy policy. Hall put policy anomalies (outcomes at odds with those predicted by the theoretical tenets of the operative paradigm), policy failures and policy learning at the heart of his explanation of policy paradigm change. Others have found merit in Hall's invocation of policy failure as a trigger to policy learning and policy paradigm change. It has been used to explain, for example, the adoption of the European Monetary System (McNamara 1998), the privatization of the public sector in several Latin American countries (Meseguer 2004), agricultural policy paradigm change in industrialized countries (Coleman, Atkinson and Skogstad 1997), and central bank reform in the United Kingdom (King 2005).

Several of these accounts of policy paradigm change also implicate changes in the international political economy, including economic globalization, in policy failure and policy learning. For example, McNamara's (1998) study of the adoption of the European Monetary System argues that enhanced capital mobility engendered macroeconomic policy failure and a search for alternatives to traditional Keynesian policies. In this context, other countries learned from Germany's success with a 'pragmatic version' of monetarist policy; it was, in her words, 'a powerful example to emulate.' In like fashion, Ikenberry (1990: 89) states that privatization policies across governments in the 1980s are only comprehensible when account is taken of economic and technological changes in the international setting that 'discredited or rendered problematic the earlier appeal of enterprises managed in the public sector.'

¹ Although the focus here is on policy failure and learning, policy successes can also be the basis of policy learning (and policy transfer).

Intersecting with this body of literature on policy learning and policy development are propositions about 'a growing phenomenon' of 'policy transfer' (Dolowitz and Marsh 2000: 5). Dolowitz and Marsh define policy transfer as 'a process in which knowledge about policies, administrative arrangements, institutions and ideas in one political system (past or present) is used in the development of policies, administrative arrangements, institutions and ideas in another political system' (Ibid). These authors do not link policy transfer to either policy failure or policy success, but Stone (2004: 546) does, suggesting that 'policy transfer is likely to be more effective where learning has also taken place.' If what ultimately matters to policy transfer is policy learning, then there seems little to be gained by introducing the concept of policy transfer. Accordingly, the discussion here retains the concept of policy learning and devotes itself exclusively to probing its implications for policy development.

The policy transfer literature is useful, however, in positing a link between policy transfer and developments in the international political economy like economic globalization, supranational regulatory governance and transnational networking among non-state actors. Dolowitz (2006: 263) suggests that policy transfer is in part a response to globalization; the latter both contributes to policy failure and provides national actors with 'the means (opportunity) to learn how to govern more effectively.' How so? Economic globalization renders certain public policies—and particularly those predicated upon state intervention—less effective as states are now required to be more attentive to goals of economic competitiveness (Strange 1996; Cerny 2005). These competitiveness pressures often lead countries to emulate the successful policies of others (Ikenberry 1990: 89). At the same time, international or supra-national organizations with enhanced governance powers, like the OECD or the European Union, can play a role in helping countries solve the problems thrown up by globalization. By generating knowledge and acting as sites of consensus-building around shared problems, they serve as forums of policy learning and transfer (Dostal 2004; Stone 2004). Non-governmental actors and organizations, as well as transnational think tanks, also contribute to processes of policy development via policy failure, policy learning and policy transfer. Actors in social advocacy networks and epistemic communities, for example, point to the failure of public policies (including their gaps) and propose appropriate solutions to them (Haas 1992; Evans and Davies 1999; Stone 2004).

Speculation of the enhanced possibilities for policy failure and policy learning in the current internationalization era is clearly of great relevance to Canada. It is a medium sized country that is both an importing and exporting nation and hence vulnerable to the heightened possibilities for its policies to fail as they prove ineffective or inappropriate in a world of more permeable and integrated markets. To stave off this possibility or to deal with policy failure when it occurs, Canadian decision makers thus have incentives to emulate the successful policies of their competitors and/or to 'teach' others the merits of their own measures. They have reasons to embrace the emergence and granting of authority to international/supra-national organizations whose purpose is to address functional problems within individual policy arenas and across several policy arenas. Such forums can provide opportunities for policy learning and, as Dolowitz phrases it, 'to learn how to govern more effectively.'

But do they? Does failure-induced policy learning describe how Canadian policy makers

develop policies in response to the challenges of economic globalization? (How) do they learn from their own failures and/or those of others to deal with the complexity and uncertainty of policy making in a competitive global economy? Do Canadian policy makers use the knowledge-generated and diffused by international fora (international organizations and/or transnational networks) to devise domestic policies in advance of or in response to internationalization-related policy failures? Are they teachers or students in the process of failure-induced policy learning: active in international forums in knowledge construction and transmission, or are they rather borrowers of others' policy prescriptions? And, perhaps most importantly of all, how do domestic factors—domestic policy making processes and ideational frameworks, for example—affect the type of learning and the nature of policy development that results from policy failure?

These questions are all important ones and their answers exceed the reach of any single study. This paper is an initial effort at addressing the interplay of failure-induced policy learning, internationalization, and domestic policy development. It restricts its focus to policy learning around policy issues in which knowledge (expertise) is a critical resource in policy making but where what constitutes knowledge may be politically contested. These types of issues arguably provide more scope for policy learning of the sort that can lead to radical transitions in policies and policy paradigms.

