

## **The ideological roots of industrial transformations**

The purpose of this chapter is to propose an ideational explanation for industrial transformation. The account offered focuses on the top decision-makers of firms undergoing industrial transformations. It traces how ideologies drive those decision-makers to transform the production models and business strategies of their firms.

This explanation represents an alternative but potentially complementary account to prevalent theories of industrial transformation. It stands as an alternative insofar as ideology intervenes as an independent driver of radical organizational change, operating alongside other explanatory variables. The two cases of this dissertation illustrate this alternative account, showing how two teams of top firm decision-makers, the Apostles of Development and Cooperative Brigadistas, transformed firms in two agro-industries in the “unlikely scenario” of 1980s and 1990s Central America. Yet, the explanation offered may also complement well-established theories: to the extent that firm agency interacts with prevailing explanations, it may strengthen their accounts of industrial transformation.

To develop this argument, the chapter begins with an overview of the explanations provided by prevalent theories of industrial transformation. After drawing attention to some of their main drawbacks, especially the constraints they impose on firm agency, it turns to the ideational alternative. I offer a detailed discussion that conceptualizes ideology as an independent variable and reveals a model for its translation into the transformative actions of top firm decision-makers. The chapter then proceeds to a review of these transformative actions: first, the creation of new production models and business strategies, a process which I call “neomorphism”; and second, their diffusion to other firms, a process commonly known as isomorphism.

## **Alternative Theories of Industrial Transformation**

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The numerous theories of industrial transformation that have held sway over time vary quite extensively in the outcomes they explain and the explanatory variables they propound. All address dramatic firm or industry-level changes. But the measures for those changes range widely. The more orthodox among them prioritize total output, productivity and exports. Other accounts also incorporate measures such as technological sophistication and capital intensity, worker skills, product quality, and market diversification.

Alongside those variations in the outcome, we can find broad differences in the factors presented as causes of industrial transformation. For analytical purposes, I group these theories into two categories distinguished by the type of explanatory variable. The first set of theories introduces state policies as the general drivers of industrial transformation. The second set focuses on inter-firm relationships and collaboration. While not an exhaustive list of explanations for industrial transformation, these two sets of theories include the most prevalent and influential accounts at this time.

### ***State Policy***

The literature on the role of the state as a driver of industrial transformation extends across a broad spectrum. On one extreme, authors from the “production school,” point to the unique pre-conditions that fostered the “miraculous” state-led industrial upgrading of the East Asian countries (e.g. South Korea, Taiwan). According to these authors, competent and cohesive state bureaucracies, guided by a shared ethos and commitment to national economic development picked firms and industries, or “winners,” destined for world-class production.

These state bureaucracies relied on information provided by the business sector to tailor various policy instruments to industry or even firm-specific needs. The bureaucrats shared close relations with business while simultaneously remaining

autonomous – a condition captured by Evans’ concept of “embedded autonomy.” The goal of these heavy-handed interventions was to move the targeted winners from primary production into knowledge and skill-intensive manufacturing. The gamut of instruments available to bureaucrats ran from tariffs and other trade protections from international competition for domestic infant industries, through reciprocity-based (i.e. subsidies, credits and other benefits contingent on firm performance) export strategies for "mature" firms, to educational and social control policies designed to create an obedient, cheap and increasingly skilled workforce (A. H. Amsden, 2003; Deyo, 1989; Evans, 1995; Haggard & Kaufman, 2008; Kohli, 2009; Schneider, 2013).

According to these arguments, these chosen national firms and industries, with the overt support of state bureaucracies, would quickly upgrade their production. In East Asia, the argument goes, they overcame the entry barriers of advanced industrial nations and conquered their mass consumption markets. Through their transformations, these “winners” fueled rapid economic growth and national development in their home countries.

Though offering a “compelling correlation,” in Schneider’s (1998) terms, the production school faces some noteworthy challenges. With a few exceptions,<sup>9</sup> little work has addressed the origin of these Weberian bureaucracies. Yet such processes of emergence would appear to demand significant resources and time. Moreover, as Schneider (1998) explains, the causal connections between different “facets of embeddedness” – such as “data collection,” “private sector expertise,” “negotiation and renegotiation,” and “consensus” – and the studied outcomes remain unclear (108). Schneider goes on to argue that parsing apart these different relations would be useful for the “mass of ‘intermediate’ states” that cannot hope to achieve

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<sup>9</sup> See Doner, Ritchie, & Slater (2005) on the role of “systemic vulnerability” in fostering the emergence of developmental states.

autonomous Weberian bureaucracies in the short run but might be able to reap some of the benefits of embeddedness.<sup>10</sup>

Furthermore, all the facets of embeddedness that Schneider mentions are contingent not only on the actions of state bureaucrats, but also of business. Yet, because of its single-minded focus on the state, this theory largely omits a discussion of firm agency. Most of the argument centers on the different policy instruments state bureaucrats deploy. Firms are simply assumed to share and collaborate, or in the authoritarian East Asian tigers, comply, with state bureaucrats. For our purposes, most of the discussion on Weberian states is moot to the extent that neither the Guatemalan or Nicaraguan states developed East-Asia-like development capabilities. Nor did state bureaucrats pick the studied industries as national “winners.” Though both industries enjoyed some protective tariffs, in no way did those trade protections set them apart from their competitors in neighboring countries or comparable industries in their domestic market.<sup>11</sup>

A very different set of critiques inspired the “Washington Consensus,” located at the opposite end of the state policy spectrum. This perspective posited that state intervention of the type advocated by the production school often elicited not upgrading but rent seeking and corruption, waste and inefficiency, poor public services, and large public deficits and inflation. Given this critique, Washington Consensus champions proposed a starkly different set of prescriptions. They drew heavily from neoclassical economics to defend the “liberalization, deregulation and privatization” troika. For them, the state should steer clear of the economy (deregulation of entry/exit barriers, prices), ensuring only macroeconomic stability (through fiscal discipline and lower public expenditures, broader tax bases with lower marginal tax rates, and competitive exchange rates), private ownership (defense of property rights, privatization) and unhindered flows of goods and

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<sup>10</sup> Indeed, the East Asian “tigers” appear to be a rather unique historical phenomenon, which leads to the question of the generalizability of their lessons.

<sup>11</sup> In assessing this and other alternative explanations, I examined the two country’s trade protections, state budgets and histories, industry-specific regulations, and state credit policies.

capital (financial and trade liberalization) (Bates, 1981; Krueger, 1990; Schleifer & Vishny, 2002; Williamson, 2008).

However, like its production school nemesis, the Washington Consensus has faced significant challenges. Stiglitz (1999), echoing the view of many of its critics, decried the Washington Consensus' "misunderstanding of the very foundations of a market economy" and its "failure to grasp the fundamentals of reform processes" (3). He claimed that its deep reliance on neoclassical economics entailed "excessively simplistic textbook models of the market economy" that obscured problems related to entrepreneurship and the creation of new enterprises, corporate governance (e.g. the separation of ownership and control) and the institutional framework that a working market economy requires. These omissions fatally undermined intended economic and industrial development.

Most important for the argument of this dissertation, in an ironic twist, the Washington Consensus argument mirrored the production school in overlooking the role of firm decisions. Paradoxically, given its emphasis on the blessings of "the market," the Washington Consensus theory paid scant attention to firm agency. Like the production school, it implicitly assumed that firms would respond to the favored policies in a largely deterministic fashion.

For our purposes, we should note that in the cases presented in this dissertation, the Guatemalan and Nicaraguan states' eagerly adopted of the Washington Consensus package well after the mills and cooperatives initiated their transformations. And, as the empirical chapters show, once their respective states adopted liberalized markets and partially deregulated domestic economies, the Guatemalan mills and Nicaraguan cheese processing cooperatives continued to grow, fully exploiting the new market possibilities. They also diverged from the development trajectory of comparable domestic firms and industries.

In light of the challenges associated with both the production and Washington Consensus schools, various authors have combined their insights. Most of them share the view that the industrial policy advocated by the “production school” may indeed produce a number of undesirable consequences. But they recognize that markets may succumb to serious failures as well (e.g. information externalities, coordination problems between firms and between firms and the state).

According to this hybrid perspective, which builds on Stiglitz’s (1999) critique of the Washington Consensus, the state’s most general role in triggering upgrading is to define an institutional arrangement that will overcome collective action problems. These problems, which arise when individual actors with a fixed set of (exogenous) preferences and tastes vie to maximize their own welfare in the market, lead to suboptimal collective outcomes. In this context, state-devised institutions structure the interactions of economic actors. They supply incentives for them to reach socially optimal outcomes, and thereby provide the necessary and sufficient conditions for industrial upgrading (Hall & Taylor, 1996; Rodrik, 2007).

The range of market supporting institutions necessary to guarantee the socially optimal outcome of upgrading and economic growth is quite broad, varying by author. Parsimonious accounts underscore the state’s ability to enforce property rights and the rule of law as central to national economic growth (Acemoglu et al., 2005; North & Thomas, 1973; North, 1990). Other authors view these as insufficient and advocate additional institutions, such as institutions of regulation (for goods, services, labor, assets, financial markets), conflict management (judiciary, political institutions, independent trade unions, social partnerships) macroeconomic stabilization (sound fiscal and monetary policies), social insurance, and even – in arguments that shade into the production school realm – industrial policy (with close consultation with business, but importantly, also targeted at activities such as R&D rather than sectors, and with credible commitment, monitoring and strict controls) (R. F. Doner, 2009; Hausmann & Rodrik, 2003; Rodrik, 2007).

