THE INHERENT LIMITS OF ORGANIZATIONAL STRUCTURE

AND THE UNFULFILLED ROLE OF HIERARCHY:

LESSONS FROM A NEAR-WAR

Michael G. Jacobides
London Business School
mjacobides@london.edu
http://faculty.london.edu/mjacobides


Sid Winter’s guidance, help and support, as well as the stimulating discussions with Jim March during my stay in Stanford made the original paper possible. Howard Kunreuther, Rob McMillan, Harry Tzimitras, and Roberto Weber are acknowledged for their comments on early drafts, and Vassiliki Zafolia for her dedicated research assistance. My thanks go to Mie Augier for her encouragement to re-work on the current version and to Eugenia Cacciatori, Stephan Billinger, Yiorgos Mylonadis, Heidi Gardner, Phanish Puranam, Don Sull, Sarah Kaplan, Susan Lynch and LBS Seminar Participants for discussions that have helped shape the current version. The Decision Sciences Program at the Wharton School gave financial assistance; the research was carried out when I was Decision Sciences Inter-departmental Doctoral Fellow at Wharton. I would like to thank the North Atlantic Treaty Organization for funding; the original paper was largely written when I was a NATO Science Fellow.
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ABSTRACT

Drawing on the Carnegie tradition, this paper examines how the Greek government and its military apparatus handled an incident involving the islets of Imia, which led to a near-war with Turkey in 1996. This came about not merely as a result of escalating circumstances: there were failures in strategic decision making resulting from the organizational structure, which shaped identities, defined repertoires of action, sustained routines, filtered and interpreted information, and provided the platform for interaction between organizational actors. Organizational structure, I observe, shapes the political economy of an organization and affects individual and collective action. Individuals react according to their positions in the organization, rather than to the actual problems encountered; the division of labour within an organization inevitably imposes a set of local responses which, while being cognitively economizing, are not always well calibrated. Hierarchy potentially offers some relief from this excessive compartmentalization, through control over which routines are enacted and the way a problem is framed. Hierarchy and management might, therefore, yield benefits inasmuch as they can help re-frame issues, intervene in the setting in motion of inappropriate routines, or design new routines. In our case-study, these safety valves were not effective; information relevant to framing the issue was neglected; responses were local and disaggregated; each partial reaction worked to worsen the problem; senior decision-makers failed to re-frame the issue, or alter the routinized repertoire of actions; all of which led to the militarization of this crisis.

Keywords: organizational decision-making, organizational structure, routines, frames, political economy, hierarchy
On the night of January 31, 1996, Greece and Turkey were on the brink of war. Athens’ air defense was on full alert for the first time since the Cyprus invasion of 1974, in the face of a potential air raid by Turkish fighters. Despite the efforts of Richard Holbrooke, Bill Clinton’s Undersecretary of State, to mediate and diffuse the crisis, it seemed that Greece and Turkey were heading for full-scale military confrontation. Not until 4.15 am, literally at the 11th hour, was a compromise achieved. The conflict, which was over a group of small, uninhabited islets, together no more than the size of a football pitch, had escalated, nearly to the point of a full-scale war, which, as the decision makers stressed, was a highly unattractive option. Although war was averted, how the crisis was managed tarnished the reputations of the main parties involved. The Greek Chairman of the Joint Chiefs of Staff tendered his resignation; the Prime Ministers’ approval ratings plummeted from 80% to 36%; the governmental apparatus for handling the crisis was derided; and there was a feeling among the population that the long-term interests of the country had been damaged. So why did this situation occur? What went wrong? What was behind the collective behavior that produced this near war situation?

This paper uses this case, viewed from the Greek perspective, to advance a new interpretive lens to help us to understand the impact of organizational design on collective organizational behavior. To do so, it draws on Cyert and March (1963) and provides a cognitive motivation to explain why organizational divisions exist in any organization of a certain size; argues that divisionalization affects the dynamics of “issue identification” (Dutton, 1993);, and points to some relatively understudied downsides of organizational structure. It also revisits the role of hierarchy, suggesting that one of hierarchy’s key functions is to help organizational participants re-frame issues, and selectively halt or trigger routines in real time. This approach suggests that problemistic search and sequential problem solving (Cyert and March 1963) do not happen at the level of the whole organization, but rather are mediated in specific ways by organizational structures and hierarchy.

This focused analysis of how organizational structure and hierarchy affect organizational decision making brings new understanding to theories of escalation of commitment (Staw and Ross 1987) by considering a case where many of the mechanisms usually invoked to explain escalation behavior do not apply. In this instance, none of the organizational participants had great conviction or public commitment about how the crisis should be handled; and there was no evident reason why the process of escalation began. Thus, the objective here is to understand how and why the escalation process occurred, and focus on the role of the administrative partitioning and hierarchy in creating this crisis.

This paper complements research into decision failures and administrative dynamics. While it does not have the depth that characterizes Vaughan’s (1996) analysis of the Challenger disaster our evidence also does not point to the “normalization of deviance” dynamics underlined by Vaughan; there is no evidence of a gradual neglect, or a consensual discounting of pertinent information, which would ultimately lead to a failure. Likewise, there is no evidence of “groupthink” (Janis 1971), i.e. the willful
neglect of important information, driven by the desire not to disturb the group dynamics (cf. Kramer (1998) for a critique). The evidence also suggests that what was at fault may be more than the gradual dismantling of a well-functioning system as a result of “practical drift”, where local units become increasingly de-coupled from each other – the tantalizing hypothesis advanced by Snook (1997) in his examination of the “friendly fire” accident when US fighters shot down two US Black Hawk helicopters. Rather, our analysis suggests that the division of labor existing between different units led to an inappropriate framing and conceptualization of the problem, which was further reinforced by the partial responses of the administrative apparatus (on the Greek side).

This analysis qualifies and extends Allison’s (1971) seminal framework on the different factors that drive collective action and escalation of international relations. Our case suggests that bureaucratic politics, and the efforts of sub-groups within an administration or an organization are not always as prevalent as Allison implies, and that organizational structure, through its impact on the different frames and routines of organizational sub-units, may play a more important role than previously acknowledged. It also offers the opportunity to delve more deeply into organizational structure and hierarchy, and see how and why they impact on collective decision-making.

Finally, this approach is in part consistent with Ocasio’s (1997) theoretical paper, which suggests that firms (and organizations more broadly) are attention-focusing devices, and that their attributes define which problems receive attention, and why. It extends his analysis by underscoring the role of organizational structure and the intra-organizational division of labor in defining the nature of the problems that receive attention and the sequence in which they are tackled, and in shaping the nature of the information that is received by the hierarchy in the organization. Also, I observe that not only does structure shape the focus of attention in routine organizational action, as described by Ocasio (1997), but that hierarchy can and should provide for targeted intervention in routines to refocus attention. Similarly, this approach extends the important work on issue identification and framing (Dutton 1993; Starbuck and Milliken, 1988) by considering how structure and hierarchy mediate to shape the overall perceptual filters and automatic issue diagnosis at the level of the organization, and considers how hierarchy might alleviate some of the inherent problems of perceptual filters.

Specifically, I build on Henderson and Clark’s (1990) insight that an organization’s information filters, and its communication channels, are the product of and reinforce product architecture. I broaden this purview by arguing that division of labor and compartmentalization are necessary to grapple with cognitive complexity, and that they impose a “cognitive architecture” within the organization. The argument, then, is that organizational division of labor emerges naturally to assist in the cognitive simplification of tasks, but that the existence of divisionalization creates blinders – filters that become increasingly narrow and limit the ability of the organization to respond. Thus, I consider the disadvantages of organizational design not only in terms of the challenge to integrate differentiated
organizational units (Lawrence and Lorsch 1967) and manage interdependencies (Thompson 1967; Baldwin and Clark 2000; Levinthal and Siggelkow 2003), but also in terms of the challenges related to the emergence of partial frames, information filters and routines that accompany divisionalization.

I also suggest that divisionalization is intimately related to hierarchy and organizational design. Specifically I argue that often each division within an organization tends to view the problem in terms of its own domain of expertise and responsibility, but that there is a mechanism to enable problems to be “passed on” (upwards hierarchically) whenever a division feels unable to cope. This allows more senior managers to make rather more ad hoc decisions in relation to what the problem is about, and to adjust the response of the organization, thereby ensuring that the existing divisions of labor and partial responses are not putting the collective onto auto-pilot (Dutton, 1993). Thus, I argue that the dual role of hierarchy is to re-frame the problem, and either intervene in existing routines or design new (potentially routinized) interventions.

However, I also observe that the mechanisms for this “exception management” are often incomplete or imperfect, and in dynamic situations they can collectively produce undesirable results. In the case of the conflict between Greece and Turkey, I argue that the main failure of the administrative apparatus was that it did not incorporate the safety valves that would have allowed the office of the Prime Minister to frame the problem appropriately. In other words, the hierarchy here (and in many other settings I suspect) did not counter organizational inertia by re-framing the problem and triggering appropriate routines and procedures.

I use the case study of the Aegean Crisis to explore these theoretical issues. While the articulation of the theory has been informed by iteration of the data, this is primarily a theoretical paper, whose constructs are anchored in a real case, which highlights issues raised, but not examined thoroughly in Cyert and March’s seminal work. In the spirit of Allison (1971), I consider how different theoretical perspectives can be used as interpretive lenses, and I focus on the new “compartmentalization, framing, hierarchy and re-framing” lens which explains the roles of organizational structure and hierarchy as they affect the framing of problems and action in the field.

While this case considers an administrative situation, which is not strictly comparable to the challenges faced by a firm, the analysis of the governmental apparatus and its internal division of labor does provide insights that can be extended to for-profit organizations.\footnote{Two arguments can be advanced for this aim. First, the inherent attributes of governments are very similar to those of a firm. There is delegation of decision rights, a quasi-hierarchical mode of control, accountability of decision makers in their efforts to achieve certain goals for their stakeholders. Organizational dynamics, structures and routines exist for government agencies as well as for-profit organizations; career ladders and incentive structures characterize the public as well as the private sector. Therefore governments and for-profit organizations can be analyzed using the same framework. Second, this study looks at the administrative angle of an international crisis, rather than its political or legal determinants. The fact that the focal crisis is a near-war should not blind us to the objective of the paper, which is to explore the organizational dynamics that affect organizational decision and action.}
consequences of organizational structure, I focus on one of the two parties involved in the conflict. I show that almost all participants were in a worse position after the crisis, and illustrate how divisionalization affects collective decision-making, focusing on the potential adverse side-effects.²

My objectives are first to systematize some “folk-theorem” type arguments about the benefits and shortcomings of the division of labor within organizations, or within sets of organizations, and second to develop the theory in terms of the dynamic properties of this division of labor, focusing in particular on how organizational structures create the frames, filters and routines which eventually constitute the “building blocks” of an organizational response, and reconsidering the role of hierarchy in its ability to re-frame and re-assess a problem rather than merely aggregating the organization’s responses. I start with a brief analysis of the cognitive foundations for the organizational division of labor and discuss the key constructs of this paper, i.e. organizational structure, frames, and routines. Within this theoretical framing and context, I move to the analysis. I blend theory and evidence to explain how this approach to the impact of organization structure sheds light on this remarkable episode. I conclude with implications for theory and practice.

**Theoretical Background: Organizational Structure, Routines, Frames and Hierarchy**

This section puts the key constructs in context. Research on the advantages and costs of organizational structure is summarized in the appendix; and additional research on both the escalation of commitment, on Allison’s (1971) three lenses, and on the mechanisms that can lead organizations astray (e.g. Vaughan’s and Snook’s works) are discussed after the presentation of the key theoretical framework to try to explain the crisis.

**Constructs: Organizational Structure, Design, and their Attendant Routines and Frames**

By organizational structures I mean organizational divisions, organizational sub-unit boundaries, and internal administrative layout (Weber 1947), which partition work into different, largely independent but occasionally overlapping segments. These structures are reflective and affect the division of labor within a larger organization. Thus, organizational structure, as (narrowly) defined here, consists of the way in which the task environment is partitioned and relegated to permanent or transient organizational sub-units. The most important forms of these sub-units are the divisions individuals belong to (e.g., the Ministry of Defense vs the Ministry of Foreign Affairs; or the Directorate of Intelligence vs the Directorate of Greek-Turkish Relations within the Ministry of Foreign Affairs), which define both the major tasks and objectives, and the activities undertaken by their members. In

² To put the paper into perspective, most of the research on decision making has concentrated so far on individual or group processes and pathologies. Although these are certainly important, as borne out by this case analysis, they overlook some very interesting, complex, and understudied dynamics. The similarly limited research on the structure of decision processes (e.g. Mintzberg et al. 1976) looks at decision structure and communication patterns, rather than at the ways in which organizational structure affects the content of the decisions.
addition, some structures may be more transient, and consist of inter-divisional groupings, such as the KYSEA (the council that cuts across different Ministries in Greece).

Without going into the idea of “double hermeneutics” (Giddens 1985) or considering how structure is perceived by the “subjects”, I just propose that the structures exist and are exogenous in the short term (the dynamics of structural change would require a study to itself). In our context, the existence of two separate entities in the Greek administrative apparatus, the Defense Ministry and the Ministry of Foreign Affairs, and the nature of their sub-units describe organizational structure. The fact that crisis-handling is not delegated to, or supported by, a particular organizational unit in the Ministry of Foreign Affairs, provides information on organizational structure (or lack thereof).

Organizational structure is important as it impacts routines and the stimulus-response patterns in an organization. The concept of a routine draws on evolutionary economics (Nelson and Winter 1982), and the Carnegie Tradition (Cyert and March 1963). This refers to recurring, learned and practiced modes of organized response. A routine is a “patterned sequence of learned behavior involving multiple actors who are linked by relations of communication and/or authority” (Cohen and Bacdayan 1994: 554). It is “an executable capability for repeated performance in some context that has been learned by an organization” (Cohen et al. 1996: 683). A routine rests on, though is not limited to the confines of standard operating procedures (SOPs) (Cyert and March 1963).

Routines and SOPs are closely related to structures: structures dictate SOPs, which are salient in large organizations and particularly so in public organizations (Weber 1947). SOPs, themselves based on structures, provide the basis for routinized patterns of action. These patterns of action define and constrain what organizations do; they affect the way organizations respond not only to external stimuli, but also to internal requests for change from the hierarchy, as Allison (1971) stressed in his “Organizational Process” model.

Organizational structure also contains or quasi-resolves intra-organizational conflict (Cyert and March 1963) through the creation of the divisions that attend, fairly autonomously, to particular parts of the task environment of an organization. It dictates which participants tackle particular issues, defines their organizational objectives and determines patterns of interaction, and the issues that will be addressed (Ocasio 1997). Thus, the partitioning of activities provides a potent and under-studied mechanism of conflict quasi-resolution that helps shape intra-organizational truces and routines (Postrel and Rumelt 1991).

Finally, organizational structure moulds the political economy of an organization – the incentive systems that not only drive individual action, but also affect the nature and the robustness of organizational routines. It dictates the objectives and expected action of organizational sub-units and provides the template against which organizational objectives are achieved. Thus, direct and indirect
incentives help focus attention, and likewise the learnt but perhaps implicit patterns of activities within organizations shape the way individuals view the world- not only in terms of the conscious mental processing of decision-makers, but also in terms of the way individuals look at the world. Thus, organizational structure affects cognitive frames.