Part I of the paper provides an analytical overview of the concepts of policy failure and policy learning which, first, distinguishes between policy failure as a social construct and policy failure as a material phenomenon; and second, differentiates among different types of policy-relevant learning. In particular, instrumental learning that is geared to problem solving within an existing interpretive framework should be distinguished from transformative or paradigmatic learning that entails adopting a new ideational frame of reference. Part I also theorizes on how the hegemony of technical expertise and paradigms/discourses of market liberalism and scientific rationality in international institutions may affect the possibilities for policy learning and paradigmatic policy development when policy failure occurs.

Part II turns to three empirical cases drawn from the domain of agricultural and food policy where the dynamics of internationalization via economic globalization, supra-national regulatory governance, and transnational networks of non-governmental actors are fully visible, and where policy failures have occurred. These three cases are policy developments with respect to BSE risk mitigation measures, the safety of genetically modified crops and foods, and farm income support programs. They illustrate the interactive dynamic of domestic policy learning and learning in international institutions, and their resulting consequences for policy developments.

I. Linking Policy Failure, Policy Learning and Policy Change

The terms 'policy failure' and 'policy learning' present conceptual and methodological challenges, and some would argue raise epistemological issues as well. In a 1992 overview of the then literature, Bennett and Howlett (1992) sifted through the multiple usages of the term 'learning' and noted the need to be conceptually precise about who learns (state and/or non-state actors?), what they learn (how better to achieve one's ends or the very need for new ends and/or

new values?), and with what consequences for policy change (incremental or paradigmatic?). Methodological issues arise too. How does one know when learning has taken place? Or, for that matter, when policies have failed? Several analysts concede the empirical difficulty of demonstrating that these processes are occurring or have occurred. Because learning cannot be directly observed, it must either be inferred or the researcher must rely on political actors' testimony that they have learned. Inferring learning is problematic, especially when the inference is from the very policy change for which learning is supposed to be an explanation.

Notwithstanding these challenges, there have been important steps taken in clarifying the concepts of policy failure and policy learning and the conditions under which they matter for policy development. Looking first at policy failure, May (1992: 341) provides the important insight that 'the objective reality of policy failure is less important than a perception of policy failure.' One *can* think of instances in which virtually everyone's perceptions of policy failure are in accord with a material outcome. Some policy failures (economic depression, a war lost when it was predicted to be 'a slam dunk', hundreds of civilians dead from eating meat labeled as safe) are of such magnitude and visibility that they can hardly escape this description. The only debate here will be over who or what to blame for the policy failure. In many instances, however, there will be more room for debate that policies have failed and perceptions will differ.² It is perceptions that count and perceptions of policy failure may or may not be materially grounded. Bovens et al. (2001:10) suggest that 'The assessment of success and failure of particular policies or programmes is in the end a political judgment. ... these political evaluations do not necessarily square with the actual performance of a programme or policy.'

The foregoing observations suggest the merits of treating policy failure as socially constructed: a perception shared by actors, rather than an empirical reality. A distinction can be made between policy failures around which there is widespread agreement (perhaps because of tangible indicators) that a policy is not producing desired or expected outcomes, and policy failures where there is less accord that desirable goals are not being met. This observation suggests that policies fail when they are perceived to be both ineffective and illegitimate. Indeed, Walsh (2006: 495) *defines* policy failure as occurring when responsible decision makers conclude that policies no longer achieve the political and program goals they prefer.

Turning to policy learning, conceptualization begins with a definition of learning as 'a change in beliefs or the degree of confidence in one's beliefs' as a result of observation and interpretation of experience (Levy 1994: 311). From here, a useful distinction is made between instrumental learning, on the one hand, and social or paradigmatic learning, on the other hand.³

² As a construct, policy failure can be likened to a crisis. As Blyth (2002: 9) observes, a crisis is not 'a self-apparent phenomenon' so that 'Crises need to be narrated and explained.'

³ May (1992) identifies a third type of policy-relevant learning that he calls political learning: learning strategies to enhance the political viability of policy proposals. It appears to this author that such strategic learning should be seen as a corollary to either instrumental or social learning.

Instrumental policy learning, says May (1992: 332) 'entails lessons about the viability of policy instruments or implementation designs.' A similar definition of instrumental learning, although described as 'policy-oriented learning,' is offered by Sabatier (1998: 104): 'relatively enduring alterations of thought or behavioral intentions which result from experience and/or new information and which are concerned with the attainment or revision of policy objectives.'

Instrumental policy learning is distinguished from social learning: 'lessons about the social construction of policy problems, the scope of policy, or policy goals' (May 1992: 332). Hall (1993) also refers to social learning as paradigmatic learning: a shift of beliefs about the problems in need of resolution and the goals worth pursuing, as well as the principles and means by which they should be achieved. Other analysts refer to a shift in policy frame (Rein and Schon 1993: 153). Social learning that results in paradigm change not only requires the de-legitimation of the existing paradigm but the presence of a politically viable alternate paradigm (c.f. Hall 1992; Walsh 2006).