Though this perspective has become influential over the past decade, it too has encountered challenges. Critics question the increasing number of institutions considered indispensable and the difficulties associated with introducing them. Rodrik's (2006) critique, initially intended for institutionalists more friendly to the Washington Consensus, can be extended to illustrate the problems associated with this third state-centered perspective: "In the limit, the obsession with comprehensive institutional reform leads to a policy agenda that is hopelessly ambitious and virtually impossible to fulfill... Furthermore, there is something inherently unfalsifiable about this advice. So open-ended is the agenda that even the most ambitious institutional reform efforts can be faulted *ex post* for having left something out" (980).

In addition, while synthesizing the production school and Washington Consensus this "third way" also smuggled in their shared exclusion of firm agency. Like its two sources of inspiration, it relies upon a strongly deterministic conception of firms insofar as it renders them completely beholden to the "iron laws" of their institutional environments. Fortunately, in the studied cases of this dissertation even the most parsimonious of these "institutional packages" was absent in war-torn Guatemala and Nicaragua. As firms undertook the studied transformations, neither country offered even secure property rights, much less the more sophisticated institutions of social insurance or industrial policy that some authors consider necessary. Only later, as the countries pacified, would some of these institutional conditions become established.

### ***Inter-firm collaboration and learning***

The literature on inter-firm learning and collaboration also encompasses a range of different approaches. For analytical purposes this literature can be divided into two distinct traditions: one focusing on institutions governing the vertical interactions between buyers and suppliers, the other on institutions governing the horizontal interactions between similarly placed firms. The former tradition sheds light on upgrading across Global Value Chain (GVC) (Bair, 2005; Gereffi, 1999; Nadvi &

Halder, 2005; Schrank, 2004) and domestic large firm suppliers (Chandler & Hikino, 1997). It focuses on how suppliers upgrade by learning from global buyers and large domestic firms. The mechanisms explored to account for upgrading include changing and increasingly complex buyer demands (e.g. movement from simple assembly into full-package manufacturing), organizational succession (i.e. increasingly sophisticated buyers move into production sites), and continuous discussion and standard setting (i.e. learning by monitoring).

Some of the main critiques directed at this literature spring from the variation in the extent of upgrading observed, as well as the social consequences of the changes. In addition, authors such as Schrank (2004) question the extent of the returns and sustainability of upgrading. Most notably for our purposes, however, and notwithstanding a few exceptions,<sup>12</sup> much of this literature undertheorizes the agency of developing country suppliers in processes of upgrading. For the most part, the emphasis falls on the role of pedagogical buyers. In our studied cases, sugar mills in Guatemala and cheese processing cooperatives in Nicaragua supplied global value chain buyers only at later stages of their development. These buyers approached the mills and cooperatives not looking to upgrade their production models and strategies, but rather to benefit from their already transformed capacities. In neither case did the buyers offer the type of pedagogical attention conducive to industrial transformation.

The tradition focusing on horizontal institutions of inter-firm learning and collaboration studies spatially concentrated industrial districts and clusters of mostly small and medium-sized firms. These firms engage in seemingly contradictory relations of collaboration and competition. They are closely linked – in some cases they even specialize in different phases of the production process. Labor moves relatively freely across them. Institutions jointly created by them in

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<sup>12</sup> See Pipkin (2011)

their locales coordinate economic activity.<sup>13</sup> These institutions also encourage permanent generation and diffusion of knowledge, training and innovation. They fuel continued upgrading, and allow them to adjust to changing conditions in the global economy. Undergirding these institutions are cross-firm relations of trust and a shared understanding of mutual dependence. Additionally, spatial agglomeration reduces costs of access to key inputs, such as labor, finance or infrastructure (Humphrey & Schmitz, 2002; Nadvi & Halder, 2005; Piore & Sabel, 1984; Saxenian, 2004).

The challenge with such accounts is that they take trust and shared understandings as given. Few explore the roots of these conditions. Yet, creating those cross-firm bonds and the willingness to invest in costly joint institutions is often a firm-led process that already reflects a high degree of sophistication. As the two cases of this dissertation suggest, though they catalyzed industrial change, such cluster-like relations and institutions arose only after the creation of the new production models and business strategies. Studied firms, and particularly top firm decision-makers, introduced them to encourage diffusion of the new model and strategy. Previously, firms in both countries existed in an equilibrium of cutthroat competition and individualist production.

### **Ideology as an explanation for industrial transformation**

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The purpose of introducing the prevailing theories was not only to evaluate them as possible accounts for the studied cases. I also sought to show that, as influential approaches, they would benefit from a less simplified understanding of firms, particularly of the firms examined as cases of industrial transformation. Such an understanding must make room for firm agency.

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<sup>13</sup> One institution not necessarily unique to clusters and industrial districts is the business association. A growing literature addresses the role of “developmental associations” that offer market supporting and complementing institutions – usually in conjunction with the state – conducive to upgrading. In explaining developmental outcomes, authors in this tradition emphasize conditions such as association encompassingness, degree of formality, and use of selective and public benefits and barriers to exit (R. Doner & Schneider, 2000)

Recognizing the existence of firm agency and abandoning more determinist assumptions would strengthen prevailing theories in general, and may offer alternative hypotheses for two particular scenarios. First, in the “divergence scenario” the favored condition produces varying outcomes.<sup>14</sup> As I further discuss in the Conclusion, divergence scenarios may become intelligible by developing explanations for firm agency and incorporating them into prevailing theories of industrial transformation.

The second “unlikely scenario” arises when industrial transformations unfold even in the absence of the established explanations. In this scenario, firm-led industrial transformation emerges as a compelling explanation. Yet, for such an explanation to work, explaining the agency of particular firms in introducing and then diffusing transformed production models and business strategies proves indispensable. This dissertation advances such an explanation of industrial transformation focused on the actions of top firm decision-makers. It posits that ideologies account for the transformative actions of these top firm decision-makers. Ideologies explain how top firm decision-makers create and diffuse new production models and business strategies that entirely transform firms and industries.

The two studied cases of this dissertation illustrate this explanation for industrial transformation in “unlikely scenarios.” The Guatemalan sugar mills and Nicaraguan cheese processing cooperatives fundamentally revamped their production models and business strategies in the absence of the standard conditions for industrial transformation. In both cases particular ideologies drove the actions of two teams of top firm decision-makers, the Apostles of Development and Cooperative

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<sup>14</sup> In some instances, this scenario triggers useful revisions that refine understandings of the main explanatory variable. For example, when examining very different employment practices and, of particular interest for their argument, labor standards, across two Mexican apparel producers, Locke et al. (2007) further our understanding of the role of compliance relations between buyers and suppliers. They distinguish between two different kinds of brand compliance relations with their suppliers: a “hands-on, cooperative relationship with some suppliers and an arm’s length, more distrustful ‘compliance’ relations with others” (34).

Brigadistas. Guided by their ideologies, the Apostles and Brigadistas first created the new transformed production model and business strategy at one firm, and then diffused it to other firms.

### ***Ideology as an explanation for human action***

How do ideologies account for top firm decision-maker creation and diffusion of new, transformed organizational models? To address this question, we must first define ideology and attend to how ideologies account for human action broadly conceived – what Weber calls “value-rational action.” Only then can we address the relationship of interest between ideology and the human actions producing industrial transformations.

To understand the concept of ideologies, we can turn to Geertz's (1973) chapter on *Ideologies as a cultural system*, in which he set out to devise a “conceptual apparatus capable of dealing more adroitly with meaning.” Central to this conceptual apparatus is his description of ideological thought as “intricate symbolic webs” that provide “extrinsic sources of information in terms of which human life can be patterned.” Ideologies represent articulate “symbolic templates” and “interpretive frameworks” that render meaningful “otherwise incomprehensible social situations.” They “can be said to distort and mystify experience,” thereby “[masking] possibilities of alternative understandings and accounts of social relations” (Silbey, 1998). They encompass varying values and beliefs. Thus, different ideologies serve as competing, articulate sense-making devices.

Building on his conceptual apparatus, Geertz (1973) argued that ideologies organize, guide and to a significant extent control the “extremely plastic” behavior of human beings. In this vein, most “ideational” studies assume that ideologies lead to consistent behavior by “supplying the ultimate ends or values toward which action is directed.” As Weber put it, while “interests directly govern men’s attitudes,” often “the world images that have been created by ideas have, like switchmen, determined

the tracks along which action has been pushed by the dynamic of interest” (Weber 1958, 280).

As the most prominent exemplar of this approach, Weber's (1905) *Protestant Ethic and the Spirit of Capitalism* posits that the “doctrine of pre-destination” and the “calling” of ascetic Protestantism single-handedly shattered “traditionalist” behaviors. In what constituted an example of Weber’s concept of value-rational social action, this new ideology prompted individuals to curtail consumption while they simultaneously worked tirelessly to acquire wealth. These individuals patterned their actions according to a particular substantive rationality, founded upon a particular religious value-postulate. As a result, the adoption of the Protestant Ethic spawned a new pattern of action associated with the “spirit of capitalism.”