Frames are the cognitive simplifications of reality. They represent interpretive frameworks that identify the parts of the environment that require attention, explain what is important, and define how it should be tackled. As Tolman (1948) suggested, individuals use frames, which are shared representations and information filters, whether implicit or explicit, that assist with the “adaptive mapping” of their environment (see Acha 2004; Kaplan 2004). As Starbuck and Milliken observe, the existence of such frames and perceptual filters is a necessary, even if problematic means of coping with the complexities of the organizational and competitive environment. Likewise, as Dutton (1993) observes, the existence of such filters means that management shifts onto “automatic” diagnosis, creating cognitive shortcuts that help economize on conscious effort (cf. Gavetti and Levinthal, 2001).

While organizational scholars have studied frames, the focus has been at the level of the entire firm. Daft and Weick (1984), for instance, consider “firms as interpretation systems”, underlining the critical role of frames as the link between the firm and its environment. Likewise, Orlikowski and Gash (1994) conceive frames as the ways that a firm can see technology; they suggest that different firms advance different conceptualizations of the same technology and show how these different conceptualizations drive action, an approach further developed by Tripsas and Gavetti (2000). This insight has been amplified by social constructivists such as Kunda, Garud, etc. Frames have also been considered at the level of the industry, most notably by Spender (1989) and Porac et al. (1989), who explained how common frames affected the nature and evolution of a UK industry.

What I propose is that over and above the frames of the whole organization, each division of the organization has particular frames, which define which parts of the environment will receive attention. That is, frames do not (only) exist at the level of the organization as a unitary actor, but (also) exist at the level of the organizational sub-unit. Evidence for this proposition can be found in the discussion of the different “thought-worlds” encountered in organizations, described by Dougherty (1992). Dougherty realized that different parts of the firm were focused on different aspects of the same endeavor: the production division views an innovation in terms of manufacturing details; the marketing division considers it as a new means to satisfy customers; and so on. This insight was further developed by research on “boundary objects” that link different aspects of an organization (Carlile 2002; Bechky 2003). This stream of literature provides support for the contention that within the same organization different frames – different “thought worlds” – exist, roughly co-terminous with the organizational structure.
This also implies that the nature, scope, and definition of the different sub-units within an organization can critically shape frames; that is, divisionalization creates the set of filters and frames that reduce the immense complexity of the environment onto a number of manageable attributes, that individuals can cope with (cf. Starbuck and Milliken 1988, Gavetti and Levinthal 2001). The set of “local”, heterogeneous, and only partly overlapping frames serves the crucial purpose of ensuring that individual actors can cope with cognitive complexity, ensuring each individual attends to only a few dimensions. Thus, organization structures operate as “the paved roads across the swamp” (Nelson and Sampat 2001). Yet, while helping individual decision makers, they also critically constrain the aspects of the environment that are attended to (see the Appendix for details.)

In addition to frames, routines and SOPs, organizational action is also affected by managerial interventions and hierarchy. Hierarchy, a key construct, is quite narrowly defined for the purposes of our analysis. It is the hierarchical authority to accept or override framings and routine responses from lower levels in the organization. While I refer to hierarchy as being able to re-frame, it should be stressed that hierarchy does not, in and of itself, make decisions, or frame problems; the managers or decision-makers do this. Hierarchy is the structure that gives decision makers the ability to choose, frame, resolve, and communicate.

The role of management and hierarchy in this sense, is to examine the appropriateness of routinized responses given a broader framing of the situation which cannot be seen by sub-units. Note that this does not require that managers be gifted with extraordinary insight— they are as boundedly rational as anyone else, but that they focus on the appropriateness of frames, routines, rules, and procedures. Thus, hierarchy has a cognitive function that assists the division of labor by endowing particular organizational members (management) with the responsibility for monitoring or over-riding the partitioning of tasks and organizational response (Fayol 1949; Gulick and Urwick 1937; Simon 1945; March and Simon 1958). Thus, this paper complements and extends Ocasio’s (1997) analysis, by explicitly considering the role of both organizational structure and hierarchy in focusing attention.

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3 This is particularly important as the existence of such frames can easily lead important information about the environment to “slip through the cracks”. Contrast this focus with research on the heterogeneity of “thought-worlds” within organizations: My interest does not, as Carlile’s (2002) or Bechky’s (2003) does, lie in understanding how different “thought-worlds meet” through the boundary objects that link them, but rather in considering the implications of the very existence of these different thought-worlds for the prospects and dynamics of the organization.

4 By hierarchy I mean the role and ability of a manager to accept the current nature of an organizational response or override it; I use the term “hierarchy” (or “management”) as opposed to “manager”, to stress the structural role of managers within the context of a hierarchical organization. Of course, I acknowledge completely that managers are able to reframe only as a result of their formal power, but also because of their personal and moral authority. So the formal organizational chart is not a sufficient statistic of the distribution of power and influence within an organization.
How Structures, Frames, Routines and Hierarchy shape Organizational Courses of Action

I now shift to a brief integrative discussion of my approach. Literatures originating from a broad range of fields, from economics, to sociology, to organization studies, provide various arguments about the advantages and the risks introduced by organizational structure. Our literature review (see appendix) suggests that organizational structure has both enabling and constraining features, and that while different streams of research have focused on individual parts of the problem, we have not, as yet, achieved an adequate synthesis.

In summary, therefore, first, organization structure emerges not only because it allows for specialization and more focused learning, but also because it provides for a manageable number of variables. In other words, the fundamental reason for organizational structure is human bounds on cognitive complexity, and the need for a simple set of objectives (a point made by Hayek 1945: 520), especially in situations of delegated authority.

Second, the incentive problem (i.e. identifying a way to measure and assess the contribution of individuals within units, or of units within firms) increases the need for a set organizational structure with clear objectives; individuals need cognitive simplifications both to comprehend their world, and to understand what is assessed. Thus, even if the underlying tasks are not fully de-composable, organizational division of labor enhances the productivity of the parts of an organization by increasing accountability and transparency, and improving incentives (Daft, 2004).

Third, organizational structures shape routines. These routines determine how relative competencies are developed within an organization. They create dynamic paths, i.e. trajectories within which organizational sub-units co-evolve, and determine which pieces of information will be identified, organized, and acted upon, as a function of particular stimuli.

Fourth, organizational structures and routines shape frames and cognitive filters at the organizational division level. This is a dynamic process: as organizational divisions solidify, they create perceptual filters that enhance the focus of these divisions on particular sub-tasks. This dynamic process is also responsible for goal displacement, and for the endogenous tendency of organizational sub-units to increase their autonomy, which, more often than not, creates substantial problems for the organization as a whole.

The main dynamic problem for organizations then, is that because of these behavioral bounds on individual cognition, and because of the attendant pressures for “domain simplification” and for the institution of stable frames of reference, themselves further enhanced by the incentive and reward structure, a potentially excessive or incorrect compartmentalization may occur. Even if, initially, the compartmentalization of a problem or task might be appropriate, each division of labor carries with it potentially destructive elements because organizations create trajectories, which increasingly make
them hone in on sub-parts of their task environment, thereby developing a set of partial competencies which may be unable to address the real underlying problem (cf. Cacciatori and Jacobides 2005).

This tendency was noted by Henderson and Clark (1990:15) in the context of new product development. They argue that firms create divisions which take them along specific paths, but also create powerful blenders. They suggest that each technology is linked to the particular way in which labor could be divided, and that this division automatically provides a set of frames of reference that constrain the organization’s ability to draw information from and react to its environment (also, see Tripsas and Gavetti, 2000). Thus, as divisions emerge in organizations, filters and communication channels follow, which renders the organization as a whole able only to respond to certain particular, narrow features of its environment, which are consistent with the “cognitive architecture” dictated by the division of labor. Over time, these trajectories solidify, become increasingly less explicit and taken for granted, and consciously and unconsciously reinforced.⁵

If to this natural tendency we add the natural propensity of organizations to “over-measure” particular items to provide stronger incentives for achieving divisional objectives (see Levinthal 1988), and the natural propensity of actors to try to “play the system” (or just comply with it!) by behavior that meets the assessed criteria, but does not necessarily answer the underlying value-adding processes (Jacobides and Croson 2001), then we have a cognitively and behaviorally grounded explanation for goal displacement. Goal displacement, i.e. the tendency of sub-units to reify their partial goals often to the detriment of the organization as a whole, was noted by Merton (1957) and Selznik (1957), but has not been studied in depth. I argue that goal displacement is an unavoidable side-effect of organizational design, and suggest that over time, organizational units focus increasingly on their narrow areas of expertise, occasionally to the detriment of the purpose (or stated purpose) of the whole organization. This tendency is exacerbated by the creation of cognitive frames that dynamically restrict organizations.

This explains how organizational structure shapes (through frames and routines) the response of the organization – the first part of my argument. The second, and surprisingly novel part of my argument is that while there is substantial inertial influence from the divisions, some still manage to show up “on the radar screen” when they are actively perceived as “falling outside” the areas of competence, or the purview of individual sub-units. These issues are transferred to more senior management to be

⁵ As they argue, “An organizations’ communications channels [and information filters] will come to embody its architectural knowledge… The fact that those working on the motor and the fan blade [in a fan-making factory which has two separate divisions on fan blades and motors] report to the same supervisor… is an embodiment of the organization’s architectural knowledge about the relationship about the motor and the fan blade… As a product evolves, information filters and communication channels develop… The strategies designers use, their channels for communication and their information filters emerge in an organization to help it cope with complexity. They are efficient precisely because they do not have to be actively created each time a need for them arises…[Yet] the
framed and understood more appropriately, either because they require extensive interaction between units which cannot be managed through existing channels, or because they require a re-framing. In this sense, organizational design, here seen narrowly as the mechanism that allows issues and concerns to move up in the hierarchy of organizations, provides the ability to re-frame and re-consider the nature of the problems faced. Indeed, the tasks associated with management (the creation of ad hoc teams, the implementation of task forces, the assignment of roles that cut across the traditional structures of an organization) are all intended to ensure that problems are not forced to fit into existing organizational structures.

In addition to these two main points, there is an additional dynamic, inter-temporal element in this approach: I observe that organizational structure, through the creation of independent entities that interpret the environment and act on it, shapes the organizational environment, and often leads the organization down a specific path, as a result of partial responses, especially if no re-framing takes place in the early stages; some of these partial responses can substantially affect the nature of the task environment. As one division independently responds to what it perceives as an environmental stimulus, it changes the environment for the rest of the organization. These dynamic issues are illustrated by our case-study.

**Our Empirical Context: The Near-War Between Greece and Turkey**

**The Crisis**

On January 31, 1996 Greece and Turkey narrowly avoided all-out war in their most dangerous bilateral crisis since the 1974 invasion of Cyprus. A dispute with Turkey over sovereignty of the barren and uninhabited islet of Imia led the Greek government to escalate a crisis and risk a state of war – an outcome that Greece did not want. After all-night negotiations led by the US President Bill Clinton, both countries retreated from the disputed area. However, later on February 1 questions over the crucial decisions made by the Greek government began to mount. Barely three days after a new government had been greeted with great hope and expectations, by the public, the political scene had changed dramatically. The new premier, Prof. Simitis, and his senior cabinet members came under fierce attack from both wings of the opposition, and the governments’ own party about the way the crisis had been handled. The Joint Chief of Staff, and two of the other three Chiefs were dismissed, and an atmosphere of bitterness pervaded. The decisions made by the National Security Council on the critical night of January 31 and the days preceding were challenged. It seemed these decisions had benefited no-one, and especially not those involved in the decision making.
How did this situation arise? Why did experienced politicians, members of one of the most technocratic Greek governments in recent years, make such misguided decisions? What led to the escalation of a situation where a diplomatic solution would most likely have produced an endorsement of the Greek stance by the international community? How did routinized patterns of action affect the escalation? What was the role of organizational structure and hierarchy in producing such outcomes? And what lessons can we draw from this near disaster?

Data and Methods

This paper has an explicit underlying theoretical pre-conception that guides its grounded empirical investigation (Starbuck 1981). It provides different theoretical perspectives as complementary yet not exclusive interpretive lenses, which help us understand the critical aspects of an administrative situation (Allison 1971). To do so, we draw on the individual and collective decision-making processes as they relate to the Imia crisis. I was fortunate in having access to the types of data usually not made publicly available - an almost complete account of the discussions and interactions in the crucial six-hour meeting of the Greek National Security Council, which was leaked to the press. Given the minimal cohesion of the decision-making group when the crisis occurred (the government having only been in office for three days), and given the need for individual actors to be accountable for their actions and not to appear incompetent or self seeking, most of the participants in the decision-making process gave unusually detailed accounts of what happened. This enables an in-depth examination of the deficiencies in the decision-making process, and reduces the danger of imputing intentions or assuming hidden agendas.

The data are wide ranging and include most publicly available sources. Almost all published Greek material on the crisis was examined, including literature on frictions with Turkey, memoirs of key reporters (Kourkoulas 1997; Pretenderis 1997), content analyses of press accounts (Gialouridis 1997), and a book on strategy by the then Joint Chief of Staff (Lymberis 1997). Special editions of newspapers and magazines, and extracts from televised debates were analyzed. Studies in International Relations (IR) and politics with special reference to this crisis were examined (e.g. Dipla et al. 1996, Dokos 1997). Information on the internet was exhaustively researched. The literature search also included Turkish sources of information, official (Turkish Ministry of Foreign Affairs) and reports in the Turkish press (especially news briefings in English). Interviews with individuals in Athens complemented the archival research. Although some of the data rely on leaked reports - which, however, were not officially discounted - there seems to be considerable consensus about the nature and evolution of the crisis in the material analyzed. Even if we cannot exclude the possibility that important information underlying the crisis remains confidential from the public and analysts, it seems safe to assume that the analysis contained in this paper is a plausible rendition, and helps to illustrate and extend the theory. This does not claim to be a deep ethnographic study (Van Maanen 1988),
neither does it have the depth of information that can be found in Snook’s (1997) recent book on friendly fire, or Vaughan’s (1996) detailed analysis of the Challenger disaster. However, within the constraints of the data, I hope to provide a perspective that can be extended beyond the specifics of this case.

This analysis is unavoidably partial. Although every effort has been made to avoid bias in the examination of the crisis, the problem is examined from the point of view of the Greek officials. As the intention is to examine the impact of Greek decision making failures, and their adverse impact on Greek decision makers, we examine the situation from the Greek standpoint. Hence this analysis is not intended to be an impartial study of an IR problem, but rather an illustration of the impacts of decision-making pathologies within the institutional environment it has developed.

The approach used to interpret the data was iterative (Eisenhardt 1989), oscillating between evidence and theory. First, a thorough grounding, not only in terms of the specific crisis, but also of the broader context, was sought. Then, a list of all the imputed errors and issues in the handling of the crisis was prepared, to which I added my own questions and a series of “open issues”. I then applied existing approaches to build “interpretive lenses” (Allison 1971), able to provide an explanation for this escalating behavior. I thus considered Allison’s “three models” (unitary actor, organizational process, bureaucratic politics) as expanded by the recent and thorough critique by Bendor and Hammond (1992); the “escalation of commitment” literature (e.g. Staw and Ross 1987); as well as more recent analyses by Vaughan (1996) on the “normalization of deviance” and Snook (1997) on “practical drift”. For each approach, I tried to create the most complete and plausible set of explanations with regard to the crisis and, having done so, I noted inconsistencies and potential open issues. I then returned to the data, in an attempt to identify other issues and eventually identified division of labor and partial framing as potential candidates. I revisited the literature, to identify building blocks, and investigated whether the use of any existing perspective on organizational design could help to explain the crisis.

