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Crafting the Nuclear Regime Complex (1950–1975): Dynamics of Harmonization of Opaque Treaty Rules

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Abstract

In recent years, international lawyers have increasingly debated the normative consequences of the 'fragmentation' of international law. More rarely have they studied empirically how tensions between overlapping systems of rules emerge, how conflicts are harmonized, and with what effects. This article explains such dynamics in the case of the nuclear non-proliferation regime (NPR) complex. Based on original archival fieldwork conducted in the private papers of American and European diplomats in the early Cold War, it shows how Western states solved the tensions that existed between contradictory commitments contracted in the European Atomic Energy Community (Euratom) Treaty and the Nuclear Non-proliferation Treaty in 1968 (NPT). To lessen the tensions between regional and global orders, the Euratom control rules were used as a source of inspiration for the new rules used to monitor compliance with the NPT at the global level. In retrospect, this outcome was puzzling, as the Euratom Treaty was not originally concerned with non-proliferation issues. That the knowledge of the original intentions behind Euratom was lost to the policymakers who negotiated the NPT thus had grave consequences in the future. This case shows the importance of studying the concrete knowledge of international legal rules that gets transmitted across generations of policymakers in order to understand how regime complexity evolves.

In recent years, international lawyers have increasingly debated the normative consequences of the 'fragmentation' of international law, e.g., the 'increased proliferation of international regulatory institutions with overlapping jurisdictions and

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ambiguous boundaries'.[1] Legal theorists have come to recognize that the normative principles enshrined in the Vienna Convention on the Law of Treaties (1969) no longer provide clear guidelines in a world in which treaties with overlapping jurisdiction and non-identical parties have multiplied.[2] Thus, an interesting debate has emerged among legal scholars over which normative principles should be adopted when treaty regimes distribute differently rights and duties to their adherents:[3] while some have complained about the negative consequences of legal fragmentation,[4] others have praised the networked form of governance it generates,[5] and the adoption of global norms of 'legal pluralism' it often entails.[6]

More rarely have legal scholars explained the empirical mechanisms that lead either to the 'fragmentation' of international law or to the 'harmonization' of the legal rules adopted and enforced by regulatory institutions with overlapping jurisdictions. This article proposes to carry out this task by explaining the (socio-cognitive) dynamics of fragmentation and harmonization rather than discussing their normative implications. In particular, it seeks to invite the 'law and society' scholars to pay more attention to the role played by the concrete knowledge of legal rules possessed by policymakers in their analysis of the dynamics of 'regime complexes', e.g., loosely coupled and 'partially overlapping and parallel regimes that are not hierarchically ordered'.[7]

In doing so, this article adds to various strands of empirical research on regime complexity and legal fragmentation. This article continues the work done by political scientists on 'regime complexes' in the fields of trade, climate change and human rights law, by adding a focus on treaties in the fields of international security, which are rarely analysed as dynamic and unstable socio-cognitive objects.[8] But whereas political scientists interested in explaining regime complexity generally assume that such complexity emerges when powerful states seek to 'reduce the clarity of legal obligation by introducing overlapping sets of legal rules and jurisdictions governing

1 Benvenisti and Downs, 'The Empire's New Clothes: Political Economy and the Fragmentation of International Law', 60 *Stanford L Rev* (2007) 596.

2 Koskenniemi, 'Fragmentation of International Law: Postmodern Anxieties', 15 *Leiden J Int'l L* (2002) 553.

3 Shaffer and Pollack, 'Hard vs. Soft Law: Alternatives, Complements and Antagonists in International Governance', 94 *Minnesota L Rev* (2010) 707, and 'Hard versus Soft Law in International Security', 52 *Boston College L Rev* (2011) 1149.

4 Benvenisti and Downs, *supra* note 1, at 598.

5 A. Slaughter, *A New World Order* (2004).

6 Koskenniemi, *supra* note 2; Maduro, 'Contrapunctual Law: Europe's Constitutional Pluralism in Action', in N. Walker (ed.), *Sovereignty in Transition* (2003), at 501–537; Halberstam, 'Local, Global and Plural Constitutionalism: Europe Meets the World', in G. De Burca and J. Weiler, *The Worlds of European Constitutionalism* (2010).

7 Alter and Meunier, 'The Politics of Regime Complexity', 7 *Perspectives on Politics* (2009) 13.

8 For international security specialists, states either stick to the original meaning of treaty provisions, or abandon these rules altogether when the actions that treaties prescribe clash with how they understand their national interest: Keohane, 'The Demand for International Regimes', in S. Krasner (ed.), *International Regimes* (1983), at 141–172.

an issue'[9] (and thus treat states as unitary and strategic actors), this article focuses on the socio-cognitive dynamics of regime complexity (and the knowledge of international law possessed by policymakers). This article shows that regime complexity can emerge almost inadvertently, because new policymakers in powerful states have a limited knowledge of prior legal rules passed by their predecessors; and that, in fact, once they are made aware of tensions between overlapping treaty rules, even these policymakers who work for powerful states take seriously the task of harmonizing the commitments that their states successively pledge to honour on behalf of various treaties with overlapping but non-identical parties. In other words, policymakers usually take law seriously, although it is unclear whether they know what the law says at one point in time.

This article also offers a complement to the 'recursive' approach to global lawmaking and the formation of 'transnational legal orders' developed by socio-legal scholars who focus on the socio-cognitive dynamics at play in domestic struggles for power and on their effect on transnational legal regimes.[10] As the sustainability of past legal rules over time depends upon the ability of governmental interpretative agencies (national and international courts, governmental offices, legislative authorities) to *remember* which treaty rules their predecessors have pledged to honour, and to *know* the original meaning of specific treaty rules at the time they were first signed, socio-legal scholars insist that regime complexes should not be studied in the abstract, as if 'states' were not made of human beings with limited knowledge resources. The interpretation of treaty rules is often greatly affected by their clarity or ambiguity:[11] indeed, it seems easier for new policymakers to change the interpretation of ambiguous rules than clearly understood ones, and to adapt ambiguous rules to the new objectives of their policy coalitions.[12] But, as this article adds, new policymakers can interpret past rules in ways that radically depart from the original intentions of their authors not only because these rules were ambiguous or because these newcomers bring new ideological lenses to the policy debate, but also because newcomers may ignore the original intentions of their elders: this is especially true when their elders were careful to hide some of their original intentions when they privately negotiated past treaties.

This article shows that we can better understand the emergence and evolution of regime complexes and transnational legal orders by studying how specific treaty rules

[9] As Karen Alter and Sophie Meunier (*supra* note 7, at 16) write, regime complexity often 'further advantages the rich and powerful – be they the most resourced states, firms able to hire expensive lawyers or the most organized activists'; see also Benvenisti and Downs, *supra* note 1, at 597; and Drezner, 'The Power and Peril of International Regime Complexity', 7 *Perspectives on Politics* (2009) 66.

[10] Halliday and Carruthers, 'The Recursivity of Law: Global Norm Making and National Lawmaking in the Globalization of Corporate Insolvency Regimes', 112 *Am J Sociology* (2007) 1135. This recursive approach to legal ordering converges with that of 'regime complexity' scholars: Shaffer and Halliday, 'Transnational Legal Ordering', Paper presented at the Law and Society Association Meetings (2012), at 14.

[11] H. Morgenthau, *Politics Among Nations* (1960), at 277; Abbott and Snidal, 'Hard and Soft Law in International Governance', 54 *Int'l Org* (2001) 421; Tallberg, 'Paths to Compliance: Enforcement Management and the European Union', 56 *Int'l Org* (2002) 609; Shaffer and Halliday, *supra* note 10, at 5.

[12] Y. Dezalay and B. Garth, *The Internationalization of Palace Wars: Lawyers, Economists, and the Contest to Transform Latin American States* (2002); A. Cohen and A. Vauchez (eds), 'Introduction: Law, Lawyers, and Transnational Politics in the Production of Europe', 32 *L and Social Inquiry* (2007) 75.

are understood by diplomats who participate in the treaty negotiations and by those who remain outside, and by analysing how the knowledge of these legal rules (found in treaties, agreements, protocols, 'soft law' guidelines produced by international organizations) is transmitted between generations of policymakers in successive periods of treaty negotiation, implementation, and reform. In particular, this article focuses on the (limited) knowledge that the US policymakers who negotiated the Nuclear Non-proliferation Treaty (NPT) in 1968 possessed of existing European legal rules adopted in the late 1950s, and the role that such limited (and biased) knowledge played in the emergence of a regime complex in the field of nuclear non-proliferation.

The aim of this article is not to be exhaustive but illustrative, as its empirical focus is restricted to documenting the role that these mechanisms of inter-generational transmission played in the dynamics of fragmentation and harmonization in the nuclear Non-Proliferation Regime (NPR) complex, a particularly interesting case as it represents one field where the issue of fragmentation has had strong consequences. Indeed, although the NPR complex includes a rather clear set of treaty rules written in the NPT, signed in 1968, and a verification system (through the International Atomic Energy Agency or IAEA) that is one of the most intrusive ever made to this day, its control rules have been criticized for containing too many loopholes, inconsistencies, and exceptions. As former IAEA Director General Mohamed ElBaradei acknowledges, the existence of 'double [or triple] standards' pervading the NPR complex almost led the world to a 'state of chaos'.[13] In particular, many tensions within the NPR complex concerned whether the control rules instituted in Western Europe since the European Atomic Energy Community Treaty (Euratom Treaty, 1957) would continue to be valid after the NPT, and whether similar rules would be applied to the non-Western and decolonizing world.[14]

Based upon new archival research in the private papers of key American and European diplomats,[15] this article documents how multiple stakeholders interpreted the monitoring rules by which the regime institutions (Euratom and the IAEA) abided, and the role that their limited knowledge of each set of rules played in the emergence of a regime complex. To do so, I consulted the personal and institutional archives of key global lawmakers and international organizations in the US and Europe: I used a 'snow-balling technique' which consists of starting with one individual whom I (among others) consider a key player in the making of the NPR complex, and

[13] M. ElBaradei, *The Age of Deception: Nuclear Diplomacy in Treacherous Times* (2011), at 258.