A number of other authors have also developed arguments in this conventional vein. For instance, in studies on policy, Hall (1989, 1993, 1994) points to Keynesianism and Monetarism to explain the economic approaches of Great Britain and other nations during the twentieth century. Similarly, for Blyth (2002, 2007) different “economic ideas” enabled the varied policies and institutions devised in the context of the Great Depression. Dobbin (1994) offers another example, focusing on the “national traditions” and “institutionalized meaning systems” that elicited distinct national industrial strategies in the United States, Britain and France.<sup>15</sup> Studies on management and political economy of business mirror this explanatory pattern. For instance, Reinhardt Bendix (1963) explains the variation in labor relations across England, the US, Eastern Germany and the Soviet Union by reference to the “ideologies of management.” And Guillen (1994) sheds light on the role of

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<sup>15</sup> Gerschenkron (1962), Adler (1988), Campbell (1998), Chwioroth (2010), Kindleberger (1975) and Stepan (1978) also develop ideational accounts for policy.

“managerial paradigms” in his study of the actions of “management intellectuals” and practitioners in the United States, Spain, France and Germany.<sup>16</sup>

Yet, two problems arise with these conventional ideational accounts. First, people expressing the same values or principles often pursue them through different and even inconsistent means. (Pipkin, 2012; Swidler, 1986; Tilly, 1993, 2005). As Swidler (1986) explains, “People may share common aspirations, while remaining profoundly different in the way culture organizes their overall pattern of behavior” (275).<sup>17</sup> For instance, she argues that even Weber was “hard pressed to explain why the doctrines of predestination and proof produced the rationalized, ascetic conduct of the saint” and not “fatalistic resignation, or even hedonism” (280).<sup>18</sup> The second, closely related problem is that ideologies often provide only general principles that leave significant leeway for individual agency. Rarely do they furnish “road maps,” “scripts” or “cues” that ideological carriers can “blindly” follow (Campbell, 1998).

These two problems bring to the fore the need to develop a theory of translation from ideology to action. The general principles of ideologies may elicit varied patterns of action. Thus, determining how particular value-rational actions arise – how ideologies translate into specific patterns of action – becomes indispensable.

This dissertation offers a model of translation. Building on the evidence from the ideologically-motivated organizational transformations of the Guatemalan sugar

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<sup>16</sup> In Italy, a number of authors similarly point to Communist and Christian Democratic ideologies as explanations for firm organization and development (Brusco & Pezzini, 1990; Criscuolo, 2002; Piore & Sabel, 1984; Trigilia, 1990). And in Indonesia and Morocco, Geertz (1956, 1963, 1978) turns to the importance of Hinduism and Islam to account for entrepreneurial activities. Other ideational studies on business: Boltanski & Chiapello (2007), Cammett (2005), DiMaggio (1997).

<sup>17</sup> Tilly (2005) also develops a critique along these lines. He addresses what he calls “dispositional explanations.” He claims that explanations for why and how ideologies motivate economic actions remain “underspecified and mysterious” in these accounts (in particular, see his critique of Greenfeld).

<sup>18</sup> Dobbin (1994) makes a similar point with regard to religion: “All religious systems (i.e. rationalized meaning systems) orient institutions to the service of a higher power, with an eye to the achievement of grace in the afterlife. However, [the same putative] systems represent the higher power and the religious ethic variously, so that social practices oriented to salvation take markedly different forms.”

mills and the Nicaraguan cheese processing rancher cooperatives, it begins by stressing the independent explanatory role of ideology for human action. The general principles of an ideology articulate the values and beliefs that shape action.

As Chapter 3 explains, in Guatemala's sugar mills Vatican II Catholic social doctrine motivated and shaped the actions of the team of ideological carriers in top firm decision-making positions, the Apostles of Development, that transformed the sugar industry. Among its general principles, as captured primarily in Catholic Social Encyclicals, Vatican II Catholic social doctrine emphasized the earthly pursuit of the common good and salvation, the human solidarity and Christian brotherhood of mankind, respect for human dignity, and the subsidiarity of the state. Chapter 4, in turn, argues that in north central Nicaragua, a separate group of ideological carriers influential in firm decisions, the Cooperative Brigadistas, pursued the values and goals of Sandinismo. Declarations, speeches and documents published by the Sandinistas called for the construction of a revolutionary new society by a vanguard that pursued an independent economic policy, popular democracy, the creation of a "new man," and the defense of the rural lifestyle. Thus, in both cases ideologies provided principles to guide action.

Yet, at the same time, the two studied ideologies spawned different patterns of action. The Apostles of Development in Guatemala and the Cooperative Brigadistas in Nicaragua created and diffused new production models and business strategies for privately owned firms, contributing to their industries' capitalist development. But in contrast, many carriers of the same ideologies in the same countries actively promoted social mobilization (e.g. unions, peasant movements, community organizations), alternative economic projects (e.g. smallholder cooperatives, communes, state-led development initiatives) or revolutionary activities.

This variation suggests that ideologies are "less a blueprint than a set of architectural principles" (Sewell, 1985). As Sewell (1980, 1985) argues in his discussion of the worker organization and mobilization in the French Revolution,

the abstract principles of ideologies such as the Enlightenment provide room for carriers to formulate different and often conflicting “practical plans.”

In explaining how ideologies foster such distinct practical plans, this dissertation reveals the key intervening role of “moral-practical mindsets.” Moral-practical mindsets blend particular interpretations of an ideology with the professional background of that ideology’s carriers. This combination of ideological interpretations with professional backgrounds refracts the causal thrust of ideology; it fosters distinct ideological enactments. By shaping these enactments, moral-practical mindsets account for the predictable and consistent human action and behavior that ideologies elicit. In the studied cases, they explain the transformative actions of the Apostles of Development and Cooperative Brigadistas.

Ideological interpretations represent the first component of moral-practical mindsets. Commonly influencing different groups or factions of carriers, they flourish around the internal inconsistencies of ideologies (Silbey, 1998). Building on the “contradictory possibilities” offered by these inconsistencies (Sewell, 1985), they assert certain values and beliefs of a body of ideology while downplaying or obscuring others. In other words, they privilege particular “value postulates” (Kalberg, 1980).<sup>19</sup>

Consequently, while they coexist under the umbrella of the ideology, rival ideological interpretations and their associated substantively rational points of view often differentially influence action. This influence flows along two channels. First,

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<sup>19</sup> Mahoney's (2002) study of the 19<sup>th</sup> century Central American liberal reform period illustrates both the existence of varied interpretations of ideologies, and the consequences of their variation for action. He focuses on Central American liberalism, which included general principles such as the defense, as natural and desirable, of a hierarchical ordering of society; a vocal advocacy for land privatization and free trade; the active use of the state to promote economic development; and opposition to traditional corporate entities, such as the Church and Indian communities, within society. Given these principles, key liberals in the region chose between two variants of this ideology: radical or reformist liberalism. These two options, argues Mahoney, “reflected differences in the pace and scope of agrarian modernization and in how the state was used to promote commercial agriculture.” They triggered divergent “structural transformations” with long-lasting consequences for the political and economic development of the region’s countries.

ideological interpretations provide “causal maps” that entail distinct cause-effect relations. They identify problems, diagnose puzzles, highlight contrasting moral imperatives, provide general guidelines to devise solutions, and reconstitute interests (Blyth, 1997; Guillen, 1994; Hall, 1989). Second, ideological interpretations play a “taxonomic” role. They classify individuals and organizations into different groups, assigning them differing roles and tasks. Through this taxonomic channel, ideological interpretations form coalitions across certain collectivities portrayed as “allies,” and dig deep trenches that keep others, the “foes,” away.<sup>20</sup>

In the empirical cases of this dissertation, the motivating ideologies similarly spawned distinct interpretations, each invoking particular causal maps and taxonomies. In Guatemala, Elite Solidarism, a hierarchical interpretation of the Catholic Church’s Vatican II social doctrine, guided the Apostles of Development in the sugar mills. This interpretation embraced the authoritarian conception of authority of Dulles’ (1978) “institutional model of the Church.” It made an appeal for the privileged members of society to unilaterally promote the common good. Working jointly, these “electi” were to deploy their concentrated power through a program of social transformation that vanquished the indignity of poverty.

