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Safeguards and Profits: Civilian Nuclear Exports, Neo-Marxism, and the Statist Approach

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The purpose of this article is to appraise the explanatory capacities of the Statist model and of structural Marxism—amended and elaborated here—as applied to the issue area of the regulation of civilian trade in sensitive nuclear facilities and fuel. During periods of ‘happy convergence’ between the interests of state managers and of pertinent societal groups, many scholars find little to choose between the two models. In moments of ‘policy crisis’ however, we find that structural Marxism provides the better account of the dynamics of conflict over policy formulation. The article indicates that the revised structural Marxist model warrants further applications in a limited but highly crucial set of policy problems which exhibit the characteristics of ‘crisis’ described herein.

Statist Approach and Neo-Marxism as Competing Explanatory Models

In his *Defending The National Interest*, Krasner formulated a ‘statist approach’ which he argues is demonstrably superior to both liberal pluralism and instrumental Marxism as an analytical framework for explaining decisions taken by US central policymakers regarding the promotion and protection of raw materials investments by American corporations abroad. The statist model claims to represent better the role of ideology in decisionmaking. The fundamental flaw in the discarded models is that they both ‘view formal governmental institutions as relatively passive recipients of societal pressure’ (Krasner, 1978:26). Krasner’s wide-ranging collections of case studies disclose a State which is much more autonomous and dynamic than pluralist images imply, while instrumental Marxism is jettisoned because of cited instances wherein the State behaved more entrepreneurially than private investors (as in the case of Iran between 1951 and 1955) or else declined to support American foreign investments. Despite ITT activities, Krasner construes the destabilization campaign against Chile as a case of the State

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taking advantage of corporate 'predispositions' to achieve its own antagonistic aims in the Southern Cone (Krasner, 1978:311). Thus the State is comprised of a set of institutions which pursue aims that 'are separate and distinct from the interests of any particular societal group' (Krasner, 1978:10). The most autonomous of these institutions are the White House and the State Department—forming the 'pivot of the State' in foreign affairs—which, unlike Congress, 'usually have been able to resist private pressures to take actions that were not perceived as furthering the national interest' (Krasner, 1978:18). The latter is inductively, if not tautologically, defined as the preferences of central decisionmakers which persist over time, are rank-ordered, and relate to general societal goals. Private corporate actors presumably suffer whenever and wherever their expressed preferences diverge from those of the State in a foreign policy arena (but see Lipson, 1976).

Krasner claims a slimmer margin of superiority over the more refined neo-Marxist model because although

it is much more difficult to distinguish structural Marxist arguments from a statist paradigm, the importance that American central decision-makers have at times attributed to ideological as opposed to economic or strategic aims is more compatible with the theoretical image that guides this study than with any materialist interpretation (Krasner, 1978:34).

While this verdict might evoke incredulity among modern scholars familiar with the contributions of Gramsci (1971) and of the Frankfurt School (e.g., Marcuse, 1968; Habermas, 1973; and Jay, 1973) in regard to the 'material power of ideas', Krasner still deems structural Marxism to be his sturdiest paradigmatic rival since it too ascribes a relative autonomy to the capitalist State which acts (or rather, appears) as a 'neutral arbiter' charged with maintaining the cohesion of the capitalist 'social formation' even at the tactical expense of particular powerful economic agents. In the promotion of foreign investment, for example, Krasner finds a 'happy convergence of interest between the state and private corporations' so that 'no firm judgment about the relative merits of statist and structural Marxist arguments' can be rendered (Krasner, 1978:133).

Leaving the defense of liberal pluralism and of instrumental Marxism to others, *our enterprise here is to apply the statist approach as well as a neo-Marxist theory of the State to the issue of the promotion and the regulation of the US civilian nuclear industry* and its exports in order to further appraise the relative explanatory merits of the competing approaches. We do so because, unlike the case(s) of raw materials investments, the 'happy convergence' rancorously broke down in the issue area of civilian nuclear commerce during and ever since the domestic legislative struggle over the passage of the Nuclear Non-Proliferation Act of 1978 (NNPA), thereby posing an interesting test for the models.

Nuclear vendors and their allies argued that the NNPA threatened their very future as exporters and producers—a future they identified with the strength and security of the United States by emphasizing a series of pronuclear themes which, however, had altered somewhat over the history of the nuclear industry (e.g., the early promise of energy 'too cheap to meter', then stress on nuclear power as the 'cutting edge' of inevitable technological progress, and, lately, the argument that no realistic alternative exists; the mammoth amounts previously invested represent sunk costs which demand additional financial support and political patience before dividends accrue, otherwise the markets may be lost to foreign suppliers). Until very lately, the nuclear industry enjoyed what may be accurately labeled 'ideological hegemony' in terms of the way its own interests

purportedly fit with American predispositions toward *laissez-faire*, free trade, technological imperatives, and strivings for economic growth. Of course, a key ideological notion which aided the nuclear industry has been the *conceptual barrier* which allegedly separates the civilian applications of nuclear power from military applications (Lonroth and Walker, 1983:176).

In addressing the relationship between ideology (interests) and decisionmaking within the Statist model, what is particularly anomalous is the reversal of roles by the 'central decisionmakers' and the Congress during and after the NNPA debate with respect to pursuing general objectives against the expressed preferences of influential societal interests. In this case, structural Marxism provides the clues necessary for determining why and how the 'anomaly' occurred—and perhaps for predicting its recurrence in other cases. Our main thesis is that *during moments of perceived/actual crises in relations between the State and influential private corporate actors, the structural Marxist model displays the greater explanatory utility*. By *crisis* we mean both sudden or gradual departures from a 'happy convergence' which the pertinent private elite apprehensively view as imposing serious disadvantages upon themselves; we do *not* refer to full-blown systemic crises which threaten to rupture and/or transform the socio-economic structure of the entire society. At 'lower stakes', we refer to *policy crises* where definitions of interest by the State and by leading capitalist firms suddenly diverge, but with no (immediate) threat of an accompanying social crisis.

Also at issue here then is the plausible degree to which neo-Marxism can illuminate not only the 'outer parameters' of the policymaking structure which limit the admissible range of options and behavior, but the capacity of structural Marxism to contribute fruitfully to the analysis of the disputants' behavior in particular concrete cases of policy crisis, where even sympathetic scholars believe that standard pluralist methods of investigation are superior (Alford, 1975; McGowan and Walker, 1981). In public policy 'the parameters are economically determined but what takes place within them need not be' (Wolfe, 1974:137; Offe, 1975; and Przeworski, 1977). Neo-Marxists view the accumulation process as the most powerful *constraint* criterion but not as the sole determinant of the content of public policy. Hence, our aim is not to elaborate a 'synthetico-additive paradigm' or to cite points of synthesis between radical and conventional models of foreign economic policymaking (though such implications emerge) so much as to demonstrate the applicability of structural Marxist analysis in at least this restricted but significant range of 'short-run, incremental' policy struggles and choices.

In the broader context of US non-proliferation policy, we will briefly review the relationship between the State and private nuclear firms from 1945 until the onset of the Carter Administration, during which period of policy compatibility there is indeed little to choose between the Statist and the structural Marxist models. Focusing on the role of Congress, we then examine the legislative struggle over the NNPA and draw out conclusions as to the illuminative and limiting aspects of the two models (though we will advert at times to other paradigms). Finally, we examine recent trends in nuclear export promotion and non-proliferation policy and we discuss the import of our conclusions for future research into occasions of 'policy crisis'. A preliminary task, however, is that of clarifying the distinctive claims and analytical features of the statist approach *vis-à-vis* neo-Marxist theory of the capitalist state—which is not synonymous with schema championed by the French Structuralists (Poulantzas, 1969; Althusser and Balibar, 1970).

Competing Autonomies of the State

Statist View

'America has a strong society but a weak state' due to the fragmentation of power and the multiple points of access to the decisionmaking process so celebrated by pluralist writers as endemic features of the Lockean liberal legacy in America (Hartz, 1955; Krasner, 1978:61). In this environment, vetoes are easily imposed while positive policy initiatives are daunted by a purgatorial process of review, revision, and frequently rejection since the State 'confronts dissident bureaus, a recalcitrant Congress, and powerful private actors' in its quest to manifest whatever central decisionmakers determine to be the 'national interest' (Krasner, 1978:63). These interests are more generally 'national' if they do not consistently discriminate for or against particular societal groups. This latter notion, that American central decisionmakers form such policy goals unbidden by intrusive societal interests, appears at odds with Krasner's observation elsewhere that a weak state 'can act effectively in the strategic arena because its preferences are not likely to diverge from those of individual societal groups' (Krasner, 1978:70). Whatever the provenance, the policy goals are definitively rank-ordered so as to facilitate choices wherever conflicts occur and they include not only specific material interests but also 'ambitious ideological goals related to beliefs about how societies should be ordered' (Krasner, 1978:10).