An important question is whether instrumental learning can lead to social/paradigmatic learning and whether it can occur without shifts in the institutional context of policy making. Hall (1993) argued that social learning occurred as a result of sequential policy learning. Initial learning consisted of acquiring knowledge that the 'settings' of existing policy instruments needed adjustment. When these changes failed to deal with anomalies, subsequent learning suggested that the policy instruments needed changing if policy goals were to be realized. Both types of learning can be described as instrumental learning. Only when these reform efforts also failed to correct the anomalous outcomes did social learning occur. But social learning and paradigm change required a shift in the 'locus of authority' as well as in the governing coalition.⁴

Sabatier (1988) and his co-author (Sabatier and Jenkins-Smith 1993) also agree that social/paradigmatic learning is unlikely to take place without a change in the dominant governing coalition. In their view, policy actors can learn to adjust their strategies to achieve their core beliefs, including learning the need to alter policy instruments. As they acquire a better understanding of a problem—often from knowledge provided by scientists and other experts—they reform policies to realize their core policy beliefs. But they do not learn to change their fundamental or 'deep core' beliefs. Given these learning limitations, policy paradigms change only when one 'advocacy coalition' is displaced by another and the latter occurs when contextual changes fatally discredit the dominant belief system/policy paradigm.

For Hall and Sabatier, then, most learning will be intra-paradigmatic; that is, within the prevailing set of cognitive and normative beliefs of what constitute important policy problems and their appropriate solutions. Incidents of policy failure (when policies fail to realize their anticipated or desirable outcomes) are given order and meaning within this paradigm, or 'policy frame,' as it is frequently labeled (Rein and Schon 1993: 153). The discourse of political actors—

⁴In his investigation of change in British security policy after the Cold War, Walsh (2006) finds that a change in government was needed before policy failure translated into policy change.

the ideas, language and rhetoric they draw on to give meaning to events and to legitimize certain interpretations of these events—is likely to be consistent with the dominant paradigm.⁵ All this suggests that instrumental learning will be far more prominent than social/paradigmatic learning.

If (new) knowledge, information, and ideas can help political actors make sense of anomalous or undesirable outcomes and deal with contexts of uncertainty, there should be nonetheless be no assumption that either policy failure or policy learning will induce major policy change (May 1992; Walsh 2006). Policy failures that entail large economic, health or human costs *are* more likely to lead to paradigmatic learning and radical policy changes than those of smaller magnitude. For policy failures of lesser magnitude—where there is more room for debate about whether policy failure has occurred—there are likely to be differences in the rate of learning across state and non-state political actors. State officials may adjust their policy beliefs on the basis of negative feedback effects of policies and embrace new paradigms, but find themselves handicapped in moving forward on policy reforms by the absence of similar social learning on the part of non-state actors. Where norms require the consent of affected non-state actors for legitimate policy making, the link between learning and policy change will normally be dependent upon learning across both state and non-state actors.

The structures and norms of the institutional setting of policy development affect the possibilities for learning and for learning to result in appreciable policy change. ‘Competing networks’, says Pemberton (2003), prevented ‘third order’ or paradigmatic learning around economic policy in Great Britain in the 1960s from being translated into effective policies. By contrast, dense patterns of exchange among political actors may facilitate learning. In institutionalized networks where the same actors interact regularly with one another, there are more opportunities to translate information into common knowledge and for actors to re-evaluate their initial beliefs and preferences, and to engage in a problem solving logic (Eising 2002; Coleman et al. 1997; Hemerijck and van Kersbergen 1999). This learning may be instrumental, but it may also be paradigmatic.

The internationalization of domestic politics--via economic globalization, supranational governance, and transnational networks of non-state actors--creates more opportunities and incentives for social and instrumental learning. It is also likely to promote learning around particular paradigms. The incentives for learning (including pressures of competitiveness) have been noted earlier in the paper, as have the opportunities created by international organizations and transnational epistemic communities. Internationalization tends to privilege some discourses and paradigms over others with consequences for the domestic stability and influence of

⁵Discourse and framing are similar concepts (Hay and Rosamond 2002: 151; Fischer 2003: 90; Schmidt and Radaelli 2004: 193). Discourse can be viewed as the content of framing with the latter term referring to the exercise of providing ‘order, action, rhetoric, and analysis’ for understanding and dealing with problems’ (Rein and Schon 1993: 153). Both concepts direct attention to political actors’ use of *ideas* and *language* to shape the terms and outcomes of political debate.

domestic paradigms. The dominant discourse and paradigm of economic globalization is market liberalism. It is predicated on the belief that optimal policy outcomes result when market forces are allowed to function and state intervention is limited to cases of market failure (Hay 2005). In international organizations like the OECD and the WTO, market liberalism is supplemented by another paradigm: scientific rationality. It includes the belief that scientific facts can be derived that are universal, neutral and objective and that scientific principles therefore should serve as the basis for policy-making (Isaac 2002: 129). These two ascendant international paradigms--scientific rationality and market liberalism--may or may not be isomorphic with the dominant domestic paradigm. Where isomorphism exists, there is clearly less pressure on the domestic policy paradigm than where the opposite situation (a lack of congruence between domestic and international paradigms) prevails. In the first case, policy developments will be more likely to be consistent with instrumental learning and non-incremental change. Paradigmatic clash and possibly rupture is greater in the second situation.