Elite Solidarism obscured the more democratic, grassroots aspects of Vatican II social doctrine captured by an alternative ideological interpretation, Liberation Theology. The Theology of Liberation openly criticized capitalism, and repudiated authoritarian rule. It explicitly related poverty to structural inequalities, or “institutionalized violence” (Gutierrez, 1970). Furthermore, emulating Dulles’

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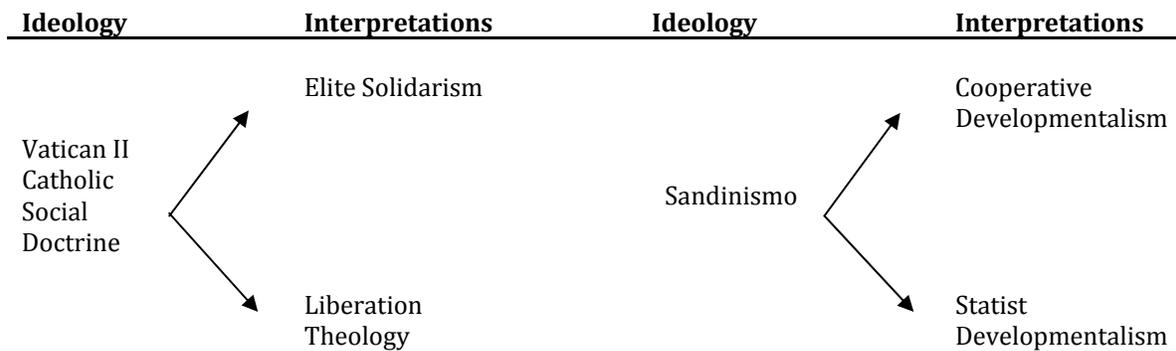
<sup>20</sup> This argument builds on the cognitive theory of strategic decision-making (Daft & Weick, 1984; Porac & Thomas, 1990) to develop the distinction between these two roles of ideological interpretations – “causal map” and “taxonomic.” The cognitive theory emphasizes the “social psychological” factors that account for top management’s interpretation of organizational environments (through shared schema) and its consequent definition of firm strategy. Daft and Weick (1984) argue that managers scan the environment for data, interpret it using cognitive maps to translate and give meaning to this data, and then act upon this interpretation by developing business strategies. Porac and Thomas (1990) add that cognitive models not only suggest causal relations between environmental variables, but also consist of “internalized cognitive taxonomies of organizational forms that describe organizational similarities and differences.” Unfortunately, this literature largely overlooks the origin of such cognitive models.

“model of the Church as servant,” Liberation Theology stressed popular activism, participation and empowerment, particularly among the poor. As Levine (1992) notes, the poor were “no longer to be taken simply as the uninstructed waiting to be led by their betters.”

In Nicaragua, Sandinismo spawned the “Cooperative Developmentalism” interpretation. This interpretation guided the Cooperative Brigadistas in the cheese processing rancher cooperatives. It gained prominence during the last years of the Sandinista Revolution. Echoing the views of Marxists such as Eduard Bernstein, it favored a mixed economy and the development of privately-owned processing facilities in the countryside to foster a thriving rural economy. In constructing the new society, it also championed producer cooperation and organization, and promoted socialization campaigns to create the “new man.” In these endeavors, it welcome the leading role of a relatively short-lived vanguard (FSLN, 1985; Hodges, 1986).

Like Elite Solidarism, the Cooperative Developmentalism interpretation grew alongside another interpretation of Sandinismo, Statist Developmentalism. The contrast between the two interpretations partly mirrored the Bernstein-Lenin controversy of the early 1900s. Influential throughout most of the 1980s in Sandinista Nicaragua, Statist Developmentalism drew for Leninism. It celebrated the transformative role of the state, through capital-intensive investments, in a largely centralized, independent economy (Harnecker, 1985; Nolan, 1984; Ryan, 1995). According to this hierarchical interpretation, popular democracy, foreign aid and the “new man” were to be subordinated to the state, the spearhead of modernization. The vanguard, in firm control of the state, would serve for an extended period of time. Figure 2.1 shows the two studied ideologies and their interpretations.

Figure 2.1 Ideologies and interpretations



Notably, the empirical evidence suggests that even if they share the same ideological interpretations (e.g. Elite Solidarism, Cooperative Developmentalism), ideological carriers often act in strikingly contrasting ways. As Chapter 3 details, in Guatemala the Apostles of Development acquired their Elite Solidarism interpretation in an Elite Jesuit school. However, not all their classmates, who underwent the same process of indoctrination, pursued comparable firm-level transformations. While they shared the Elite Solidarism motivation to hierarchically promote the common good, they directed their efforts to other realms of social life. Some, for instance, turned to social services such as public health, while others dedicated their efforts to politics. None developed Apostle-like production models and business strategies.

Likewise, as Chapter 4 describes, a number of other actors shared the Cooperative Developmentalism interpretation of the Cooperative Brigadistas in Nicaragua. In fact, a few directed and participated in rancher associations much the same as those transformed by the Brigadistas. Others organized a variety of agricultural cooperatives known as Cooperativas de Creditos y Servicios (CCSs). Yet, to a large extent, none pursued organizational transformations comparable to the Brigadistas’.

In both cases, the professional backgrounds of the Apostles and Brigadistas set them apart from comparable ideological carriers.<sup>21</sup> Professional backgrounds represent

<sup>21</sup> The idea is not new. Weber, for instance, examined how the “occupational experience of different social groups” or “carriers” and “the social strata” to which they belonged colored the economic ethic of different religions (Bendix, 1960; Swedberg, 2003). As Bendix (1963) has noted, he concluded that

the second component of moral-practical mindsets. They complement ideological interpretations, allowing carriers to devise and implement practical plans. While ideological interpretations supply casual maps and taxonomies favoring certain moral and political imperatives and aspirations, they leave significant leeway for action.

Professional backgrounds narrow and define action possibilities in two ways. First, they focus ideological carriers' actions on particular realms of social life, channeling their efforts to enact their ideological interpretations. Hall (1989) provides an illustration. He describes how the adoption of Keynesian ideas by different groups was associated with a focus on different "puzzles" highlighted by their occupational and professional backgrounds. For example, economists deployed the doctrine to solve puzzles in economic theory, while civil servants applied it to administrative puzzles associated with budgetary policy.

Second, ideological carriers rely upon the practices, skills and knowledge of their professional backgrounds to fulfill the demands of their ideological interpretations. Professions are often grounded in an "abstract body of theoretical knowledge" (Ranganathan, 2013, 903). They incorporate training, certification programs, licensing, educational requirements, and ethics codes that build on that body of knowledge. They may also involve standardized work practices, target settings and performance reviews. Through such mechanisms, they galvanize distinct communities of knowledge with shared approaches to problem-solving (Ranganathan, 2013). For instance, all of Bendix's (1963) English industrializers proceeded from a rising class of entrepreneurs with a unique knowledge of technology. Their shared occupational and educational origins shaped the enactment of their Evangelical- and Methodist-influenced entrepreneurial ideology. Jackall (2010) similarly underscores how managers, "the principal carriers of the

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the "predominant values of the occupational experience of different social groups tended to induce a certain variety" in both their respective "religious propensities" and associated economic ethics.

bureaucratic ethic in our era,” have shaped the corporate and broader bureaucratic landscape (12).

In the empirical cases of this dissertation, professional backgrounds played an analogous role. In Guatemala, the Apostles of Development graduated as industrial and agronomist engineers. Their engineering background channeled their moral mission toward agro-industrial activities. In contrast to other classmates who shared the Elite Solidarity interpretation but pursued degrees in law, medicine or architecture, engineering focused the Apostles’ efforts on business. To enact the moral imperatives of Elite Solidarity, the Apostles relied on their engineering knowledge, tools and skills. They consistently promoted technological innovation and imported practices from abroad. They introduced changes focused on taking control every aspect of production and prioritized efficiency considerations. Most generally, they emphasized issues related to their engineering expertise.

In Nicaragua, the Cooperative Brigadistas shared a profession as consultants. This background also turned their transformative initiatives to business. Serving as outside advisors and “knowledge brokers” (McKenna, 2010), they introduced “best practices” from abroad, and searched for model and strategy options ignored, neglected or overlooked by their advisees. That the knowledge and tools provided by their profession proved paramount in executing these organizational changes becomes apparent in the contrast with other, non-consultant, CCS and rancher association members. Lacking the consulting tools and knowledge, these competing Cooperative Developmentalists struggled to enact comparable translations.

In the empirical cases of this dissertation, the merger of the carriers’ ideological interpretations and professional background spawned two distinct moral-practical mindsets (see Table 2.1). In Guatemala’s sugar mills, the Apostles of Development relied upon a technocratic approach to Elite Solidarity. This moral-practical mindset combined their Elite Solidarity interpretation of Vatican II Catholic social doctrine and their engineering background. It blended Elite Solidarity’s

authoritarian concern with social transformation and human dignity, with engineering's compulsive preoccupation with efficiency, technological innovation and control in private firms.

In north central Nicaragua's rancher cheese processing rancher cooperatives, the Cooperative Brigadistas drew from a Best Practice Approach to Cooperative Developmentalism. This moral-practical mindset blended their rather conservative interpretation of Sandinismo, Cooperative Developmentalism, with their professional background as consultants. This Best Practice Approach to Cooperative Developmentalism concentrated the Brigadistas' efforts on firm-level changes that would contribute to the construction of a society of new men. These new men would participate in cooperatives of private producers. They would employ superior practices imported from abroad to process their raw products and succeed in a capitalist economy. The Brigadistas, acting as the knowledgeable vanguard, would play a temporary role as leaders. They would retire once the Nicaraguan producers overcame their "backwardness" and caught up to their "level of development."

Table 2.1 Moral-practical mindsets, ideological interpretations and professional backgrounds

	<b>Guatemalan sugar industry</b>	<b>Nicaraguan cheese industry</b>
<b>Moral-practical mindset</b>	Technocratic approach to Elite Solidarism	Best practice approach to Cooperative Developmentalism
<b>Ideological Interpretation</b>	Elite Solidarism	Cooperative Developmentalism
<b>Business-focused Professional background</b>	Engineering	Consulting

***Ideologies and the actions of industrial transformation***

Building on this discussion on ideologies and moral-practical mindsets, this work argues that Vatican II Catholic social doctrine and Sandinismo drove the industrial transformation of the Guatemalan sugar mills and the Nicaraguan cheese processing rancher cooperatives by shaping the actions of top firm decision-makers. Through

the technocratic approach to Elite Solidarity and the best practice approach to Cooperative Developmentalism, these two ideologies motivated and guided the actions of two teams of top firm decision-makers, the Apostles of Development and the Cooperative Brigadistas. As the following sections show, their actions involved first, the creation of new production models and business strategies (i.e. “neomorphism”), and second, the diffusion of these new models and strategies across the agro-industries (i.e. “isomorphism”).