The successful implementation of state policies depends on the *arena* in which decisions are made and upon the adroit use of *leadership* by the central State decisionmakers which are, in foreign economic policymaking, the White House and the State Department. If policy implementation is confined to the executive branch and dependent upon executive resources, the State usually succeeds in imposing its policies even where powerful oxen in the private sector get gored (Krasner, 1978:18). On the other weaker hand, if policy implementation required 'authorization from Congress, or required the cooperation of private companies', central decisionmakers sadly are 'frustrated' or are 'forced to compromise some of their aims' (Krasner, 1978:19). But central state institutions carry prestige and deploy real resources which effective and perhaps even imaginative leadership can convert into decisive instruments even in the face of opposition. Because 'international politics presents options that are not available for purely domestic issues and because political leaders can themselves redefine a dispute and change both its scope and the arena in which it is decided', Krasner contingently labels the United States as a 'moderate state' in the exercise of foreign policy. When the instruments putatively at their disposal are employed well, State authorities not only can resist societal interests, but also change their behavior, more or less, to suit their own designs. Splits occurring both inside Congress and among the affected private interests can be exploited: the scope of an issue can be expanded to invite more favorable constituencies to tip the balance; and the way in which the policy dilemma is defined can be modified by soothing or stimulating presidential rhetoric. F. D. Roosevelt commonly is cited as a master of all these maneuvers (Schurmann, 1974; but *see also* Skocpol, 1983). Where zero-sum disputes arise in the regulatory or redistributive issue arenas, a president can (attempt to) shift the matter out of those vulnerable realms onto the higher plane of 'power politics', where the reasons of the State are least challengeable (Lowi, 1964; McGowan and Walker, 1981). But during policy crises, both the president and the affected private interests can plausibly play the game of identifying their preferences with that of the 'national interest' during Congressional debate because no immediate

peril looms and a swing vote is yet to be won. Credibility (or credulity) is the key to 'moderate' State success.

Marxist Perspectives

'The executive of the modern State', Marx and Engels assert 'is but a committee for managing the common affairs of the whole bourgeoisie' (Tucker, 1978:475). Anyone ever privileged to have served on a committee ought to be disabused of the notion that consensual policies are effortlessly fashioned therein and effectively implemented thereafter. Although Marx displayed a rich analytical appreciation of the complex, multivariate relations between the State and civil society in his more 'empirical' studies such as *The Civil War in France* and *The Eighteenth Brumaire*, a cartoon-like caricature of naked ruling class domination arose. Marx bequeathed no such image (or any theory of the State and bureaucracy at all).

Structural Marxists view the State¹ as a mediator and arbitrator of conflicts within an internally divided capitalist class and between the latter and other classes, groups, organizations, and the social formations in other nation-states (Miliband, 1977:68; Poulantzas, 1969). The State, which is itself divided into relatively autonomous branches, must both preserve (and enhance) the conditions for economic growth—the *accumulation function*—and maintain the ideological credibility of itself and of the economic system—the *legitimation function*—in order to foster the long term interests of the capitalist system. Hence, 'class reductionism' and raw economic determinism are repudiated while the intertwining of ideology and material interests in all State policy is stressed. The functions of accumulation and legitimation are definitively rank-ordered because the latter (in, for example, the tangible form of welfare state provisions) cannot be fully secured unless the former is thriving. The State, therefore, manages the contradictions between the functions, rather than resolving them.

A 'hyper-structuralist trap' may exist, 'which deprives "agents" of any freedom of choice and maneuver and turns them into "bearers" of objective forces which they are unable to affect' (Miliband, 1977:73). Both Poulantzas, especially in his early work (1969), and Krasner exaggerate the State as a unitary actor composed of omniscient, perfectly effective managers. The result is that this version of structural Marxism resembles nothing so much as a mechanical 'realist' model which posits the closest possible congruence of means to ends. Like the hardest-headed realists, Marxists evidently disdain 'the independent role of ideology' (Krasner, 1978:333, 345) and so allegedly cannot account, for example, for the 'nonlogical, manner in which American leaders pursued their anticommunism' in Vietnam.² Structural Marxism is shrugged off for failing to approximate the very objective it denies—that of forging an infallibly predictable and economically deterministic instrument for predicting policy outputs *and* outcomes.

While structural Marxism is not in the dire dogmatic straits to which Krasner consigns it, neither is it in the clear. Recent neo-Marxist scholarship emphasizes—more adaequately than in the past—that 'to endow the State with an essential class unity or inevitable bourgeois character is to engage in crude reductionism' and, with belated humility, that there is 'no reason to expect a purely Marxist approach to exhaust the analysis of the state' (Jessop, 1982:220, 223). Riven by struggles within and between its own apparatuses, the State is *highly problematic* since, within certain broadly specifiable limits which vary with the situational context, 'relative' autonomy increases the likelihood of unpredictable outcomes, i.e., policy decisions unfavorable to actors apparently wielding the greater resources. Moreover, during these occasions of policy

crisis—which we emphasize are moments of jeopardy for particular sets of firms rather than for the reproduction of the capitalist system, the ‘elasticity’ of the relative autonomy of the state increases as well. By this we do not mean that a Bonapartist situation is on the horizon or even that the hand of the executive branch is strengthened, but rather that all policy contestants are compelled by their relative deadlock to conduct their ‘war of position and to concentrate their resources inside the indeterminate world of the state apparatuses. These apparatuses are ‘indeterminate’ because economic and social power do not translate proportionately into political power, and most certainly not so in *each* branch and agency of the State. Other things being equal, the uncertainty of policy outcomes is enhanced because the most powerful actors (societal groups, classes, class fractions, central decisionmakers, etc.) are unable to muster a quick decisive victory during these periods of increasing ‘elasticity’ within the relatively autonomous state apparatuses.

We wish carefully to note that increasing ‘elasticity’ of the relative autonomy of *state apparatuses* does not necessarily cumulate into an increase of the relative autonomy of *the State*. Pressed too far and for too long, such increasing elasticity would impair rather than fortify the functioning of the State. Secondly, the elasticity of the relative autonomy of the apparatuses or of the State is bounded by the limits imposed by the structural need for ‘functional compatibility’ between the economic system and the state structure and its policy outputs. Any State whose relative autonomy is infinitely elastic is not a capitalist or will not be for long. Thirdly, increased ‘elasticity’ can be both a cause and a consequence of policy crises.

Recent Structuralist Refinements

Block (1979, 1980) and Joseph (1981) have attempted to refine Marxist theory as a tool of policy analysis and to go beyond the early structuralist formalism of Poulantzas (1978). Block notes that the power of state managers is based on a monopoly of the legal means of violence by which they can force compliance with their wishes. But while state managers are interested in ‘maximizing their power, prestige, and wealth’ their power is constrained both by the institutional rules of the game in a parliamentary system and by the particular class context in which they operate (Block, (1980:229). The competitive international state system compels state managers to

‘protect their nation’s positions within the international state system since those who preside over a decline in their nation’s political, economic, or military strength are likely to find their own power reduced as their nation’s freedom to maneuver internationally declines’ (Block, 1979:84).

Hence a *security function* is added to those of accumulation and legitimacy. In practice these three functions come into conflict with each other (which gives rise to policy crises). Different parts of the States bureaucracy and administration will champion one goal over others (which motivates increases in ‘elasticity’). Since there is no harmonious ruling class directing the State’s economic fortunes nor is the State a unitary force which always shepherds myopic capitalists towards their own best long term interests, neither side has, as Block puts it, a ‘monopoly on rationality’.

While Block attends to the kinds of goals state managers pursue and the ways in which the range of choice and the realization of goals is restricted, Joseph’s (1981) concept of policy currents—borrowed from Schurmann (1974) and analytically adapted—has some utility in delineating different ways by which given goals might be attained. *Policy currents* are:

basic prescriptions governing the role of the U.S. in the World Arena; a response to forces of opposition on the part of defenders of capital foreign and domestic; ideological bridges between the capitalist class and state managers; and they embrace special interests which influence but do not determine policy' (Joseph, 1981:72).