[14] G. Perkovich, *India's Nuclear Bomb: The Impact on Global Proliferation* (1999), at 138; A. Forland, *Negotiating Supranational Rules: The Genesis of the International Atomic Energy Agency Safeguards System*, PhD Dissertation (1997).

[15] In addition to consulting the papers of Jean Monnet, I consulted official and private papers of key individuals in various sites: at the European Archives in Florence: Euratom Commission (EC), Louis Armand (LA), Pierre Chatenêt (PC), François Duchêne (FD), Jules Guéron (JG), Etienne Hirsh (EH), Max Kohnstamm (MK), Jacques Van Helmont (JVH); at Princeton Mudd Library: George Ball (GB), John Foster Dulles (JFD), David Lilienthal; at the Library of Congress, Felix Frankfurter (FF), Paul Nitze (PN), Glenn Seaborg (GS). I also consulted public archives, such as those of the Foreign Relations of the United States (FRUS), and the archives of the French Foreign Ministry (Ministère des Affaires Etrangères Français, MAEF).

following the paper trail which led to his assistants, colleagues, and opponents. In this case, the key player was the Frenchman Jean Monnet (1888–1979), who was instrumental in negotiating most of the transatlantic treaties regulating nuclear trade between the US and Europe in the 1950s, and in defining the scope and limitation of the control rules in the NPR complex in the late 1960s and early 1970s.

This article is structured in three parts. I first assess whether the initial objectives of the Euratom Treaty (1957) – and the US–Euratom Treaty (1958) that was signed in its wake – were compatible with those of the NPT, and I show that, in fact, Euratom's original purpose had little to do with non-proliferation: the Euratom and US–Euratom treaties, to a great extent, allowed the supranational proliferation from the US to an integrated Europe to become legal. Thus, the next two sections try to account for the puzzling adoption of Euratom's control rules by the IAEA after the NPT entered into force. I explain that puzzle by focusing on what was publicly known of Euratom's control rules at the time of the US–Euratom deliberations. I show that when the Euratom Treaty and the US–Euratom Treaty were signed, the Euratom control rules were presented in the US by Jean Monnet and his associates as embodying the most proliferation-resistant rules. Thus, the decoupling between public and private interpretations of those rules (their opacity) can explain why newcomers in the US field of nuclear non-proliferation had such limited knowledge of the loopholes these rules contained. Besides, processes of transmission of legal knowledge in the US field of non-proliferation can also explain why the memory of the original goals pursued by the Euratom Treaty's promoters in the 1950s were lost to the new foreign policymakers in the late 1960s. I conclude by discussing the role that opacity plays in the emergence of regime complexes more generally.

1 Euratom in the NPR Complex: The Genesis of Legal Complexity

A *The Place of the NPT in the NPR Complex*

The NPT, signed in 1968, was the first treaty that manifested states' ambition to solve the problem of nuclear proliferation in the whole world. The NPT actually rested on three pillars: non-proliferation, enhanced peaceful nuclear cooperation, and nuclear disarmament. In the NPT, the Nuclear Weapon States (NWS) committed not to help other states to acquire nuclear weapons technology; and Non-Nuclear Weapon States (NNWS) swore not to seek that help from the NWS (Articles 1 and 2). In exchange, the NWS recognized that NNWS have an 'inalienable right' to peaceful nuclear development (Article 4), and they pledged to offer them privileged access to international trade in civilian nuclear technologies. In addition, the NWS pledged to 'pursue negotiations in good faith' on nuclear disarmament (Article 6). This grand bargain between NWS and NNWS was supposed initially to last for only 25 years, after which parties would decide whether they wished to extend indefinitely their obligations – which they did during the 1995 NPT Review Conference. Furthermore, in order to guarantee

compliance with the first two pillars (non-proliferation and enhanced nuclear peaceful cooperation), the NNWS endowed the IAEA with the 'exclusive purpose of verification of [their] obligation with a view to preventing diversion of nuclear energy from peaceful uses to nuclear weapons' (Article 3(1)).[16] The NPT gave the IAEA a right of '*verification*' that proper controls were in place within NPT signatory states, which had to sign, either 'individually or *together with other states*'[17] (Article 3(4)) a Safeguards Agreement with the IAEA. It is therefore fair to say that the NPR rested on this one treaty (the NPT), and a range of Safeguards Agreements between NPT signatory states and the main verification agency of that NPR complex: the IAEA.

To many analysts of the NPR, this treaty and these Safeguards Agreements formed a tightly integrated global regime:[18] the NPT systematized the goals pursued by past treaties, like treaties which regulated the trade in dual-use nuclear technologies (activities which could be used for either peaceful or military purposes) and 'special fissionable materials' (materials that could be transformed to produce a chain reaction, controlled or uncontrolled in the case of a nuclear explosion) between the main exporters (like the US) and the main importers (like Western European countries). For instance, often included in this global non-proliferation regime is the Euratom Treaty (1957), which regulated the exchange of technologies and fissile materials in Europe, and between the US and Euratom, after the US signed the US–Euratom Treaty in 1958.[19] This inclusion is not surprising as the signature of the Euratom Treaty created the first international (European) system of control of nuclear technologies traded among advanced nations, which was maintained in place in 1972 by the Safeguards Agreement that the IAEA signed with Euratom NNWS. Besides, the historical record of negotiations shows a clear filiation between Euratom and IAEA control rules: the Euratom system of control served as a model that the IAEA used when it signed new Safeguards Agreements with European and non-European states after the NPT entered into force.[20]

Thus, in the NPR complex, the NPT was one treaty that crowned a global expansion of treaties and covenants,[21] which reflected (and still reflects) the growing awareness by the governments of the perils of nuclear proliferation.[22] Even though this narrative of linear progress towards the universalization of non-proliferation rules is generally convincing, as I will explain below, it overlooks serious discrepancies between the new NPT obligations and prior rules, especially the obligations contracted by West European states which signed the Euratom Treaty in 1957, and by the US when it signed the US–Euratom Treaty in 1958. As I will show now, when the NPT was signed

[16] See www.un.org/en/conf/npt/2010/npttext.shtml.

[17] Italics mine.

[18] J. Nye, *The International Nonproliferation Regime* (1980); Tate, 'Regime-Building in the Non-Proliferation System', 27 *J Peace Research* (1990) 400.

[19] L. Scheinman, *Euratom: Nuclear integration in Europe* (1967), and *The International Atomic Energy Agency and World Nuclear Order* (1987); Nye, *supra* note 18; Tate, *supra* note 18, at 410.

[20] Forland, *supra* note 14, at 235.

[21] The NPT also had relevance for Nuclear Weapons Free Zones treaties.

[22] G. Seaborg with B. Loeb, *Kennedy, Khrushchev, and the Test Ban* (1971).

in 1968, the new 'transnational legal order'[23] – or rather, the combination of a legal order of wide geographical scope but limited legal scope (the NPT) and one of limited geographical scope but wide legal scope (Euratom) – was fraught with tensions.

B *The Puzzling Case of Euratom in the NPR Complex*

A superficial reading of the Euratom Treaty and the absence of access to the archives of the treaty negotiations, some of which were opened only in the mid-1990s, can explain why the Euratom Treaty and the NPT are often presented in the same basket, as if both sought to accomplish the same goal: to prevent European NNWS from developing nuclear weapons.[24] But the Euratom Treaty differed in an important respect from the NPT.

The Euratom Treaty rules are harder to sum up than the NPT rules: whereas the latter contain only 11 short Articles (most of which are clear), the former contains 225 Articles, some of which are quite complicated and hard to understand. This is especially so for English-speaking readers as, until the UK entered into the European Communities in 1973, no 'official' English translation of the Euratom Treaty existed – a fact that may explain some of the common misunderstandings of the Treaty shared by Americans at the time of the signing of the US–Euratom Treaty (1958). To sum it up quickly, the Euratom Treaty set up both technical and political institutions which established a new European trading partner for the Anglo-American nuclear exporters (the US, the UK and Canada) (see Figure 1). It also set up a series of standards regulating the protection of workers in the nuclear field in Europe. In addition, it established a Euratom Commission in charge of controlling the use of fissile materials in the territory of its six member states, but also of buying special fissionable materials abroad (through the European Supply Agency) and planning technological activities (to be approved by the Council) that Europeans could develop jointly, either alone, or with the US (the main exporter at the time), in the nuclear sector (see Figure 1). In case interpretive conflicts emerged about treaty rules, the European Court of Justice was charged with the litigation of cases.

To assess whether the extension of Euratom's control rules to the post-NPT era manifested some continuity or a break in the understanding of Euratom's place in the NPR complex one needs to read the treaty against the background of the discussions that diplomats and other European foreign policy elites had about its original meaning. Archival research on the '*travaux préparatoires*' reveals a surprising result, as it shows us that the authors of the Euratom Treaty secretly sought to enable the US to help a federated Europe acquire nuclear weapons capability at a time when none of its member states had yet exploded a nuclear device (a goal in clear contradiction with the future NPT). Under that light, many of the rules of the Euratom Treaty that seemed to be clearly in line with the non-proliferation objectives of the future NPT need to be re-qualified: in particular, the rules defining Euratom's controls, which

[23] Shaffer and Halliday, *supra* note 10, at 11.
[24] Tate, *supra* note 18, at 410.