*Neomorphism: the creation of a new production model and business strategy*  
How do new production models and business strategies emerge? What accounts for their particular features and internal coherence? Rao (1998) argues that “new organizational forms are new embodiments of goals, authority, technology, and client markets,” representing “structural incarnations of beliefs, values, and norms.”

Yet surprisingly, the processes surrounding such “entrepreneurship projects” (Paul DiMaggio, 1982) of “neomorphism” receive relatively scant attention in the literature. Padgett (2001) notes that most studies on organizational genesis adopt “consequentialism” as their “epistemology.” They emphasize “performance, and hence death rates, of different forms in different environments” and fail to probe “the dynamics of emergence” of new organizational forms.<sup>22</sup> Padgett concludes that though “our approaches can deal with reproduction, or choice within given alternatives; none can deal with the genesis of the alternatives themselves.” While he overstates the scarcity of theories of organizational form emergence,<sup>23</sup> the point remains relevant: what often begin as explicit efforts to explain neomorphism often descend into either veiled studies of diffusion, or studies on the preconditions of

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<sup>22</sup> Padgett builds on a similar argument presented decades earlier by Stinchcombe (1965). Stinchcombe bemoaned the simultaneous abundance of observations of correlations between different variables (e.g., literacy) and the rate of founding of new organizational forms abounded, and absence of “direct evidence of the intervening process.”

<sup>23</sup> Some exceptions to Padgett’s edict: Rao (1998) nonprofit consumer watchdog organizations (CWOs); DiMaggio’s (1982) Boston “high culture” organizations (Boston Museum of Fine Art and Boston Symphony Orchestra); Westney’s (1987) Japanese police, newspaper and postal service. Also, see the recently published volume edited by Powell & Padgett (2012)

model emergence. The process of creation is largely overlooked in the neoinstitutional,<sup>24</sup> organizational ecology<sup>25</sup> and strategic management literatures,<sup>26</sup> among others.<sup>27</sup>

Given this theoretically barren landscape, this dissertation proposes an explanation that traces the process through which ideologies and moral-practical mindsets account for neomorphism. The explanation builds on the cognitive theory of management (Daft & Weick, 1984; Porac & Thomas, 1990) and the strategic choice theory of industrial relations (Kochan et al., 1986) to account for the creation of new production models and business strategies. Consistent with these theories, it recognizes that to plan and devise new models and strategies, firm decision-makers interpret their environments, the role of their organizations in those environments, and their own role in the organizations. In this dual process of interpretation and construction, the decision-makers draw upon their “ideologies” and “interpretive frameworks.” As Kochan, Katz and McKersie (1994) explain, “Changes in the external environment induce employers to make adjustments in their competitive

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<sup>24</sup> For instance, in the neoinstitutional tradition, Dobbin & Dowd (2000) claim to study how managers in the railroad industry devised new business models in the face of changes to antitrust policy in 1897. But in reality, rather than focusing on the process of development of their so-called “finance” and “predatory” models, most of their account centers on the eventual victory and diffusion of the former model.

<sup>25</sup> Haveman (1993), for example, relies on the common ecological explanations of legitimacy and competition to develop a set of preconditions for form emergence and diffusion, but never elaborates on how particular forms emerge. Other organizational ecology studies facing similar limitations include Baum & Haveman (1997), Deephouse (1999), McKendrick, Jaffee, Carroll, & Khessina (2003) and Ruef (2000)

<sup>26</sup> On the one hand, approaches emphasizing industry structure center on preconditions for change, but tend to neglect the process of strategy innovation (Davis & Cobb, 2010; Porter, 1980, 1996). On the other hand, the Resource-based View (RBV) accounts for firm strategy heterogeneity by pointing to the distribution of firm-specific, difficult-to-imitate human, organizational and physical “resources” (Teece et al., 1997; Wernderfelt, 1984), yet largely elides an account of how those resource differences arise.

<sup>27</sup> While this discussion only addresses the neoinstitutional and organizational ecology literatures, the problem haunts other literatures as well. For example, the literature on firm networks highlights the success or failure of efforts to exploit ties and status to enter new, existing markets. But it largely sidesteps accounts of the genesis of those ties or the motivation to explore new markets (Burton, Sorensen, & Beckman, 2002; Jensen, 2003; Phillips, 2002; Podolny, 2001) – for an exception, see Phillips & Zuckerman (2001). The resource dependence theory, which straddles the organizations and strategy literature, similarly focuses on environmental pressures that can generate a range of possible responses (Davis & Cobb, 2010; Pfeffer & Salancik, 1978). But it largely overlooks a description of how actors create those responses.

business strategies. In making these adjustments, the range of options considered are filtered and constrained so as to be consistent with the values, beliefs, or philosophies ingrained in the minds of key decision-makers, or, in some organizations, to reflect the norms that have diffused from founders or senior executives to lower levels and succeeding generations of managers” (12). As I argue, ideologies supply “causal maps,” moral imperatives and aspirations, and standardized practices and tools that guide these decision-makers as they diagnose and grapple with key problems.

However, though the cognitive theory of management and the strategic choice theory of industrial relations coincide in underscoring the role that ideologically-motivated carriers play in shaping firm outcomes, the question that arises is how carriers of a new ideology, distinct from the one that prevails in firms, rise to become top firm decision-makers in firms and industries in the first place? How do these unorthodox ideological carriers, the potential architects of industrial transformations, reach those positions of power?

To address this question, the proposed explanation underscores the role of short-term firm-level shocks that create windows for decision-making infiltration. The argument builds on previous work by Gould (1995) and Padgett (2001). Both suggest that short-term shocks “activate” new ties. Gould brings to the fore the war with Bismarck that galvanized the cross-class ties, formed in Paris during the Haussmann reconstruction, into a revolutionary force in 1871. Padgett, in turns, claims that bankers in 12<sup>th</sup> and 13<sup>th</sup> century Florence resorted to networks from “other domains” when their firms were “in a pinch.”<sup>28</sup>

Drawing on this literature, this work suggests that when cornered by short-term firm-level shocks, owning families may promote relative outsider ideological

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<sup>28</sup> More generally, a broad literature in the organizational and strategy fields emphasizes the importance of firm-level shocks for strategy change. In particular, this literature highlights the pressure on managers to reduce the uncertainty triggered by shocks (Dobbin & Dowd, 2000; Heinrich Greve, 1998; Henrich Greve & Taylor, 2000; Porac & Thomas, 1990).

carriers to influential decision-making positions. As Chapter Three describes, in Guatemala the consistent decline in production and rise in labor unrest at one of the industry's mills, Tajumulco,<sup>29</sup> led the owning family to offer management positions to the innovative Apostles of Development. These Apostles would transform the mill. Chapter Four similarly shows that in Nicaragua a set of dairy rancher cooperatives, including Concepcion and San Cristobal, encountered severe difficulties as economic conditions worsened and Sandinista state-owned milk processing plants sharply reduced their raw milk demand in the late 1980s. These cooperatives, led by a small local rancher elite, entrusted a team of Finnish Cooperative Brigadistas to transform their organizations.

However, though instrumental in promoting the ideological carriers to top decision-making positions, firm-level shocks alone did not ensure the creation and diffusion of new, transformative models and strategies. In both studied cases, other firms faced similar short-term shocks. But lacking the guidance of the Apostles and Brigadistas, they failed to adopt comparable approaches. In Guatemala, labor unrest and volatile production affected the rest of the mills in the sugar industry, forcing many of them to open their doors to newcomers. Yet, only at Tajumulco did the widespread organizational changes arise. Similarly, in Nicaragua other rancher associations faced the same collapsing market as Concepcion and San Cristobal. But they found few outsiders with the ideological motivation and professional skills to offer guidance. As a result, they stagnated or collapsed. The contrast between Tajumulco in Guatemala, and Concepcion and San Cristobal in Nicaragua, on the one hand, and these similarly troubled firms, on the other, highlights the crucial role played by ideologically-driven Apostles and Brigadistas. Relying upon their particular moral-practical mindsets, they created the new production models and business strategies at these original firms.

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<sup>29</sup> Throughout this dissertation, I have changed the names of all firms and individuals to protect their anonymity.

In the process of neomorphism, the Apostles' and Brigadistas' accounts, actions and new production models and business strategies bespeak the influence of ideology and moral-practical mindsets. First, the Apostles of Development and Cooperative Brigadistas patterned their actions in accordance with the technocratic approach to Elite Solidarism and the best practice approach to Cooperative Developmentalism, respectively. In Guatemala, the Apostles hierarchically centralized control of production and laid particular emphasis on efficiency and productivity growth. They also unilaterally introduced improvements in labor conditions for cane cutters. In Nicaragua, the Cooperative Brigadistas took up residence in the isolated dairy-producing rural locations, integrated medium- and small-sized producers into cooperatives, and educated these "new men." Then, they replaced traditional production technology with sophisticated ranch and processing equipment, and opened new markets.