Particularly relevant for our concerns is his account of presidential and bureaucratic decisions. Although a president may feel personally attached to a certain current, 'the actual decisions of the president . . . shift between different currents, especially during periods of crisis' and these conversions stem from a 'shifting calculus of costs' (Joseph, 1981:73, 272). That is to say the balance of pressure exerted by forces of opposition changed and the president, with however much regret, acted accordingly.³

Just as a president may try to shift the arena in which policy is decided or central decisionmakers may try to change the definition of an issue or the scope of affected interests during a period of policy crisis, so too can the threatened private interests respond by attempting to shift the 'site' of real power over the issue area.

'In other words, the organization of the bourgeois State allows it to function by successive dislocation and displacement through which the bourgeoisie's power may be removed from one apparatus to another: the State is not a monolithic bloc, but a strategic field' (Poulantzas, 1978:138).

For example, Poulantzas refers to strategies—short of the 'evasive action' of capital flight and disinvestment—which capitalists pursue to guard their interests when a leftist government takes 'formal' power. This strategy may also be adopted in 'lower stakes' situations such as regulatory conflicts where the interests of a fraction, or a few firms within a fraction, of the capital owners are involved which other capitalists do not identify with systemic survival (and toward the realization of which interests they consequently may even be indifferent or antagonistic). During policy crises, what neo-Marxists call the 'conjunctural primacy of politics' is thus underscored. To refine the point further, we note that Abraham, in his study of the collapse of Weimar democracy, argues at the systemic level that:

The less obvious the dominance of any particular capitalist fraction, the greater the impact of the bureaucracy and of the executive on the one hand, and of private interest groups on the other. The political disorganization of the dominant classes, even during the years of stabilization, rendered the bureaucracy a stronger force in mediating interclass conflicts (Abraham, 1981:45).

But in policy rather than systemic crises, the power of the executive is not necessarily enhanced and the bureaucracy cannot itself maintain the necessary coherence to mediate conflicts since the 'elasticity' of the relative autonomy of the State apparatuses is increasing. The State indeed becomes a *strategic field* wherein the central decisionmakers (Krasner) or state managers (Block) must struggle to realize their definitions of the 'national interest' in particular policy arenas; the affected fractions of capital owners will respond to resistance by, among other things, attempting to shift the real power over policy to a more favorable site; and wherein the impact of groups with weaker or fewer resources to deploy *improves*. Thus we expect that, in policy crises, the greater the increase in 'elasticity' of the relative autonomy of the components of the State apparatus, the more any initial imbalance in the distribution of political resources among the contestants will tend to be neutralized—enhancing the uncertainty of the content of the eventual policy outcome. As with more powerful contestants, groups with intense interests but weak resources can exert significant influence upon policy through

(potentially) sympathetic sites inside the State. Hence, a president—or a societal interest—who seeks to draw more support for a particular policy preference by expanding the participative scope of an issue may instead further confound and/or dilute the predominance of the State and of the aggrieved societal interests by opening the policy process to new groups which, formerly marginal, must now be overcome or appeased. One might regard this as a kind of democratizing paradox or, more analytically, term it an ‘elasticity effect’. In any case, while central decisionmakers may ordain the ‘national interest’ in foreign economic policy, they can neither decide nor implement it as they please.

The foregoing refinements are vital aspects of the neo-Marxist model which we will shortly weigh against the Statist approach in the policy area of civilian nuclear exports. Before proceeding to the NNPA policy crisis, we review the material and ideological foundations of the ‘happy convergence’ in interest between the State and the nuclear industry. To cast the argument in sharper relief, we also adopt the economically determinist hypothesis that the stringency and coherence of the international regime for sensitive nuclear facilities varies inversely with the level of success of the civilian nuclear drive. We dub this the ‘vulgar hypothesis’ because it encompasses two distinct perspectives. The first is the crude determinism often and unjustly attributed to Marxism. The other is a similarly crude determinism associated with a Liberalism which attributes all allocative virtue to market transactions, wherein the most powerful buyers and/or sellers will hold sway in decisions. We introduce the vulgar hypothesis only to underscore the value of the models selected for further analysis of the case.

Atoms for Peace

Oppenheimer observed in a public lecture delivered nine months after the Hiroshima and Nagasaki blasts—amid euphoric predictions that this nuclear force which obliterated cities yesterday would illuminate them cheaply tomorrow—that ‘the science, the technology, the industrial development involved in the so-called beneficial uses of atomic energy appear to be inextricably intertwined with those involved in atomic weapons’ (Ames, 1978:13). That this intrinsic link was not recognized by central decisionmakers is evidenced by the declaration made earlier by the United States, Canada, and Great Britain that they were ‘prepared to share, on a reciprocal basis with other of the United Nations, detailed information concerning the practical, industrial application of atomic energy just as soon as effective enforceable safeguards against its use for destructive purposes can be devised’ (quoted in Epstein, 1976:5).

Strongly influenced by Oppenheimer, the Acheson-Lilienthal report recommended establishment of an international authority with full ownership of nuclear facilities and exercising stringent control over activities susceptible to diversion to weapon manufacture. After an original recommendation for international ownership of uranium mines was deleted for distinctly Lockean liberal reasons, the ‘Baruch Plan’ entered the UN where the Soviet Union swiftly rejected it as a legitimization of the American nuclear weapons monopoly. The United States passed the McMahon Act of 1946 which established civilian control over atomic energy, breached an agreement with Canada and Great Britain to share research information, and stipulated that

until Congress declares by joint resolution that effective and enforceable international safeguards against the use of atomic energy for destructive purposes have been established there shall be no exchange of information with other nations with respect to the use of atomic energy for industrial purposes (Epstein, 1976:8).

The Atomic Energy Commission (AEC) was to be responsible for developing and regulating all atomic energy programs while the Joint Committee on Atomic Energy (JCAE) decided policy 'with the advice and consent of the Executive' and was vested with statutory powers. From the outset, the JCAE was a relentless promoter of the fabulous new energy which, in their tantalized view, promised international prestige, foreign earnings, domestic growth, skill-intensive employment, and political influence over those nations which eventually imported such technologies from the US (Lonroth and Walker, 1979: 1–3; Yager, 1981:51; Brenner, 1981:24–30).

The JCAE hastened to close the gap between promises and pay-offs by prodding the AEC, encouraging reluctant private investors, and generally attempting to proselytize those of diverging opinions. *Government formed a partnership with private industry* to overcome the high capital costs and risks to the degree that the cumulative investment tended later to reduce State 'autonomy in this policy area and limit its ability to respond to public concerns' (Nelkin and Pollak, 1981:188). The State was the 'prime mover' in France, Germany, and (partially) Canada as well as the US where civilian industries became beneficiaries of military nuclear programs and a host of other forms of sponsorship which stimulated an expansion of R & D in this sector through the 1950s unparalleled in scope or cost by any preceding industrial effort (Lonroth and Walker, 1979:10). Such was the legal and financial dependence of private industry on government during this embryonic period that the supervisor of the Navy's atomic submarine program could virtually dictate the course of corporate nuclear development through discretionary award of military contracts (Pringle and Spigelman, 1981:147–164). In particular, Westinghouse reaped the skills acquired in the Navy project while, in general, prospects for commercially competitive nuclear energy were enhanced to a degree otherwise not so quickly, if ever, attainable. By the eve of Eisenhower's 'Atoms For Peace' speech in 1953, research on commercial applications had progressed so far as the construction of the federally-funded Shippingport nuclear power plant. In the meantime, American policymakers were rudely apprised not only of their wishful miscalculations regarding Soviet and European nuclear weapons capabilities but also with respect to competing reactor programs in both Britain and the USSR. Pressure to expand and accelerate the nuclear program at home accordingly intensified.