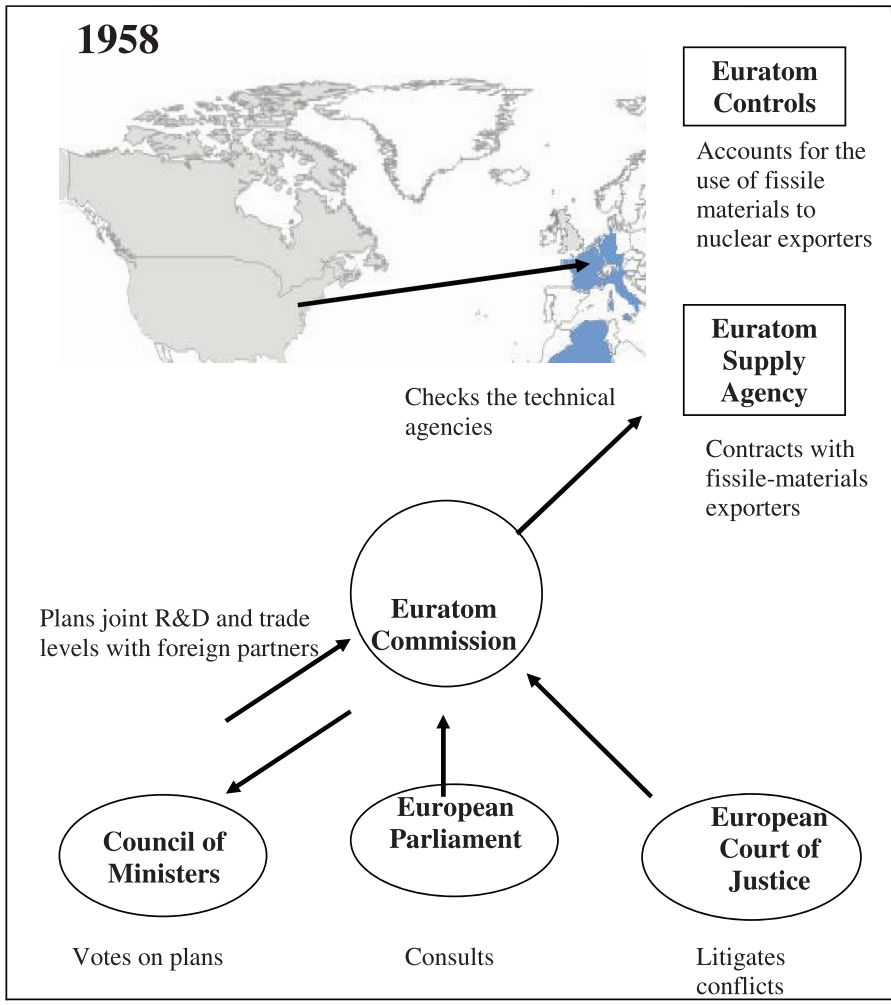


Figure 1. *The Emergence of a New European Nuclear Trading Partner*

were publicly interpreted as preventing the development of military applications of nuclear energy in Europe, but which were privately interpreted by insiders as saying the exact contrary (see Table 1).[25]

The main differences between the NPT and the Euratom Treaty stem from the fact that the Euratom Treaty clearly established the equality of rights between all of its member states, whereas the NPT clearly distributed different rights to NWS and NNWS. For instance, the Euratom Treaty made it illegal for exporters of nuclear materials to the Community to discriminate between importers within the Community

[25] Not all the rules in the treaty were opaque though.

Table 1. How the Euratom Treaty Was Part of the NPR Complex

Issues Covered by Treaty Provisions	**Public Interpretation of the Euratom Treaty as an Instrument of the Non-proliferation Regime**	**Secret Interpretation of the Euratom Treaty Provisions that Clashed with Non-proliferation Objectives**	**NPT Rules that Clashed with Euratom Treaty Rules**
Technologies exchanged between nuclear weapon-states (NWS) and Euratom's non-nuclear weapon states (NNWS)	Monnet to US Congress (1957): Euratom buys and operates proliferation-resistant US nuclear power plants and fuel. Euratom forgoes the plan to ask the US for assistance to build uranium enrichment plants that would both further military and civilian nuclear programmes of Euratom member-states	The Tripartite Agreements of November 1957: Nuclear dual-uses activities (uranium enrichment) between a NWS (France) and two NNWS (West Germany and Italy). Euratom Art. 215 + Annex V+ Euratom Commission proposals (59): No limit to the programmes that Euratom can adopt and the US can assist it in enrichment activities	NPT Art. 1: NWS undertake not to transfer to NNWS nuclear weapons technologies. NPT Art. 2: NNWS undertake not to manufacture nuclear weapons; nor seek assistance in developing nuclear weapons from NWS
Scope of Euratom's property of nuclear fuels	Monnet to US Congress (57): Euratom property extends to all the nuclear materials circulating within the territory of Euratom. Euratom Art. 86: 'Special fissile materials shall be the property of the Community'. Euratom Art. 198: Euratom Treaty applies in 'European' and 'non-European' territory	European Foreign Ministers in the Spaak Committee: Euratom property does not extend to military materials (co-owned by the French, West Germans, and Italians, as in the Tripartite Agreements of November 1957). Euratom Art. 87: 'Member-states and persons shall have the unlimited right of use and consumption of special fissile materials which have properly come into their possession'	NPT Art. 9(1): NPT is subject to ratification by states only. European jurists' published commentary and Monnet to US Department (67): as Euratom is not a state, and to the extent that it holds the property of nuclear materials, no restriction on the use of nuclear materials can be imposed upon Euratom NNWS after their ratification of the NPT

Table 1. Continued

Issues Covered by Treaty Provisions	Public Interpretation of the Euratom Treaty as an Instrument of the Non-proliferation Regime	Secret Interpretation of the Euratom Treaty Provisions that Clashed with Non-proliferation Objectives	NPT Rules that Clashed with Euratom Treaty Rules
Function of the Euratom controls	Monnet to US Congress (57): Euratom controls the use of all nuclear materials in Euratom and it checks that real uses are peaceful (similar to that of the AEC or IAEA). Euratom Art. 77: Commission 'shall satisfy itself that provisions relating to safeguarding obligations assumed by the Community with a third state or an international organization are complied with'	European Foreign Ministers in the Spaak Committee: Euratom checks that real uses are the ones declared to the agency (be they military or peaceful) without imposing any restriction on 'diversion' of peaceful to military ends. Euratom Art. 84: 'in application of safeguards, no discrimination shall be made on grounds of the use for which ores and fissile materials are intended'	NPT Art. 3(1): NNWS undertake to accept IAEA safeguards to prevent diversion of nuclear energy from peaceful to military uses. NPT Art. 3(2): nuclear exporters shall refuse to export nuclear materials and technologies to NNWS if no such safeguards as defined by Art. 3(1) are put in place by the importing NNWS. BUT Art 3(4): states will be able to sign an agreement collectively with the IAEA

(Article 84), in particular, to impose more stringent constrains on NNWS than on NWS (see Table 1). The issue of the equality of rights between Euratom's future member states may have seemed an easy issue to solve, as none of the negotiating states were NWS when the Euratom Treaty was signed. But it was actually a hard fought issue in the Inter-Ministerial Committee in charge of the negotiation of the Euratom Treaty, also known as the 'Spaak Committee' (in reference to its Chairman, Paul-Henri Spaak). All of the nations represented at the table, except for France, insisted on the equality of rights, a claim that clashed with the French demands to pursue a nuclear weapons programme.[26] As a result, the secret negotiations in the Spaak Committee long stumbled upon the West Germans' insistence that 'it was not fair to impose unity if the … supranational authority does not give the same chances to

[26] G. Skogmar, *The United States and the Nuclear Dimension of European Integration* (2004), at 99.

all member-states'.[27] If the future Euratom was endowed with the property and control of all the 'peaceful' nuclear materials in Euratom's territory, the West German Foreign Minister did not agree to let France benefit from an exception to the general rule (for instance, by allowing France to escape Euratom controls for its 'military' nuclear activities): he found this differential treatment unacceptable, and anticipated that France would quickly declare most of its activities 'military' in order to escape Euratom controls and property.[28] In order to avoid creating a permanent discriminatory system, the French should have either agreed to let West Germany benefit from the same liberty to conduct 'military' nuclear activities (against the pledge made by the West German Chancellor in 1954 to renounce fabricating nuclear weapons on German soil), or agreed to renounce their own nuclear weapons programme.[29]

This disagreement plagued the negotiation of the Euratom Treaty until October 1956. But the perceived American betrayal of France after Nasser's nationalization of the Suez canal and the failed Franco-British invasion of Egypt in October 1956 eventually convinced the French to turn towards West Germany for its future military partnership rather than towards its Anglo-American allies. This general change in France's alliance policy had direct repercussions on the Euratom Treaty negotiations. The West Germans finally accepted that Euratom's control would be applied on all their activities after they were invited by the French government to participate in the French nuclear activities deemed of a 'military' nature (these French activities that would escape Euratom controls):[30] indeed, the two Defence Ministers agreed in January 1957 to sign a secret Franco-German military cooperation agreement in Colomb-Béchard (Algeria) (signed two months before the Euratom Treaty), and they extended the terms of that agreement to Italy in November 1957 (one month before the entry into force of the Euratom Treaty).[31]

The existence of these two secret treaties changes the way one interprets the final letter of the Euratom Treaty: on its face, the Euratom Treaty clearly planned that the Euratom Commission would have sole jurisdiction over the control of fissile materials in its territory (Article 77), and that control would apply to all materials in the Community. But, as the French ambassador to West Germany concluded at the time, '[i]f Germany made concessions on the question of [Euratom's] control and property, it is because control is inevitable. Indeed, in the case of delivery of American fissile material [the main exporter at the time], the right of control kept by the U.S. authority on these fuels would not disappear if another authority were not in charge of controls.'[32]

[27] Joxe, 'Lettre du 13 février à Christian Pineau', MAEF 0111 (1956).