Second, the Apostles' and Brigadistas' accounts of their creative endeavors corroborate the observed effect of ideology on their actions. In interviews and written documents, the Apostles of Development and Cooperative Brigadistas justified their actions by explicit or implicit references to their shared ideologies. In Guatemala, the Apostles consistently referenced their efforts to promote the common good and uphold human dignity. In a number of instances, they even quoted Papal Social Encyclicals to prove their ideological loyalty. In Nicaragua, written documents left behind by Cooperative Brigadistas and evaluations conducted by their foreign aid agencies underscored their concern for reducing rural poverty, preference for cooperative organization, and support for Sandinismo. In interviews, the Brigadistas, their allies and some of their beneficiaries further acknowledged their allegiance to the Sandinista priorities.

Finally, the new production models and business strategies, and their internal coherence, corroborate the role of ideology. As the institutional literature in industrial relations and high-performance work organization suggests, firms can perform the same work by deploying a variety of practices and models (Appelbaum

& Batt, 1994; Osterman, 1994, 2000; Piore, 1990). Labor conditions, technologies, production processes and business strategies vary across different models encompassing distinct bundles of internally coherent practices. The crudest typology distinguishes between two models: “high-road” models that deliver economic and social gains, and “low road” models that can remain competitive without benefitting workers and other firm stakeholders. More elaborate typologies introduce a range of models with their concomitant implications for labor (e.g. Appelbaum and Batt 1994). Notably, the characteristics of those practices and the internal coherence of the organizational models reflect different understandings of the production process (Herrigel, 2007; Piore & Sabel, 1984).

Building on these insights, this work posits that ideologies and moral-practical mindsets can mold those understandings of production.<sup>30</sup> The features of the new models and strategies may embody the value postulates of the motivating ideologies, as filtered through the moral-practical mindsets of the ideological carriers. The coherence – as explained by the model architects – across labor and employment practices, work organization, technological choices, and products and markets can reflect the moral priorities of the organizational architects. In the studied cases, the distinctiveness and ideological roots become evident in contrasts drawn with models and strategies in comparable firms.

In Guatemala, the Apostles of Development created an unorthodox model and strategy whose internal logic can only be understood by reference to Vatican II Catholic social doctrine and the Technocratic Application of Elite Solidarism. For example, as Chapter 3 expounds, in the 1970s Cold War context in which most owners and managers in other Guatemalan mills favored repression and a cost-cutting approach, and where state regulation was largely absent, the Apostles of Development introduced improvements in the material conditions for most workers

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<sup>30</sup> Evidently, as the industrial relations literature notes, other variables, such as state regulatory policies or global buyer compliance codes, affect the characteristics of production models and business strategies as well.

at Tajumulco. Even as guerrillas and labor unions threatened their industry's continued production, the Apostles raised wages, improved living arrangements on plantations, and provided workers with proper meals, in the spirit of Elite Solidarism. Similarly, in an industry in which mechanization of cane cutting indisputably offered enhanced efficiency and lower costs of production, especially in the flat fields of coastal Guatemala, the Apostles chose to maintain a labor-based system of plantation production. As *the* Apostles of Development, their calling to reduce poverty and avoid the social dislocation stalled mechanization. While economically profitable, mechanization would produce unacceptable disruptions in cane cutters' livelihoods.

In Nicaragua, the Cooperative Brigadistas drew upon Sandinismo and the best practice approach to Cooperative Developmentalism in devising the new model and strategy. For example, as Chapter 4 details, in the spirit of Cooperative Developmentalism, they expanded the cooperatives, despite the vocal opposition of most ranchers dismissive of Sandinismo, the waning support of the neoliberal governments of the 1990s, and the numerous risks associated with this organizational form. The processing cooperatives they created in Nicaragua faced uncertain economic prospects. During the 1990s and early 2000s, they lacked the type of state protection and support common in other countries, and faced increasing competition at home. The Brigadistas also had to contend with the low education levels and limited skills of rural workers more suited to primary production. In fact, the human capital limitations were so acute that many rancher associations in Nicaragua, constrained by their lack of managerial capacities, continue to focus on raw milk production despite a growing international demand for Nicaraguan cheese.

*Isomorphism: the diffusion of a new production model and business strategy*  
Neomorphism, however, need not entail isomorphism and widespread industrial transformation. Indeed, the diffusion of new, more profitable production models and business strategies is often fraught with difficulties that perpetuate cross-firm

variation. As the institutional literature on industrial relations and high performance work (HPWO) organizations suggests, firms with different mixes of practices (e.g. high road and low road approaches) often coexist in time and space, even when the HPWOs and high road models prove more efficient or profitable.<sup>31</sup> As a result, one of the central questions in this literature is why HPWOs and high road models have failed to diffuse more broadly.

Four prevailing explanations for the limited diffusion of HPWOs and high road models curry favor. First, because full-fledged adoption of HPWOs and high road models is costly, most firms adopt the new practices piecemeal. But, as studies have shown, the returns from piecemeal adoption are unimpressive, leading firms to abandon these experiments prematurely (Kochan et al., 2013).<sup>32</sup> HPWOs and high road models prove much more profitable when adopted wholesale, but few firms are willing to tackle the full range of organizational changes required (Ichniowski, Shaw, & Prennushi, 1997; MacDuffie, 1995).

Second, at least in the United States, the absence of an institutional framework to support adoption of HPWOs and high road models makes low-cost alternatives more attractive. Kochan & Weinstein (1995) offer one example of how this “hostile” United States environment limits diffusion: “the shortcomings of the public education system and the paucity of publicly funded training programs have forced firms [adopting transformed IR/HR systems] to either fully internalize the costs of skill upgrading or to turn to the external market to meet their new labor requirements...” (26). More generally, these authors conclude that “the absence of government support for a transformed IR/HR system produces greater variation, quality, and partial diffusion” (27).

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<sup>31</sup> Studies examining the varied consequences of HPWOs across different firm outcomes build on this observation to select their cases (Ichniowski et al., 1997; MacDuffie, 1995; Osterman, 2000).

<sup>32</sup> However, in contrast to this prevailing view, Osterman (2000) argues that many firms have found it in their best interest to adopt only pieces of the HPWO model. Specifically, he suggests that they have adopted the work arrangements of HPWOs but not the practices delivering the promised “mutual gains” for workers.

Third, new HPWOs and high road models often encounter opposition within firms from different coalitions. Sometimes, opposition originates from “the fears of union leaders regarding the role that they as individuals, and the union as an institution, will play in the restructured workplace” (Kochan et al., 1986, xv). The introduction of high road practices requires relations of trust between management and workers that are not always present in firms (Ichniowski et al., 1997). In other instances, “holistic change” may be introduced with full senior management support, but without the involvement of middle level managers, supervisors and non-management employees. This can create opposition among the excluded factions (Appelbaum & Batt, 1994). Finally, often managers and workers have invested skills and work relationships that would have to change with the new practices, further inciting opposition (Ichniowski et al., 1997)

Fourth, and lastly, often management is unaware of the range of changes required. As Kochan, Katz and McKersie (1994) explain, managers may lack the requisite knowledge to “make complementary changes in managerial practices and production methods, and without such changes in management practices, change in work practices or labor-management relations has yielded limited payoffs” (xiv). Appelbaum and Batt (1994) echo this view, claiming that “managers themselves are often uncertain as to what is required to transform the production system to achieve continuous improvement in quality and efficiency” (148).

In addition to the institutional industrial relations literature on HPWOs, the neoinstitutional literature in organizational sociology also suggests that diffusion is anything but natural. This latter literature underscores that legitimacy, contention and power struggles shape the extent of diffusion of new organizational forms.<sup>33</sup> In

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<sup>33</sup> Other literatures address additional constraints. For instance, the network literature suggests that firm ties and status similarly place boundaries on the extent of isomorphism. Influenced by such foundational studies as Granovetter (1983), Burt (1992) and more recently, Podolny (2001), this literature underscores the importance of ties in transmitting information, and status in revealing firm reputation. In his study of commercial bank entry into investment banking, Jensen (2003), for example, highlights the importance of these characteristics in shaping firm strategy He concludes that because “market ties and network status are transferable resources,” they may “represent an

this vein, DiMaggio and Powell's (1983) seminal work described three distinct isomorphic processes. First, coercive isomorphism resulted "from both the formal and informal pressures exerted on organizations by other organizations upon which they are dependent and by cultural expectations in the society" (150). Second, mimetic isomorphism involved imitation across organizations in response to uncertainty. And third, normative isomorphism was driven by professionals struggling to define the conditions and methods of their work, to control 'the production of producers,' and to establish a cognitive base and legitimation for their occupational autonomy" (152). In all these processes, influential actors, such as the professions, the state and other organizations in the organizational field, conferred legitimacy on new organizational forms to overcome barriers to diffusion (Paul DiMaggio & Powell, 1983; Meyer & Rowan, 1977).

However, more recent neoinstitutional studies underscore the agency and conflict that accompany these processes of isomorphism. For instance, in their study of the post antitrust US railroad market, Dobbin and Dowd (2000) argue that "the business model that reigns at any given time represents only one of several possible models that firms could have embraced" (633). The adoption of a particular model results from a "social process" in which selection of an "optimal" model is "shaped by the attempts by [different groups] to advance their different interests via persuasion and coercion."