Our 'vulgar hypothesis' does not suffice to explain Eisenhower's proposals which, several months after the Russians displayed their H-bomb, were foremost a bid for disarmament. But neither is the hypothesis negligible. After the suggestions for an international 'atomic pool' were rejected, the amended Atomic Energy Act of 1954 opened the door to private ownership of fissionable materials and nuclear facilities and pledged 'to make available to cooperating nations the benefits of peaceful applications of atomic energy as widely as expanding technology and consideration of the common defense will permit' (Atomic Energy Act, 1954: section 3(e)). Presuming a plethora of technological 'fixes' could surgically separate what were contradictory objectives, the United States definitely ranked the promotion of nuclear power over non-proliferation concerns. A consistent ranking of policy objectives 'in the national interest', following Krasner, can thereafter be discerned. In a 'weak state', private industry had to be enticed and 'cost-plus-contracted' into lines of research deemed critical by central decisionmakers (although policy was largely though compatibly determined in Congress). State initiation and sponsorship confounds crude economic reductionist or pluralist premises that the State merely responds to private sector demands. This kind of conduct by States avidly concerned with their military and economic

position in the international order is consistent with both the statist model and neo-Marxism, thereby underscoring our primary concern with these two explanatory rivals.

Within the US, the State and the nuclear industry had cultivated a particularly mutually advantageous relationship. In 1955, the AEC had initiated a Power Reactor Demonstration Program which evolved through three phases of aid, including subsidized R & D and free fuel for 7 years, and of declassification, until coy investors themselves demonstrated interest. The Price-Anderson Act indemnified the private nuclear industry against major accidents while the AEC and the Export-Import Bank 'facilitated' overseas salesmanship. Also in 1955, the AEC Chairman obligingly announced that his agency's regulatory objective, to 'minimize governmental control of competitive enterprise' (Ford, 1982:52), was apparently a self-liquidating one. In response to the Gore-Hollifield bill in 1956 which would have compelled the AEC to construct six reactors and thus raise the specter of an 'atomic T.V.A.', the AEC chairman gamely stated that his agency's policy was 'to give industry the first opportunity to undertake the construction of nuclear reactors' failing which the 'commission will take steps to build the reactors on its own initiative' (Lambright, 1976:78-79).

Internationally, US light water reactor technology was preferred by West European recipients in the 1960s (Bupp and Derian, 1978). Since light water reactors are fueled with enriched uranium, US dominance was reinforced by the dependence of foreign customers on the virtual monopoly held by American enrichment facilities at that time. To discourage other nations from considering and adopting the proliferation-sensitive option of nuclear fuel, reprocessing and to maintain its supply monopoly, the US fostered an image as reliable supplier of abundant, low cost fuel. (The enrichment facilities were a government monopoly in which the economic costs could be 'understated' in service of the nonpecuniary 'national interest'). The State Department organized secret negotiations among uranium-supplying nations to enforce adoption of safeguards by importers at a time when membership in the International Atomic Energy Agency, formed in 1956, imposed no 'affirmative obligation either to refrain from military nuclear activities or to submit to agency safeguards' (Pringle and Spigelman, 1981:203-204; Yager, 1981:155). These more general advantageous factors, plus the advantages specified in bilateral agreements, enabled the US to police the new frontiers where nuclear trade was otherwise free to flourish.

Nowhere did the policy priorities of the White House and the State Department conflict substantially with those of the AEC, JCAE, or private industry except insofar as a fiscally tight-fisted Republican administration, which might lack the requisite commitment to long-term heavy financial support, appeared insufficiently alluring to private investors (Lambright, 1976:77). But beginning with 'loss leader' sales to hitherto wary utilities, the private nuclear industry enjoyed rapid growth during the 1960s, supported though it was by federal spending, advantageous legislation and programs, and salesmanship to the public. At that decade's close, only research and development and enrichment remained predominantly government responsibilities, which the Atomic Industrial Forum also sought to secure (Moore, 1978:33). Although private industry originally opposed the formation of the European Atomic Energy Committee (Euratom) which the US government officially encouraged for familiar geopolitical reasons, it came to be perceived as a 'convenient channel' for US sales (Bupp and Derian, 1978; Lonroth and Walker, 1983:12). American firms engaged in initially satisfactory joint ventures (e.g., with France's Framatome) and technology licensing

agreements (e.g., with German and Japanese firms). Many of these foreign firms grew through heavy State subsidies to become substantial US rivals, however.

Until 1972 technology transfers to non-communist nations were unrestricted. Abroad as well as at home, the industrial sources of nuclear energy were viewed benignly until the Chinese explosion of 1964, the abetting of an Israeli project by a French plutonium producing reactor, and fears of further proliferation stirred the negotiation of what became the Non-Proliferation of Nuclear Weapons Treaty (NPT) in 1970. But the NPT was for exporters a frictionless document—guaranteeing to signators the right to share in the development of peaceful nuclear activities—which fell well short of being ‘geographically comprehensive’ and did not inhibit the ‘spread of sensitive nuclear facilities’ (Yager, 1981:30). The US diluted its stringent ‘continuous inspection’ proposal to appease Japan and West Germany, which, as non-nuclear weapons states, feared a discriminatory rise in inspection costs for their new breeder reactor programs. Settling on tenuous detection measures, the NPT reaffirmed the primacy of marketing over non-proliferation vigilance. So weak and porous were the safeguards, even in respect to export of reprocessing technologies to nations with barely disguised desires to apply nuclear technologies to other than solely civilian uses, that a European observer later credited the Ford and Carter Administrations with the ‘triggering of an awareness in Europe of the fact that the exporting of nuclear materials and equipment is a special business’ for which unique standards must apply (Lellouche, 1981:43). Might mercantilistic motivations account in part for this nuclear naiveté?

Only naiveté and ignorance make it possible to ‘allege that sheer economic need conditions the choices available and alone determines policy outcomes’ (Potter, 1982). State support for nuclear power over alternative energies was not foreordained by economic logic. Rather, the synergy of the premature, overly optimistic forecasts of plentiful, low cost energy and the substantial State-sponsored capital investment (and maintenance of an amenable socio-economic environment) resulted in an enduring set of symbiotic public and private institutions. These developments could not have been anticipated by strictly economic analyses or by some accounting of social utility. Instead, this ‘happy convergence’ represents the mutually reinforcing integration of the perceived interests of State elites and private elites and of *plans* for pursuit of these interests. What we are emphasizing is the bond between State policy and private decisions as reflections of elite interests. Two new concepts may enlighten this point.

‘Fragmentation of power’ and ‘insulation’ are double-edged terms whose operational meaning changes with the concrete dimensions of the case at hand as well as according to the analytical framework applied. The fragmentation of public authority fosters the creation of ‘many, partially overlapping and often competing, vertical policy networks seeking to control the flow of public policy in their particular sphere of interest.’ These policy networks may contribute to the formation of ‘interorganizational coalitions’ of elites. Fragmentation may ‘free political elites to act with fewer constraints’ and ‘place them more under the influence of the most strongly organized interest groups and social classes’ (Alford, 1975:158). At the same time, by virtue of ‘expertise, hierarchical control, and ability to mobilize resources, interorganizational coalitions of such elites generally dominate policy outcomes’ due to the often prohibitive organizational and informational costs which must be borne by challengers (Lindberg, 1977:332). ‘Insulation’ may contribute to these conditions. In practice, the term may mean, as it did in this stage of the nuclear export case, insulation from popular demands rather than from corporate pressures. If this is the case, it becomes clearer how well-organized and -financed interest groups could dominate political elites: the influence of the powerful

interest groups upon political elites is undiluted whereas these elites are 'insulated' from less specific, 'popular demands. This relationship of fragmented political elites to organized, motivated, private interest groups is Krasner's 'happy convergence' and what we will term a 'policy harmony'. A *policy harmony* presupposes that: (1) an interorganizational coalition of elites within the State apparatuses and between them and the affected private elites will share basic policy premises; and (2) that they are successfully insulated from intrusive (or acquiescent) non-elites or counter-elites. A faltering in either prerequisite gives rise to a *policy crisis*.

The intimate interlock of State and private industry in the nuclear realm was dictated both by national security concerns and by the costly nature—long lead times, high capital requirements, intensive R & D—of the ambitious enterprise. While the marketplace boomed, what was good for, say, Westinghouse or Framatome or KraftWerk Union was good for their respective States, and so it is no surprise that the Statist model accounts for this period of policy harmony virtually by predefinition. Neo-Marxism is likewise consistent and even the vulgar hypothesis—that the stringency of the non-proliferation regime varied inversely with civilian industrial strength—survives scrutiny if we view the latter as a *retardant* on the former as competition intensified internationally. The test for the models is presented only when the centrifugal effect of dissension intrudes into and expands the 'elasticity' of the relative autonomies of the apparatuses of the State.