[28] MAEF, 'Compte rendu des réunions des 22 et 25 avril 1955 au Ministère des Affaires étrangères sous la direction de M. Massigli', MAEF 0611 (1955).

[29] MAEF, 'Proposition de la délégation française, à la conférence des Six au Quai d'Orsay sur les utilisations militaires de l'énergie atomique, Octobre 20–21', MAEF 0613 (1956).

[30] MAEF, 'Projet de procès verbal de la conférence des affaires étrangères des Etats membres de la CECA des 20 et 21 octobre 1956', MAE460f/56mts. CM3/NEGOC.0095/ab-a (1956).

[31] MAEF, 'Protocole secret entre les Ministres Français, Allemand, Italien de la défense', MAEF 019-21, (1957).

[32] MAEF, 'Note du 26 février, de Couve de Murville'. MAEF 19-21 (1956).

Indeed, until 1958, the main nuclear exporter of fissile materials in Western Europe was the US government, and the US Atomic Energy Commission (AEC) directly controlled how importing states, including the six Euratom signatory states, used these materials: in particular, that they were not used for military goals.[33] Thus, it was key that, publicly, the Euratom controls were interpreted as strong non-proliferation measures, for the US Congress to agree (as in the US–Euratom Treaty, 1958) to recognize the rules of the Euratom Treaty as valid and legally binding. Then, the US only asked the right to 'verify' that Euratom controls operated according to procedure, without being granted a right to 'control' facilities on the ground, as it assumed Euratom did so in a way that was similar to its operating procedures.[34] Furthermore, the US publicly and clearly recognized the exclusiveness of Euratom controls now and in the future: if the strengthened IAEA could manage all controls worldwide, the future decision to abandon Euratom controls would be Euratom's.[35]

Although the rule stating *who* shall control the use of fissionable materials in Europe was clear (Euratom), it was less clear *how* this control was to be performed and for what goal. Such opacity was created not only because the three main governments represented in the Spaak Committee (France, West Germany, and Italy) struck secret agreements on the side, but also because the authors of the Euratom Treaty obscured the meaning of key legal concepts (like property and control), which allowed them to interpret key provisions differently in secret and in public. For instance, since Euratom instituted controls on all the 'special fissionable materials' (the materials most likely to constitute the nuclear warhead) and the 'source materials', which were 'owned' by Euratom when they circulated in its territory (Article 86), the Euratom Treaty seemed to erect strong proliferation barriers, which explains why the US agreed to recognize Euratom's monopoly over controls. But, in fact, European Foreign Ministers who negotiated the Euratom Treaty used legal expertise to obscure the meaning of key words, in particular the 'control' and 'property' related to fissile materials.

A careful examination of de-classified transcripts of secret treaty negotiations shows that Europeans did not understand *how* these 'controls' were supposed to operate in the same way as the Americans did.[36] The European Foreign Ministers defined control as a '*contrôle de conformité*' ('control of conformity'):[37] Euratom inspectors would control the conformity between the 'real' and 'declared' uses of nuclear fuels (be they civil or military uses) of the firms and research institutions in the Community. As Article 77 of the Euratom Treaty stated, '*la commission doit s'assurer dans les Etats membres que les minerais, matières brutes et matières fissiles spéciales ne seront pas détournées des usages auxquels leurs utilisateurs ont déclaré les destiner*'.[38] This definition of the control rules

[33] H. Sokolski, *Best of Intentions: America's Campaign against Strategic Weapons Proliferation* (2001).

[34] Kohnstamm, 'Memo on Western control, April', JMDS 120 (1958).

[35] This recognition was clearly stated in para. 11E of the memorandum of understanding signed in July 1958: Euratom Commission, 'Notes à la Commission, February 7', JG 124 (1967).

[36] Mallard, 'L'Europe puissance nucléaire, cet obscur objet du désir. Vers une sociologie des tactiques d'énonciations du projet européen', 42 *Critique Internationale* (2009) 141.

[37] MAEF, *supra* note 31.

[38] Euratom Treaty (1957); see Figure 2 for a translation.

did not say that, for instance, the French government would lose the right to develop military uses of nuclear energy: if French (or Franco-German) installations declared that they used nuclear fuels for military ends, inspectors could only verify (up to a certain point) that these military uses were indeed the real uses. Foreign Ministers in the Spaak Committee made it very clear in their secret negotiations that Euratom controls would stop when special fissionable materials were introduced in the future (French or Franco-German) nuclear warheads.[39]

In contrast, in bilateral treaties signed between the US and other nations prior to the US–Euratom Treaty, American inspectors (and later the IAEA inspectors) obtained a 'control of finality':[40] the right to control that real end uses were not military of any kind. This was precisely the constraints that the Euratom Treaty raised, not only for France, but also for West Germany (thanks to the tripartite cooperation treaty of November 1957, by which the French, Italians, and West Germans agreed jointly to produce nuclear weapons from French nuclear installations).[41]

The opacity of the rule stating *how* Euratom would perform its controls was produced intentionally by the main promoter of the Treaty, the Frenchman Jean Monnet, and the emissaries that his European federalist lobby (the Action Committee for the United States of Europe, formed in 1955 by Jean Monnet) sent to the US in February 1957 to present the Euratom Treaty to US public authorities. As Jean Monnet's assistant, Max Kohnstamm, said, 'the possible substitution of Euratom controls for American control [of imported nuclear fuels] would be in itself a revolutionary act in the foreign policy of the U.S.' and 'it is not completely certain that the US Congress will oppose a Euratom system of control; but if it differs from theirs, it seems next to impossible'[42] (my translation). Thus, when Monnet's secretary briefed the European emissaries before their trip, he explicitly advised them to avoid explaining how the system of Euratom control would work, but, if pressed, to maintain the appearance of isomorphic equivalence and similarity between the AEC's and Euratom's control procedures.[43] In February 1957, when Monnet's emissaries presented the Euratom Treaty to the US authorities, they told them that the Euratom controls would operate 'like the AEC controls'.[44] After such briefings, the US Senators, who eventually ratified the US–Euratom Treaty in August 1958, could not have understood that they lost

[39] MAEF, *supra* note 31.

[40] Euratom Commission, 'Memorandum on Western control, January', JMDS 120 (1960).

[41] MAEF, 'Protocole secret entre les Ministres Français, Allemand, Italien de la défense, November 25', MAEF 019-21 (1957).

[42] Kohnstamm, 'Note du 20 janvier sur le régime de contrôle et les pouvoirs de la Commission en matière d'exportation et de propriété des matières fissiles en préparation de la tournée des Trois Sages'. (EC) CEAB1-79/DOC539/57f. (1957)

[43] Monnet's secretary told them before their trip that '[t]here is no doubt that the fact that Euratom does not exclude military uses of nuclear fuels will raise a sticky problem in future relations between the US and Euratom. But if you are asked questions about that, just answer that so far, no bilateral treaty signed by the US plans to limit the power of the importing state to own and produce nuclear weapons: the agreement between the US and Euratom will not change this situation' (my translation): Kohnstamm, *supra* note 42.

[44] Armand, 'Letter to John Foster Dulles, January 31', JMAS 033 (1957).

their 'right of pursuit', as the French called it: the future US–Euratom Treaty abrogated this right in the sense that materials sold to one Euratom member state (for instance Germany) by the US for peaceful purposes and then sold again to France (by West Germany) could then be re-processed (in the case of plutonium for instance) to be used eventually in French (or European) nuclear warheads (Article 84).

The public interpretation of the Euratom Treaty according to which Euratom restricted the use of special fissionable materials to purely peaceful uses was further reinforced in the minds of outsiders (in particular, the US public authorities) by one very clearly worded Article that defined the scope of the notion of 'property' of special fissionable materials in the Treaty: Article 86 said that '*les matières fissiles spéciales sont la propriété de la Communauté*'[45] (see Table 1). Since public declarations about Euratom said that its goal would be purely peaceful, it gave the impression that all the special fissionable materials in Western Europe (which all belonged to the Community) would be used for peaceful purposes. However, to this Article was added another one which stated that if Euratom formally had the 'property' of special fissionable materials, it did not have any 'property rights' in them: Article 87 said that '*les Etats-membres, personnes ou entreprises ont, sur les matières fissiles spéciales entrées à leur possession, le droit d'utilisation et de consommation le plus étendu, sous la réserve des dispositions du traité*'.[46] In other words, only if the states or companies using the most dangerous materials were proven guilty of illicit activities by Euratom controllers could the Community reclaim its latent 'property' on these fuels (and the rights to sell them, use them for whatever purpose, etc.). The Euratom notion of property was thus a notion *sui generis*, in the sense that it differed from other more common understandings of 'property'. In fact, this legal concept performed a useful service: while it gave the impression that the Euratom Treaty clearly restricted military uses of imported special fissile materials, it left to individual member states the real property rights and the freedom to use them for military goals.

The US Secretary of State, John Foster Dulles, and President Eisenhower, who both stood on the side of Euratom controls rather than prolonged US controls (or IAEA controls), helped Monnet's associates avoid a lengthy legal debate about the proper interpretation of the provisions on Euratom controls and Euratom's system of property in Congress.[47] Instead, they focused negotiations on the technological content of the US–Euratom Treaty, and helped Monnet re-frame the future role of Euratom in that matter (see Table 1). Before Monnet's intervention in the debate, Euratom's programme was in fact close to a nuclear weapons programme, as the French representatives at the Euratom Treaty negotiations advocated that Euratom focus on uranium enrichment technologies, so that France could benefit from US technical help through the future US–Euratom Treaty.[48] This initial presentation was problematic, as it clearly contradicted the nuclear non-proliferation objectives of the

[45] Euratom Treaty, *supra* note 38.
[46] Euratom Treaty, *supra* note 38; see Table 1 for a translation.
[47] Kohnstamm, 'Letter to Jean Monnet of February 10'. MK 07 (1957).
[48] Armand, 'Exposé sur l'Euratom', BAC 118/1986 1452 (1956).