More generally, the dominance of technical discourses in international organizations with authority for functional problem solving is intended to de-politicize issues of economic and social policy-making. In contexts of uncertainty, the expertise and 'best practice' guidelines of organizations like the OECD may be powerful 'teachers' that have the effect of discrediting paradigms predicated on other (non-liberal, non-scientific) premises. If Fischer (2003: 114) is correct in his observation that experts 'have the ability to constitute, control, and legitimize the very issues that we take to be the subjects of deliberation', their authority would appear to be even greater in an internationalizing context. Still, the capacity of experts to shape discourse and policy learning toward paradigm change would appear to be contingent upon not only their own internal unity/coherence but also the institutional setting of domestic policy development.

One final point can be made about how internationalization affects the possibilities for learning and policy development. Case studies of policy paradigm change, many referenced earlier in this paper, have observed a pattern of leaders and followers/teachers and students. Once large or economically dominant countries shift their policy paradigm, and the paradigm becomes acquainted with success, other nations will follow. The incentives to learn by emulating success are obviously considerable, and international organizations like the OECD, by publishing benchmark and best practice guidelines, help to make it easy for countries to do so.

To recap, policy failure may, but need not, induce policy learning and policy change. Policy failures need to be constructed and perceived as such by influential political actors. Policy failure opens the window to learning that goes beyond instrumental learning to entail social learning that allows for the adoption of new policy paradigms. Internationalization--by increasing the potential for policy failure, by popularizing alternate paradigms to those dominant in the domestic sphere, and by serving as a setting for knowledge generation and transmission--can create opportunities for both instrumental and social learning and thereby shape policy development.

II. Three Cases of Policy Failure, Policy Learning and Policy Development

How do the foregoing propositions help us understand policy developments in Canada in recent

decades? This part of the paper addresses this question by examining three issues in the agri-food sector where policy failures have had the potential to induce policy learning and change. In each case, international organizations have established either guidelines or rules for domestic policy development, creating opportunities for Canadian policy learning and policy change. The case studies show Canadian policy makers to be both teachers and students in failure-induced policy learning processes: active in international forums in knowledge construction but also transporting the cognitive and normative principles of international paradigms into domestic policy making. The analyses show more evidence of instrumental learning and policy changes within the existing policy paradigm than they do of social learning and shifts to new paradigms. In large part, this pattern results from Canada sharing the scientific rationality paradigm dominant in the OECD and WTO. Where there is international-domestic paradigmatic differentiation (on market liberalism), policy developments have not only been more fractious but developments that presaged a paradigm shift have later been checked.

A. Farm Income Support Programs: International Construction of Policy Failure and Reluctant Social Learning

In the post Second World War period, governments across rich industrialized countries implemented programs to subsidize agricultural commodity prices and to raise and stabilize farm incomes. These programs were consistent with the belief that agriculture was an exceptional economic sector and 'without [government] intervention, agricultural producers, consumers and society at large would be adversely affected' (Ingersent and Rayner 1999: 5). Not only do farmers face unmanageable natural risks of weather and disease outbreaks, it was also believed that agricultural markets were often imperfect: subject to inequities in the bargaining power of market participants and sharp fluctuations in commodity prices. The result was less than optimal outcomes that included farm incomes below those of non-farm workers. State intervention could be justified to yield more efficient outcomes and increase society's welfare to a greater degree than would a market liberal approach (Ibid: 5-8). The dominance of these beliefs resulted in considerable state assistance in industrialized countries, including transfers in support of commodity prices and farm incomes. The exceptional treatment of agriculture in domestic policy was complemented by its treatment in the international trade regime established after 1947. Even while successive rounds of GATT negotiations after 1947 gradually liberalized domestic markets, agriculture was largely excluded from these initiatives.

From the early 1980s onward, international criticism of industrialized countries' farm programs mounted. These programs were equated to policy failures on at least two counts. First, they had failed to realize their intended policy goals of stabilizing farm incomes and alleviating farm poverty. Second, they had contributed to 'the crisis on international markets' that pitted the treasuries of the United States and the European Union against one another and threatened the integrity of the international/GATT trade regime itself (Josling et al. 1996: 112). In independent institutes, government advisory bodies, and the OECD, agricultural economists diagnosed the severity of the problem of policy failure and recommend solutions to it (Ibid: 163-174). The economic analyses (knowledge) created and disseminated by the transnational epistemic community and the OECD quantified the fiscal burden of state assistance for agriculture, its

distorting effects on international agricultural markets, and the gains to be had by making agricultural markets more competitive.⁶ The epistemic community and the OECD elaborated and advocated a market liberal model of agriculture that rejected the premise of agriculture as a unique sector warranting exceptional treatment. Competitive markets were possible in agriculture, it was argued, and (functioning according to supply and demand) should largely determine producers' incomes. Persuaded by these analyses, OECD member countries agreed in 1987 to reform their agricultural policies in the direction of an increased market orientation and reduced state assistance. As GATT members, these same countries had previously agreed to negotiate their agricultural policies as part of the Uruguay Round negotiations (1986-93).