Factors which precipitated the policy crisis in nuclear export activities were: the intensifying commercial competition exemplified by the formation of the Uranium Enrichment Corporation (URENCO) and the consortium of Belgian, French, Italian, and Spanish interests in uranium enrichment named EURODIF, the shortfalls in the nuclear promises made domestically, the waning of the 'conceptual barrier' between peaceful and military uses of delivered nuclear facilities (the Indian bomb), and, not least, the well-meaning but inept and inapt promotion of private enterprise ideology by a neo-mercantilist Republican Administration. The Nixon Administration does not conform to Krasner's image of an Executive branch consistently pushing policies which maximize long term US goals. In the nuclear fuel issue area as in others (e.g., soybean embargo), the political horizons of the White House were emphatically domestic while the policy dimensions and repercussions were distressingly international, consequently irreparable damage was done to the US reputation as a reliable supplier.

As the AEC projected a 3.5 billion dollar annual market for US reactors and ancillary equipment and fuel, Nixon attempted to transfer somehow the enrichment centers into private hands, although private control risked a hike in prices that could undermine one of the few physical buttresses of the non-proliferation regime. After Congress blocked a proposal to sell off three enrichment plants, the White House impounded funds for enrichment expansion to create a supply squeeze which would 'force favorable action on privatization' (Brenner, 1981:34). The White House acted as morale booster to the diffident private sector while rate structures were revised upward, onerous new contract terms were imposed on foreign customers, and, eventually heavy orders resulted in the 1974 blockage. The AEC, which resisted privatization, was populated by Nixon appointees and the many State Department personnel with misgivings were firmly subordinated. Only after the enrichment snafu and the Indian nuclear blast was the now querulous 'voice' of the State Department 'restored' (Brenner, 1981:64). Conducted by a pro-business White House, policy harmony was reduced to dissonance.

A private consortium offered qualified support for a transfer of enrichment centers to private control, but demanded guarantees of what an American Enterprise Institute

analyst delicately terms ‘subsidy-like provisions’ (Moore, 1978:36). The Ford Administration later proposed the Nuclear Fuel Assurance Act which both the General Accounting Office and Congress opposed. The privatization campaign continued until the autumn of 1976 when the implications of the India test, the enrichment blockage, and prospective sales of sensitive equipment to ‘pariah States’ percolated up to the White House. By the mid-1970s a *de facto moratoria* on domestic reactor orders constrained US and most European industries—France expected—due to increases in construction costs, a decline in estimates of electricity growth rates, conservation measures, global recession, and public outcry over safety issues. Nuclear advocates were no longer able to persuade ‘significant sectors of the public’ that nuclear energy was safe or economic or that ‘those with interests in the expansion of nuclear power, in government or in the public sector, can be trusted to act in the public interest’ (Lonroth and Walker, 1979:42). Policy harmony gave way to crisis and the measures taken to restore public confidence in the early stages served to increase the ‘elasticity’ of the relative autonomy of State apparatuses and thus widen the policy front, diffuse among several sites the power to set policy, and heighten conflict. The 1975 Energy Reorganization Act divided the duties of the abolished AEC between the Nuclear Regulatory Commission (NRC) and the Energy Research and Development Administration (ERDA). Another casualty was the JCAE, whose jurisdiction over nuclear matters was enfeebled in 1974 and finally dispersed in 1977 among 7 other committees and sub-committees. Another anomaly for the statist model, whose implications we focus upon next, is that it was Congress, not central decisionmakers, which ‘took the first step’ after the Indian bomb hearings to stiffen regulation of nuclear exports (Pringle and Spigelman, 1981:376–377).

Until the end of the Ford Administration (when breeder reactor and plutonium recovery programs were first deferred), commercial objectives consistently took precedence over non-proliferation ones. As the Nixon episode testifies, non-proliferation aims, even when not in conflict with aggressive nuclear marketing, were dispensable for other, ideological reasons. While the election of Carter signalled the outbreak of a full-blown policy crisis, we note in passing on to the NNPA that the vulgar hypothesis does not hold—competition among domestically becalmed nuclear industries for export outlets was predictably increasing.

Legislating the Nuclear Non-Proliferation Act of 1978

On 27 April 1977 President Carter announced in a message to Congress that ‘the need to halt nuclear proliferation is one of mankind’s most pressing challenges.’ A year later Carter signed the Nuclear Non-Proliferation Act (NNPA) in which Congress declared it to be the Policy of the United States to:

- (a) actively pursue through international initiatives mechanisms for fuel supply assurances and the establishment of more effective international controls over the transfer and use of nuclear materials and equipment . . . for peaceful purposes in order to prevent proliferation . . .;
- (b) . . . confirm the reliability of the United States in meeting its commitments to supply nuclear reactors and fuel to nations which adhere to effective non-proliferation policies by establishing procedures to facilitate the timely processing of requests for subsequent arrangements and export licenses;
- (c) strongly encourage nations which have not ratified the Treaty on the Non-Proliferation of Nuclear Weapons to do so . . .;

- (d) and cooperate with foreign nations in identifying and adapting suitable technologies for energy production and, in particular, to identify alternative options to nuclear power in aiding such nations to meet their energy needs, consistent with the economic and material resources of those nations and environmental protection (NNPA, 1978, Section 2).

As the NNPA section quoted above indicates, Congress was concerned not only with preventing proliferation, but also with restoring the image of the US as a reliable supplier of nuclear reactors and fuel and with enhancing or maintaining the economic advantages of such supply. Through earlier amendments of the Foreign Assistance Act and of the Export-Import Bank Act, Congress already had created a set of sanctions—which under specific conditions the President could waive—upon non-nuclear weapons States engaging in weapons-related nuclear activities (Dunne, 1982:104–105). The economic importance of nuclear exports could not be ignored, however. The General Accounting Office noted that US private firms ‘from 1970–1973 . . . supplied 86% of the nuclear reactor capacity exported to the free world, but this share declined to 45% for 1974 through 1977. From 1978, when the NNPA was enacted, through 1980, the US share of this market was 39%’ (GAO, 1981:125). The Office of Technology Assessment predicted that the value of US reactor exports to developing nations would amount to 5–7 billion dollars by 1990, assuming a US market share of 35–40% in the early 1980s and 25–30% in the latter half of the decade (OTA, 1977:255–256). An ERDA report estimated that the US would reap 120–140 billion dollars in export revenue from nuclear sales through the year 2000 (ERDA, 1976:4–15). With ‘sweetener’ deals abounding and market share declining, the US nuclear industry had reason to fear unilateral legislation which might further jeopardize its competitiveness. Accordingly, the industry fought hard to weaken the various non-proliferation bills pending in Congress in 1977 and 1978.

Of course, the NNPA not only encountered criticism at home but also was generally perceived in a negative light by both foreign governments and foreign nuclear industry executives. European competitors suspected that the US was simply trying to change the rules of nuclear trade to protect its portion of the international market just when the Europeans ‘had developed an impressive technological edge . . . in reprocessing and fast breeder technology’ (Lellouche, 1981:41,46; Yager, 1981:190). In West Germany, where a 50% excess capacity for export purposes was built into the industry, responses were particularly livid. A Kraftwerk Union AG executive assailed the US’ self-declared role of ‘policeman on the worldwide beat of nonproliferation’ and charged that the NNPA was designed to maintain the dependence of importing countries on the United States (Hildenbrand, 1978:56). European officials and executives also feared that the US policy would serve the sinister purposes of domestic opponents of a ‘nuclear society’. An instantly formed, pro-nuclear international alliance exerting pressures against the NNPA complemented the US nuclear industry in its own efforts. This section will examine who the proponents and opponents of more stringent non-proliferation measures were, and whether advocates of tougher export controls were ultimately successful.