US Congress: as a Euratom official noted, 'France's European partners entertained no illusion about the military ambitions of such a project' of Euratom enrichment plant, due to the 'simultaneous pressures by the French to build nuclear power plants using natural uranium as well as an uranium enrichment plant',[49] which France needed only to produce the highly enriched uranium for its nuclear bombs. Thus, in 1957, Monnet prepared a new programme for Euratom which sought to assuage the fears of US Senators and of the Chairman of the AEC who, until 1957, opposed the future US–Euratom Treaty on the ground that it would help the Europeans (and the French) to develop nuclear weapons.[50] When Europeans told the US authorities that Euratom planned to buy six American power plants and the enriched uranium necessary to fuel them,[51] and that they had abandoned their projected enrichment plant, it was, as the archives now show, a half-lie, as European diplomats just turned the enrichment project secret, when France and West Germany signed the aforementioned secret agreement of military cooperation with Italy in November 1957:[52] that agreement entered into force in May 1958 when France secretly opened participation in the production of enriched uranium to the West Germans and Italians for the purpose of producing European nuclear warheads.[53] Furthermore, after the US–Euratom Treaty was signed, Europeans reneged on their promise to buy American power plants and the enriched uranium necessary to fuel them.[54] Indeed, as soon as the US–Euratom Treaty was ratified, President Eisenhower and his Secretary of State, John Foster Dulles, asked the State Department to examine how the US government could then start transatlantic cooperation in enrichment technology with Euratom (see Table 1).[55]

This quick description of the public and secret interpretation of key legal rules contained in the Euratom Treaty shows the latent contradictions between how European governmental insiders interpreted the Euratom treaty rules (especially its control rules) and the later NPT rules (see Table 1 for the exposition of contradictions). As the two regimes defined a set of contradictory and loosely coupled legal rules,[56] a regime complex emerged after the entry into force of the NPT. The next section shows how Europeans resisted the US urge to integrate all Euratom rules under the new NPT regime, and the effect that the opacity of Euratom's control rules had on the final outcome of the harmonization process.

[49] Guéron, 'Lettre à Renou du 3 janvier', JG 194, 1983.

[50] Krige, 'The Peaceful Atom as Political Weapon: Euratom and American Foreign Policy',38 *Historical Studies in the Natural Sciences* (2008) 9.

[51] Armand, *supra* note 44.

[52] MAEF, *supra* note 31.

[53] G. H. Soutou, *L'alliance incertaine. Les rapports politico-stratégiques franco-allemands, 1954–1996* (1996). However, the agreement was abrogated in June 1958 by General de Gaulle, after a *coup* in French Algeria brought him back to power.

[54] B. Goldschmidt, *The Atomic Complex: A Worldwide Political History of Nuclear Energy* (1982).

[55] Euratom Commission, 'Notes prises aux US, Juin', BAC 118/1986-1051, EUR/C/1791/59f (1959a).

[56] Brzoska, 'Is the Nuclear Non-Proliferation System a Regime? A Comment on Trevor McMorris Tate', 29 *J Peace Research* (1992) 216.

2 How Little-Understood Rules Constrain Future Global Lawmaking

A *After the NPT: An Integrated Regime or a Regime Complex?*

The deliberations about control rules (and the maintenance of Euratom control rules) in the NPR complex were the longest fought issue during and after the NPT negotiations.[57] As I said above, the prior hard law agreement signed between Euratom and the US did not legally prohibit military use of imported (or locally produced) source and special fissionable materials by Euratom member states, nor did it grant to nuclear importers (like the US) a 'right of pursuit' over degraded fissile materials (for instance, plutonium extracted from the waste of nuclear fuels imported by Euratom). In fact, Monnet, Eisenhower, and Dulles intended to use Euratom to help Europe become a strong federation, even endowed with European nuclear weapons.[58]

Considering the policy objectives shared by Euratom Treaty promoters, it came as no surprise that the maintenance of Euratom controls after the NPT was anathema to the Soviets: they insisted that the existence of various systems of controls in different regions of the world would imperil the future NPT.[59] In the aftermath of the Cuban Missile Crisis, in June 1963, the Soviets made it clear that the IAEA safeguards would institute the only legitimate control of nuclear activities, and they continued to denounce Euratom as 'a military operation',[60] which could not be trusted for the control of European nuclear activities. Together with the US, the Soviets worked to perfect the IAEA system of safeguards by designing control rules for each type of nuclear facility, by extending its control of nuclear reactors (1961) to the control of power plants (1964), reprocessing plants (1966), as well as enrichment plants (1968).

As a result, although the US government had initially presented a first draft NPT in August 1965, which left to Euratom the possibility to keep its system of control if adapted to the IAEA controls, the Democrats who had been in power in the US since 1961 eventually tried to complete NPT negotiations with the Soviets by abrogating the right of Euratom to control its nuclear activities, and charge in its place the IAEA,[61] as the Europeans were told in February 1967 by the US Ambassador to NATO.[62] Far from trying to reduce the clarity of the NPT rules by maintaining various sets of contradictory rules in each region, the two super-powers (the US and the Soviet Union) believed it was in their interest to create one integrated regime.

In this case, regime complexity emerged out of an effort by the less powerful European states to maintain in place their own system of control. The Europeans saw the contentious new NPT Article 3 on controls that the US introduced in February

57 Forland, *supra* note 14.
58 M. Trachtenberg, *A Constructed Peace: The Making of the European Settlement* (1999), at 149.
59 Forland, *supra* note 14, at 192.
60 Euratom Commission, 'Report of the 7th General Assembly, 1963', BAC059/1980-481 (1963).
61 G. Seaborg, *Stemming the Tide: Arms Control in the Johnson Years* (1987), at 269.
62 Kohnstamm, 'Conversation with Eugene Rostow, January 30', MK 046 (1967).

1967 as a violation of prior treaty commitments.[63] The West German Euratom Commissioner was particularly adamant that the new 'article 3 is incompatible with the Euratom Treaty, and proceeds from a will to discriminate between nations'.[64] In his correspondence to Eugene Rostow, the US Under Secretary of State, Jean Monnet[65] wrote that the new draft Article 3 ran in clear contradiction to Europe's legal commitments, 'as the IAEA intervention would recreate an administrative border line splitting the nuclear common market and shrinking industrial integration in a vital technological sector' (see Table 1). Not only Euratom NNWS, but also France rejected the introduction of IAEA controls in Europe, as they privileged the physical observation of facilities (whose construction had to be reviewed by the IAEA before being approved), and gave the IAEA a 'right of pursuit'[66] which Euratom member states, and France in particular, opposed: the IAEA maintained the right to control the peaceful use of nuclear materials (control of finality) once they were safeguarded by the IAEA, and wherever they might go after being sold.

Here, the clarity of public legal commitments (taken by the US with respect to Euratom) over *who* was responsible for the control of nuclear activities in Europe facilitated the preservation of Euratom control rules in the NPR complex that emerged from the NPT negotiations. To reverse the US decision to extend IAEA controls to Euratom, Europeans insisted that there was no ambiguity in the American recognition that they would consult Europeans on any future provision concerning Euratom controls.[67] After he saw the February 1967 NPT draft, Jean Monnet immediately wrote to Eugene Rostow that the decision to accept the new draft Article 3 was not solely in US hands, as '[e]ven if the non-nuclear-weapon members were to accept to submit to the IAEA, it is difficult to see how the existing situation could be changed without the consent of all members', since 'this situation results from the Euratom treaty and from the Euratom–U.S. agreement'.[68] This pressure worked: recognizing that '[t]he intervention of the Commission on the discussions of the NPT results from conventional obligations',[69] the American negotiator of the NPT, William Foster, came to Brussels in March 1967 to hear the opinion of the Euratom Commission.

The clarity of previous public commitments contracted by the Europeans and Americans in support of Euratom also convinced the Soviets to hear the West's arguments. In the Euratom Treaty, not only was Euratom clearly in charge of controlling the nuclear activities of its member states (control rules), but it was also clearly the owner of special fissionable materials circulating in its territory (property rules). When dealing with the Soviets, the US negotiator argued that 'all special fissionable material for peaceful purpose within Euratom territory was the property of Euratom' (Article

[63] *Ibid*.

[64] Euratom Commission, 'Council of Permanent Representatives, February 27', BAC 86/1982 (1967b).

[65] Monnet, 'Letter to Eugene Rostow, February 14', MK 0046 (1967).

[66] Euratom Commission, 'Memo by Guazzuoli Marini, February 28', BAC 86/1982 (1967c).

[67] Euratom Commission, *supra* note 66.

[68] Monnet, *supra* note 65.

[69] Giljssels, 'Euratom et le projet de traité de non-prolifération des armes nucléaires sous l'angle du droit', *Les cahiers du droit de l'énergie atomique* (1968) 6.

86), which meant that 'the Soviet draft contained a very large loophole, as under the Soviet article 3, all fissionable material owned by Euratom would be excluded from safeguards, not to mention the four facilities owned by Euratom over which even national governments have no independent inspection rights'.[70] The US negotiator also told the Soviets that 'based on the NPT draft of February 1967' the US would not have any legal grounding to sue the Euratom Commission if it refused to submit its imports of nuclear fuels to the IAEA controls, especially if 'the materials are sent to *the Community'* (as planned by the US–Euratom Treaty), as the Community is 'a lawful actor with a legal personality distinct from the one of member states'.[71] As the NPT only created obligations for states (see Table 1), it meant that 'the Community could not be attacked on behalf of the NPT'[72] if it refused to let the IAEA control nuclear installations in Euratom territory. Here again, it was the *public* (rather than secret) interpretation of the notion of property in the Euratom Treaty that served to convince the Americans (and, indirectly, the Soviets) to leave the Euratom Treaty untouched until future negotiations between Euratom and the IAEA.