Since no single approach offered a completely satisfactory account, I engaged in an iteration between data and theory, until I was satisfied that I could provide a consistent explanation of the организационные dynamics. In this process, I engaged colleagues and my Research Assistant to act as devil’s advocates; and I communicated my findings to people who had been close to the crisis, to ensure that my new interpretive frame had validity. Before moving on to describe the framework and the crisis itself, some background is needed.

**Background Information on a Near War**

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6 I also briefly considered “groupthink” (Janis 1971), but as it was not really compatible with the current problem, I dismissed it at an early stage of the process, since it did not yield a prima facie plausible explanation of the crisis.
Greece and Turkey have a long history of troubled relations. Ever since the Byzantine empire was swallowed up by the Ottoman empire in the 15th century, Greeks have sought to gain autonomy, and increase their territory. In 1921-22, Greece launched an unsuccessful offensive in an attempt to permanently dispose of the “Turkish threat”, which led to the loss of any claims that the Greeks may have had on Asia Minor, and to the death or expulsion of about 2 million Greeks from that territory. Since 1922, relations between Greece and Turkey have shown little improvement. Pogroms against ethnic Greeks in Turkey in the ‘50s and ‘60s, and the confiscation of Greek property in Turkey, are still vivid memories for the Greeks. The Turkish invasion of Cyprus in 1974, following a coup against the Cypriot government inspired by the Greek junta in power, and the resulting occupation of the northern part of the island, has been a constant source of friction. Also, violations of Greek airspace by Turkish military aircraft, and occasional questioning of Greek sovereign rights, e.g. drilling in the Aegean seabed by the Turks, have reinforced the feeling that Greece is constantly under attack from the Turks. At the same time, the Turks blame the Greeks for obstructing Turkey’s relationships with Europe, and argue that the Greeks support the Kurd separatists, undermining Turkish sovereignty. They also feel that the Greek islands in the Aegean - and the fact that Greece claims it reserves the right to expand its territorial waters from 6 miles to 12 - form a stranglehold around it, depriving it of unhindered access to the Mediterranean and access to the oil that is believed to be beneath the seabed. Although many of the disputes between Greece and Turkey have a local character, they always concern broader issues. Thus, the Imia issue was important for Greece because it implicitly reopened debate over what until then had been considered established treaties, and allowed the Turks to demand a renegotiation of what the Greeks saw as incontestable issues. In particular, it would de facto affect the sovereignty of 350 islets and rocks.\(^7\)

In addition, there were some particulars relating to the situation at the end of 1995. First, at the end of 1995, Greece was in political transition. The gravely ill premier, Papandreou, was replaced on January 15, 1996, after considerable political friction. Costas Simitis won the resulting election by a narrow margin, with Defense Minister Arsenis a close runner-up. The new premier faced the challenge of keeping his party and his government under control, a difficult task considering the twenty-two years of party dominance by the flamboyant and charismatic Andreas Papandreou.\(^8\) However, until the Imia crisis Simitis’s low-key, technocratic style had earned him great respect. The political situation in

\(^7\) Several analysts have wondered that two countries could go to war over an islet “smaller than a football field” (The Irish Times, February 1, 1996), “smaller than the place de la Concorde” (Le Monde, January 31, 1996) and “smaller than the White House” (Richard Holbrooke). Yet the significance of the crisis for the stakeholders in both nations was much greater. In legal terms, the issue was not just the sovereignty of the islet, but the precedent set for other islets.

\(^8\) Prior to a tumultuous career in politics, which included three terms as prime minister despite substantial health problems and financial as well as domestic scandals, Prof. Papandreou was a pioneer in the analysis of the theory of the firm. He was cited by Cyert and March (1963) for his important work on the firm as a political coalition.
Turkey was also not very stable at the beginning of 1996. Following a marked rise by the Islamist party, former Prime Minister Tansu Ciller was not re-elected. She remained in power during January 1996 as caretaker, and several analysts suggest that she tried to use the Imia crisis to boost her popularity by pandering to the nationalist feelings of both electorate and representatives. However, possibly due to the significant role of the army in Turkish politics, this governmental instability did not result in much loss of continuity in international policy-making. Against this background, it is easier to understand the gravity of the Imia crisis.

A Crisis Unfolds

December 25, 1995: The Turkish merchant ship Figen Akat ran aground on the islet Imia (known to the Turks as “Kardak”). Its captain initially rejected the Greek coastguard’s help, claiming that he was within Turkish territorial waters and, despite assurances to the contrary, sought assistance from the Turkish authorities. Imia lies 3.65 nautical miles (nm) off the Turkish coast, 2 nm away from the small Greek island of Kalolimnos, and 5 nm from the relatively big Greek island of Kalymnos.

December 28, 1995: The Figen Akat was refloated with the help of the Greek tug Matsas Star which escorted it to the Turkish port of Gulluk. Admiral Peloponnisios, Commander of the Coastguard, informed the relevant Greek authorities of the incident, but it was given no other publicity.

December 29, 1995: The Turkish Ministry of Foreign Affairs addressed a Verbal Note to the Greek Embassy in Ankara, asserting that Imia constituted part of Turkish territory, and was registered in the land registry of the province of Mugla. This was the first time that Turkey had openly laid claim to what was considered Greek territory, but the claim did not receive great prominence at diplomatic level.

January 10, 1996: In response to the Turkish Note of December 29, the Greek Embassy in Ankara addressed a Verbal Note to the Turkish Ministry of Foreign Affairs, rejecting Turkish claims to the

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9 Despite some rather desperate efforts on Ciller’s part (such as proposing to her main rival, Mesut Yilmaz, to share leadership and alternate as premiers); Yilmaz was elected as premier in February 1996. However, his tenure was very short, and he was succeeded by Erbakan, the Islamist leader, who was elected with Ciller’s support. In recognition of her 180 degree shift in political stance, Ciller appointed Minister of Foreign Affairs, a post she held for a few months. Interestingly, Yilmaz (after some “official subtle hints” from the military), managed to overthrow Erbakan and form a secular government by “stealing” the support of some of Ciller’s deputies; he was premier for most of the period up to December 1998.

10 An interesting allegation, which cannot be confirmed but seems credible, is that at the beginning of 1996, both the Greek Secret Forces and the CIA were notified about a message sent by a Turkish general to his premier asking for permission to escalate confrontation with Greece, if an opportunity were to be presented. The power vacuum in Athens had attracted the attention of Turkish officials. This information also leaked to the press, as did a letter from US President Bill Clinton to a Senate committee, expressing his fears about an escalation of action in the Aegean (To Vima, January 28, 1996: A26). Relatedly, it is worth noting that the Turkish government and military were probably not unduly troubled by the prospect of war. Turkey’s northern and southeastern provinces were in a continuous state of (rather unsuccessful) warfare with Armenian and Kurd separatists respectively. The army also had a powerful say in Turkish policy-making, and its “Army of the Aegean”, although theoretically defensive, was by far the largest fleet
islets. The Note underlined the fact that Turkey had reaffirmed Imia as belonging to Italy by virtue of a bilateral agreement signed between the two countries in 1932, and that by the Paris peace treaty of 1947 the islets were subsequently ceded from Italy to Greece with the rest of the Dodecanese island chain. Hence there was no legal ambiguity over Imia’s sovereignty.

January 25, 1996: The Turkish daily Hurriet published details of the previously unreported incident, and questioned Greek sovereignty of Imia. The same day, the mayor of Kalymnos, apparently on his own initiative, planted the Greek flag on Imia.

January 27, 1996: A group of Turkish men, claiming to be journalists from Hurriet, flew to Imia, removed the Greek flag and replaced it with the Turkish one. Doubts about this group being journalists were raised, since their helicopter would have needed a very highly trained pilot in order to evade Greek radar. The Greek response was immediate: Greek armed forces replaced the Turkish flag with a Greek one, an event that attracted enormous attention in both the Greek and Turkish press.

January 29, 1996: Premier Simitis issued a statement in unusually direct language in which he reaffirmed the position of his government on the issue. Ankara addressed a second Verbal Note to Greece, repeating its initial claim and requesting negotiations concerning the status of all the islands, islets and rocks, which, according to Turkey, was not “well determined”. Athens replied that Imia was Greek, that the signed treaties left no legal ambiguities, and hence that there was nothing to discuss. Following information on Turkish military moves, seven Greek commandos were dispatched to the island to guard the flag.

January 30, 1996: The Greek defense ministry detected movement of Turkish warships in the disputed area, and the national security council (KYSEA) was convened. A Turkish frigate violated Greek territorial waters targeting a Greek gunboat which was patrolling the area. A Turkish helicopter took off from a Turkish frigate and flew over the Imia rocks. Orders were issued to shoot anyone approaching Imia. Greek Foreign Minister Theodore Pangalos asserted that under no circumstances would Greece remove its flag from the islet. At the diplomatic level, the escalation continued. By late afternoon, the entire Greek army had been mobilized, and adult males residing on nearby islands begin receiving draft notices. By the end of January 30th, both Greece and Turkey had amassed huge firepower in the region, and the Greek air force had repelled 14 Turkish violations of Greek air space.

January 30, ~ 9 p.m. : US Secretary of Defense William Perry telephoned Greek Defense Minister Gerassimos Arsenis for an evaluation of the situation. Arsenis told Perry that the Turks had provoked the confrontation; but offered to recall Greek ships from the area and to have the commandos leave Imia if the Turks would recall their ships - but he insisted the Greek flag should remain on the islet.

of landing craft in the Mediterranean. For Greece, war was not at all a desirable option - even for the most marginal political players; an economy based on services and tourism would be shattered by any threat of war.
~ 10 p.m.: Perry, along with US Joint Chief of Staff General John Shalikashvili, spoke to Arsenis to say that both the US and Turkey sought a de-escalation, but that Turkey would withdraw its forces only if the Greek flag was removed. Nothing was resolved.

~ 11 p.m.: US President Bill Clinton telephoned Prime Minister Kostas Simitis to inform him that Turkish Prime Minister Tansu Ciller was threatening to attack after midnight if the situation was not diffused. At roughly the same time, US Secretary of State Warren Christopher telephoned Greek Foreign Minister Theodore Pangalos initiating a night-long series of calls between Pangalos and the US State Department with Richard Holbrooke assuming the role of chief mediator.

January 31, 1996: ~ 1 a.m. Simitis convened the KYSEA, Greece’s national security council. Forty minutes later, ten Turkish commandos in speedboats landed on the islet Akrogialia, opposite to Imia, and also Greek territory; Greece had no commandos there, but its warships were within 400 meters. This information was passed to the Greek Foreign Minister by Holbrooke. Reportedly, KYSEA received no confirmation from the Defense Ministry operations room of the commando landing until nearly 4 a.m. Joint Chief of Staff Admiral Lymberis dispatched a reconnaissance helicopter to fly over Akrogialia. It was later learned that the helicopter had crashed and its three crewmen had been killed. Under pressure from Holbrooke, the Greek government considered the possibility of removing the flag. Holbrooke set 3:30 a.m. as the deadline for a decision.

~ 2 a.m.: The KYSEA debated two possibilities for an armed Greek response: bombing the occupied islet to kill the Turkish commandos, or sending a detachment of special forces troops from the island of Kos to disarm and arrest the commandos. The second option received serious consideration, especially after the KYSEA was given definite confirmation of the Turkish landing (at which point Joint Chief of Staff Admiral Christos Lymberis, tendered his resignation, which was not at that time accepted).

An armed response, analysts suggest, would probably have spurred Turkey to attack on three fronts. Troops could have been airdropped on the island of Kastellorizo (45 minutes by air from the closest Greek island, and only a few miles from the Turkish coast) and bombing of Greece’s Aegean islands could have begun. This could have been followed by a full-scale attack on Cyprus, where Turkey had been amassing heavy artillery and tanks for weeks, and where its troops outnumbered Cypriot soldiers three to one. Though Thrace was defensible, Cyprus could be quickly overrun and Greece would suffer enormous human and material losses in the Aegean; it would initially lose control of many islands. Apparently unwilling to risk such a scenario, KYSEA chose the second option and ordered the navy to dispatch its special forces to the occupied islet. They were later recalled in mid-mission after Greece announced that a compromise had been reached.
~ 3:30 a.m.: Most of those at the KYSEA meeting seemed resigned to full-scale war with Turkey. Holbrooke's mediation continued.

~ 4:15 a.m.: Greece and Turkey opted for a compromise. The Greek government agreed to take down the flag, but later Simitis, Arsenis and Pangalos insisted that they retain the right to raise it again at any time, a claim that Turkey rejected. As for the substance of the agreement, both sides agreed that the situation would return to the status quo ante - interpreted by Greek officials as a positive outcome to the crisis, on the grounds that “nothing was ceded”.

~ 8 a.m.: The Greek commandos left Imia, taking the flag with them. Warships and troops from both countries distanced themselves from the region.

**The Crisis is Over: Decision Makers in Desolation**

In Greece, a feeling of defeat prevailed. The fleet returned with casualties, having been beaten at Akrogialia. Sovereignty of an island to which Turkey had laid no territorial claims in the past was now clearly disputed, and the fleet had been ordered to retreat before it could react to a Turkish offensive. Those involved in the crisis were accused of being unable to make the right decisions. The ramifications for the stakeholders in this process were tremendous. The feelings towards the new premier changed dramatically. His unprecedented 80% popularity rating two days before the crisis, dropped to 36%. Just when many observers thought (or hoped) that Simitis would have been able to use his technocratic style to eliminate the old-style party politicking and control the governing PASOK party, fierce opposition from within his government and his party critically reduced freedom of action. The guarded optimism that had prevailed towards the end of January turned to skepticism, and the forces within PASOK became hard to control. Simitis and his cabinet (especially Foreign Minister Pangalos and Minister of Defense Arsenis) were accused of treason, although their intentions were not really questioned.

The newspaper headlines the day after the crisis were far from reassuring: “Defeat and Humiliation”, deplored the daily *Apogevmatini*. “And now? What Do We Do if Turkey Strikes Again?” wondered the pro-government *Eleftherotypia*, whereas *Kathimerini* bitterly commented on “Small [leaders] in Vital Times: No-one Felt the Obligation to Resign After the National Defeat they Led Us Into”. The Greek Press was practically unanimous in its condemnation of the crisis resolution (cf. Gialouridis 1997). The international press was not much kinder: “Greek Leader Already in Hot Water”, reported the *New York Times*, while *The Irish Times* commented, “Greek PM [barely] Survives Vote After ‘Backdown’”. The opposition was even more vehement: “The government proved its impotence and the danger of its policies. In such situations, prime ministers and ministers ...[should] commit hari-kiri”, said the leader of the conservative opposition Miltiadis Evert, while the head of the Political
Spring party, Antonis Samaras commented “we have adopted a foreign policy which centers on getting smacked on the head”. Things did seem to have gone awry.

The escalation of the crisis and its handling were seen as representing a failure, certainly for the actors involved.\(^{11}\) The crisis was perceived as having had adverse effects on Greek national interests, and, very significantly, on the key decision-makers. So what had gone wrong? What could account for some of the mistakes made by these otherwise able politicians and experienced decision-makers? The decision not to guard the island of Akrogialia might have been an operational mistake, which led to complications at the negotiation stage. However, the major strategic mistake was that the Greek side escalated the crisis and, to quote Simitis, Greek decision makers mindlessly “took the Turkish bait.” The next section provides an organizational account of this faulty decision process.