During committee hearings and floor debates in the 95th Congress, various non-proliferation bills were attacked both on the grounds that specific provisions were counter-productive and, more generally, on the assumption that any unilateral tightening of export controls would injure the US economy and undermine more realistic non-proliferation strategies. Interestingly, the nuclear industry and its congressional allies sought to limit the independent regulatory power of the NRC over

nuclear export licensing and to transfer effective authority to the State Department, which was anticipated by the industry as establishing more lenient licensing procedures (Smith, 1978a:5). This corporate preference might appear peculiar inasmuch as the NRC (and its predecessor, the AEC) were strong supporters of the nuclear industry. However, in contrast to the routine approvals of licenses by the AEC, which were subject to presidential direction before 1975, the newly created NRC, with virtually autonomous licensing powers, took its task more seriously—at least in the realm of exports—so that more thorough review procedures led to a slowdown in the export licensing process (Brenner, 1981:80–88). In 1977, for example, after the NRC gained access to an International Atomic Energy Agency (IAEA) report which acknowledged the inadequacy of Agency safeguards against diversion of nuclear material, the NRC's Office of Nuclear Material Safety and Safeguards decided that it could no longer concur with nuclear export decisions on the basis of IAEA criteria (Smith, 1978b:12).

Senator McClure of Idaho, a state dependent on public and private sector jobs in the nuclear field, was a vehement opponent of the non-proliferation bill and expressed particular concern over Section 304 of the NNPA requiring the NRC to 'make independent judgments' regarding the implementation of safeguards in foreign nations for exported materials (US Congress, 1979:788). Citing State Department views, McClure argued that any such policing function would be vilified abroad and that 'any such result would completely undermine the international safeguard system and certainly throw existing international commercial procedures into great turmoil' (US Congress, 1979:789).

The NRC was divided on the issue. As prescribed by the NNPA, export licenses are to be issued by the NRC, but only after notification by the State Department that the administration has concluded that the proposed export will not be 'inimical to the common defense and security'. Should the NRC withhold an export license, the president could overrule the decision subject to review by Congress. The practical importance of the role of the NRC in export licensing is exemplified in decisions in 1978 and 1980 not to permit fuel shipments to India despite urging by the Administration (Brenner, 1981:199–204). During the bill debates, one NRC Commissioner favored executive branch rule over such decisions (Hendrie, 1978:22) while another took the opposite stance, replying that

While it is true that the executive branch can and should influence whether a nuclear export goes forward, it must provide the NRC... with convincing justification. This extra element of protection is, of course, an inconvenience to the *laissez-faire* exporters, to say nothing of those officials, who regard U.S. nuclear fuels and equipment as the modern day equivalent of glass beads and Indian blankets—prime items of international barter.... In giving export licensing authority to an independent regulatory commission in 1974, Congress was saying in effect that it wanted this country's nuclear trade to be handled consistently and to be subject to explicit protective standards rather than the political exigencies of the moment. This still makes sense (Gilinsky, 1978:23).

Although Senator McClure and like-minded legislators failed to shift the 'last word' authority on export licenses from the NRC to the State Department, some related amendments were passed. One such amendment reaffirmed the US commitment to the principles of the more liberally trade-oriented NPT. The nuclear industry lobbyists were also disturbed by a section of a bill proposed by Senators Cranston, Glenn, Javits, Percy and Ribicoff who urged that it should be US policy 'to cooperate with other nations in protecting the international environment from radioactive, chemical, or thermal

contamination arising from nuclear activities'. For example, regulations drafted by the Council on Environmental Quality would have required environmental assessments for nuclear exports (Evans and Novak, 1978; reprinted in US Congress, 1979:784). Senator McClure, for instance, opposed both actions because their restrictive guidelines 'would have a devastating effect on nuclear exports, not unlike the impact such statements have had on our domestic nuclear power and other activities' (US Congress, 1979:785). To accelerate the licensing process, McClure successfully enacted an amendment which enabled the NRC 'to make a single finding for more than one application and also to use an alternative procedure for licensing, based on a finding of 'no material (has) changed circumstance.' The State Department opposed congressional initiatives to involve the NRC in environmental review procedures or otherwise impose US standards on other nations because 'it would actually impair our ability to remain a major international nuclear supplier, a role that is closely connected with our ability to achieve our nonproliferation and other foreign policy goals . . .' (US Congress, 1980:30).

Reporting on a provision in the Glenn-Percy bill (S.897) for procuring research funds for non-nuclear energy in developing countries, the Senate Committee on Energy and Natural Resources 'was informed by the Executive Branch that they prefer deletion' because the section conveyed an 'implicit bias' against nuclear development under any circumstances (US Congress, 1979; 494-495). While not deleted, the provision also 'has not been implemented. The Congress has neither pressed the executive branch to implement Title V nor appropriated any funds for it' (GAO, 1981:109).

Throughout the congressional fight Senator McClure also stressed the vital significance of an industry whose exports offset balance-of-payment deficits and which supported 350 000 jobs at home. While these facts should not determine US policy, he argued that they should not be dismissed either (US Congress, 1979:550). The Carter Administration was by no means ignorant of the economic significance of nuclear exports. Testifying before the Senate Committee on Energy and Natural Resources, an ERDA spokesman noted that

these nonproliferation bills . . . have a significant impact on our power reactor vendors. This impact could be favorable if the result, as we hope, is to reassure other countries of our reliability as a nuclear supplier. It obviously could be unfavorable if Congress allows those features of the Glenn-Percy bill to remain which would give a basis for concern to other countries that we are unreliable . . . it is obvious that maintaining a position as a reliable nuclear supplier has tangible benefits to the United States from a commercial point of view . . . although in the judgment of the administration, and regardless of commercial benefits, nonproliferation considerations must prevail over commercial factors (US Congress, 1979:555).

The nuclear industry vigorously emphasized the aspects of unreliability and the many ways in which a complex licensing process involving several branches of government could go awry, and lobbyists warned that new legislation which appeared 'unfair, arbitrary, and inconsistent' inevitably would divert customer countries to 'non-US suppliers who give stronger supply assurances' (US Congress, 1979: 579). A vice president of General Electric pleaded for greater 'flexibility' on criteria for export licenses. Not content with a plea, he went on to define the 'proper role of Congress' as that of establishing 'goals and criteria toward which the executive branch should move, with periodic reports to Congress, and the establishment of a straight-forward licensing procedure' (US Congress, 1979:581-582).

As with the General Electric vice president, the White House and the State Department were concerned that zealous congressional action would restrict their own

latitude in foreign policy and, thereby, unnecessarily antagonize other governments. An excessively restrictive approach might also adversely affect other regime-relevant institutions, such as the delicate negotiations inside the International Nuclear Fuel Cycle Evaluation (which, however, was little more than a study group whose participants were not bound by the results). The Carter Administration did win its fight against a one-House veto on any presidential waivers of NNPA provisions, but non-proliferation was not the foremost foreign policy concern of the Carter administration. As demonstrated in the US shift toward Pakistan after the Soviets invaded Afghanistan, non-proliferation goals could conflict with other objectives.

What then was the bottom line on non-proliferation? Here it is vital to note that the version of the non-proliferation bill which stood for floor debate in February 1978 was itself a compromise between the bill originally promoted primarily by Senators Glenn and Percy (S. 897) and the Administration's bill (S. 1432). Glenn and Percy are not 'anti-nuke' radicals but men who stress the need to restore the credibility of the US as a reliable supplier while performing 'the delicate surgery that is needed to separate these Siamese twins so that . . . we can have "benefits without bombs"' (US Congress, 1979:769). Nonetheless, the Committee on Energy and Natural Resources believed that even the compromise bill established procedures which were 'cumbersome', 'time-consuming', and so 'highly unpredictable' that the bill might 'lead to an effective moratorium on new nuclear exports' (US Congress, 1979:496). The strong resistance which the non-proliferation bill(s) engendered perhaps reflects more on the credibility of the 'surgical operation' proposed than on the motives of the proposers.

Did Carter's non-proliferation policies represent a radical departure from the past? Referring to Carter's 1976 UN statement, Duffy and Adams (1978:67–68) argue that the President's policies moved 'away from restrictions on US participation in the world nuclear market, away from penalties and pressures on other suppliers and purchasers, and towards inducements and incentives for countries which supported US market policies.' They maintain that the NNPA in the long run might actually enhance the export potential of the US nuclear industry 'by encouraging it to develop and market "proliferation-resistant" fuel cycles'. Yet this outcome would depend on reactions of customer and other supplier nations and how effectively the US could sell its 'dual denial' approach and dissuade others from building indigenous enrichment and reprocessing facilities (Duffy and Adams, 1978:68).