To break the deadlock between the Europeans and the Soviets, in July 1967 the US negotiator proposed to allow both systems to survive and to leave the outcome of future negotiations between Euratom and IAEA ambiguous. The final draft of the NPT left the possibility that Euratom would be able to keep its controls in the new Article 3, while leaving the two international organizations concerned (the Euratom Commission and the IAEA) the responsibility to prove the equivalence of their safeguard system within 180 days of the enactment of the NPT.[73] Thanks to the ambiguity of the language of Article 3(4), which did not definitively grant to Euratom the control over its nuclear activities, the Soviet negotiator agreed to sign the NPT as such, even though, in July 1967, he still stressed the non-equivalence of Euratom and IAEA safeguards, as the former were based on a non-intrusive materials approach and the latter on an 'intrusive facility-based approach'.[74] For Europeans, it was an acceptable compromise, as the new Article 3 was ambiguous enough that it 'd[id] not create any real legal obligation', but 'just mention[ed] the need to plan a negotiation', which, as the Euratom Commission insisted, 'in no case would organize the legal subordination of Euratom to the IAEA'.[75] Thus, Euratom member states interpreted Article 3(4) of the NPT as saying that the US delegated their 'right of verification' of Euratom's controls (recognized by the US–Euratom Treaty of 1958) to the IAEA; that Euratom could maintain its monopoly over 'controls';[76] and that the NPT was just 'a *pactum de contrahendo*, a treaty planning another treaty'.[77]

70 Euratom Commission, 'Response to the Permanent Representatives, September 10', JG 124 (1967d).
71 Giljssels, *supra* note 69, at 6.
72 *Ibid.*, at 8.
73 Schaetzel, 'Memorandum to Commissioner Martino', JG 000124 (1967).
74 Euratom Commission, *supra* note 70.
75 *Ibid.*
76 *Ibid.*
77 Cited in European Parliament, 'Transcript of debates, July 7' *JO*, BAC 86/1982 (1972), at 80–104.

B *Harmonization of Contradictory Rules in a Regime Complex*

The loosely coupled nature of the Euratom and IAEA control systems in the NPR complex did not lead to a fragmentation of the legal world order or to a single integrated regime. Rather a harmonization process occurred between the two systems, although not in the direction planned by either the Soviets or Americans, the two super-powers at the time. Indeed, Euratom member states eventually succeeded in harmonizing the IAEA system of controls with theirs, rather than the contrary.[78] Indeed, the 'NPT safeguards system has been greatly influenced by and adapted to the Euratom system in several respects',[79] as Mohamed Shaker writes, which was a major victory for Euratom NNWS. This outcome was facilitated in large part thanks to the compared clarity of the public interpretation of Euratom rules and the ambiguity of Article 3 of the NPT. Rather than forcing Euratom to adopt its own safeguard system (elaborated for each type of facility in the 1960s), the IAEA Safeguards Committee decided in March 1971 to accommodate the Euratom system of control by adopting a materials-based approach similar to that of Euratom for all the NPT signatory states.[80] In exchange, Euratom recognized in the IAEA a right (but not an obligation) to visit some facilities in Euratom territory, when invited to do so by the Europeans.[81]

Euratom not only made very limited changes to its control procedures, but the Safeguards Agreement that Euratom NNWS signed with the IAEA in September 1972 also included exceptional rules for them. First, this was the first and only time that a regional organization, Euratom, was recognized as a party to the application of Article 3 of the NPT. Secondly, the Safeguards Agreement proposed that the territories of NNWS that were part of Euratom represented a single unit: thus, when trading among themselves, they did not have to send advanced notification of bilateral trade to the IAEA as was required for all other states.[82] Thirdly, in compliance with the US–Euratom Treaty of November 1958, no nuclear material exported from the US to Euratom was to be safeguarded by the IAEA. The diplomatic victory of Euratom NNWS cleared the road for ratification of the NPT by the five founding Euratom NNWS, on 2 May 1975.

As a result, the public interpretation of Euratom's obligations in matters of control not only survived the entry into force of the NPT in Western Europe, but they also shaped how the IAEA, charged with the responsibility of ensuring compliance with the NPT, was to function in the global non-proliferation regime. This had grave consequences, as the new materials-based approach adopted by the IAEA after Euratom's model allowed some countries – like Iran – to avoid communicating with the IAEA about their plans to construct new (enrichment) facilities: it was their right to do so in the new post-NPT system of IAEA rules, modelled after Euratom, at least until

78 M. I. Shaker, *The Nuclear Non-Proliferation Treaty* (1976), at 701.

79 *Ibid.*, at 711.

80 The IAEA reserved its old system of facility-based safeguards for those countries which did not sign the NPT.

81 Shaker, *supra* note 78, at 706.

82 *Ibid.*, at 733.

some fissionable materials were introduced in the fully-operating centrifuges.[83] As US nuclear diplomats largely ignored the fact that Euratom's control rules had been designed to allow supranational proliferation from the US to Europe, they accepted that the worldwide system of control adopted by the post-NPT IAEA guidelines be modelled after a system (Euratom's) filled with loopholes.

Thus, far from validating conspiracy theories, this case shows that clearly interpreted legal rules have a force of their own, as they can survive to the abandonment of the policy objectives that they were supposed to serve. In the long term, the public interpretations of Euratom controls as non-proliferation controls survived even though the secret goal of Euratom's treaty drafters (e.g., to allow the US, through relaxed control rules, to help a united Europe produce nuclear weapons components) had actually been abandoned by the US government during the NPT negotiations. In the next section I explain why the US policymakers who rose to power in the 1960s no longer shared that objective and I discuss how their interpretation of Euratom's rules related to their motivation, e.g., the various ways through which these policymakers understood the problem of Europe's defence and the solution they gave to that problem.

3 The Transmission of Legal Knowledge and the Creation of Regime Complexes

In this section, I show how the transmission of legal knowledge between generations can become the site of power struggles between competing policymakers, and the extent to which the opaque character of legal rules complicates this transmission. In the case of the Euratom treaty rules, the lack of continuity in the social recruitment of the US foreign policymakers serving under Kennedy, which was aggravated by the secrecy over Euratom's original objectives, interrupted the transmission of legal knowledge across generations of US policymakers

A *Secrecy and Homophily*

The circulation of opaque interpretations of key Euratom treaty rules was made possible when the Euratom Treaty was signed because of the high level of trust that existed between some European and US officials in the late 1950s – a high level of trust that came from their common social background and prior collaborative experience. After World War II, the transatlantic group of 'European federalists' – as these men called themselves – led by Jean Monnet had a long and successful history of collaboration in a wide range of fields: from finance, to arms production and administrative law reform. After chairing the Allied Production Committee (in charge of regulating Franco-British war industries) during the Great War, Monnet became the first Secretary General of

[83] But when IAEA inspectors found traces of enriched uranium in their samples of Iranian centrifuges, as El Baradei writes, 'Iran was caught, dead to rights': El Baradei, *supra* note 13, at 117.

the League of Nations, and then moved to New York where he became the vice-president of a Wall Street investment bank, from which he conducted financial operations in Europe with the help of US investment lawyers like John McCloy and John Foster Dulles and French lawyers like René Pleven.[84] In 1940, Monnet again set up an Allied Production Board which he chaired from Washington, where he led the same group of lawyers (with, again, Pleven and McCloy, the latter serving as Under-Secretary in the War Department) and engineers (with Etienne Hirsh) to plan the war effort. Quite naturally, after the Soviets exploded their first nuclear weapon in 1949, Monnet turned again to McCloy and Pleven when he started a campaign to integrate European defence industries and military command structures into a European Community in order to defend itself against the Soviet peril. In the 1950s, these men simultaneously occupied key posts in the US, French, and West German governments: McCloy served as Supreme Allied Commissioner in West Germany, e.g., the highest authority in West Germany, who was responsible for nuclear and defence policy in West Germany; and René Pleven was the French President of the Council (equivalent to Prime Minister). The first Chancellor of the West German Republic was Konrad Adenauer, himself a distant cousin of McCloy's wife, and a staunch European federalist and an admirer of Monnet.[85] Together, they proposed in 1950 the European Defence Community (EDC) Treaty which would have placed nuclear development in Western Europe under the federal European authority in charge of all defence industries (including all nuclear industries).

After the French Parliament failed to ratify the EDC Treaty in 1954, Monnet, McCloy and Pleven believed that Western Europe should repeat Monnet's experiment of the two World Wars: transatlantic nuclear integration, which meant nuclear proliferation from the US to an integrated European Federation. By the time Monnet proposed the Euratom Treaty, other former associates of Monnet were in power in the US government: it was actually through McCloy's mediation, in 1951, that Monnet convinced Eisenhower, who served in Europe as NATO's Supreme Commander, to become the Republican champion of European federalism,[86] which he remained after he was elected President in 1953. Finding a way to remove the fiscal burden of Europe's defence away from American taxpayers' shoulders by getting the Europeans united against the Soviet peril was a strong motivation for Eisenhower and his Secretary of State, John Foster Dulles: in exchange, they believed the US should relax the strict nuclear non-proliferation legislation adopted by President Truman and the US Congress since the Atomic Energy Act of 1946.