**Using our Existing Theoretical Lenses to Understand the Crisis**

**The Need for an Organizational Account for the Crisis: Interpretive Lenses, Old and New**

“With such a tremendous accumulation of firepower in the area, a clash would have led to open war - not a battle, but an open war between Greece and Turkey,” Defense Minister Arsenis said, adding “The choice was between war with a huge cost in human life or a peaceful solution that safeguards all our interests. We will let the Greek people make the judgment.” “I’m stingy when it comes to spilling the blood of Greece’s youth”, said Foreign Minister Pangalos. “I’m not saying we shouldn’t give our blood for our country, but it has to be done carefully and only if every other possible solution has been eliminated.” Both were probably right. Two months after the crisis, when the initial shock was over, the polls showed a wide approval of the “no-war” policy. But if indeed the objective was to avoid war by all means, why was the response escalated in a way that would lead Greece to the brink of war?

Greek officials had received information about impending Turkish aggression, and knew that a war would not be as catastrophic for the Turkish side - or at least for their key decision-makers. If, as Susana Agnelli, Italian Foreign Minister, stated “the primary goal of the crisis [was] the strengthening of Tansu Ciller and her party which was defeated in the recent elections”, why was such an escalation mindlessly pursued from the Greek side, to the detriment of all involved?

\(^{11}\) The situation prompted the de facto adjudicating powers (the US and the EU) to find a pragmatic solution that avoided war, rather than an unbiased resolution of an international dispute. Greece’s escalation of events did not help its international standing- and it also did not allow it to capitalize on the Turkish nationalist rhetoric. Ciller, for instance, stated that “in our history, lives can be sacrificed, but not land”; or, “I had promised the Turkish people that the Greek soldiers would withdraw and their flag would be taken down from the islet. And that’s what happened. We won’t surrender a single pebble, let alone a piece of rock. These islets are ours. We have nothing to discuss with Greece or the West”. This stance could have counted heavily in favor of Greece’s national interests if it had not been for the “equal-distance policy” prompted by the near war. The Data Appendix, which contains the minutes of the EU’s formal reaction (from the Council of Ministers and the European Parliament) attests to Greece’s political capital, which was wasted – or not even tapped – as a result of the crisis handling process.
The biggest factor in the handling of the crisis was that the decisions of Greek policy makers led to the militarization and the escalation of the crisis. They stripped themselves of other options, and were then confronted with the dilemma of war - averted only at the last moment by an external intervention - or a humiliating retreat, which would implicitly force Greece to renegotiate its sovereignty in the Aegean area, thus opening a Pandora’s box. How can this be accounted for? In the following sections, we consider a number of different theories or “interpretive lenses”, each of which sheds some light on the factors underpinning this crisis. In doing so it becomes clear that interpretations drawing on existing theory are incomplete, leaving open questions; thus a new lens, which focuses on the nature and impact of organizational structure and design is proposed.

Organizational Escalation of Commitment: A Cause or an Effect?

It might be simple to conclude that the genesis of the crisis was just another instance of a non-rational escalation of action, and look to the relevant literature for some guidance (Ross and Staw 1986; Staw and Ross 1987, Bazerman et al 1984; Bazerman 1990). The escalation of commitment literature examines why individuals continue to stick to a wrong course of action, even when faced with evidence that its outcome may be ultimately detrimental. While most of the literature considers the micro-psychological drivers of escalation, including cognitive dissonance or the danger of “losing face”, other research (e.g. Vaughan 1996) looks at how group and organizational dynamics lead to the gradual neglect of critical information (a theme noted by Janis, 1971, but see Kramer 1998 for a critique). So could this just be just another incidence of escalating commitment? Our analysis would not seem to suggest so, but let us first look at how the “escalation of commitment” argument fits in our context, using this as one possible theoretical lens to show what brought about this near-war.

The simplest approach is to consider each country as a unitary actor (following Allison’s (1971) example in his first “model”) and consider how the escalation occurred. We could argue that the idea that predominated in Athens was that Turkey should not be allowed to get away with it provocation. However, calculation of the impact of Greece’s response is not accurate. As in other instances of non-rational escalation, placing an ever “higher bid” (i.e. being more adamant and tough) is uncritically seen as the only way out. On January 28, Foreign Minister Pangalos told a TV reporter: “I am worried about the [Turkish offensive] in Imia... we must insist on our rights. I am sure that recent events have shown that those who advocate talks with Turkey on all issues are wrong.” So, the escalation was mounting. On January 29, 1996, Premier Simitis officially stated: “To any aggressive nationalism Greece’s response will be strong, direct, and effective. Greece has the means and will not hesitate to use them. Greece will accept absolutely no dispute regarding its sovereign rights.” Obviously, the implied recourse to the use of arms was used to signal Greece’s commitment, rather than being a credible and calculated possibility.
Yet Turkey soon took advantage of the Greek aggression, and escalated its demands by essentially claiming rights on all of the frontier islets, and by amassing its fleet. Greece considered it was left with “no choice.” Indeed, retreating at that stage would have been potentially damaging, both to Greece’s bargaining position, and to the image of the newly formed Greek government. But, there were ways that face could have been saved and the crisis de-escalated, possibly by a focus on Turkish aggression and recourse to the legally involved third party (and then president of the EU), Italy. Greece however only dug itself in even deeper: the choice was either a war that it did not want, or a retreat that would be distasteful and unpopular.

However, this overlooks one basic point, that is that escalation seemed to be the result of some important underlying processes: What and who, in particular, were driving it? What were the factors underpinning the dynamics? It might be useful to recall that most analyses of escalating behavior have been at the individual level. Even organizational escalation is usually seen as the result of the decision making of one particular player operating under the constraints, structures and pressures of her organization. As Staw and Ross note, “[an] issue plaguing escalation research is the reliance on laboratory thinking” (1987: 42). In the case studied here, though, the decision was the result of identifiable interaction between players from different organizational sub-groups.

More important, our case fails to provide support for one of the necessary ingredients of escalation, the unambiguous upfront cost (Staw and Ross 1987: 40), which explains why one or several decision-makers insist on a mistaken course of action. The Greek premier never quite invested in the military option, and his ex post facto public thanks to Richard Holbrooke and Bill Clinton for their involvement in averting the war serves as a potent counter-argument to any suggestion that he was pursuing a bullish escalation as a calculated gambit to enhance his image and toughness. If anything, the image of a technocrat (an advantage in Greece at that time) was not necessarily compatible with a mindless escalation. Moreover, retreating from military confrontation to sit at the diplomatic negotiating table incurred no direct cost. And, more important yet, the militarization of the crisis was made before the public escalation began.

This leads us to consider the possibility that organizational structure, divisionalization, and compartmentalization of decision making, as well as the lack of a safety valve to enable a re-framing of the problem through hierarchical intervention brought about the escalation of the crisis. This approach, then, is complementary to most escalation studies. It also helps us move away from the elusive notion of “Athens” (a non-existent unitary actor with no persona or psychological reflexes) escalating commitment in order to avoid imputing feelings, behaviors and intentions to a body of decision-makers who did not act as an entity.
Redefining the Political Element, Even in Politics: Political Economy vs Politicking

The previous section suggested that the anthropomorphic metaphor in organizational analysis may be misleading, and that we need to look at how structures and processes bring together individuals, and affect organizational decisions and actions. To do so, we should consider a further set of interpretive lenses advanced by Allison (1971) in his analysis of the Cuban Missile Crisis.

In his seminal book on the Cuban missile crisis, Allison documents how we were nearly thrust into a nuclear war, and suggests that to understand such confrontations we need to apply increasingly deeper levels of analysis. He suggests that the explanation for such crises becomes more convincing if we shift from the “rational [unitary] actor” (actions undertaken by “states” or “governments”, which have some aggregate “desires” and “plans” and can be assumed to act rationally); to the “organizational process”, which considers bureaucratic structures (acknowledging that each “state” or “government” consists of a series of organizational and bureaucratic units, and that it is the SOPs and rules of these units that affect the outcome, overriding the objectives of the individuals involved); to the “bureaucratic (governmental) politics” model, which acknowledges that individuals have political objectives and that they will steer the departments that they control in ways that maximize their influence over the entire government or organization.

Allison argues that the unitary actor model –essentially, the lens we used to consider the “escalation of commitment” approach– can only be of limited help in explaining real-world complexities. He argues that within governments, there are organizational processes and routines that may exacerbate problems – a point we noted in the theoretical section, and which we expand with the new lens. Yet Allison has a preference, and suggests that reality is best explained by the “bureaucratic politics” model. He argues that we need to consider the political determinants within organizations if we are to explain or predict their collective behaviors, an approach which has found sympathy, and yet has provoked little follow-on research in the field of management (cf. March (1988); but, see Bendor and Hammond (1992) for a thorough critique of Allison). So before articulating a new lens, which will extend Allison’s organizational process model by considering the role of compartmentalization and hierarchy, we should consider the extent to which bureaucratic politics were responsible for this crisis, and as such we consider Allison’s (1971) “bureaucratic politics” model.

Luckily, and predictably, this “political” aspect received great attention from the Greek daily press, which scrutinized every action of the office-holders where political interests might have overtaken national security imperatives, thus, if anything, we might expect a bias in favour of, rather than away from, this explanation.12 The opposition was also far from being kind about the way the government

12 Before moving on to examination of the role of the political element, it is useful to distinguish between two quite separate issues that tend to get lumped together as “political”. On the one hand, we have the political economy of organizations- i.e. the basic incentive structures (official and unofficial, acknowledged or not) that determine how
handled the crisis, and was more than eager to prove that there were hidden agendas behind some key mistakes. Interestingly, though, and despite the rhetoric (and the subsequent hearings in Parliament) there do not appear to have been any blatantly self-interested decisions that proved detrimental to the nation (see To Vima, February 4: A2-14; February 11: A4-A12; Kathimerini, February 1- 4, 1996; or Odyssey, January-February 1996). Nonetheless, the decision-making process was influenced by the personal agendas of individual actors, and more importantly, by the incentives resulting from organizational structure.

The very extensive media coverage of the event played a part in how decision makers acted: a Turkish newspaper first reported events; the Greek media inflated their importance. As Kourkoulas (1997: 41) notes, “.. it was television that … changed the issue from a diplomatic one to a public opinion poll, [inducing] strong feelings associated with national symbols”. Ironically, on the day of the Hurriet helicopter cum flag incident, the Turkish Foreign Undersecretary Inal Batu denounced the act. Later, the representative of the Turkish Foreign Ministry spoke to a Greek reporter saying that “Turkey might tolerate the Greek flag [flying on Imia], but it can hardly see how this can contribute to a resolution of the tension”, while re-confirming Turkish claims to the islet (January 27, 1996). This was hardly a reason to escalate the Greek stance. Yet the Greek decision-makers responded to the Greek media (which, in its turn, responded to the Turkish media) rather than responding to the official Turkish position. The structure of the administrative layout, and the nature of rewards offered to its participants thus induced action – albeit the wrong kind of action. Individual actors were myopic, rather than Machiavellian: they were responding to their limited frames, as opposed to jockeying for power on the bureaucratic chessboard.

This conception of the political element, subtly different from Allison’s, highlights the role of organizational structure and the boundedness of organizational participants, especially when time is too short for machinations. Still, individual politicking could provide an interpretive lens. Defense Minister Arsenis, for instance, recently beaten in elections for premier by Simitis, might have wanted to seize the opportunity to be dominant. He had earned great respect as Minister of Defense in the previous two years when he had served under Papandreou, and had shown substantial military incentive structures, and the resulting political economy then, are by-products of organizational structure and design. On the other hand, we have the politicking of various organizational participants- i.e. the active engagement of organizational actors in promoting their own agendas and interests within organizations. Usually, the former can be associated with even benign behavior (just following the rules), whereas the latter has customarily a more Machiavellian flavor to it.

The media was, to an extent, controlling this crisis. Decision-makers were seemingly overly committed to their relationship with the media, to the extent that many politicians, even those within the government, asked for Foreign Minister Pangalos to step down because, instead of being on call or preparing the national security meeting, he was visiting TV studios, moving from one political talk show to the next during the critical two days preceding the crisis climax. (To Vima, February 4: A8-9). Indeed, Pangalos was in a popular talk show when he was urgently called to the KYSEA meeting on the night of January 30th.
diplomacy, especially over the troublesome issue of the Balkans; he perhaps felt the need to show that the Greek armed forces were capable of protecting Greek rights. Nonetheless, Arsenis seemed to be the only person who took the threat of war seriously from the outset, and allegedly asked for a commitment which could lead to war if Turkey did not retreat; he felt that Greece could not afford another compromise (see To Vima, idem, A6). Yet his stance, influenced as it was by his official role (and his frame of reference) was a cautious one, in that it assumed the threat of war would be a deterrent.

Relatedly, for most of the cabinet, showing strength and resolve was seen as a good way to ensure acceptance of the newly formed government. Politicians wanted to show that the resolution and power of the ruling PASOK had not disappeared with the replacement of the ailing Papandreou. Yet, plausible as this may sound, the ruling party did not seem prepared to take the risk or bear the brunt of a war, as became abundantly evident from the statements of key political figures the day after the crisis. Even the leadership of the military did not seem to be focused on waging war- a war that might also expose weaknesses.

As for the Prime Minister, it could be hypothesized that he wanted to be shown to be strong. As a close collaborator of Premier Simitis admitted to the Vima reporter (February 4: A7) the Premier’s entourage (and the premier himself) was becoming increasingly aware of the media perception that he was “being too mild” in his handling of the crisis. This might have shaped his actions on January 29th and sharpened the wording of his official statement, but more likely this hardening was the result of the Prime Minister having neither fully considered the potential framing of the crisis as it was at that time, nor the repercussions. That he did not actively seek to be seen as “hard” and “protective of the national interests” is shown by the fact that on February 2nd he publicly expressed gratitude to the US President for his mediation. This public display of humility and subservience, which was considered a very “un-Greek” action, was ridiculed by the press (cf. Odyssey 1996). His statement, which was by no means necessary, indicates that the crisis was not the result of a desire on the part of the decision-makers to gain political power through the exhibition of strength and toughness, which would be the prediction of the “politicking” model. Indeed, if displaying toughness was the objective, Simitis would have avoided such an unnecessary public display of humility ex post facto.

Thus, political elements might have played a role in the way decisions were taken, but do not provide a straightforward account. Rather than shrewd Machiavellian actors, politicians and members of the

14 As our discussion considered Allison’s (1971) analysis, an interesting distinction should be made between the Aegean crisis and his work on the Cuban missile crisis. In the latter, the US government had unusual control over the pace of its unfolding. It was able to start and stop the clock at will - at least, until the confrontation became public knowledge. Under these conditions, actors might indeed engage in more careful strategizing and politicking, but such conditions in a crisis are the exception rather than the norm. In comparing with Allison’s case analysis, this must be borne in mind and generalizing his results should be done with caution. Thus, our more basic description of political behavior may be more widely applicable than Allison’s model.
administration appear to be limited to their own parochial visions, and relatively unprepared for the events their actions brought about.