However, a 1981 Government Accounting Office report concluded that, as mentioned, foreign reactions were overwhelmingly negative—with the major exceptions of Australia and Canada—and that the NNPA had a negative impact on US nuclear export sales, although the GAO could not specify cases where the NNPA was the decisive factor (GAO, 1981:130). Recipients of US nuclear products were perturbed by those NNPA provisions which unilaterally altered the terms under which the US engaged in nuclear cooperation, and by the severe restrictions imposed on what customers could do with US supplied nuclear products. This poses a quandary to the US industry only insofar as the NNPA is only one of a variety of political factors which affect nuclear purchases. In fact, in 1978–1979 the US industry did sell four reactors to foreign customers. 'As a practical matter,' Yager (1981:177) also notes, 'since all nations with which the United States had had agreements for cooperation met the criteria of the NNPA when the act entered into force, no immediate export embargoes were effectively imposed.'

Statism, Neo-Marxism and Policy Crises

Statism

Congress, not the Executive branch, proposed and fought for the strictest export controls. Although weakened, the NNPA still dismayed the nuclear industry and was passed 411:0 in the House and 88:3 in the Senate. Certainly, the nuclear lobby's preference that central decisionmakers retain ample leeway for action *vis-à-vis* Congress is remarkably incongruent with Krasner's portrait of the American political system. Does this case then indicate that the White House and State Department were targets for corporate influence while Congress remained more distant?

That Congress did not vacillate toward extremes either of non-proliferation or of profitability is evident in their successful resistance to the most domestic element in Carter's 'dual denial' policy—the halt of the Clinch River Breeder reactor. At that time many congressmen believed that a halt to the breeder reactor program would obstruct technological progress and attainment of energy independence. Brenner (1981:190) suggests that congressional debate could more easily be controlled by staunch non-proliferationists than by the nuclear industry because the NNPA was not a vitally salient issue for most members. Congressional action concerning different issues depends upon the kind of issue in question and the local constituent pertinence of the issue. Krasner correctly stresses that the way in which an issue is defined and the arena in which it is decided are critical dimensions of policy formation, but his characterization of the arenas is static and simplistic.

Another fundamental problem of the Statist model is the portrayal of central decisionmakers as autonomous shapers of policy in the 'national interest'. Krasner makes a valid point in rejecting a bureaucratic approach to foreign policy which maintains that 'government action does presuppose government intention' (Allison, 1971:175). His case against the anti-intentionality of *early* formulations of structural Marxist theory is similarly warranted since, as shifts between presidential administrations since Nixon attest, the intentions and strategies of actors—particularly if they inhabit the Oval Office—can make a distinct, though not always decisive, difference. Although Eisenhower and Carter were no less 'pro-business' than Nixon or Reagan, the *intensity* of adherence to liberal economic ideology does distinguish the approaches of these presidents to the non-proliferation issue.

Ideological orientation will render the allegedly insulated White House more permeable to the preferences of some societal interests than to others. One might retort, however, that such ideological convergences are coincidences and only incidental in the larger policymaking scheme of things. Perhaps only incidental, these 'coincidences' must be addressed in any investigation of the policy process and of the imputed autonomy of central decisionmakers. The Carter Administration clearly sought to 'sanitize', not ban, nuclear exports and also adhered to the 'reliable supplier' creed. The goals it pursued, though, were not identical with the short-term interests of the nuclear industry or of rival suppliers and potential customers. The State Department was willing to sacrifice stringency in non-proliferation measures in order to mollify allies, particularly Western Europe and Japan. Against this background, the Administration understandably placed a premium on flexibility. That these international pressures worked to the advantage of the nuclear industry did not, of course, escape the attention of US corporate executives. This conciliatory *real politik* is also a response to a display of the force of international capitalism. Subject to these dynamics, the 'national interest' becomes a more pliable commodity than Krasner leads one to believe.

Neo-Marxism

Contrary to Krasner's expectations, these central decisionmakers did not comprise a united front based on the consistent pursuit of predetermined ends. Conflicts occurred within the White House and State Department as well as between these central decisionmakers and a divided NRC and the Council on Environmental Quality. If the enactment or implementation of a policy should depart markedly from the intentions of central decisionmakers, Krasner attributes the deviation to external opponents which were, of course, multitudinous. But an adequate explanation of outcomes in this case requires conceptual tools which enable the identification of structural constraints under which State policies are formulated and of how those constraints are expressed by conflicting forces and sites *within* the State.

Brenner (1981) divides the main Administration actors into three categories which dovetail with Joseph's use of 'policy currents'. The 'mainstream' current believed that non-proliferation concerns preceded commercial considerations but were willing to make pragmatic adjustments. The 'purist' (Left) current was implacably opposed to plutonium recycling and advocated the most exacting export controls. Though a small group, these 'purists' entered into 'close alliances with like-minded staffers on key congressional committees and in the NRC' (Brenner, 1981:127). On the opposite side of the spectrum was the old nuclear establishment (Right current) whose influence was concentrated in the ERDA. The resulting bureaucratic in-fighting led to the transmission of confused signals by the Administration to Congress, and so exacerbated the effects of the increasing 'elasticity' in the relative autonomies of the State apparatuses. Stated another way, a struggle occurred on the 'strategic field' of the State where each contender maneuvered so as to shift ultimate policy authority to the most compatible sites. That the participative scope had increased is reflected in NRC commissioner Gilinsky's exasperated remark that 'nothing is going to shut this trade off faster than for the public to decide it is really a trade in bombs' (Smith, 1978a:5). While even Brenner's labyrinthine account is insufficient for tracing the struggles among differing forces within the Administration and across the apparatuses of the State, and thus for gauging their exact impacts on the NNPA, to judge by subsequent events the Right current was clearly a loser and Congress clearly a winner in the aftermath of the policy crisis.

The Carter Administration neither threw its unqualified support behind the nuclear industry nor did it champion the national interest, as the statist model presumes. The final version of the NNPA neither satisfied the immediate interests of the nuclear industry nor lived up to Carter's crusading expectations. The Administration housed within its branches the oppositional forces arrayed against the President's initiative; and eventually, pressures mounted by these forces were compounded by other events (e.g., the Soviet invasion of Afghanistan) which shifted Carter from his early 'hard-line, purist, anti-plutonium position' toward the Right current. What matters most for this analysis, however, particularly since the Reagan Administration took office, is that the policy crisis winner, Congress, has not followed suit.

The Reagan Administration, which set out to 'streamline' the licensing process (hopefully to transfer that function from the NRC to the State Department) also attempted to lift the embargo on domestic reprocessing, ease the rules on foreign reprocessing of US-origin uranium, exploit loopholes in the NNPA regarding 'dual-use technologies', minimize congressional review of Executive expeditiousness, and cheer-lead private sector involvement, even suggested that civilian spent fuel be reprocessed for

military purposes. Despite the Administration's effort to 'remove impediments' to US nuclear trade, the ostensible beneficiaries were curiously dissatisfied with the extent of the aid offered by central decisionmakers in their zeal for free marketeer exchange. 'I think it is the religion of this Administration,' commented the President of Power Systems Inc. (Westinghouse), 'that there will be *no* subsidies, that we've got a free market economy—which would be fine if markets were truly free' (Atomic Industrial Forum, 1981:10). Facing a far more dissatisfied Congress, by the end of 1981 the Administration abandoned its effort to alter or repeal the NNPA (Hamilton and Spector, 1983).

Viewing Reagan decisions to sell nuclear materials to non-treaty signators such as Argentina, South Africa, and India, Senator Percy remarked 'I am concerned that we as a nation—and, in particular, we in the Congress—may be losing our grip on non-Proliferation' (*New York Times*, 2 October 1983). During House hearings on amendments to close loopholes, a member noted that Congress 'can't escape the conclusion that the Administration sees the NNPA not as a means of halting and spread of modern weapons but as a hurdle to overcome in order to conduct nuclear commerce overseas' (US Congress, 1983:9). Fears of a 'nuclear Sarajevo' spurred the passage in the House of two amendments designed to staunch the trend. The Reagan Administration is highly unlikely to succeed in recreating the policy harmony which previously existed due to the indelible impression—institutionally expressed and embodied in Congress and the NRC—resulting from the 'elasticity effect' during the policy crisis. Fragmentation had indeed cut the other way. As Lonroth and Walker (1979) observe, *due to the absence of centralized planning*, US nuclear development 'has tended to reflect the commercial interests of individual private enterprises to a greater extent than in other countries', yet nuclear power is 'particularly vulnerable in countries where authority is *fragmented*, as in countries with federal structures and/or judicial systems with broad mandates' [authors' emphasis] (Lonroth and Walker, 1979:42; also Nelkin and Pollak, 1982).