One principle OECD members endorsed as a basis for agricultural program reforms and incorporated into the World Trade Organization Agreement on Agriculture in 1995 is 'decoupling.' Programs with decoupled payments replace existing government programs that support commodity *prices* or make payments to farmers based on what or much they produce. It is theorized that decoupled payments, in the form of direct payments to farmers to support the income of their whole farm operation, serve two policy goals: they allow governments to support farm incomes and to do so without distorting production or trade (OECD 1994, 2000).

In advance of the principle of decoupling being implemented as part of the WTO Agreement on Agriculture, Canadian policy makers had introduced the farm community to the principle and built a consensus in major farm organizations for reform of Canadian farm income programs on the basis of decoupling. Policy changes followed as new programs consistent with supporting the income of the 'whole farm' were negotiated in a network of state actors and representatives of the farm community (Coleman et al. 1997). Farmers who participated in the new income safety net programs (as they were called) were required to share a portion of their costs and their co-financing responsibility necessitated the participation of their representatives in farm income safety net design. Farm income support programs were also reformed in the world's most important agricultural powers: in the EU in advance of the implementation of the WTO Agreement on Agriculture; in the United States, in its aftermath in 1996.

There were additional market liberal changes besides the program changes that implemented the internationally-sanctioned principle of decoupling into Canadian farm safety nets. A government-wide exercise in expenditure restraint in 1995 reduced federal expenditures for farm income safety net programs by 30 percent (Agriculture and Agri-Food Canada 1995). The termination of other subsidies brought Canadian government spending in support of producers' incomes to a ten year low, and Canadian government transfers to Canadian agriculture, as a percentage of the total value of production, substantially below those in the European Union and the average for OECD countries (OECD 1997: 31). A new paradigm consistent with the OECD market liberalism philosophy appeared to have been embraced in Canada. 'The agricultural sector in Canada,' said a senior official in the federal department of Agriculture and Agri-Food, 'has undergone a sharp increase in its market orientation combined

⁶ The Australian Bureau of Agricultural and Resource Economics, the International Agricultural Trade Research Consortium, and the International Policy Council on Agriculture and Trade were important institutional forums of such analyses and policy prescription.

with substantial decreases in support' (Huff 1997: 1408).

In the late 1990s and early 2000s, however, developments in the international political economy taught other lessons and checked enthusiasm for further embrace of a market liberal paradigm in agriculture. The terms of trade in international markets turned dramatically against Canadian farmers, bad weather added further to their income woes, and large numbers of farmers were struggling financially. The political discourse around farm income safety net program development changed dramatically. Rather than being a rationale for a market-oriented agriculture, economic globalization and the knowledge generated by the OECD was used to justify a brake on the market liberal paradigm. Canadian farm leaders used OECD data to demonstrate the continuing high levels of state support of farm incomes in the European Union and the United States, and argued that their own government had exposed them to greater competition and uncertainty in the global market place without providing a similar degree of insulation them from that vulnerability (Friesen 2000).

With the economic situation of many farmers (especially those in the grain sector) dire, farm leaders pressed for increases in government farm income support. The institutional framework of farm income policy development in Canada proved an ally. The very policy process that Hall implicated in paradigm change—one that takes policy making out of closed policy networks, shifts authoritative rule making to other sites, and often involves a societal wide debate—checked further transition to market liberal policy reforms in Canada. Canada's parliamentary and federal systems were both important institutional players in the arrested trajectory toward market liberalism. Farm leaders were able to make strategic alliances with provincial governments whose cost sharing responsibilities for farm income safety nets gave them considerable influence over policy developments. United in their endeavour, farm organizations were also adept at raising the profile of the farm income crisis, capturing the attention of national media, and garnering support of parliamentarians across all parties. Along with an improvement in the fiscal situation of governments, this context made augmented state assistance a more viable option than an alternate market liberal paradigm that would have left farmers to fend for themselves.

This hiatus in policy developments toward market liberalism was resisted by state actors in the government of Canada. Officials in Agriculture and Agri-Food Canada, and the minister of agriculture over the period 1997-2003, were loathe to resume significant fiscal transfers to the farm community and initially resisted farm leader entreaties. Consistent with analyses of the OECD (2005: 42-43), Canadian agricultural officials cited data that showed that farm incomes no longer lag behind non-farm incomes and used these data to argue that a major premise of state assistance—that government transfers are needed to raise farm incomes to some parity level with non-farm workers--was no longer tenable. This 'anomalous' outcome, however, did not hold sway with authoritative actors within the broader institutional framework of agricultural policy development.

Within the institutional setting that the OECD provides for its 30 member countries `to discuss, exchange views on what the problem is, get new ideas from other countries, and move

minds,'⁷ there was evidence of learning. On the basis of economic analyses produced by Agriculture and Agri-Food Canada that cast doubt on the assumption that all decoupled programs were production- and trade-neutral (Rude 2000), the OECD revised its decoupling guidelines (OECD 2000).