**How Organizational Structure and Hierarchy Contributed to the Near-War:**

**Implications from the “Framing, Compartmentalization, Hierarchy and Re-framing” Lens**

While the “political actor” model might fare better than the “country as a unitary actor” or the traditional escalation model, it still does not provide a wholly satisfactory account of why the crisis was handled as it was in Greece, and leaves some important questions. In the remainder of this section, I articulate a complementary lens to help us understand both this particular case, and some broader, relatively understudied organizational dynamics.

**Organizational Structures, Frames and Routines: The Risk of Following established Trajectories**

It seems that the main drivers of the initial and continued escalation of the crisis was the use by the organizational actors of available stimuli-response patterns relating to the Greek-Turkish problems (see Nelson and Winter 1982; Winter 1988) and the frames and filters, which gave sense to the information being interpreted by different parts of the organization. These routines, frames and filters were a dis-service in this particular situation. Extrapolating from past behavior was the wrong reaction as exemplified by the events of January 27, 1996.

The information available on January 27th was that the occupants of a helicopter, allegedly leased by the Turkish daily *Hurriet*, had replaced the Greek flag on the islet of Imia with a Turkish one. Despite the official Turkish position being that it had territorial claims to these islets, the Turkish flag had seemingly not been raised by a representative of an official Turkish authority. Therefore, the Greek response could have been milder, which would have benefited the Greek participants: The authorities could have drawn a halt to proceedings at this point, while drawing Europe’s attention to this outright provocation, and enlisting its support. The Turkish side would have been forced either to renounce its claims, or to increase its aggression against a more united European front. Also, the government could have wielded pressure on local authorities (such as the Mayor of Kalymnos) if it had wanted to plant the Greek flag. This would have prevented immediate militarization of the crisis, and Turkey would have appeared as the aggressor in summoning its forces, which would have been distasteful even to the fairly indifferent NATO and the United States.)

The Greek response was filtered through the frames that were created *at the local, sub-organizational level*, and were rather knee-jerk in character. The framing of the Ministry of Defense in relation to Turkey, was more or less established to respond to potentially hostile acts, and also to assume that Turkish actions should be seen as provoking a decisive response. Thus, Turkish military aircraft in
Greek airspace are expelled by Greek military aircraft; Turkish vessels are monitored and, at times, escorted to international waters by Greek vessels, etc. In other words, the Ministry of Defense responded to what it perceived to be as aggressive behavior towards its territory and its national symbols by restoring the national symbols and guarding the territory. The Greek Ministry of Defense responded to this perceived Turkish aggression in a way consistent with its own sense of mission: it sent a military force into the region to discourage any further action and defend the borders, seemingly regardless of the dangers involved in provoking a response.

In parallel, politicians were framing the problem as one of showing strength – another predictable framing emanating from the “professional politician’s” perspective that led no-one to question the escalation. The nature of the crisis, the fact that things really could get out of hand in this particular instance, and the peculiarities of the situation were ignored as a function of the direct incentives of the politicians involved in the decision-making process. The media-friendly but hardening stance fueled the vicious circle of non-rational commitment to action, and triggered the wrong routines: more extensive media coverage, stronger pressures for a firm policy on both the Greek and the Turkish sides, and an even greater aggravation of the crisis.

So, while the routine response to a Turkish claim might have well been inappropriate given the political context; and while the available information should have caused Greek policy-makers to doubt the appropriateness of their unsubtle response, the response was automatic and consistent both with existing routines, and with the framing of politicians and bureaucrats alike. The information available – the threat of Turkish aggression, political motives of the Turks to create tension, etc. – was ignored, and the framing of this dispute as being a test of strength persisted, until its dangers became impossible to ignore. Although the views of certain individual decision makers were perhaps more constructive, they were not a part of the established decision-making routines (cf. Ocasio 1997). This led the Greek side to take the bait, and despatch a small garrison. As Kourkoulas reports, “the question that Ankara [even in the most moderate circles] was trying to answer was why the Greek government was escalating its actions and statements” (1997: 40).

The existing set of organizational frames and routines left no space for creative problem-solving. A more considered response to the January 27 incident, would have been to raise both a Greek and a European flag on the same mast, or even just a European one. This would have produced an impasse; by challenging such an action, Turkey would have been confronting the EU. It would have been forced to stand down or take on a united EU. The problem would have been elevated to a Turkish-European dispute and Greece would have been able to mobilize its European allies to protect its territory from Turkish threats. Yet neither the politicians (who framed this problem as a contest of appearing tough and proud, unyielding to symbols, since they responded to the incentives provided by press coverage and to their views of their roles as “representatives of the people”), nor the senior
members of the Department of Defense (who viewed this as an opportunity to show might and fulfill their duty) were able to diagnose the problem or come up with a response.

The organizational frames and routines, in their turn, were dependent on the underlying organizational structure. Who participates in the routine involved in tackling a particular problem is a function of the hierarchal and organizational structure – a fact noted by Allison (1971) and Ocasio (1997). In this sense, organizational structure – and the attributes of those with decision-making authority, either explicit or implicit – indirectly but very strongly affects the quality of the decisions taken. For instance, if there had been an administrative structure and concomitant routine involving a body of select policy advisors proffering constructive, calculated plans of action for government to follow, the escalation might not have occurred. Structure determines the types of frames in an organization’s repertoire and the nature of routinized responses that are provoked, and thereby determines organizational action.

Organizational structure also directly affected frames and filters, i.e. the process of environmental scanning, how information is interpreted, and the nature and content of the routines that are subsequently executed. In our particular case, the ways in which Turkish actions were interpreted were rather rigid and unconstructive; the routines generated were few and were geared towards an immediate response all of which was the direct result of the institutions charged to cope with such crises (Ministry of Defense and Ministry of Foreign Affairs.) How an organization (in this case, a state) perceives and classifies environmental permutations, and how it frames the nature of the problems it faces depends on organization structure, and in particular on the parts assigned with responsibility for addressing environmental change. As an illustration of the role of perceptual filters, to the Greek Ministry of Defense, the Hurriet helicopter incident was perceived as a Turkish aggression to be countered. The Ministry of Defense was geared to perceiving such a threat as an outright hostility, and the subtleties of the exact institutional involvement of Turkey, and who were the actual aggressors were details beneath its consideration. The routines put into operation were one dimensional: to make certain that the aggressors received a direct response. To go to the politicians’ frame, the issue was one of “showing strength” and pleasing the media; and the response was to endorse a strong stance. The broader consequences were not immediately evident to any of the constituent parts; as such, the crisis escalated without any restraint being imposed.

The Lack of Hierarchy and its Dangers: Organizational Design and Potential Re-framing

While the division of labor between the different units, and the broad incentives and the political economy in the administration were in part responsible for the crisis, there is yet another key factor at play. What drove the mounting escalation was not only the lack of a unit able to judge whether strong
actions were or were not appropriate, but also the conspicuous absence of any re-framing of the problem by the KYSEA (the core policy-making unit), and the Prime Minister.

In hierarchical decision making, there is a level where a re-composition can be made. In our case-study, the Prime Minister and the KYSEA were responsible for synthesizing partial views, integrating additional relevant information from whatever source, and shaping the organizational decision-making process and ensuring the right routines operated. However, the problem was seen by the (boundedly rational) Prime Minister and his cabinet within the strict division of tasks within the routine operating: he was presented with parts of the problem by the different parts of the state apparatus. He was thus reacting solely to what was presented and, as none of these parts on their own gave the full picture, he did not reframe the problem.

However, the Prime Minister and the KYSEA, i.e. the top administrators in this case, did not use their authority, initiative and ability to re-frame the situation by taking into account all the extraneous pieces of information that were available in deciding on a course of action that might not be part of the usual repertoire. It might have been possible to provide a framing that would not have naturally emerged from any of the information held in the agencies or units that comprised the government and administrative apparatus; indeed, the ability to look beyond the partial spot-lights provided by the organizational sub-units, and to appreciate the potential risks of routine responses that need to be culled or muted may well be one of the key functions of management / hierarchy, and one that was not exercised here. That is, while it was entirely understandable that politicians would largely frame this as an issue of maximizing political image, and that the Department of Defense would go on automatic pilot in terms of their response, the Prime Minister’s task was to consider if these frames were indeed appropriate and, if not, to re-calibrate them, inhibiting some routine responses, and designing others.

In other words, I argue that here, as in other cases, the role of hierarchical governance is not only to manage the intra-organizational interdependencies that cannot be dealt with without intervention from the different units (as suggested, for example, by the seminal work of Thompson (1967), Lawrence and Lorsch (1967), Galbraith (1973), or more recently by Baldwin and Clark (2000), Levinthal and Siggelkow (2003) and Ethiraj and Levinthal (2004)). It should also consist of identifying new ways of framing a problem, and triggering appropriate organizational responses, whether on the basis of established routines, or of completely new ones. The raison d’etre of a hierarchy is its ability to devise and initiate a different and novel framing and response, which could not have come about within the structures imposed by the division of administrative labor.

Yet while this is a role that hierarchy can play, it is often a role that it does not play appropriately. In this case, there were two reasons why the hierarchy failed to re-frame the problem, and recognize the danger of the local, routinized responses. First, the organizational design structure to enable weak
signals to be acted on and transferred higher up the hierarchy was poor. Second, the government having been in office for only three days had no previous experience to draw on. Unlike what transpired in the Bay of Pigs incident, though (cf. Kramer 1998) the lack of experience was not detrimental because it led to “group-think”, i.e. the group-level consensus reached when there is no desire or willingness to challenge the emerging consensus, arbitrary as this might be (see Janis 1972). Instead, lack of experience in this case did not allow the Premier to consider the situation carefully, to acknowledge the inherent tendencies of organizational sub-units to consider narrow perspectives, and to take the initiative to override local responses.

This leads us to another observation with regard to how and when hierarchy can function to alleviate the problems of excessive compartmentalization. Whereas the handling of the crisis was pushed up in the hierarchy, and while the Premier and the KYSEA did give its own stamp of approval in terms of how the crisis would be handled (the militarization of the crisis had the go-ahead of the Premier), no re-framing took place; the Premier accepted the views of the sub-units, without considering whether these would lead the collective astray. So the problem was not that the decision-making was “too local”, but rather that not all the issues were taken into consideration, as the “hierarchical” problem solving did not make full use of all the sources of information or the framing that could be incorporated. What is important is not only the transferring of the problem to the hierarchy, but also what the hierarchy does with the problem – in particular, whether any appropriate re-framing takes place.

Path-dependency and the Sequencing of Problem Solving in a Dynamic Context

Another element of this crisis that was important was timing: as in other dynamic contexts, timing and sequencing are very important to how path-dependencies emerge. Consider the chain of events:

First, the Greek flag was initially hoisted by the Mayor of Kalymnos. At this point, the Turkish government, through Undersecretary Baku, took the view that “it would tolerate the Greek flag but it could not see how it would contribute [to the resolution of this issue or Greek-Turkish relations at large] ” The quasi-independent action of sending in a garrison to raise the Greek flag changed things drastically and produced a media frenzy, to which, rather than working out how the issue should be framed to benefit Greece (and themselves) in the long term, the politicians responded. The payoffs of escalation only became obvious to the key players in Turkey after Greece had militarized the crisis. Thus, the Greek government actually created the crisis through its partial, inappropriately framed and badly timed actions, which were the result of its internal division of labor and its inability to re-frame the problem. The reactions in the press also worked to harden the Greek government’s stance. Events were escalating into a chain of interrelated activities, which were neither planned, nor anticipated.
At each stage of this crisis, then, each organizational unit responded to its own stimuli, according to its perceived categorization of the environment and its idea of efficient performance. Also, these partial responses often worsened the problem subsequently faced by other parts of the organization, which were responding not just to the environmental conditions, but also to the outcome of the actions of other organizational constituents. Within such a dynamic context if there is a requirement for organizational responses to be consistent, then it clearly obtains that organizations, through partial yet interacting decisions, create and become trapped within their own paths. For the Greek government then, the very path dependency of these actions led to an escalation that did not seem to have been planned: the prime minister was reacting to, not consciously planning, the Greek response.

The role of time is critical within this “organizational snowball”. Where there is time for long-range planning and unhurried decisions, information gathering from all organizational participants will allow undesirable path dependencies to be minimized. However, in a fast-changing environment, when immediate action is required, responses to the environment are often partial. The interaction of these responses (especially when the organization favors internal consistency) can consolidate particular courses of action that are neither optimal, nor take into account vital information and give a correct focus (cf. Ocasio 1997). In our particular case, the Greek government apparently felt compelled to continue a consistent, if unfortunate course of action. Thus the initial militarization created a path, which all government agencies (even if against militarization) had to follow.

**The New Interpretative Lens: Compartamentalization => Framing / Hierarchy => Re-framing**

With all the pieces of the puzzle in place, we can now briefly reconsider the proposed lens, and see how it might shed new light on this fascinating crisis and other cases. As in most settings, labor was divided within the Greek administrative apparatus in a bid to reap the benefits of specialization. However, this division of labor with its related organizational structure, created partial and incomplete frames and routines which inevitably led to a complex environment becoming decomposed. This incident, for the Ministry of Foreign Affairs was a diplomatic problem; for the Ministry of Defense was a threat to national security; for senior politicians was an opportunity to show their strength; while the press saw it as a challenge to the national pride and national rights. The problem was actually all, and not completely any of these things.

In our case each part of this complex organization (or set of organizations) reacted in a local, narrow way, which further changed the task environment, unwittingly aggravating the crisis. The parochial, and fairly myopic view of each constituent part led to the triggering of inappropriate routines, and the challenge for the hierarchy was that it did not manage to frame (or re-frame) the problem, or to intervene in the nature of the organizational response, and manage the routines in place. The hierarchy did not exercise its ability to re-frame the problem, to the detriment of all parties involved. This
arguably was because the organizational and administrative design did not include appropriate “safety valves” or additional sources of information, and because lack of experience and control produced a degree of inertia. The lack of experience of the government led to tough rhetoric, and little re-framing. The structures needed to render hierarchical action effective were not in place, and the hierarchy was not able to assert itself.

Discussion: What this Means for our Understanding of Organizations

While this case focuses on a set of administrative pathologies in the context of a crisis, it can be applied to a broader set of phenomena. It allows us to reconsider and potentially extend some of the theoretical lenses we use to understand organizations and their structures.

A Behavioral Defense of Organizational Structure and Authority

First, this analysis provides a behaviorally grounded analysis that formalizes a “folk theorem” in the field of organizational studies—i.e., that organizational structure and authority provide a cognitive economy needed for boundedly rational decision makers. As we know from the earliest contributions of the Carnegie School (Simon 1945), individuals are bounded in their capacity to comprehend complex problems and deal with the entire scope of environmental evolution. What this paper underscores is that the boundedness is a matter more of dimension than degree— that is, that individuals are able to concentrate on only a few dimensions (Hayek 1945; Simon 1947; Cyert and March 1963; Allison 1971). Similar to Cyert and March’s (1963) argument about the need for and practice of sequential problem solving at the individual or collective level, we argue that organizational structure and the division of labor plays a similar economizing role, and helps to channel human effort more effectively.