The concerns of a wider non-elite audience are reflected by Congressmen who, during the amendments hearings, cited worrisome matters such as the Israeli air strike of the Osiraq reactor in Iraq, reported efforts by Libya to buy a bomb from Pakistan, and 'what-if' speculation over possession of a bomb by Argentina during the Falklands War (US Congress, 1983). The risk of ignoring these developments for the sake of adding to profitability, even if of billions of dollars, no longer seemed worthwhile; discretion is deemed the better part of mercantilist valor by these critics. As structural Marxists observe, the 'economic' does not translate proportionately into power in the 'political' realm—and markedly less so in the throes of a policy crisis.

Conclusion

One might regard this new institutional equilibrium as a positive democratic gain in the evolution of the political system though hardly complete or necessarily enduring. The decision to promote nuclear power was not immanent in the 'motion of capital' or preternaturally inscribed in the structure of the State. Like Krasner, who examines relations between the State and particular firms, we have not addressed in this study *classes as such* since the survival of the world capitalist system or of any single capitalist State does not appear crucially contingent on the fortunes of the nuclear industry. Unlike Krasner, we assessed the explanatory capacities of the Statist model, and of structural Marxist theory, in terms of valid applicability to highly discordant developments within what was for three decades a very 'happy convergence' of interests between the (components of the) State and the nuclear industry. Analysis of the

subsequent policy crisis disclosed defects in the statist model, which is unable to account for the anomalous behavior of central decisionmakers and of the Congress in this policy area. The degree of insulation of central decisionmakers from societal interests is dramatically more *variable* than Krasner indicates—substantially mediated as it is by the intensity of ideological identification across the formal public/private boundaries. On the other hand, Congress can thrust itself (or be thrust) forward as the initiator and guardian of the ‘national interest’ due to the dynamics of increasing ‘elasticity’ which attended this crisis. For example, unlike the case of cabinet systems of governance, the American Congress (and to a lesser extent the courts) is the most crucial site because it can determine the (re)allocation of powers and missions among other sites in the system during occasions of policy crisis. Structural Marxist theory, as amended and elaborated here, predicts a concentration of lobbying efforts in Congress because it is: (1) the most permeable to representations by non-elites and counter-elites; (2) the most equitable—or least inequitable—site in which groups with highly varying resources can contend; and (3) a repository of *effective* powers for maintaining or altering the institutional structure of the previous ‘policy harmony’. In other words, Congress can engage efficaciously in adversarial struggles with central decisionmakers in the Executive branch over the proper definition of at least some aspects of the ‘national interest’. Here is where the Statist model is particularly confounded and where too structural Marxist theory provides the better analytical basis for explanation of the dynamics and directions undertaken during a policy struggle.

Because the State was unwilling to promote nuclear exports *at any price* (or, by the same token, unilaterally alter the non-proliferation regime whatever the international and domestic costs), it appears ‘vital to reject any attempt to establish the functionality of the State on behalf of capital on *a priori* essentialist grounds’ (Jessop, 1982:235). During a policy crisis, the State becomes not merely the arbiter of the conflicting interests of fractions of the bourgeoisie but a strategic field in which the increasing elasticity of the relative autonomies of the apparatuses generates opportunities for either effective entry or enhanced influence by non-elites and counter-elites who join in the struggle to shift genuine policy authority to the most favorable site. This is not the stuff of standard bureaucratic politics models but a wider ‘war of position’ in which the agencies and branches of the State become the focal points and/or vehicles for access to policy influence by new entrants and by ‘old’ contestants compensating for earlier imbalances in the distribution of political resources. Mediated by the direction and the level of popular mobilization (intensity of class struggle), the range of permissible and politically viable options will expand while the relative weights of the options will change. Since the ‘policy harmony’ preceding the crisis is by definition a purely elitist equilibrium, these tendencies will exercise a democratizing effect on the policy process in the specific area in question. This is a *trend* arising in policy crises which is, of course, neither irresistible nor irrevocable. Minimally stated, these trends will enhance the indeterminacy of the content of the eventual policy outcome.

The effects of foregoing factors can be compounded further by the shifting of actors and agencies across the ‘policy currents’ as a result of the elasticity effect. For instance, a sympathetic critic of structural Marxism cogently cites the need for a ‘theory of the *interiorite* or the limited freedom of the subject, which goes together with the autonomy of the cultural and political factors’ because actors have a built-in ‘internal distance’ which enables ‘a limited but real range of choices about the roles they are going to play, not to speak of the way in which they are going to play them’ (Perez-Diaz, 1978:91). Motivated by new evaluations, perceptions, evidence, coalition possibilities, or moral misgivings,

actors may at most redefine institutional missions and switch their allegiances among policy currents at least. We can hardly undertake construction of such a theory of 'internal distance' here⁴, but do advance the thesis that the 'internal distance' of actors will increase with the increasing elasticity in the relative autonomies of the apparatuses of the State during a policy crisis. The behavior of NRC members and of Congress in this case provides suggestive, if hardly conclusive, evidence to that 'elasticity' effect.

An investigation of the civilian nuclear exports issue has led to the rather severe questioning of the explanatory adequacy of the Statist model, while structural Marxism is endorsed when amended or modestly elaborated to account for a limited but highly significant range of short run, relatively low stakes incremental policy changes. We have argued that structural Marxist theory can yield useful insights into the dynamics of policy formation in some distributive, regulatory, and 'power politics' issues as well as in redistributive ones (Lowi, 1964; McGowan and Walker, 1981). Such applicability, however, is likely to correspond to the potential for the conversion of an issue into a redistributive one. In the nuclear exports case, opponents of 'nuclear *laissez-faire*' tend to worry not only about whether system-destabilizing retransfers may occur, but also about the repressive shape of a 'nuclear society' to come (Lindberg, 1977; Nelkin and Pollak, 1982).

The utility of this middle-range operationalizing of notions like 'policy crisis' and 'elasticity' can only be determined through further elaboration, specification, and testing in other cases. Candidates might include: trade legislation (especially import-threatened firms), regulatory struggles over pollution controls or occupational safety and health standards, and the emergent industrial policy debate. In comparative analysis, political systems will display different 'elasticities' during policy crises which confine the effects described and suggested here: for example, the proposition that the French State apparatus(es) are less elastic than the West German or American or that the individual apparatuses in one State exhibit a significant variance in the distribution of 'elasticities' compared to those in another State with the following specifiable differences in policy outcomes and in social consequences. Theoretical fertility is the concern here.

This study has tentatively advanced an argument regarding a pattern of events and institutional conditions which enhance the *indeterminacy* of outcomes in formerly closed policy areas termed 'policy harmonies', and thus provide opportunities which non-elites and counter-elites *may* exploit to press their preferences effectively. Success in one policy area (e.g., more stringent safeguards on foreign sales on nuclear equipment) does not necessarily spill over into other areas of related non-elite or counter-elite concern (e.g., repealing Reagan Administration initiatives). Increasing elasticity in the relative autonomies of the apparatuses of the State do not necessarily cumulate into increased relative autonomy of *the State* itself from societal interests. Given this analysis, any notion of the existence of a thing called The State apart from the relationship of social forces which constitute its apparatuses seems dubious; structural Marxism's abstract sketch of the State as 'a condensation of a relationship of forces among classes and fractions of classes' but not 'reducible to the relationship of forces' seems remarkably and vividly appropriate. Finally, we note that just as there are limits to the autonomy of the State and the elasticity of its apparatuses, so too are there limits to the applicability of structural Marxist theory. While this enterprise does warrant the encouragement of further Marxist-oriented policy studies, need we say that the tantalizing dream of constructing a 'universal solvent' of a theory is the very height, to put it charitably, of philosophical innocence?

Notes

1. The social origins and personal predilections of State elites are minimized, if not dismissed, since they are superseded by structural imperatives and barriers.
2. Other non-Marxist, non-Statist analysts have noted that Lockean liberal ideology and attendant 'irrational anticommunism' are highly implicated in the expansion of American capitalism in the post-World War II era (Ruggie, 1980).
3. Joseph also notes that 'specific state agencies do not "belong" to one current or another; during the Vietnam war policy disagreements occurred both between and within agencies'.
4. Theories of internal distance have long been a project of the Frankfurt School.

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