The common social background shared by these political elites and '*notables du droit*'[87] allowed the Euratom Treaty drafters to let their most contentious interpretation of the Treaty's objectives circulate quite informally. To help them draft these European treaties, Monnet, Dulles and McCloy recruited lawyers from the most cosmopolitan

[84] J. Monnet, *Mémoires* (1976), at 250.
[85] K. Bird, *The Chairman: John J. McCloy, The Making of the American Establishment* (1992).
[86] Monnet, *supra* note 84, at 420.
[87] Dezalay and Garth, *supra* note 12.

and prestigious institutions, such as Harvard Law School: for instance; the Director of the Policy Planning Staff in the State Department was Robert Bowie, whom McCloy had recruited in 1950 to draft the anti-trust provisions of the European Coal and Steel Treaty (ECSC Treaty), the first Community created, initially chaired by Monnet.[88] Only a handful of men in the highest offices of US diplomacy (Eisenhower, Dulles, Bowie) had knowledge of the secret military treaties signed in 1957 and 1958 between France, West Germany, and Italy[89] in the background of the Euratom Treaty negotiations. The social proximity reached by the promoters of European federalism in Europe and in the US allowed them to keep some of their contentious interpretations of treaties private rather than to share them with national parliamentary assemblies.[90] Indeed, these top US policymakers were instrumental in advising European federalists on how to keep secret their private interpretation of the control rules and technological programme defined by the Euratom Treaty until the US–Euratom Treaty was ratified in Congress.[91]

B *A Postponed Downfall of European Federalists in the US and on the Continent*

The election of Kennedy to the US Presidency in 1960 led to a radical change in the US diagnosis about nuclear proliferation. The diagnosis changed not only because the governmental coalition changed (from Republicans to Democrats), but most importantly because a major intergenerational change among the US nuclear proliferation experts changed the kind of knowledge resources mobilized to think about East–West diplomacy and Europe's defence in the nuclear age.

For the new generation which came to power with Kennedy, and which shaped the next generation of non-proliferation leaders in the US,[92] the 'objectivity' that was granted to Law (especially international law coming from Europe) by the European federalists around Monnet no longer operated as a matter of principle. New institutions of research in nuclear strategy which granted no legal training gained prominence in the US field of non-proliferation (the Rand Corporation, the Harvard Department of Government Studies, etc.), while the institutions that had been central in the production of the first generation of European federalists lost their relevance (like the Harvard Law School) (see Figure 2). This intergenerational shift affected mostly the Democrats,[93] in large part because they suffered more from McCarthy's witch-hunt

[88] Cohen, 'La Constitution européenne: Ordre politique, utopie juridique et guerre froide', 26 *Critique internationale* (2005) 130.

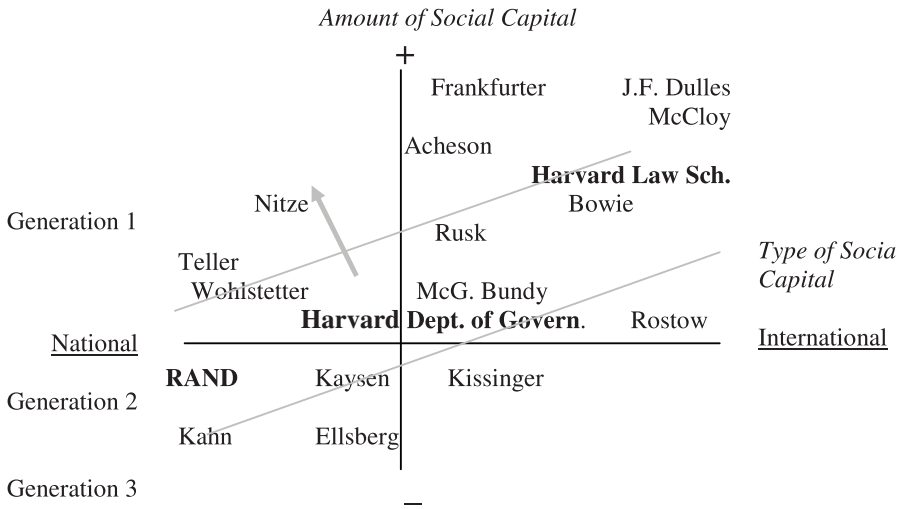
[89] Soutou, *supra* note 53, at 113; Soutou, 'La politique nucléaire de Pierre Mendès France', in M. Vaïsse (ed.), *La France et l'atome: Etudes d'histoire nucléaire* (1994), at 157.

[90] Similarly, Eisenhower kept from Congress the secret pre-delegation orders which authorized NATO's Supreme Commander to fire nuclear weapons stockpiled in Europe: Trachtenberg, *supra* note 58, at 195–199, 212.

[91] Schaetzel, 'Letter to Max Kohnstamm', MK 014 (1957), and 'Letter to Max Kohnstamm', JMDS 120 (1958).

[92] The new paradigm soon crossed over partisan divides as most of the younger non-proliferation experts were trained in the tradition of the Rand Corporation.

[93] F. Kaplan, *The Wizards of Armageddon* (1983).



* Bourdieu represents a specific field as a plane, whose vertical axis measures the amount of social capital accumulated by its practitioners, and the vertical axis measures the type of social capital accumulated (opposing, the capital accumulated strictly in the national institutions on the left, and the capital accumulated in international markets on the right). This representation just provides a graphic way to simplify complex information gathered from biographies of individuals.

Figure 2. *A Bourdieuan Representation of the US Field of Nuclear Strategy in the early 1960s**

against foreign policymakers (from the State Department to the CIA) with elitist school backgrounds (like the Harvard Law School). Thus, Kennedy's 'whiz kids' distinguished themselves from their elders by not having a background in international law,[94] not to mention European law, and by downgrading the symbolic status of such knowledge as they developed instead statistical and 'scientific' methods of geopolitical analysis, which used the language of game theory.

These new insiders were closely tied together and shared many similar features that distinguished them greatly from the young and old '*notables du droit*' gathered around Monnet. Emblematically, the incoming National Security Advisor, McGeorge Bundy,[95] who was charged by Kennedy with the responsibility of recruiting the new generation of nuclear strategists, later acknowledged that '[t]he European Community is an institution which I chose to admire, partly with a willing suspension of disbelief but also with a necessary confession of ignorance'.[96] Inside the government, Bundy hired the men whose careers he had fostered at Harvard in Governmental Studies (rather than in the Harvard Law School) when he was Dean there, or those Rand analysts who were the protégés of Paul Nitze,[97] the former Director of the Policy Planning Staff of McGeorge Bundy's father-in-law, Dean Acheson. Robert McNamara, an economist at

94 K. Bird, *The Color of Truth: McGeorge Bundy and William Bundy, Brothers in Arms* (1998).
95 *Ibid.*, at 102, 104.
96 Bundy, 'Address to the Conference on the EEC, November 29', (1972).
97 Bird, *supra* note 94, at 136.

Harvard Business School in 1940, also had no background in international law when Kennedy chose him as Secretary of Defense.[98]

The new knowledge resources and the new symbolic status granted to law impacted on the prior treaty regimes to which the US was party (like Euratom). The new Kennedy administration immediately re-interpreted prior treaty commitments undertaken by the old European federalists in the Eisenhower administration according to their own cognitive lenses, so that they would fit with the new agendas they promoted regarding the role of US nuclear weapons for Europe's defence. For instance, in line with Rand's doctrine of centralized and flexible deterrence developed by Rand's Albert Wohlstetter,[99] McGeorge Bundy believed that Kennedy should distance the Europeans from the nuclear trigger and that he should abrogate the secret pre-delegation orders which President Eisenhower had passed and which allowed NATO's Supreme Commander 'to start the thermonuclear holocaust on his own initiative if he could not reach you'[100] during an emergency. Similarly, Kennedy's new AEC Chairman made it clear that the US would abide by public interpretations of the Euratom Treaty, but that the US should exclude all enrichment activities from the joint US–Euratom research programme.[101] The AEC insisted on limiting the US–Euratom collaboration to the optimization of the one US power plant sold to Euratom,[102] and it criticized the Europeans for failing to honour their public promise to buy six proliferation-resistant power plants.[103] Even if most of these new experts remained unaware of the relationship that the Euratom Treaty entertained with Eisenhower's past objective of helping an integrated Europe build nuclear weapons with US help,[104] all their action had the effect of unravelling Einsenhower and Monnet's legal tapestry.

Of course, the new US insistence on non-proliferation objectives with regard to Europe immediately raised negative reactions among Europeans with ties to Eisenhower and McCloy. Overall, European jurists and policymakers blamed the lack of legal culture of the new US insiders for their new demands (and for their failure to obtain what they asked for, in the case of Article 3 of the NPT): for instance, a German deputy in the European Parliament declared to his peers in March 1967, 'the experts in disarmament responsible for the NPT' who proposed to replace the Euratom system of control with that of the IAEA 'ignored everything of the Euratom Treaty, which is characteristic of the new disorder which threatens us'.[105] As the future West German Chancellor Helmut Schmidt wrote to Monnet's associates, part of the growing distrust between Europe and the US under Kennedy was due to the sentiment 'that the Americans do understand the questions of war and peace as a technical problem, soluble by computers, rather than as a political one that requires personal skill and

98 Kaplan, *supra* note 93, at 330–335.
99 Wohlstetter, 'The Delicate Balance of Terror', 37 *Foreign Affairs* (1959) 211.
100 Cited in Trachtenberg, *supra* note 58, at 298.
101 Hirsh, 'Conversations confidentielles avec Mr. Guillaumat, May 4', EH, Box 17 (1960).
102 Euratom Commission, *supra* note 55.
103 Goldschmidt, *supra* note 54, at 309.
104 Kohnstamm, 'Conversations with Cattani and Helmont, December 14', MK 025 (1964).
105 Giljssels, *supra* note 69, at 1.

judgment'.[106] Indeed, for new young insiders who shared a similar social background (much less cosmopolitan than their elders') and a similar language (that of political science rather than a legal language), the US monopoly over the making of nuclear weapons and their use operated as a matter of principle. European jurists thus concluded that the negotiations leading up to '[t]he NPT raises an exemplar case of a new kind of problem, which is to harmonize the numerous engagements that States take, for themselves and their citizens, toward other States or international organizations', as 'the obligations subscribed can become contradictory simply because of the inadvertence of the negotiators who do not know of engagements taken elsewhere and in another conjecture'.[107]

This case shows that it was not so much the interpretive opportunities offered to the most powerful states by regime complexity,[108] but, rather, the diagnosis struggles between generations of US foreign policymakers, whose effects on legal change were aggravated by the opacity of prior treaty rules, that explain the emergence of a regime complex and the secret abandonment of secret interpretations of key Euratom Treaty rules (see Figure 3). If we represent schematically the process of global lawmaking from the negotiation of the Euratom Treaty to the negotiation of the NPT as two successive time periods (times 1 and 2 in Figure 3), we can conclude that the differences in the level of expertise that each generation had in legal knowledge (high for the older European federalists, low for the new generations) and the associated legitimacy that each granted to law in nuclear matters (what I call 'field-specific' factors), explained that European federalists succeeded in salvaging some of the clear commitments taken by the US government *vis-à-vis* Euratom; but that the secret interpretations of key provisions (linked to the secret proliferation objective behind the US–Euratom Treaty) were abandoned as they no longer fitted with new problem-solving techniques adopted by the new US foreign policy elites (see Figure 3). Opaque legal rules did not survive for very long: only their public meaning survived after inter-generational renewal in the field of nuclear diplomacy.