Structure provides limited (at times, too limited) domains within which participants can operate to carry out organizational goals and objectives. A colonel in the Ministry of Defense has a particular framing of his tasks and his environment (mandated, or instilled through socialization – cf. March 1991). Were he totally free to interpret the environment subjectively, he would possibly not know how to initially handle the problems, let alone coordinate with other members of his organization. Even if this individual regularly interacts with constituents of multiple organizational divisions (Ministry of Foreign Affairs, Office of the Premier) and takes their requests into account, his central objective directs his actions. Decomposition, divisionalization, and the breaking down of problems into component parts (as a consequence of organizational structure) allows for a set of boundedly rational actors to collectively tackle complex problems in a potentially efficient way (Hayek 1945: 520). The fact that the same underlying problem (an incident at international level) is perceived as a military threat by the Ministry of Defense and as an IR problem by the Ministry of Foreign Affairs, is predictable and is the prerequisite for an efficient organizational response. Without such a
simplification of cognitive domains, without the provision of some structure to guide individuals to recognize what they can see in their environment, organizations would consist of paralyzed actors, confused about their roles. Thus, despite its shortcomings, there is much to be said for procedural rather than substantive rationality, with its logic of appropriateness (March 1992).

Furthermore, organizational structures and routines in which interactions are contained, provide the possibility for coordinated action. If the decision makers in the Ministry of Defense did not share understandings and did not have ways to restrict their own domain as a function of dividing labor, the Ministry would be in total administrative chaos, and its purpose would be defeated. Although in this particular instance, structures were not appropriate, they did serve a purpose. For each decision failure there are probably numerous instances of successful operations. The replacement of substantive logic with the logic of appropriateness (March 1992) serves not only to help frame problems and decisions, but also to ensure coordination and effective collective action and that, in organizational life, there will be a quasi-resolution of conflict (Cyert and March 1963), with existing routines operating as truces (Neslon and Winter 1982: ch 5, Postrel and Rumelt 1991).

Cognitive Architectures and Architectural Inertia

The benefits of organizational structure and the division of labor notwithstanding, the creation of different divisions creates a set of filters and frames of reference through which the world is conceived. In a world of infinite variety, each type of divisionalization creates a set of ways of perceiving what are parts of a whole, and organizational design prescribes how these parts can be reassembled. The definition of the parts of the whole can never be an exhaustive breakdown of reality, nor can how the parts are put together capture all relevant information and variety.

This point helps to explain both the consistencies with and the differences from Snook’s (1997) thorough and fascinating analysis of the “friendly fire” incident when two US fighter places accidentally shot down two US Black Hawk helicopters. Snook focuses on “practical drift”, suggesting that while the “formal” organizational division of labor and the initial de-composition of labor may be functional, over time different divisions tend to create shortcuts and identify ways in which they can locally adapt to their environment.15 Our evidence is consistent with Snook in that each constituent part of the organization focused increasingly on the narrower conception of its objective, thus adapting locally, and potentially even displacing the original goal with the sub-unit

15 As Snook observed: “When the rules don’t match, pragmatic individuals adjust their behavior accordingly; they act in ways that better align with their perceptions of current demands. In short, they break the rules” (1997: 193). “Constant demands for local efficiency dictate the path of the drift. Over time, incremental actions in accordance with the drift meet no resistance, are implicitly reinforced, and hence become institutionally accepted within each subunit” (1997: 194). “Hence the behavioral balance tips in the direction of local adaptation at the expense of global synchronization… the general phenomenon of drift and ensuing chasm between what is formally written and actually done is a common theme” (1997: 196).
goal. On the other hand, I would not concur that “practical drift”, in terms of an unfortunate “deviation from plan” caused the crisis. In our case study, rather than being a problem of “practical drift” from formal to de facto SOPs, the problem was that each division interpreted the world in a narrow way which was constrained and defined by the very structure of the organizational sub-unit. The fundamental problem lies in the creation of the “cognitive architectures”, which are embedded in an organization’s structure and design.

Each “cognitive architecture” is also self-reinforcing. It dynamically affects the organization by identifying the types of problems that are being tackled. This sets in motion a process of capability development, whereby an organization, as a result of its “architecture” (i.e. the de-composition of the world into different sub-groups) creates a particular way of identifying the important trends in its competitive environment, a pattern identified by Henderson and Clark (1990). While Henderson and Clark’s research focuses on why firms get locked into particular technological trajectories (Dosi 1982), and the way executives frame a technology or product (Tripsas and Gavetti, 2000), such analysis can be expanded and built upon. It appears that in most organizations, a particular cognitive architecture emerges, which not only divides labor, but also the types of problems to be attended to (cf. Dutton, 1993). Each unit identifies and responds to a particular part of its environment and, without hierarchical intervention, the sum of these partial responses constitutes the organization’s response to the environment. Furthermore, this limiting factor of organizational structure appears to be self-reinforcing— that is, it appears to become stronger over time, as the need for cognitive simplicity creates an increasing pressure for compartmentalization of a problem—inevitably leading to problems in the future.

The point that structures within organizations define and shape trajectories over time has some interesting parallels with recent work on the division of labor between different types of organizations in the same industry. As Jacobides and Winter (2005) noted, the division of labor between different types of firms creates the templates for capability development; it shapes the trajectories along which knowledge accumulates. Cacciatori and Jacobides (2005) showed how in the UK construction

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16 Our argument (that over time increasingly constraining trajectories form) is partly consistent with, yet substantially different from Vaughan’s (1996) thorough analysis of the Challenger disaster. Vaughan (1996) focuses on the increasing “normalization of deviance”, i.e. the increasing acceptance of data and evidence that should alert the organization in terms of potential problems. Rather than it being a question of acceptance of problematic data, we focus on the inability to look at the right kind of data as a function of the divisionalization in an administrative setting.

17 As Henderson and Clark (1990: 15) observe, “an organizations communication’s channels [both formal and informal] develop around …interactions in the organization…Thus an organizations’ communications channels will come to embody its architectural linkages between components that are critical for effective design… The information filters of an organization also embody its architectural knowledge. An organization is constantly barraged with information. As the task that it faces stabilizes and becomes less ambiguous, the organization develops filters that allows it to identify immediately what is most crucial in its information stream (Arrow, 1974, Daft and Weick, 1984).”
industry, the increasing vertical specialization between engineers, architects, quantity surveyors, etc. led to the creation of a set of partial trajectories of capability development which eventually ignored “buildability” and “timeliness of design” since these attributes did not neatly map on to any of the parts of the vertically specialized system. Likewise, in our setting, compartmentalization created divisions with different “thought-worlds” (Dougherty 1992), which all overlooked the essence of the problem. Thus, one implication of this study is that we need to further study organizational architectures and how they affect organizations; in particular, we need to understand how they create self-reinforcing sub-organizational filters and routines which mediate the organization’s relationship with its environment, and shape its patterns of routinized action.

Hierarchy and Management as Re-Framing: An Unexplored Set of Benefits

One of the novel aspects of this paper is the identification of authority / hierarchy as the ability to re-frame a problem. As I have shown, the poor handling of this crisis was exacerbated by the fact that this was a very young government operating in a turbulent environment, and that hierarchy did not intervene to re-frame the problem, but rather accepted the partial views (largely, those of the Ministry of Defense and the consensus of senior members of the cabinet) that emerged as a confluence of the organizational structure of the administrative apparatus and the related political economy (displaying toughness to the media, and enacting the frames and routines of the Ministry of Defense). This raises a broader theoretical point in terms of the potential value-added of hierarchy, and the functions of the different layers in an organization. Briefly, we can argue that management (whether in the private or the public sector) is necessary to provide a safety valve and allow checks on (a) which of the existing frames, that are being naturally evoked by the organizational structure, are appropriate, and which are not; (b) what new frames should be introduced at all levels of the organization or administration; and (c) the types of routines which might be expected to be triggered, but should be controlled (e.g. diffusing the “natural” and expected reaction of the military); or (d) the existence and triggering of appropriate responses, whether routinized or not. The function of management and organizational

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18 Note that the usual discussion on why hierarchical, de-composed systems are effective is subtly but substantively different. The argument is that divisionalization and specialization may allow for adaptive responses to the changing environment, as Simon (1988) suggests through his comparison of two blind watchmakers, Tempus and Hora. Hierarchy and decomposition are superior in an evolutionary setting, as they allow for greater robustness and adaptation. This view has been echoed in recent evolutionary literature in biology, e.g. in Gould (1983) and Dawkins (1976). Important research on complexity and socio-cultural evolution also seems to underscore this idea (Durham 1991). Yet, while this research suggests that structure, hierarchy, and divisionalization can yield benefits over and above those gained from the division of labor, it still does not consider the importance of re-framing and directing partial responses as a valuable function of hierarchy. Likewise, while research in the team theoretic tradition (Marschack and Radner 1972; Van Zandt 1999) or in Computational Organizational Theory (Carley and Prietula 1994) explores the effect of different hierarchical or reporting structures on decision making or information processing efficiency, it does not consider the benefits of re-framing and selecting routine advancement.
design as a framing and re-framing mechanism, and its conception as a means to control the routines that should or should not be triggered, provides a new angle that complements the existing literature.\(^19\)

This view of the potential value-added of hierarchy returns the focus to the potential merits of managers, be they administrators or managers of for-profit organizations. Their role has been largely neglected since Barnard (1938), with some exceptions (e.g. Minzberg 1973). More broadly, this underlines the need to comprehend the value of hierarchy – a remarkably understudied area in terms of theory and empirics (see Radner 1992). Most of the research has focused on the merits of hierarchy as the creator of design principles, and little work has considered what is the potential value added of managers given the boundedly rational structure of all involved, managers and managed alike.

Research in Computational Organization Theory (Carley and Prietula 1994) or in Team Theory (Marschak and Radner 1972; Van Zandt 1997) has focused primarily on computational overload or the ability to gather and qualify information effectively, and has not looked at the role of framing or re-framing; and research in Organization Theory that has considered such dynamics (Weick 1979) has largely focused on organizations as a whole. Thus, I would suggest there is a need to study the roles of managers as they try to redress some of the inherent limitations posed by the intra-organizational division of labor, itself a function of bounded rationality.

The argument, then, is that one of the major functions of hierarchy is to provide (and impose) new frames that are not reducible to the sum total of the partial, individual conceptualizations of the problem. This intuitive role of hierarchy has been overlooked, despite its early consideration in Chester Barnard’s (1938) classic. Yet this aspect of hierarchy, which is to frame and re-frame problems, re-focus attention and intervene in routines or design new routines seems to be at the heart of what “management” does, and how it adds value.

This approach complements and contrasts with related work in the evolutionary tradition. For instance, rather than highlighting the inertial forces of a management that wants to cling to parochial frames while the organization is de facto moving on (Burgelman 1994) on a day-to-day level, hierarchy could (perhaps should more actively) be involved in re-framing issues that cannot be dealt with appropriately at the local level. Likewise, in addition to viewing management as the facilitator of the guided evolution process (Lovas and Ghoshal 2000), relying only on environmental variation to shift the organization one way or the other, we may want to consider management and hierarchy as the potentially active re-framers of the problems faced by organizations. More broadly, this perspective

\(^{19}\) In this regard, the ability to re-frame has both advantages and disadvantages. The obvious risk in waiting for hierarchically-induced re-framing to occur is paralysis as a result of inaction. Thus, there is a trade-off between a response that might be too local and whose framing might be inappropriate for the organization as a whole, and a pattern of decision making that is slower involving senior management making ad hoc determinations with regard to the nature of the issue. Yet because of the routinized nature of work (Nelson and Winter 1982), the “default” for an organization is to proceed with a set of local, even if ill-calibrated responses, without any intervention.
suggests that in addition to using the lever of resource allocation to guide the organization in the medium term (cf. Burgelman 1991; Noda and Bower 1996; Christensen and Bower 1996), hierarchy can (even if it sometimes does not) serve the crucial purpose of mitigating some of the inherent limitations of organizational structure, and of the excessive, or simply inefficient compartmentalization of the environment.

This approach also suggests that we should consider the elements of organizational design that allow an organization to switch from one framing to the next, and the mechanisms that enable and facilitate the appropriate framing and calibration by management, i.e. the modes that permit it to overcome the natural inertial forces inherent in any organizational architecture.

**Organizational Design: From Managing Interactions to Dynamically Shaping Frames**

Building on the previous two sections, we can extend the research on Organizational Design. Most of the current work builds on a set of commonly accepted precepts. That firms need to be both differentiated and integrated (Lawrence and Lorsch 1967) as a function of their environment; and that they need to find ways to manage their interdependencies, which can range from sequential to pooled (Thompson 1967), using a variety of means and tools (Galbraith 1973; Gulati et al. 2005). In addition, some recent work on modularity (Baldwin and Clark 2000) has spawned an interest in examining the principles that guide the grouping of different activities, the general approach to which has been to suggest that activities could be modularized when there are substantial task interdependencies within modules, and limited task interdependencies between modules, which is supposed to yield substantial advantages in terms of reducing the strains of coordination, and increasing local exploration, with some provisos (Sanchez and Mahoney 1996; Levinthal and Siggelkow 2003; Ethiraj and Levinthal 2004). All of this research focuses on the interaction between the tasks, but does not directly consider the potential dynamic downsides from compartmentalization of problems and thus compartmentalization of the organizational response.

Therefore, to the current focus on the somewhat more static “task interactions” in a design matrix (i.e. how activities from one potential division would interact with another) we need to add consideration of how any particular organizational structure will lead to a number of partial frames, and what will be the ultimate dynamic limitations of these frames. Also, we must ensure that while creating “neatly modular” divisions, we maintain the ability of the hierarchy of the organization to reframe and use the loose signaling that may exist in the environment to better calibrate the organizational response. I thus argue that organizational design, through delegating decisions to higher hierarchical levels provides the opportunity for novel, ad hoc, potentially better-calibrated framings of the problem. This can help an organization respond to a new type of problem, or to an “unusual” environmental permutation; an appropriate response is obtained by overriding the expected response.
This analysis would suggest that there is a tension between the immediate adaptive capacity of an organization in which the division of labor increases the ability of the parts of the organization to act and respond, and the medium-term appropriateness of that division of labor in terms of the information that may “slip through the cracks”, and in terms of the potential downsides of any organizational architecture and its associated trajectories of development, of capability-building, and of increasing (but increasingly narrow) problem solving expertise. This tension is mediated by hierarchy, which can use exception management to re-frame, selectively trigger or halt routines, or even change the organizational structure to accommodate the adaptation.

Organizational Structures and Governance Modes as Frames and Filtering Devices

This analysis indicates that organizational arrangements have a significant impact on how decisions are taken. We can examine organizations by looking at how they filter and frame relevant information from the environment, and how they organize their functions and employees. This will allow us to re-interpret Chandler’s (1962) seminal work on the advantages of structures such as the multidivisional (M) form, shifting away from a preoccupation with transaction hazards and conflicting incentives (Williamson, 1985). A functional (F) form, for instance, is only able to perceive the environment as consisting of a combination of manufacturing, marketing, support, and sales issues. An M form may be able to assess the impacts of environmental change on specific lines of products, even if this means limited consistency within functions across markets.

If we adopt the idea of organizations as places where frames –or even identities are shaped, goals are set, and communication supported (cf. Kogut and Zander 1996; Conner and Prahalad 1996; Collis and Montgomery 1995; Hedlund 1994), then we need to examine more closely why different forms present differential advantages. This paper proposes one avenue for research into how organizational forms differ in the way in which they shape decisions and scan the environment. This vantage point is also consistent with recent research on how different “information” and organizational structures are connected to differential firm behavior and performance (Williams and Mitchell 2004).

Also, organizational forms differ in the extent to which they rely on standardized, routinized responses, or on ad hoc behaviors with their greater reliance on constant re-framing (Mintzberg and McHugh 1985; Hedlund 1986; 1994). In turbulent environments a limited reliance on structure is necessary, whereas in stable environments the appropriate structure will be a more rigid division of labor, which saves on resources and communication.  

