
An ecology of ideology: theory and evidence from four populations

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This paper analyzes the founding rates of two types of Jewish agricultural cooperatives, the moshav and the kibbutz, to show how political ideology intersects with resource requirements to produce competition and mutualism between organizations. These two populations, which share ideology and a resource base, competed with each other. They both enjoyed mutualism with the population of credit cooperatives, which represented a kindred ideology, but relied on different resources. They both suffered competition from the population of corporations, which represented a rival ideology, capitalism.

1. Introduction

All organizations are infused with ideologies, worldviews which include preferences regarding social outcomes, and theories about how those outcomes can be obtained. This is obviously true for social movement organizations, which exist explicitly to promote ideologies. It is also true for other organizations, which may not have the maintenance or promotion of an ideology as an explicit goal, but cannot escape being affected by the ideologies of their participants. Ideology fundamentally influences organizational behavior as it does all forms of human agency, as it determines the baseline models with which individuals confront the social world.

There has been extensive attention to the idea that organization-centered ideologies affect an organization's structure and policies (e.g. Beyer, 1981; Dunbar *et al.*, 1982; Baron *et al.*, 2001), and occasional recognition of the influence of broader ideals, particularly those regarding managerial authority relationships (Bendix, 1956; Guillen, 1994). It is less common for organizational researchers to consider political ideologies, which are ideologies that transcend specific organizations and the rules of organizing, and extend to broader social, economic and political systems. Political ideologies, such as capitalism, socialism, Catholicism or Zionism, may affect organizational structures and practices, as, for example, when utopian socialist ideals manifest themselves in workplace democracy in cooperative organizations (Rothschild-Whitt, 1979).

Just as significantly, political ideologies have implications for inter-organizational relations, as they typically include values which apply to others' behaviors and organizations. Again, cooperativism is a convenient example, as cooperatives all over the world recognize some version of the Rochdale Principles of Cooperation, which

include an admonition to help other cooperatives in the interest of developing a society of cooperatives. Not all ideologies present such explicit directions with regard to inter-organizational relations, but even the giants of western capitalism, organizations that espouse nothing beyond a quest for profit, interact more smoothly with others that share their structures and values, and influence others to adopt those things (DiMaggio and Powell, 1983).

Recognition that organizations are key mechanisms for the maintenance and spread of ideology is a promising step for organizational theory, especially in light of recent criticisms that the field has lost sight of its mission to identify the role of organizations in society (Hinings and Greenwood, 2002). This promise is particularly relevant to organizational ecology, given that field's methodology for analyzing the rise of organizational forms (and consequently, the ideologies they represent), and its own motivating assumption that organizational forms represent the bedrock of societal capability (Hannan and Freeman, 1977). Indeed, a number of recent ecological analyses have examined the ideological bases of inter-organizational dynamics (Minkoff, 1995; Wade *et al.*, 1998; Ingram and Simons, 2000; Barnett and Woywode, 2003).

This paper follows those ecological efforts and has a specific purpose of resolving an ambiguity in the emerging ecology of ideology. Two different explanations have been developed as to how similarities of ideology affect interdependence between organizational populations. The *ideological affinity* position holds that organizations with similar ideologies will be sympathetic to each other, and will help each other as a way of forwarding their own ideological ends. The resulting prediction is that there will be mutualistic relationships between populations with similar ideologies (Ingram and Simons, 2000). The *niche overlap* position holds that ideological similarity increases the overlap among the resource profiles (which include more ephemeral resources such as legitimacy and identity) of two organizational populations, and thereby contributes to competitive relations between them (Barnett and Woywode, 2003). We develop a contingent argument that incorporates both the idea that ideological similarity produces affinity, and that it may increase competition. The key contingency is the populations' location in resource space. When they occupy similar roles in that space, that is, when they rely on some of the same key resources, then the main effect of their ideological similarity is to evoke competition. When they do not rely on the same key resources ideological similarity will manifest itself in mutualism born of affinity.

This contingency effectively explains the set of pre-existing results on the interdependence between ideologically similar organizational populations. More importantly, we use it to develop predictions regarding the interdependence between a number of populations in twentieth-century Palestine and Israel. The bases for the analysis are the founding rates of two types of agricultural cooperatives, moshavim and kibbutzim. These ideologically similar organizations rely on similar sets of resources (land, customers, potential participants), and they compete with each other. Both moshavim and kibbutzim have mutualistic relationships with the population of credit cooperatives, which share their ideology but have a different resource base. Additionally,

both moshavim and kibbutzim suffer competition from a third group of organizations, capitalist corporations. This last result indicates the flip-side of the ideological affinity argument, a negative relationship between populations that represent rival ideologies.