The OECD also made what some saw as a significant retreat from its advocacy of a market liberal paradigm for agriculture when it recognized the multi-functional character of agriculture and accepted the legitimacy of state intervention to provide valued goods that the market fails to provide: viable rural communities, food security and quality, bio-diversity and natural resource protection (OECD 1998). The concept of multifunctionality has guided reforms since the early 1990s to the EU's Common Agricultural Policy and become the basis for a new agri-food paradigm (Garzon 2006: chapter 9). Multifunctionality is also endorsed by other OECD members, including Norway, Switzerland, and Japan. In articulating a rationale that extended the basis for state financial assistance for agriculture, the OECD, in the words of one senior official, 'recognized that liberalization was not winning the day' and that the organization 'risked being irrelevant if it didn't take up the (multifunctionality) concept.'⁸

In Canada, the additional rationales for state assistance provided by multifunctionality were incorporated into a new Agricultural Policy Framework in 2003. The path of income safety net policy development through to 2006 has been consistent with OECD decoupling principles. In its 2005 review of Canada, the OECD credited Canada with 'substantial progress in policy reform' from its 1986-88 benchmark and towards less distorting forms of support. At the same time, the OECD noted that the upward trend in the level of support in the last decade, as governments had provided additional funding to support farm incomes 'works against the goal of a more market-oriented agricultural sector' (OECD 2005: 43).

In the case of farm income safety nets, then, there is evidence of state and non-state actors engaging in instrumental learning in the case of a constructed policy failure. Whether there is social learning—at least on the part of non-state actors in Canadian farm organizations—is more difficult to assess.

B. BSE Risk Mitigation Measures: Instrumental Learning within the Scientific Rationality Paradigm

The second case of BSE risk mitigation measures entails learning across countries and within the OIE. It began in 1986 with what most would describe as a colossal case of policy failure in the United Kingdom when cattle infected with bovine spongiform encephalopathy (BSE) or 'mad cow disease' enter the food chain. Over 100 British citizens died over the next decade and a half from an invariably fatal variant of Creutzfeldt-Jakob disease, presumably as a result of eating the infected beef. Sales of British beef plummeted, foreign markets closed, and the British beef industry sustained large economic losses. The British policy failure led not only to a better

⁷ Quote of an OECD senior official in a meeting with the author, May 2007.

⁸ Ibid.

understanding of the causes of the disease and how to lessen the risks of its occurring, but also to substantial policy developments. For example, responsibility for animal and food safety in the UK was transferred out of the agricultural ministry to a new, independent agency and new regulations to mitigate the risk of the disease were implemented.

Governments elsewhere learned from the British experience with BSE and the accumulating scientific knowledge about the causes of the disease and how to prevent its transmission to humans. When other European countries experienced outbreaks of BSE (for example, Germany in 2000), these countries also responded with rigorous institutional and policy reforms that reassigned institutional responsibility for food safety and were intended to increase food product safety.

Learning also took place in the World Organization for Animal Health (OIE), the organization that food exporting and importing countries created in 1924 to develop international health standards for animals and animal products with the aim of assuring the sanitary safety of international trade in these products. The OIE also advises on how to manage the risks of disease outbreaks. BSE was a disease unknown to the OIE and it drew extensively on the UK and European experience, as well the latest available scientific understanding of the disease, to issue its first guidelines to its 168 members in 1992. These guidelines advised both appropriate domestic measures to mitigate the risk of the disease and factors to take into account when importing products from countries with incidences of BSE.

OIE standards are voluntary and historically few countries adopted them in their entirety. However, since the implementation of the WTO Agreement on the Application of Sanitary and Phytosanitary Measures (hereafter, SPS Agreement) in 1995, countries that adhere to OIE standards are automatically in compliance with the SPS Agreement (Roberts 2001). The SPS Agreement and the OIE work within a scientific rationality paradigm that requires countries to base their sanitary measures on scientific principles and a risk assessment that is supported by scientific evidence. Although countries can take temporary measures to protect animal, plant or human health that are not based on scientific risk assessments, they have an obligation to seek out additional scientific information to support the temporary measures. Countries are also required to design their SPS measures in a way that impacts trade in the least restrictive fashion and does not discriminate between foreign and domestic goods. OIE standards and guidelines are proposed by scientific experts using the latest scientific information and are adopted by consensus by member countries during their annual meeting.

The scientific rationality paradigm is one upon which Canada regulatory authorities have long relied to determine their own sanitary measures. Shortly after BSE was confirmed in the United Kingdom, Canada imposed an import ban on UK live cattle and animal products, and latter extended this ban to all BSE-infected countries. When the OIE issued its guidelines with respect to BSE in 1992, it recommended that countries continue to receive imports from countries considered at high risk from BSE, providing certain conditions are met. Like many other countries, including the United States which was also then free of BSE, Canada did not adhere to this guideline. It did, however, implement another OIE guideline with respect to surveillance for BSE. Consistent with the state of existing scientific knowledge, the surveillance

measure tested a sample of higher risk cattle for BSE. In 1997, when the OIE recommended a prohibition on rendered meat and bone meal in feed for cattle and other (cud-chewing) ruminants, Canada implemented this measure as well. This ruminant-to-ruminant feed ban was consistent with scientific understanding that BSE is transmitted from animal to animal (and then to humans) when cattle (as one ruminant) are fed rendered meat and bone meal from infected animals.