Ingram and Rao (2004) also depict the political struggle involved in the replacement of independent retailers with chain stores. The enactment and repeal of anti-chain store laws spawned opposing social movements and interest groups that employed differing tactics. The case contradicts "explanations from economic history" that portray "rationalization as an inevitable response to efficiency opportunities presented by advances in transportation and communication technologies." It

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important base for market entry." Firms with different market ties and network statuses will likely pursue different diversification strategies.

suggests that isomorphic processes may often be “stalled, or even derailed, by resistance from those who do things the traditional way.”

In discussing isomorphism and the industrial transformations of the two studied industries, this dissertation builds on the institutional industrial relations literature on HPWOs and on this more recent neoinstitutional literature. In the Guatemalan sugar mills and Nicaraguan cheese processing rancher cooperatives, the original organizational experiments delivered substantial benefits for owners. For example, in Guatemala the introduction of the new model and strategy by the Apostles of Development at Tajumulco led to unprecedented production growth. Following years of declining output, Tajumulco quadrupled its production in a mere three years, becoming the industry’s top producer. Two of Nicaragua’s original cheese processing cooperatives, Concepcion and San Cristobal, exhibited a similar pattern. After they set up an efficient milk collection arrangement by building small cooling centers and new roads throughout the territory, the Cooperative Brigadistas upgraded their processing facilities. They introduced imported technology and laboratories. In a time of declining raw milk prices, the new plants offered Concepcion and San Cristobal producers the option of producing export cheese and accessing new, high standard markets.

Yet, as neoinstitutionalists such as Ingram and Rao (2004) suggest, opposition by, among others, traditional business elites often hampers isomorphic processes. These elites may undermine the legitimacy of the innovations, regardless of their efficiency. In the studied cases, such criticism of the new models and strategies arose among sugar barons and cattle ranchers. Their rejection initially stalled isomorphism and eroded the legitimacy of the new organizational forms.

At least part of their opposition rested on barons’ and ranchers’ commitment to hegemonic ideologies deeply critical of the Apostles’ and Brigadistas’ approaches. In the highly polarized Guatemalan and Nicaraguan contexts of the 1980s and 1990s, Vatican II Catholic social doctrine and Sandinismo elicited visceral responses

against boundary crossers like the ideological carriers. In Guatemala, economic results notwithstanding, other mills largely refused to apply the practices of the Tajumulco model and strategy. Sugar barons and managers at other mills pivoted from initial amused condescension to open and aggressive hostility after the Apostles – which they saw as a ragtag team of naïve “communists” – introduced the new practices, including improved labor conditions for indigenous cane cutters. The innovations, according to some of these traditional sugar barons and managers, threatened to subvert their control over the workforce.

A parallel conservative reaction swept through much of the Nicaraguan cheese industry following the introduction of the Concepcion and San Cristobal innovations. In post civil war Nicaragua, fiercely conservative cattle ranchers in the strongly anti-Sandinista and pro-Contra departments of Chontales and Boaco shuddered at the prospect of joining cooperatives. Associated with the Sandinista regime, cooperatives evoked painful memories of war. As armed units within the Sandinista army, Sandinista cooperatives often fought against many of these Contra producers. The organizational form, with its emphasis on cooperation, also challenged a deeply rooted individualist tradition among ranchers. As a result, the model and strategy triggered a vocal opposition that curbed its diffusion.

Crucially, in both cases these traditional elites could maintain their opposition because their low-cost alternative models were still attractive. As the institutional literature in industrial relations and HPWOs would suggest, without government policies or other interventions to block off this “low road,” elites lack the necessary incentives to transform their production models and business strategies. Unsurprisingly, in the studied cases, neither the Guatemalan or Nicaraguan governments introduced institutional changes supportive of the new models and strategies.

Given this hostile environment, how did the new production models and business strategies diffuse from Tajumulco in Guatemala, and Concepcion and San Cristobal

in Nicaragua, to other firms? To address this question, the proposed argument advances the concept of a hegemonic crisis as a pre-condition for diffusion and industrial transformation in such unlikely contexts. Hegemonic crises arise when new organizational field entrants credibly challenge the economic and political positions of elite organizations. Often emerging in times of economic distress for incumbents, the challenge usually forces traditional elites to reevaluate their hegemonic strategies and models.

As Silbey's (1998) has argued, during periods of "ideology" subordinate and dominant groups face off over the "dominant meanings" and "justice claims" suggested by their respective ideologies. These struggles may involve individuals, families, political factions and, as Stinchcombe (1965) notes, organizations. In established organizational fields, Silbey's periods of ideology often stem from challenges by new entrants. Dismissive of the prevailing "norms by which organizations change their relative ranks" (Stinchcombe, 1965), these new entrants dispute the hegemonic ideologies of organizational elites.

Their challenges may lead to "unlimited means of organizational competition," plunging organizational fields into a Hobbesian state of nature, as Stinchcombe (1965) suggests. But they may also trigger the healthier alternative of organizational innovation, spurred by a Gramscian reaction in which "the traditional ruling class" (and its organizations) "reabsorbs the control that was slipping from its grasp..." (Gramsci, 1971). What usually ensures the survival of the elite and its organizations, according to Gramsci, is the decision of the "traditional ruling class, which has numerous trained cadres," to change "men and programs..." In executing these necessary changes, elites and their "new men" usually rely upon subordinate ideologies. These subordinate ideologies, as interpreted by the new men, inspire

new programs. The new programs, in turn, allow the traditional ruling class and its organizations to survive and retain economic and political control.<sup>34</sup>

The Guatemalan sugar and Nicaraguan cheese industry transformations illustrate the role of hegemonic crises in encouraging adoption of new “programs” through isomorphism. In Guatemala, sugar mills, the incumbent elite organizations, faced a growing challenge in the economically turbulent 1970s from a growing federation of mill worker unions, a national-level peasant organization and a guerrilla movement at the peak of its strength. These challengers articulated the conflicts inherent in the elite’s prevailing hegemonic ideology, particularly in their treatment of workers. Similarly, in Nicaragua Salvadorian cheese merchants and large Managua-based industrial dairy plants sourcing raw milk from the north central region threatened the position of ranches as local elite organizations. The cheese merchants and the industrial plants enslaved the ranchers to unpredictable and volatile raw milk demand, highlighting the limitations of their prevailing strategy and model. In both cases, the challengers compelled the traditional elites to reevaluate their organizational “programs,” thereby creating an opening for diffusion.

Notably, while proving necessary to overcome opposition to new production models and business strategies and generate interest among the traditional elite, hegemonic crises in no way assured isomorphism or industrial transformation. For instance, unions, peasants and guerrilla forces in Guatemala also threatened the economically-troubled cotton and coffee industries. Yet unlike the sugar mills, firms in these comparable industries persisted in their ways, failing to adopt new organizational forms. Similarly, while all ranchers in north central Nicaragua faced a common context of hegemonic crisis, only a handful of rancher associations adopted the cooperative cheese processing model.

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<sup>34</sup> The role of crisis in encouraging diffusion has also been recognized by some authors in the institutional industrial relations literature. Appelbaum and Batt (1994), for instance, identify crisis as one of the three conditions that may enable widespread adoption of new high road models in contexts lacking the necessary institutional support. By rendering prevailing low cost models unworkable, they block the low-road.

The hegemonic crises raised Tajumulco in Guatemala, and Concepcion and San Cristobal in Nicaragua, to the status of “organizational archetypes” (Scott, 2008). They offered a “new program,” in Gramsci’s terms, serving as “models for individual actor roles and collective actors and organizations.” They provided templates of “rules, administrative systems and accounts of activities” (Scott, 2008) for other firms to replicate through mimetic isomorphism.

Yet, even in contexts of uncertainty and despite the existence of these organizational archetypes, mimetic isomorphism proved challenging. On the one hand, as the institutional literature on industrial relations and HPWOs would suggest, opposition among internal coalitions sometimes emerged in potential adopters, most notably in Guatemala. As Chapter 3 describes, disgruntled workers skeptical of the new approach and managers vested in the traditional approach obstructed the process of mimetic isomorphism across sugar mills.

On the other hand, as a literature on organizational ecology emphasizes, resource constraints also threatened mimicry in uncertain times.<sup>35</sup> According to this literature, new organizational forms require specific resources, such as a skilled labor force, that are often in short supply. Competition for those resources among would-be adopters thus slows processes of isomorphism (Carroll & Hannan, 1989; Haveman, 1993). The observation applies particularly to north central Nicaragua, where scarce managerial resources constituted the main break to imitation among rancher associations. As Chapter 4 details, despite the example set by Concepcion and San Cristobal, rancher associations struggled to emulate them, their leaders lacking the necessary managerial knowledge and administrative skills to reconstruct the new model and strategy. The finding mirrors the argument in the institutional literature in industrial relations and HPWOs according to which

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<sup>35</sup> A large number of ecological studies shed light on the resource constraints to diffusion of new organizational forms, including Baum and Haveman (1997), Ruef (2000), Deephouse (1999), and Hannan and Freeman (1984).

management is often unaware of the changes required for the new model to become workable.