2. Ideological similarity and organizational interdependence

2.1 *Ideological affinity as a source of mutualism*

As worldviews, ideologies influence their adherents' evaluation of the desirability of the social arrangements that they encounter, including organizations. These evaluations translate into endorsement and support, or rejection and discouragement for organizations, based on the consistency of their structures, policies and goals with a focal actor's ideology. By supporting organizations that represent their ideological values (or values that are sufficiently similar), and discouraging those that represent rival values (those which are dissimilar and opposing), actors push the social world towards their ideal.¹ For some organizations, such as those that spearhead social movements, the pursuit of ideological goals can be expected to weigh very heavily relative to other organizational interests such as survival or revenue. Even organizations that emphasize non-ideological interests, however, frequently encounter opportunities to further their ideologies at acceptable costs to their other interests.

Organizations may influence others that represent rival ideologies by making the provision of resources to those others contingent on change in specific elements of their structures, a process that we have called ideological coercion (Simons and Ingram, 1997). Rothschild and Whitt (1986) describe a free high school that created bureaucratic offices to handle government relations and a free clinic that had to temper the information it provided to clients in order to pacify granting agencies. The victims of ideological coercion often view the concessions they are forced to make as inconvenient, but not fundamentally threatening to their core beliefs—the free clinic, for example, continued to supply pamphlets that offended granting agencies 'on the sly'. In the long run, such strategic decoupling of organizational behavior and ideology is risky. It is well known in human psychology that behavior and belief are reciprocally

¹All political ideologies have as a goal the diffusion of some set of values. This is true even of ideologies that maintain a principle of exclusivity in terms of their core group of adherents. Consider the examples of Judaism, which in contrast to most other religions discourages conversion, and the ideology of the moderate socialist movement associated with the kvutza (early, small versions of the kibbutz) in Palestine which tried to limit membership to a select group of true believers. Both of these ideologies expected their core groups to act as behavioral exemplars for people outside the group. Jewish people: 'Observe therefore and do them; for this is your wisdom and your understanding in the sight of the peoples, that, when they hear all these statutes, shall say: "Surely this great nation is wise and understanding people"' (Deuteronomy IV 6); Kvutza: 'If the kvutza perfected itself, in terms of standards of work and efficiency and of relationships between its members, others would recognize perfection when they saw it and do likewise' (Near, 1992:56). In both cases, the exclusivity of the core group is not intended to restrict the scope of the ideology, but rather as a strategy towards the goal of spreading certain values beyond the core group.

related, and that over time, identities will evolve to be consistent with actions, even if those actions were undertaken due to external influence (Festinger, 1957). An organizationally equivalent process is illustrated in the case of hired labor on the kibbutz (Simons and Ingram, 1997). In the 1950s and 1960s, kibbutzim came to employ increasing numbers of hired workers, although that practice was inconsistent with their cooperative ideology. They did so partly because of ideological coercion from capitalist banks. Over time, the adoption of hired labor has come to be seen as a 'Trojan Horse' that seeded the erosion of other elements of the kibbutzim's cooperative system of production.

Ideological coercion may also undermine the target organizations by blurring their identities, producing hybrid organizational forms that draw objections from perceivers on all sides (Pólos *et al.*, 1999; Zuckerman, 1999; Barnett and Woywode, 2003). For example, during the 1980s and 1990s many American food cooperatives sacrificed core principles such as democratic management in response to perceived pressure from the external environment (McEvily and Ingram, 2003). The resulting hybrids not only failed to satisfy constituents who wanted managerial efficiency, but also undermined support from traditional sources, particularly cooperatives that maintained democratic principles. For example, the North Country Food Cooperative in Minneapolis, which has adhered to democratic principles, refuses to engage in collective action with other Minneapolis coops that it views as having 'sold out'. It also takes a public swipe at them on its web site, where it claims to be 'the only cooperative grocery in Minnesota which is still collectively managed' (http://www.northcountrycoop.com/About_NCC.htm; 02/28/2003).

Another option to discourage organizations that represent rival ideologies is to refuse to exchange with them altogether. For example, in early twentieth-century Palestine, capitalist printers refused to print socialist newspapers (Daniel, 1989). Still another avenue is for organizations to withhold their own endorsements of, or to influence the state to legislate against, organizations whose ideologies they find disagreeable. Wade *et al.* (1998) showed that breweries were harmed by state temperance laws, which came about partly due to the efforts of organizations such as the Women's Christian Temperance Union.