When Canada's Food Inspection Agency announced the country's first home-borne incident of BSE in May 2003 (to be followed by two cases months later), Canadian regulators reported that the infected animals had not entered the food chain. Canadian consumers were reassured of the safety of their beef supply and their consumption of beef increased in the following months. Canadian consumers had not perceived the BSE case(s) to be instances of regulatory policy failure. It became immediately clear, however, that the livestock and meat industry faced an economic crisis. In keeping with the precautionary measures they are permitted under international law, thirty countries barred the entry of Canadian live cattle and beef products.

Of the lost markets none was more important than the American. The US was the destination for 70-80 percent of Canadian beef exports and almost 100 percent of live cattle exports. Despite commitments under NAFTA to harmonize sanitary standards for livestock (and other products) and meat inspection, little progress had been made by the time of the BSE outbreak (Kerr 2002). Both countries did have similar policies with regard to mandatory reporting and surveillance of BSE and both (as noted above) had banned the import of ruminants or ruminant/meat products from regions where BSE was known to exist.

Upon discovery of the Alberta BSE case, the Canadian government invited an OIE committee to review its procedures for mitigating and managing the risk of BSE. The review committee concluded that Canada met OIE guidelines, but it made a number of recommendations for further risk management. In the months ahead, Canada overhauled its BSE measures to bring them in line with OIE recommendations and a proposed international standard before the OIE.

Policy development was, however, complicated by an internal debate that questioned the scientific rationality model and by the perceived need to harmonize Canadian and American measures. Canadian (and American and Mexican) officials argued for scientific rationality; that is, that BSE measures should be based on the latest scientific risk assessments, and in line with emerging OIE guidelines. Alternatively, some industry groups, including the organization representing Canadian cattlemen, as well as the Alberta premier (where the cattle industry is concentrated) were willing to take whatever regulatory measures were necessary—including exceeding OIE recommendations—in order to access markets. Some importers of Canadian beef, most notably Japan, insisted that any future imports from BSE-infected countries—Canada and later the US—meet its own high standard of 100 per cent testing of slaughtered animals. Japan had adopted this BSE standard to address domestic consumer concerns following local BSE cases. The Japanese market was especially important to the United States, accounting for one-third of US exports. Convergence on the Japanese standard was a price that some Canadian cattlemen were willing to pay to recapture the Japanese (and US market). However, Canadian

and American regulatory officials both strongly resisted mandatory testing, arguing that the Japanese standard was not scientifically warranted and inconsistent with OIE guidelines regarding testing. Ultimately, Canadian regulators prevailed, building an internal consensus for their position and the reforms they proposed through a Roundtable that brought together more than 50 individuals who represented all sectors of the beef chain with provincial and federal government officials.

The other factor complicating policy development was the perceived need for Canadian and American (as well as Mexican) to be harmonized. American regulators had difficulty securing approval for their own regulatory changes, as its legal system provided veto points for those who wanted to block Canadian cattle and beef from entering the US market. Within two years, however, BSE regulatory measures were harmonized in the NAFTA region. This work was done in NAFTA-wide working groups of veterinarians and officials responsible for food safety but transnational networks of representatives of the cattle, meat packing, meat processing, and export trade in the NAFTA region were also important to expediting consensus for regulatory harmonization. The new BSE risk mitigation measures in NAFTA now conform more fully with WTO rules that require SPS measures to be based on scientific risk assessments and OIE guidelines than they did before the BSE economic crisis.

In the BSE case, then, state and societal learning has been instrumental: it has consisted of acquiring the information of the need to adjust policy instruments to secure access to vital export markets. It has stayed within the paradigm of scientific rationality.

C. Genetically Modified Crops and Foods: Paradigm Clash

The third case of regulation of genetically modified (GM) crops and plants tells a different story. Policy failure in the EU's regulatory approach has led the EU to depart in some considerable measure from the internationally dominant paradigm of scientific rationality and to move toward a social rationality paradigm. The absence of an international paradigm that enjoys legitimacy on both sides of the Atlantic has presented Canadian policy makers with a conundrum, but they have resisted societal pressures to move towards the European social rationality model. Policy development remains on the path on which it was launched two decades ago.

In 1986, the OECD issued guidelines on how to regulate genetically modified organisms (GMOs) to manage their safety risks from the stage of their development in the laboratory to their cultivation in field trials and for commercial harvesting. These organisms have had their genetic material (DNA) altered in a way that does not occur naturally by mating or natural recombination. In GM plants/crops, a (a pest-or herbicide-resistant) gene is transferred from one plant to another. The expected benefits for farmers are increased crop yields owing to the GM plant's protection from pests and diseases. There are, however, potential human health and environmental risks from genetic modification that have to be assessed and managed. There are also potential health risks with GM foods, which, for reasons of economy, will be the focus of discussion here.

In the early 1990s, an OECD expert committee recommended the principle of

`substantial equivalence' be used to assess the risks of GM foods. The concept of substantial equivalence assumes that GM crops and foods are not inherently different from and less safe than their counterparts produced through traditional processes. Only when the molecular structure of a GM food differs from its conventional counterpart should the GM products be more rigorously regulated. By the mid-1990s this concept had been made a part of the EU, US and Canadian regulatory frameworks (Murphy and Levidow 2006).