5 Conclusion: The Opacity of International Legal Rules

In the field of security in general, and in the field of non-proliferation in particular, legal instruments are often not tightly integrated but loosely coupled. To understand the dynamics of these regime complexes we need to pay more attention to the socio-cognitive mechanisms that explain how legal knowledge of past legal instruments is acquired and transmitted between generations of foreign policymakers. The empirical focus of this article has been on the origins of the NPR complex, and further research should be done to document how regime complexity evolved in that field. As some of

[106] Schmidt,' Letter to Kohnstamm, July 5', MK 000024 (1963).

[107] Giljssels, *supra* note 69, at 1.

[108] Alter and Meunier, *supra* note 7, at 16. Here, it was the US government that tried to force the (less powerful) Europeans to move toward an integrated regime.

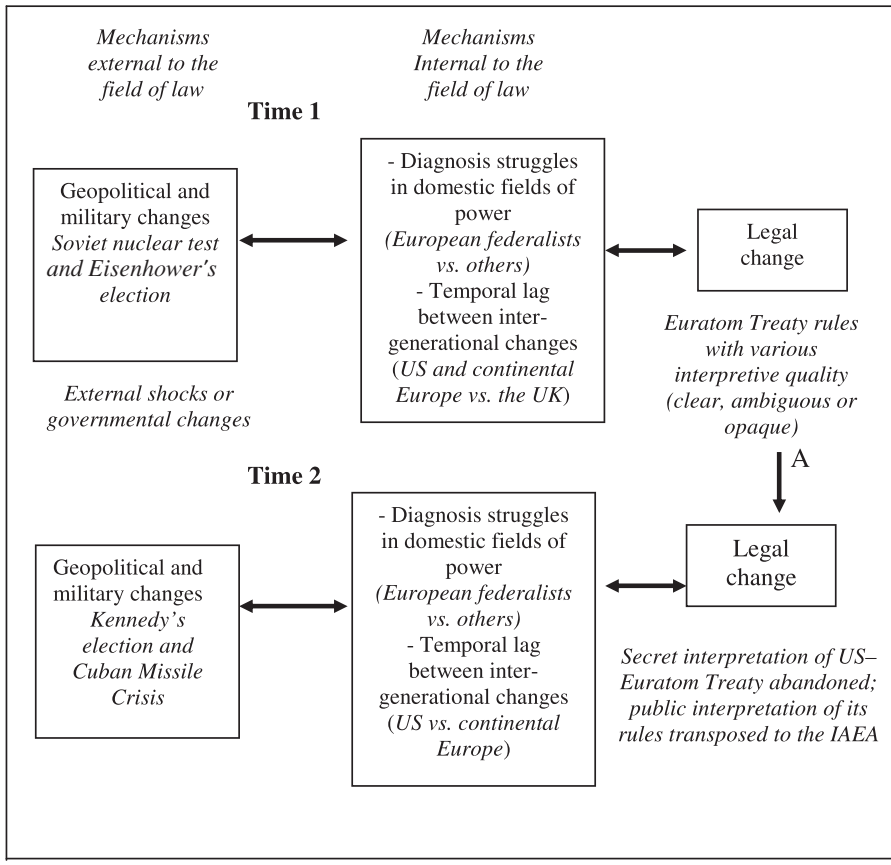


Figure 3. *A Dynamic Approach of Recursive Cycles of Global Lawmaking*

the new instruments (like UN Security Council Resolution 1540) sidelined the IAEA – thus working more as 'antagonists' than as 'complements'[109] – it is likely that future studies will find that nuclear proliferation legal instruments still constitute a regime complex rather than a tightly integrated regime.

More generally, the prevalence of what I call 'opaque' legal rules in the field of international security (where secrecy has long been a cherished practice among top diplomats, from Metternich to Kissinger) raises important issues related to the evolution of regime complexes. Indeed, the last 30 years of US diplomacy are filled with similar examples of opaque legal arrangements, characterized by the existence of public and private (contradictory) interpretations of the same rule. One can think of bilateral arms sales treaties especially: because of the limitations placed by the Foreign Assistance Act on the use of US-exported weapons, the US government has sometimes

[109] Shaffer and Pollack (2011), *supra* note 3.

buried in secrecy its interpretation of such rules when it sold such weapons to Western allies.[110] Similarly, as a result of the 1976 Symington Amendment to the Foreign Assistance Act, which prescribes that the US President must give a certificate of good nuclear conduct to recipients of US aid, US top policymakers have accepted a large degree of opacity in their interpretation of legal rules, especially when they certified to the US Congress that strategic aid recipients (like Pakistan) had good nuclear conduct, despite evidence to the contrary.[111] Further examples of secret interpretations of treaties and international legal concepts have arisen since the beginning of the war on terror.

Thus, to the two categories that most legal scholars use to distinguish how legal rules are known to their interpreters (whether they are 'clear' or 'ambiguous'), and which play a major role in explaining how transnational legal orders evolve over time,[112] we should add a third one: 'opacity', which designates another kind of polysemy in addition to ambiguity. Indeed, an opaque treaty rule is interpreted differently by insiders, who share a private understanding of the treaty in the backstage, and by outsiders, who also believe they understand clearly what the treaty means (see Table 2).

It is important to distinguish opacity from both clarity and ambiguity, because it is likely to have different effects in case of overlap between various treaty rules. Opaque treaty rules may survive legal contradictions longer than ambiguous ones, depending on how efficient the insider parties to the opaque treaty are in hiding their initial secret purpose from the outside world, or in denying its private meaning in case it is leaked.[113] In the case of the NPR complex, the publicity of certain (opaque) rules in Euratom's architecture (although initially contradicted by secret interpretations that were rejected later) facilitated their preservation in the NPR complex that emerged from the NPT negotiations. Their clarity when expressed in public can explain why the European foreign policy elites succeeded in resisting attempts by more powerful

Table 2. The Typology of Interpretive Tactics

	Similarity of Meanings in Public and Private Interpretations	**Differences of Meanings in Public and Private Interpretation**
Monosemy of the interpretation in the same forum	Transparency	Opacity
Polysemy of the interpretation in the same forum	Ambiguity	

[110] C. Hitchens. *The Trial of Henry Kissinger* (2001).

[111] A. Levy and C. Scott-Clark. *Deception: Pakistan, the United States and the Secret Trade in Nuclear Weapons* (2008), at 65.

[112] Halliday and Carruthers, *supra* note 10, at 1059.

[113] A. Cohen, *Israel and the Bomb* (1998), at 5.

governments (like the US and Soviets) to repel these legal rules, after new insiders among the US policy elites insisted on establishing in their place the rules of the IAEA.

This focus on opacity raises important methodological concerns. Indeed, a text that appears to be clearly defining the meaning of a rule can in fact be opaque (rather than clear) when understood in the larger context of the interpretative discourse produced about its meaning. Taking into account the possibility that discrepancies between how treaties are interpreted in public and private exist means that it is not the text itself which is clear, ambiguous, or opaque, but rather, its interpretation, which circulates in a socio-legal network made of texts,[114] judgments, values, and modes of ascertaining interpretive authority. Thus, socio-legal scholars interested in opacity will have to enlarge the spectrum of texts that are considered as legitimate sources of interpretation by legal practitioners: for instance, socio-legal scholars will need to secure access to such documents as reports of preparatory conferences ('*travaux préparatoires*') before deciding whether clear or ambiguous legal provisions do not in fact hide some opaque meaning.

In the future, more research will be needed to compare how opacity operates in different fields of international law, and whether opacity plays a special role mostly in international security regimes. Indeed, it seems that in contrast to other fields, like trade law, in which international courts play a central role (from the CJEU to the Appellate Body of the World Trade Organization), new cycles of global lawmaking which affect international security regimes are largely done outside international courts. This specificity explains why the global dynamics described here have largely escaped the scrutiny of international legal scholars, who tend to focus on the development of published case law, and who often ignore the outcomes of successive rounds of secret treaty negotiations. Conducting more research on how the knowledge of legal instruments is acquired and transmitted by foreign policymakers in these diplomatic rather than judicial settings can allow us to highlight the role of opacity, but we also need to compare systematically how the context of interpretation (diplomatic negotiation or international court, the varying levels of trust and social cohesion among negotiators) affects the recursive dynamics at work in global lawmaking.

[114] Riles, 'Models and Documents: Artefacts of International Legal Knowledge', 48 *ICLQ* (1999) 805.