In compensating for the limited extent of mimetic isomorphism in the two cases, the figure of the original architects of the new model and strategy, the ideological carriers in the two industries, looms large. The Apostles of Development in Guatemala and the Cooperative Brigadistas in Nicaragua played a pivotal role in fostering diffusion, largely through normative channels. This argument echoes a growing neoinstitutional literature. This literature suggests that in some cases firms, led by ideological carriers, will actively pursue diffusion of their practices.<sup>36</sup>

But why would ideological carriers engage in such active diffusion? After all, as an influential strategy literature emphatically argues, firms will “naturally” resist sharing the practices and resources that set them apart. Above all else, firms will strive to differentiate themselves from the rest, carving out special positions that shower them with monopolistic or Ricardian rents. In doing so, they will discourage diffusion of profitable resources and practices (Porter, 1980; Teece, Pisano, & Shuen, 1997; Wernderfelt, 1984).

The proposed argument centers on how ideological carriers’ substantive rationality, particularly their ideologies and moral-practical mindsets, affects their reasons for diffusion and the scope of their diffusion efforts. First, ideological interpretations provide a “causal map”, supplying a set of reasons and justifications for diffusion. The empirical cases elucidate this point. In Guatemala, Vatican II Catholic social doctrine’s principle of human solidarity and Christian brotherhood portrayed inter-firm sharing and collaboration as a self-evident solution consistent with the Apostles of Development’s interests. The contrast is stark with the industry’s

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<sup>36</sup> Recent neoinstitutional accounts recognize that to overcome opposition and encourage diffusion, supporters of a new model must mobilize. Some authors point to pressures by coalitions within organizations, across firms in the same industry and across industries as drivers of model selection and diffusion (Dobbin & Dowd, 2000; Dobbin & Sutton, 1989). Others focus on the role of skillfully organized multi-actor coalitions (Ingram & Rao, 2004).

previous competitive approach which, consistent with the strategy literature, disparaged sharing and collaboration as irrational and counterproductive.

In Nicaragua, in turn, Cooperative Developmentalism's vision of a mixed economy, rural industrialization and close producer cooperation prescribed strong cheese processing rancher cooperatives. As the vanguard of Sandinismo, Cooperative Brigadistas fulfilled this vision by promoting sharing among rancher associations and diffusing the Concepcion and San Cristobal model and strategy. The approach fundamentally contradicted the frontiersman-like devotion to individual pursuit of economic profit prevalent among most ranchers.

In addition to playing a role as causal maps, the Apostles' and Brigadistas' ideologies and moral practical mindsets assumed a taxonomic role. They largely determined the *scope* of diffusion by drawing distinctions between enemies and allies, forging coalitions or creating cleavages. Among allies, they encouraged collaboration and joint work. With foes, they severed all ties. As Sewell (1985) has argued, ideologies "inform... the nature of social cooperation and conflict." Gould (1995) has similarly claimed that ideologies "render a schematic image of the world in terms of collective actors... [They map] individuals into collectivities, both protagonists and foes..." Different ideologies accord "different kinds of social ties... dramatically different amounts of salience..." Along similar lines, Blyth (2007) has written that "ideas make collective action and coalition building possible..." They "build bridges... through the redefinition of agents' interests, and define the common end of action."

The empirical cases evince this taxonomic role. In Guatemala, Elite Solidarity created two distinct camps: the "electi," and the rest. It restricted collaboration to the "electi," a group composed of mill barons and managers. In their mission, the Apostles defied the mills' conflict-ridden relations and actively encouraged diffusion of their practices among these peers. At the same time, Elite Solidarity cast as foes all other non-"electi" actors, including "communist subversives" such as unions and guerrilla forces. More surprisingly, the antagonist net also caught landowners,

perceived as paternalistic anachronisms unfit to serve as electi. The Apostles steamrolled this group, composed mostly of large- and medium-sized sugarcane plantation owners, out of the sugar industry

The case of the Nicaraguan cheese processing cooperatives also highlights the consequences of ideological taxonomies for isomorphism. The Cooperative Brigadistas and their allies focused on developing a strong cooperative movement. They targeted only existing rancher associations in their diffusion campaigns. At the same time, they excluded individually-owned firms. They pursued this diffusion strategy even though, relative to individually-owned firms, processing cooperatives entailed higher costs and risks.

In promoting diffusion and industrial transformation, the Apostles and Brigadistas largely resorted to a normative “diffusion apparatus.” A diffusion apparatus – an analogue to Gramsci’s “ideological apparatuses” – encompasses the set of institutions and organizations built, redesigned or redeployed to promote close cross-firm collaboration and isomorphism. It includes business associations, professional networks, personnel mobility across firms, and joint industry-wide projects, among others.<sup>37</sup> In Guatemala, the Apostles created the diffusion apparatus by reviving the neglected practice of organized field visits, encouraging cross-mill personnel mobility, and creating a network of industry-wide organizations, with the business association at its core. In Nicaragua, the Cooperative Brigadistas created a matching diffusion apparatus. They initially intervened directly in other rancher associations, replicating pieces of the cheese processing cooperative model. But

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<sup>37</sup> These institutions and organizations have received significant attention in the literatures on the sociology of organizations and the political economy of business interests. In the sociological literature on organizations, for instance, authors emphasize isomorphism-producing organizations such as state regulatory agencies, interlocking directorates, consulting agencies, and professional and trade associations. They also point to institutions such as different types of cross-firm transactions (e.g., formal contractual relations), professional networks and informal ties across firm personnel (Paul DiMaggio & Powell, 1983; Scott, 2008; Tolbert & Zucker, 1996). In the literature on the political economy of business interests, in turn, authors focusing on firm collective action similarly underscore the role of developmental business associations, state-firm relations, institutions fostering collective learning and firm capabilities, and different types of product standards (e.g., quality) (R. Doner & Schneider, 2000; McDermott, 2007; Perez-Aleman, 2011).

more importantly, they shared their experiences with other aid agencies, which employed them as a template for their aid programs. They also indoctrinated Concepcion and San Cristobal cooperative members and professional staff on the need to collaborate, prompting sharing initiatives. And lastly, they promoted the creation of cross-cooperative associations.

Crucially, through these apparatuses of diffusion, the Apostles and Brigadistas overcame two of the central barriers to adoption highlighted by the institutional literature on industrial relations and HPWOs. First, they allowed managers and producers to acquire a detailed understanding of the new production model and business strategy. Field visits, activities initiated by cross-industry agencies and direct interventions by the Apostles and Brigadistas generated a wealth of available information for firm elites and managers. This was especially significant in Nicaragua, where managerial skills remained scarce.

Second, in both cases, the apparatuses of diffusion largely promoted the diffusion of the new production model and business strategy as a mutually reinforcing bundle of practices. The Apostles and Brigadistas spent considerable time instilling in other industry elites and managers the importance of introducing the entire organizational model. This effort largely foreclosed the possibility of piecemeal introduction of the practices. It also triggered the type of rapid – as opposed to slow and cautious – industrial transformations observed in the two cases.

Thus, through the normative channels of their apparatuses of diffusion, the Apostles and Brigadistas succeeded, to varying degrees, in diffusing their models and strategies, and promoting the industrial transformations of sugar mills and cheese rancher cooperatives. In Guatemala, all mills in the sugar industry adopted the Tajumulco approach. In Nicaragua, at least nine new rancher associations have upgraded into cheese processing, replicating the experience of San Cristobal and Concepcion.

## Summary

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This chapter has presented the central theoretical contribution of this dissertation, focused on the role of ideology as an explanation for industrial transformation. It begins with a discussion of prevailing theories of industrial transformation, evaluating them as explanations for the two cases of this dissertation, and underscoring the need to incorporate firm agency into their accounts. Given this need, the chapter develops the proposed explanation for industrial transformation, which centers on the role of upgrading firms. The proposed explanation, which works independently but likely also complements standard accounts, suggests that ideology accounts for the transformative action of top firm decision-makers.

In crafting this account, the chapter first develops a model of translation from ideology to action, generally conceived, among so-called “ideological carriers.” The model, which traces how ideological carriers enact the general principles of ideologies, reveals the intervening role of “moral-practical mindsets.” Moral-practical mindsets combine the moral and political imperatives and aspirations of particular ideological interpretations with the knowledge and skills of the ideological carriers’ professional background. By recognizing the intervening role of moral-practical mindsets, the model specifies how the general principles of an ideology drive and shape observed patterns of action.

The chapter then explores the role of ideologies and moral-practical mindsets in shaping the particular set of actions fostering industrial transformations: the creation and diffusion of new production models and business strategies by top firm decision-makers. Using the proposed model of ideological translation, it depicts the processes through which these top firm decision-makers, acting as ideological carriers, first devise and introduce the new production model and business strategy at one or two firms, and then actively disseminate the practices to other firms in their industries.

The empirical cases of industrial transformation in the Guatemalan sugar mills and Nicaraguan cheese processing rancher cooperatives offer an illustration of this explanation. They reveal the profound influence exerted by two ideologies, Vatican II Catholic social doctrine and Sandinismo, on the teams of top firm decision-makers, the Apostles of Development and Cooperative Brigadistas. The Apostles and Brigadistas created the new production models and business strategies that transformed the sugar mills and cheese rancher cooperatives. In drawing from their ideologies to foster these industrial transformations, these Apostles and Brigadistas relied upon their specific moral-practical mindsets, namely the technocratic approach to Elite Solidarity and the best practice approach to Cooperative Developmentalism.