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20 This point leads to a behaviorally founded contingency argument. While problems are not decomposable, nor is it straightforward to create and maintain structures that efficiently accommodate organizational complexities, there is a spectrum of possibilities. At one end of the spectrum, in a simple, predictable world, strong divisionalization and breakup of the problem will be favored; the challenge then is how to devise an appropriate division. At the other end of the spectrum, structure, despite its operational benefits, may impede the creativity, synthesis, and initiative required to succeed. As environments become more volatile, structured organizations and their concomitant
Another extension of this approach is to motivate why large organizations contain multiple and often competing divisions to cater to new needs – a phenomenon recently explored by Galunic and Eisenhardt (1997, 2001), and Birkinshaw and Lingbladt (2005). These authors observed that organizations allow different types of divisions to “compete” as they change their charter, i.e. their scope (the markets they cover, etc.), and the way they are organized. This experimentation with divisional charters is consistent with the analysis in this paper. If divisional charters are seen as the structures that ultimately define how the organization approaches its environment, and if each charter is seen as consisting of a different set of ways to organize information and shape action, then the existence of these potential structures makes perfect strategic sense. Different charters (or in a government, different policy units) imply different structures, and different filters and routines; each set of structures and routines will have its advantages and disadvantages, and each will lead to a unique way to approach a new set of opportunities (a new market, technology, or policy).

Summing up: Theoretical Contribution of this Study, and the Debt to Cyert and March

This paper used the near war between Greece and Turkey as the opportunity to advance an explanation for some hitherto neglected aspects of organizational structure. I have suggested that existing lenses have some limitations, and as such proposed a new lens, based on divisionalization, framing, hierarchy, and re-framing. Drawing on work in decision-making and perceptual filters (Dutton 1993, Starbuck and Milliken 1988), and on an analysis of how the division of labour leads to different trajectories (Henderson and Clark 1990) and thought-worlds (Dougherty 1992), I reconsidered the role of hierarchy in shaping organizational responses.

In terms of the literature on the escalation of commitment (Staw and Ross 1987), this paper offers a new way to interpret these dynamics, without anthropomorphizing. It also proposes that escalation does not necessarily require a key actor to have a stake in any course of action, but that it can emerge out of the dynamic inefficiencies of organizational structure, particularly the set of “partial responses” that emerge and the dynamic structure of the system.

In terms of the literature on international crises, this paper proposes that Allison’s (1971) “bureaucratic politics” model does not necessarily offer the most effective lens, and we should not rush to identify politically motivated actors who, in their quest for supremacy and power, lead a collective endeavor astray. Although it sometimes may apply, it may also be that organizational structure and design, and the ability or inability of higher administrative levels to control frames and routines are significant in explaining aggregate behavior, especially in a dynamic environment.

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structured and quasi-predetermined responses are increasingly likely to be inefficient. The operational cost of a more opaque structure or ad hoc decision-making might become more acceptable even though it may be substantial. In an era of admonitions about chaotic behaviors in chaotic environments (Eisenhardt and Brown 1997), it may be easy to overlook the fundamental attributes and limitations of humans as decision makers.
This analysis draws heavily on the seminal contribution of Cyert and March (1963), by acknowledging and exploring the implications of bounded rationality; the nature of organizations as the context in which decisions are made; and the ability of organizations to ensure quasi-resolution of conflict under multiple, often competing claims. Yet at the same time, it extends Cyert and March’s analysis in one important respect: it considers the role of organizational structure as it affects decision-making and the reaction of the organization (or indeed of any administrative structure) to its environment. In that regard, it is important to note that whereas Cyert and March underlined the existence of multiple units within the firm, and while they acknowledge the inter-divisional dynamics (each unit of the organization “appropriately discounting” information from another unit so as to balance out any inherent bias), they do not consider why organizational structure emerges, and how it affects the nature of the problems an organization must tackle or the direction it takes. For instance, whereas Cyert and March (and subsequent literature) identify problemistic search, and describe how issues are sequentially tackled, the analysis is made on the assumption that the “organization” at the aggregate level (i.e., in its totality) performs this search. This paper, on the other hand, identifies the role of organizational structure in determining the nature of the problems that are faced by the organization, highlighting structure as a key mediating variable. Thus, rather than suggesting, as Ocasio (1997) does, that the firm is an attention- or focus-generating device, I argue that organizational structure serves this purpose.

This present analysis also consolidates and explicates received wisdom that organizational structure exists for cognitive economizing reasons, and that there are (as there should be) multiple “thought-worlds”, each devoted to one facet of reality (cf. Dougherty 1992; Carlile 2002). It also suggests that the existence of these different “thought-worlds” and divisions creates frames that are self-reinforcing and also restrict the scope of the organization, by providing it with a collection of only partial cues; in other words, it implies that any divisionalization imposes cognitive architectures, which dynamically restrict organizations. This observation, which draws on Henderson and Clark (1990), helps to articulate the contrast between the short-term efficiencies of divisionalization and the dynamic constraints it imposes. This also provides a concrete tool to understand the trajectories not only of problem solving, but also of competency development, and thus links organizational structure to the dynamic capabilities of an organization.

Analysis of the drawbacks to an organization’s structure and design helps to contextualize current theory on organizational design (e.g. Sanchez and Mahoney 1996; Levinthal and Siggelow 2003; Ethiraj and Levinthal 2004), by shifting attention from the role of interactions between activities and from the task of managing the interdependencies, towards a deeper understanding of how structure leads to dynamically inefficient frames. It proposes a dynamic, cybernetic view of organizational design, which considers the role of organizational structure in shaping frames at the sub-
organizational level, as opposed to the level of the organization (e.g. Daft and Weick 1984), the industry (Porac et al. 1989) or the profession (Abbott 1988), which is the level at which framing has been considered. Thus, this approach links and is consistent with recent research on framing, and on the competition between different ways of framing a problem in the context of an organization (Kaplan 2004; Acha 2004), highlighting organizational structure and the resulting political economy of the organization.

Finally, the key contribution in terms of theory is the re-conceptualization of the role of management as being responsible for re-framing, and for ensuring that the inertial “partial response” is overridden when necessary. This is where the Greek Prime Minister failed –hardly surprising, given his short tenure and lack of channels to highlight weak signals and allow him to re-frame the issue. This view of the benefits of hierarchy fills a gap in the informed analysis of the nature and content of hierarchy and management. This perspective complements the analysis of the evolutionary, adaptive benefits of hierarchical systems in general (Simon 1962, 1988), and of the analysis of managers as actors in an “internal selection process” (Lovas and Ghoshal 2000). It explains how hierarchy could, perhaps even should, operate to mitigate the inherent limitations of organizational structure and divisionalization, even in the presence of boundedly rational managers or administrators.

Prescriptive Implications: Some Conjectures

In the spirit of Cyert and March, to be useful a theory should be able to prescribe as well as describe. So, then, what are the prescriptive implications of this approach? While a full discussion would be beyond the scope of this paper, some preliminary thoughts are worth noting. This analysis suggests that organizations must acknowledge and appreciate the inescapable dynamic impacts of segmentation and compartmentalization, and also try to mitigate them as much as possible, acknowledging the limits to rationality of all involved.

Organizations could create ad hoc units to provide new framings for problems and tasks. The time-honoured practice of appointing “special advisors”, who do not belong or report to any of the existing divisions, or the use of “informed outsiders” could be a solution. However, the challenge is to ensure that such quasi-outsiders are not token members. As we have seen, even when good ideas exist in the organization, they will remain unexploited if they are not transferred to key decision-makers, or are not embedded in the relevant routines.

To make a bolder suggestion, our analysis could be extended to imply that occasional wide scale reorganizations (i.e. changes to the organizational structure, a shift from one type of divisionalization, such as geographic, to another, such as functional) might be of value. Even occasional switching between two types of structures might have benefits because this would enable the participants to appreciate the different trajectories that develop, much as Bartunek and Franzak (1988) found in their
study on how re-structuring can affect existing frames of reference. Inasmuch as the participants in the organization do not change and their memory of their experience within one structure will carry into their experience in another, re-organizations may help attenuate some of the problems of excessive compartmentalization. So organizational redesign may not only be called for when conditions change; it may also help to refresh the perspectives in the organization, avoid parochial framings, and mitigate the risks inherent in structure.

If for some reason intra-organizational consistency vis-à-vis the external environment is at a premium, special attention must be paid to the temporal sequencing of different units’ responses, and the identification of the path along which the organization must navigate. For instance, deciding a priori how crises should be handled and which part of the organization will decide the initial course of action, may have a significant impact. In our case, even the temporal primacy of the Ministry of Defense over the Ministry of Foreign Affairs or the Office of the Prime Minister in handling the crisis might have affected the nature and efficiency of its resolution.

More broadly though, it is imperative that management (whether in public administration or the corporate arena) accepts that re-framing problems, re-calibrating responses, and deciding which routines to set in motion or to halt are its main responsibilities, and that it should exploit as much information as possible to enable the organization to overcome any inertia – advice that is consistent with books on management practice (cf. Senge 1990; Markides 1999).

Attention should also be paid to the integration of weak signals into decision-making and framing. As became obvious in the 9/11 Commission hearing, much of the fault lay in the inability of the senior echelons to integrate the relevant information and activate the appropriate routines. This applies not just to public administrations, but also and perhaps more so to businesses, where it is necessary to ensure that organizations capitalize on outside information to maintain their edge (Geroski and Markides 2005). Managers should not only “guide the evolution” of their firms (Burgelman 1996; Lovas and Ghoshal 2000); they should also help re-frame the paths taken by their organizations, or orchestrate new routines that will be responsive to a shifting environment.

**Limitations and Issues for Future Research**

While this paper has yielded some potentially interesting and it is hoped controversial hypotheses and conjectures for debate, it clearly has several shortcomings. First, it is primarily theoretical in that it does not involve the deep immersion in the field of ethnographic studies or detailed archival studies such as Vaughan (1996) or Snook (1997); nor is it based on such detailed evidence as was available from the Cuban Missile Crisis (Allison, 1971) and the Bay of Pigs fiasco (Kramer 1998). This reading of events is provided with due caution. There is, however, sufficient evidence to construct a theory-driven, plausible, interpretive lens to examine this and other administrative situations.
Second, whereas the discussion and theory largely revolve around business firms, the actual case study is of an administrative situation involving no shareholders, no profits, and no markets. Yet, there are several ways in which this setting might be appropriate precisely because it is easy to describe and understand. Much as Weber (1947) used government as the test-bed to develop his theory of bureaucracy (widely employed to explain firms), we consider a non-firm setting facing some fairly typical challenges. As Cyert and March (1992: 196-201) noted, theories could and should be made sufficiently general to encompass different types of organizations. The problems faced by the Greek governmental apparatus in terms of incorrectly framing the problem, not integrating useful information, and responding in line with the individual responses of organizational sub-units would seem to apply equally to business organizations. But, we should also be wary of generalization.

Third, this particular crisis was somewhat unique in that timing was important, and actions were non-reversible. In organizational settings where actions can be reversed, and where the pace is slower, and more controlled, some of the factors that were very significant here may not be less relevant.

Fourth, we had to ignore some potentially important perspectives. We did not get into issues of identity (Albert and Whetten, 1985; Dutton and Dukerich, 1991), or the way in which structures shape people’s perceptions of self and others, and of the related double hermeneutics (cf. Giddens 1985). There is clearly a host of questions relating to the interpretive nature of structures, frames, or routines that here were treated summarily, or not at all. Similarly, a number of important micro-psychological factors relating to framing have not received as much attention as is warranted. At the structural level, we have not shown how the different frames within the organization contrast and collide, and how the company’s activities are predicated on these dynamics of multiple frames as they co-evolve with the organizations’ structure (see Kaplan 2004; Acha 2004).

**Concluding Remarks**

Its limitations notwithstanding, this study has attempted to advance our understanding of how frames, structures, processes, routines, and the resulting political economy of organizations shape organizational decisions and actions, and occasionally can lead us to the brink of disaster. In analyzing the case of the near war between Greece and Turkey, the main theoretical concepts were shown to explain a significant part of the unfolding dynamics. Strategic decision failures were shown to be the consequence of organizational structure, which shapes identities, defines repertoires of action, sustains routines and filters and gives sense to information, and provides the platform for interaction between organizational actors. The political economy of the organization (rather than shrewd politicking) was also found to be an important factor, and its relationship with organizational structure was stressed. Hierarchy was also seen as a critical element which could potentially help re-frame problems and focus organizational attention, although it failed to operate effectively in this instance. We argued that
such a structural approach could thus help us move beyond the standard, largely micro-psychological discussions of escalation of commitment, and help us better understand organizational adaptation and the impact of organizational design and hierarchy.

The paper also emphasized the benefits and the dynamic limitations of organizational structure, demonstrating their impact in terms of creating limiting frames and repertoires of action, and also highlighting the role of hierarchy and management in mitigating these limitations and in introducing more appropriate frames and reactions. In addition to shedding new light, and contributing to new theory in the Carnegie tradition by explicitly considering the role of organizational structure and hierarchy (relatively neglected to date) on organizational decision-making, it has also advanced some conjectures in terms of practice.

Finally, this study has suggested new paths for research. It is clear that much remains to be done on the impact of decision making on organizational effectiveness. Although the study of individual biases and decision-making limitations has become a recognized area of inquiry, its organizational counterpart is still in its infancy. Further research into the role and impact of the bureaucratic and political aspects of decision-making in organizations is needed to increase the scant empirical evidence currently available. Likewise, despite the rekindled interest in organizational structure (much of it driven by the recent upsurge in the popularity of “modularity” and complexity studies), work on these topics remains at an abstract level, and is not as behaviorally grounded as it might be in the future. The cybernetic view of design proposed in this paper, could be a step in that direction. More important, our study underscores the need for more detailed, empirically-focused analyses of the potential value-added activities of hierarchy and management in assisting organizational adaptation, in particular the role of hierarchy in managing routines, framing and focusing attention. Clearly, much progress could be done in extending this understudied aspect of organizational life, in the spirit of Cyert and March’s (1963) seminal contribution.
Appendix: Benefits and Costs from Organizational Structures and Division of Labor

Research on the impact of Organizational Structure and Decision Making: The Background

In the years that have followed the publication of Cyert & March’s *Behavioral Theory of the Firm*, research on the theory of the firm has burgeoned. Any search engine will record hundreds or even thousands of hits – a dramatic increase on the amount of research on the topic of forty years ago. Yet while *some* aspects of the theory of the firm have been thoroughly researched, others have surprisingly been neglected. Much research has addressed issues of *external* firm boundaries- that is, the question of whether firms make or buy particular inputs (see Williamson 1975, 1985; Boerner and Macher 2004). Yet some key questions stemming from the Carnegie research program, such as understanding how organizational structure affects the efficiency of decision-making and the effectiveness of organizations, have been neglected for some time.