While approval and commercialization of GM crops proceeded apace in North America, the situation was rather different in the European Union. Public opposition to GM foods and crops mounted in Europe and when the first American shipments of GM soya and corn arrived in Europe in 1996, environmental groups successfully blocked their importation. Food retailers pulled GM food products from their shelves. With public sentiment running strongly against GM products, EU member states refused to approve new applications to license GM crops and foods. The EU had assumed the joint task with member states of regulating GMOs in order to maintain the internal market (that is, to avoid regulatory barriers across member countries with respect to GM licensing and commercialization). The actions of member states indicated EU policy failure as measured by this goal.

Policy learning and policy changes followed in the wake of policy failure as the EU modified its GMO regulatory framework to pass public tests of legitimacy. These reforms were consistent with an alternate paradigm to the scientific rationality one that dominates in North America and which is implemented in WTO agreements. In Canada and the United States, only the scientifically determined risks of GMOs are considered in decisions to license GM crops and foods; other considerations, like the ethical, social and economic issues raised by the technology are ignored. Whereas science is viewed as value-free in North America and a powerful source of authority for regulation, it enjoys no similar status in Europe and regulators must therefore rely on mechanisms of citizen input—democracy—to justify risk regulation processes and outcomes (Jasanoff 2005: 266, 288). The resulting paradigm of `social rationality' (Isaac 2002) incorporates social concerns about plant biotechnology and does not rely solely on scientific knowledge about the risks of the technology when regulating it. EU regulatory reforms in the early 2000s included new requirements to label and trace GM products, made approval procedures more transparent and democratic, and endorsed the precautionary principle.⁹ They also explicitly rejected the concept of substantial equivalence of GM and non-GM foods.

The divergent regulatory approaches of North America and the European Union, coupled with regulatory diversity across countries around the globe, have made elusive consensus-building within international institutions on appropriate guidelines for regulating GM products. The SPS Agreement requires that countries base their SPS measures on scientific risk assessments and international guidelines where they exist, and mandates the Codex Alimentarius

⁹Despite these rigorous measures, there continues to be considerable opposition to GM crops and foods in some EU member states and the products which have been licensed under the new regulations have all been approved by a procedure which allows appointed European Commission officials to license a GM product.

Commission (Codex) to establish international standards and guidelines. To date, Codex has had only partial success in fulfilling this mandate. Its committee mandated to establish guidelines and standards for labelling GM food has been unable to bridge the difference between countries that oppose labelling of GM foods to indicate their method of production (Canada and the United States) and those who support extensive labelling of GM food to provide consumer information unrelated to health and safety effects (approximately 30 countries, including the member countries of the EU (Gruere 2006: 16-17).

The European, indeed international, backlash against GM crops and foods has occasioned learning on the part of Canadian social activists who oppose the technology. An alliance of groups representing environmentalists, consumers, organic farmers, and globalization sceptics among others has lobbied the Canadian government for legislation that would effectively redirect Canadian GMO policy away from its current path toward the social rationality model embraced in the EU. They have, for example, argued that the principle of the consumer's right to choose should be upheld in the form of mandatory labelling of GM foods.¹⁰ None of these pressures from civil society groups to incorporate a broader range of social concerns into Canada's GMO regulatory framework has persuaded government regulators to deter from their science-based framework: one that gives civil society 'limited say' and is 'limited to traditional actors and experts' (Isaac 2002: 200). Canadian regulators (and plant biotechnology developers and the vast majority of the Canadian farm community) have stuck with a regulatory framework that is consistent with the scientific rationality model that prevails in the United States and, albeit with less than full legitimacy, in international law. If there is any learning taking place, it is to reinforce a long-standing belief that the interests of an export-dependent country, and one overwhelmingly dependent upon the American market, lie with aligning Canada's regulatory frameworks with international rules and principles, especially when those same rules and principles are those of its major trading partner.

III. Conclusion

This paper has reviewed the literature that links the concepts of policy failure, policy learning and policy development. It has theoretically distinguished between policy failures that are constructed as compared to those for which there are clearer material manifestations. This distinction helps to understand how policy failures that are socially constructed—such as that around farm income programs in industrialized countries—may have uneven effects over time in serving as catalysts to policy change. Sifting through the literature on policy learning, it has argued that a useful distinction can be made between instrumental (intra-paradigm) learning and social learning by which new policy frames and new cognitive and normative beliefs are acquired. Theorizing suggests that policy failure can induce social learning, but it is only in the case of the European GMO policy that such social learning is revealed here. There may be social learning and paradigm change with regard to farm income safety nets in Canada but it remains unclear at this point whether the multifunctionality concept will be fully embraced in Canada.

¹⁰Consistent with international guidelines and the practice elsewhere, Canada requires GM foods that raise health issues, such as compositional or nutritional changes, to be labelled.

There is evidence of the capacity of internationalization-as manifested in the influence of transnational epistemic communities and the governance authority of international institutions—to engender policy learning and paradigm change. Canada’s scientific rationality paradigm with respect to sanitary and phytosanitary measures is congruent with that of supranational regulatory governance (the WTO, the OIE, Codex). Still, the BSE case does reveal domestic policy learning consistent with drawing lessons from other countries and in keeping with the scientific knowledge in the OIE regarding the disease. The alternate market liberal paradigm of the OECD (and incorporated to some measure in the WTO) has had a more destabilizing impact on domestic policy developments.

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