This is particularly true of organizational structure, that is, why firms, administrations and not-for-profit entities are organized in a particular way, and how their organizational structure affects their decision-making capabilities and efficiency has not been thoroughly researched, either in the original Carnegie research, or in follow-on work. Some particular issues, such as the hierarchical flow of information has been modeled (see Radner 1992; Carley and Prietula 1994), yet we do not have a comprehensive account of (a) why such a division of labor occurs in organizations; or (b) what are its potentially deleterious side-effects. Cyert & March (1963), for instance, while acknowledging the importance of divisionalization within organizations, chose not to tackle it head on: They took organizational structure for granted, accepting that different divisions exist within the same firm, and focused on how the existence of such divisions (such as marketing and production) affects organizational dynamics. Specifically, they observed that each division has different objectives and manipulates information accordingly, and that this “partisan” behavior is understood and “discounted” by others in the firm. They also focused on the “local” nature of decision-making, and on the “problemistic” aspect of search, although they did not explore how organizational structure can affect decision making by changing the architecture of the decision-making process.

A few years after Cyert and March’s seminal publication, research in organizational design boomed with the publication of Lawrence and Lorsch’s (1967), Thompson’s (1967) and later Galbraith’s (1973) landmark books. However, this “contingency-based” research was focused at the aggregate level, accepting the existence of different divisions, and focusing on the relationships between these divisions, their similarities, their differentiation, and the mechanisms needed to integrate them as well as to transfer information or handle coordination challenges. This stream of research focused on the relationship between organizational units and the overall organizational environment. The focus was narrowed by subsequent research (e.g. Galbraith 1973, Tushman and Nadler 1978), which concentrated on the “information requirements” of different organizational designs, and identification of the means by which an organization could be structured to deal with information overload. Research on organizational design was diverted from the micro-level factors that led to the need for the creation of separate sub-units within organizations in the first place. Also, rather than considering how the creation of boundaries within organizations create upsides and costs, the literature focused on how, *given* the existence of different units, we can devise mechanisms to make the organizations work.

Later research on the existence of distinct “thought-worlds” within the same organization (Dougherty 1992) confirmed that the constituent parts of an organization have distinct, often conflicting views of similar phenomena (such as new product innovations). Similarly, research on the existence of “boundary objects” that link these different “thought-worlds” (Carlile 2002; Betchky 2003), while confirming the cognitive and behavioral division of labor within the boundaries of one organization, does not explain why this comes about, nor does it explicitly consider the implications of the multiplicity of vantage points within the organization. This lacuna, then, leads us to consider the merits and shortcomings of divisionalizing and of dividing labor between different, hierarchically linked organizational units.
The Manifold Benefits of the Division of Labor, and Organizational Structures.

Fascination with the division of labor in the context of purposeful economic or administrative activity is older than the science of economics itself. Discussions on the nature and benefits of dividing labor and having specialist organizational units can be found in Plato’s *Republic*, in Aristotle’s *Politica*, and in Xenophon’s *Oeconomicus*, as well as in the more recent writings of J.S. Mills and Adam Smith. The arguments for the division of labor, and specialization of different tasks seem to fall into four fairly distinct categories.

The first advantage of dividing labor and divisionalizing is in the *learning and specialization* benefits. This is probably the most prevalent benefit claimed (especially in earlier writings) and is best summarized by Smith’s famous pin-factory example. Smith observed that specializing in particular sub-units allows benefits in terms of both throughput and learning by specializing in a particular task (Smith 1776: 24). The ability of such structures to lead to efficiencies because of both specialization and rationalization underpins Weber’s (1947) contributions in sociology, which explain how the division of labor, and its flip-side (the use of authority) can enhance rationalization and reduce capriciousness, leading to higher standards of material well-being. These benefits were described by early administrative theorists, and in particular by Fayol (1949), and Gulick and Urwick (1937), and were documented in Chandler’s (1962) analysis of the benefits of large corporations, which could *afford* substantial divisional specialization, hence their dominance in US business life.

Another set of benefits from specializing labor (and creating independent organizational sub-units to compartmentalize it) comes from cybernetics and evolutionary studies. This strand is best summarized by Simon’s (1962) famous comparison between the two watchmakers, Tempus and Hora, where one assembles the entire watch in one go, putting all 10,000 pieces together at the same time, while the other assembles 100 units of 100 pieces. If we assume that a disturbance is likely to destroy the assembly of the watch, the one done as a series of specialized tasks will be much more robust; each time an integrated watch-making exercises begins, it has a far greater likelihood of being disrupted and thus never being finished.

A third, and conceptually distinct set of arguments for the creation of different divisions is grounded in bounded rationality; this may be the most interesting and the least well-developed argument in support of divisionalization. These cognitive elements have been evoked at various levels of sophistication. The simplest form incorporates a cost for processing information, or a time-lag for processing information itself potentially costly; this formulation underpins Marschack and Radner’s (1972) team theory tradition (for a more recent survey, see Van Zandt (1999)).

This and other recent economics papers (Bolton and Dewatripont 1994; Garicano 2000) also consider the role of hierarchy, discussed in the paper. They review the potential benefits of different “organizational” or “hierarchical” structures. Per this literature, these consist of the ability of particular structures to minimize the total cost of performing information transmission. Similar arguments have been advanced in the context of computational organizational theory (see Carley and Prietula 1994), which consider how different structures and different topographies of reporting lines (with or without sub-divisions, with more or less redundancy, etc), allow the organizations (or, the decision maker at the top of the organization) to make the appropriate choices. In this tradition, researchers focus on how different types of compartmentalization manage to support complex, distributed decision-making.

The idea that the organizational division of labor helps cope with cognitive problems, such as overload, though, goes further than these formal exercises. It is accepted as common knowledge (if under-researched) that individuals cannot cope with particularly high cognitive complexity, a point that Hayek (1945: 520) considered as fundamental for our understanding the theory of economic organization. This argument is made, albeit casually, by Lawrence and Lorsch (1967) and by several other Organizational Design theorists in explaining why we have different divisions within organizations. There is solid evidence to corroborate the claim that divisionalization serves as a cognitive economizing device. The importance of the “cognitive simplicity” that individuals seek, and the way in which this quest for simplicity leads to a typification of the environment has been
analyzed, at the level of the entire industry, by Porac, Thomas and Baden-Fuller (1989) and Spender (1989), in their important work on industry recipes and maps. But whereas we know that individuals require cognitively tractable structures, there is little work that considers how the creation of different divisions is a response to this need.

Some indirect evidence on this “cognitive economizing” rationale in support of the division of labor comes from the students of organizational decision making, who argue that as problems are often too large to be tackled by individual decision makers, they are decomposed and addressed partially by different actors who usually belong to different divisions of the organization.21 Each part of a complex organization recognizes, processes and analyzes only parts of the environment, and fragments and facets of the actual problems encountered. As Starbuck and Milliken (1988) argue, “Opposing interests and countervailing goals frequently express themselves in intraorganizational labor specializations, and they produce intraorganizational conflicts. An organization asks some members to enhance quality, some to reduce costs, and others to raise revenue; and these people find themselves arguing about the trade-offs between their specialized goals.”

Indeed, some of the recent calls for (and paucity in examples of) ambidextrous organizations (Tushman and O’Reilly 1997) show how difficult it is not to have a partial view of a problem, even at the highest levels in the organization. The principal reason for this is that individuals need a simplification of their domains in order to be able to perform effectively – a fact that has admittedly been more often asserted than researched. Thus, the creation of separate divisions within an organization serves a number of important purposes, some of which are born of the boundedness of individuals, which is not in terms of degree, but is boundedness in terms of the number of dimensions that can vary before individuals lose their way in terms of what they could or should do.22

Fourth, divisionalization serves the purpose of increased accountability and thus provides an understandable set of incentives. This argument in support of “divisionalization” is not made in the theoretical literature, but it can be seen as the principal driving force in the applied literature on organizational design (see, e.g., Daft 2004). The argument here is that creating a division ensures clarity of goals and thus provides the opportunity for both direction of effort and measurement and provision of incentives.

Janus’s Dark Side: The Dynamic Implications of the Division of Labor

The creation of boundaries within organizations incurs costs, largely relating to the dynamic, adaptive properties of the organization. First, there are problems involved in managing the integration between the different units, in that divisionalization is also linked to inter-unit differentiation. As contingency theorists have pointed out, any divisionalization brings differentiation between units; and, following Lawrence and Lorsch’s (1967) seminal book, the emphasis has been on finding ways to measure and assess the differences between divisions along a common scale. These differences (e.g. goal, time or inter-personal orientation of successful employees; formality of structure; model of conflict resolution within the unit) make integration between units difficult. Thus, the research has centered on analysis of the modes of integration that enable effective operation for the organization as a whole. One of the main areas of research in “classic organizational design” has thus been the identification of the mechanisms that enable the integration, and in particular the requisite information transfer (Galbraith 1967; Tushman and Nadler 1978).

21 It is interesting to note that traditional economic theory abstracts from this problem, suggesting that the owner of the firm, the mythical “entrepreneur” knows what she needs to do, and that the problem is simply one of delegating and monitoring. Wile this depiction is far from the reality, as occasionally noted by organizational economists (e.g., Demsetz 1995), little has been done to challenge it in the textbook and advanced depictions of firms.

22 This analysis raises an interesting possibility that it may be appropriate for a variety of reasons, mostly related to cognitive limitations, to de-compose a potentially non-decomposable activity. This is not only because, as Baldwin and Clark (2000) point out, de-composability of a complex product (or system) in constituent parts allows the potential upside from sub-system innovation to be maximized, but rather that even a non-decomposable system might benefit from a set of partitions which provide the requisite cognitive economizing for the organizational members.
Second, the recent progress in the study of modular systems (Baldwin and Clark 2000), and the upsurge in work on complexity and evolution spurred by Kauffman (1993), have rekindled interest among organizational scholars in the interaction between choices of different organizational sub-units, an idea initially discussed by Thompson (1967). While modern-day organizational scholars (Levinthal, Siggelkow, Rivkin, Ethiraj, Gavetti) focus on the interdependence between different decisions, and on the extent to which organizations “modularize” (i.e. de-compose) decisions, as opposed to the structure and nature of actual organizational sub-units, their work can be extended to encompass issues of organizational design.23 The potential downsides of the organizational division of labor (or, at least, the creation of “groupings” in terms of decisions that organizations make) are that it may restrict the types of choices or changes the organization can make, and, more importantly, that the groupings that firms adopt may not reflect the true map of interdependencies, and as such that the firm may not actively consider how two choices which may in isolation be positive, will interact negatively.

Research on modularity, drawing on the design of complex products (Baldwin and Clark 2000), makes a similar point, by suggesting that different activities exert influences over each other, and that organizations should be structured in a way that maximizes interactions within and minimizes them across units. This principle, modularity researchers argue, would allow units to independently create value, without bearing the costs of managing the interactions with the rest of the organization. According to this line of thinking, the potential downsides of the organizational partitioning of labor relate to the fact that organizations with a non-modular system may lose value through units being created which act independently but retain some dependency. Modular organizations try to minimize this risk by reducing the interdependencies across units, but still have the problem of potentially important links remaining, which adversely affect the overall organization.

The third disadvantage of the organizational division of labor is related to goals. This view has emerged from “bottom up” research on the downsides of organizational structure (as opposed to the “top down” view of models of evolution or product design). Economic sociologists, following Merton (1957) and Selznick (1957) have highlighted the challenges brought about by “goal displacement”. Organizational sub-units are assigned certain functions, and set goals, which will contribute to the overall purpose of the organization. However, the sub-units tend to magnify the importance of their individual goals, often to the detriment of the organization as a whole.

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23 The focus on a number of these studies (e.g. Rivkin and Siggelkow 2003; Siggelkow and Levinthal 2003; Ethiraj and Levinthal 2004, 2005) is fairly similar: They consider how different “decisions” (modeled as 0-1 choices) interact in determining a “fitness landscape” for the organization overall. On the basis of this canonical representation, researchers consider how, given different “decision making strategies” (e.g., “local search” of immediate changes vs “long jumps” to different configurations) interact with different “grouping strategies” (i.e. how different choices are made either in tandem or in isolation) to drive performance. In this stylized family of models, firms do not always know the true complexity of their environment (Gavetti and Levinthal 2001) or the true nature of the interactions (Ethiraj and Levinthal 2004), and the benefits from grouping different decisions together comes from the fact that they enable organizations to act in a way that acknowledges interactions and interdependencies between two binary choices.
Data Appendix: EU Reactions, after the Crisis had Escalated

EUROPEAN PARLIAMENT

Adopted by a vote of 342 for, 21 against, 11 abstentions on February 15, 1996

on the provocative actions and contestation of sovereign rights by Turkey against a Member State of the Union

The European Parliament

A. having regard to Turkey's provocative military operations in relation to the isle of Imia in the Eastern Aegean,
B. concerned about the dangers of over-reaction if this dispute continues,
C. having regard to Turkey's official statements making territorial claims and contesting the sovereign rights of an EU Member State,
D. whereas the islet of Imia belongs to the Dodecanese group of islands, on the basis of the Lausanne Treaty of 1923, the Protocol between Italy and Turkey of 1932 and the Paris Treaty of 1947, and whereas even on Turkish maps from the 1960s, these islets are shown as Greek territory,
E. whereas this action by Turkey forms part of a broader policy of questioning the status quo in the Aegean,
F. having regard to the common position of the Council set out at the association Council meeting of 6 March 1995 which considered it "of paramount importance to encourage good-neighbourly relations between Turkey and its neighboring Member States of the EU", and whereas these privileged relations between the Union and Turkey should automatically preclude any military aggression,

1. Gravely concerned by the dangerous violation by Turkey of sovereign rights of Greece, a Member State of the European Union and by the build-up of military tension in the Aegean;
2. Deplores the fact that Greece and Turkey appeared to be on the brink of hostilities and calls for an immediate stop to all actions which endanger peace and stability in this area;
3. Stresses that Greece's borders are also part of the external borders of the European Union;
4. Calls for compliance by Turkey with international treaties, and in particular the OSCE, which insists that all disputes be settled by peaceful means in accordance with international law;
5. Deplores the failure of the European Union and its Member States in this crisis, to take effective action within the framework of the common foreign and security policy;
6. Calls on the Council to take appropriate initiatives for the amelioration of the relations between Greece and Turkey;
7. Instructs its President to forward this resolution to the Council, the Commission, the Government of Turkey, the Parliament of Greece and the Grand National Assembly of Turkey.

E.U. COUNCIL OF MINISTERS OF FOREIGN AFFAIRS

Declaration adopted by the 15 Ministers of Foreign Affairs of the E.U. at the General Affairs Council on 15.7.96 (SN 3543/96)

i. Council Declaration

The European Union has followed with serious concern the situation that has emerged as a consequence of the issue raised by Turkey concerning the Imia Islets.

The resulting frictions involve, on the one hand, a Member State with which a natural solidarity exists and, on the other hand, a neighbouring country with which the European Community wishes to develop further a relationship of dialogue and cooperation in all the fields resulting from the Customs Union. The Council recalls its attachment to the development of good neighbourly relations among all countries of the region. In this context, the Council recalls that relations between Turkey and the European Union have to be based on a clear commitment to the principle of respect for international law and agreements, the relevant international practice, and the sovereignty and the territorial integrity of the Member States and of Turkey.

The Council considers that disputes should be settled solely on the basis of international law. Therefore, the Council calls for restraint and avoidance of any action liable to increase tensions, and specifically the use or threat of force, and considers appropriate that dialogue should be pursued along the lines which have emerged in previous contacts between the interested parties which may contribute to the improvement of bilateral relations as well as to the establishment of a crisis prevention mechanism.

The Council further underlines that the cases of disputes created by territorial claims, such as the Imia Islet issue, should be submitted to the International Court of Justice. The Council requests the Presidency to invite Turkey to indicate whether she commits herself to the aforementioned principles.
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