Organizations have a similarly broad set of options to help those that represent ideologies they'd like to encourage. For instance, the Karma Coop, a food retailer in Toronto, endorses a range of other organizations by allowing them to post on its bulletin board. The organizations thus represented on June 19, 2002 were consistent with the liberal, environmental, and cooperative values espoused by the members of the coop: a communal house, a coop that produces wind power, three yoga studios, and two social movement organizations, one promoting a Peace Festival, the other a protest march on the Canadian House of Parliament. Karma provides direct assistance, in the form of donations in cash or kind, to kindred organizations such as the Ontario Coalition Against Poverty. And it gives explicit recognition in its product policy that patronage can be used to promote ideologically aligned organizations: 'Our decisions to

buy products are also decisions to support those who produce and distribute them' (Kaplan and Burt, 2002: 16).

Ecological evidence in support of these arguments comes from our analysis of the failure rate of Israeli workers' cooperatives, which demonstrated competition from a population representing a rival ideology (capitalist banks) and mutualism with populations representing similar ideologies (kibbutzim and credit cooperatives; Ingram and Simons, 2000). Both these results illustrate the condition upon which the impact of ideological affinity on inter-population relations rests, that one population must have the power to affect the resources available to the other. It is important to maintain a broad understanding of what these resources are, and to recognize explicitly that they may include endorsements, legitimacy, patrons, capital, participants, as well as the sanctity of the identity that an organizational population relies on. The ideological affinity argument is thus represented by these propositions:

Proposition 1: When an organizational population has the power to affect resources of another population with a dissimilar and opposing ideology, it will affect that population competitively.

Proposition 2: When an organizational population has the power to affect resources of another population with a similar ideology, it will affect that population mutualistically.

2.2 *Niche overlap and ideological competition*

In a fascinating study of ideological competition in inter-war Vienna, Barnett and Woywode (2003) make a number of arguments consistent with the position we have outlined: that organizations are influenced by ideologies; that the interdependence of organizations is a fundamental determinant of the rise and fall of ideologies; and that there is sympathy between organizations that represent similar ideologies (what Barnett and Woywode call *esprit de corps*). They differ significantly, however, with regard to their basic prediction regarding the ecological interdependence between organizational populations with similar ideologies. They argue that 'the strongest ideological competition is likely to take place among . . . adjacent [as opposed to distant] ideologies (2)', an apparent contradiction of the propositions above.

They arrive at this prediction by evoking one of the most robust claims of structural sociology, that competition between actors is rooted in their similarity. In general, organizations compete more to the extent they share a common resource 'niche' (McPherson, 1983; Baum and Singh, 1994; Carroll and Hannan, 2000). Barnett and Woywode argue that organizations with more similar ideologies will have greater niche overlap, that ideological similarity brings them into conflict over certain resources. Critically, these resources include the concrete, such as money, customers and participants, and the ephemeral, such as legitimacy and identity. They apply these ideas to three subpopulations of Viennese newspapers, representing ideologies of the left, center and right. Right-wing newspapers might have competed with the adjacent

centrists for readers who were hostile to Marxism, and cartoonists who could caricature Jews. The left-wing papers did not rely on such resources, and consequently have little overlap, and resource competition, with right-wing papers. They may have, however, competed with the center for readers hostile to capitalism, and journalists who feared unification with Germany. Barnett and Woywode find qualitative support for this pattern of competition in the content of the three groups of newspapers, and quantitative support from models of organizational failure that show that right-wing papers increased the failure rate of those in the center, but not of those on the left.

A kindred argument was developed in the social movement literature by Zald and McCarthy (1987). They begin with a sentiment that reflects the logic behind proposition 2 above, that social movement organizations (SMOs) that share the same broad ideologies 'ought to' cooperate to achieve their shared goals. Often they do not, however, because their ideological similarity means that they compete for money and participation from a common set of potential adherents. This problem is particularly intense when resources are scarce (as they often are): 'Under conditions of the declining availability of marginal resources, direct competition and conflict between SMOs with similar goals can be expected to increase' (Zald and McCarthy, 1987: 164). As an example, they cite an 'acrimonious dispute' that arose over fund raising between two closely aligned organizations, the National Association for the Advancement of Colored People (NAACP) and the NAACP Legal Defense and Education Fund. Ecological evidence in support of this argument comes from Minkoff's (1995) analysis of interdependence in a community of liberal SMOs from 1955 to 1985. She finds a varied pattern of interpopulation relationships, including competition between organizations that pursued broadly similar civil-rights agendas, for example the population of African-American SMOs and Women's Rights SMOs after 1969, when resources available to these organizations became scarcer. This position is also reinforced by McPherson's (1983) finding of competition between non-profit organizations that rely on overlapping sets of potential participants.

These arguments can be translated into the following proposition:

Proposition 3: Organizational populations with more similar ideologies will have more competition.

How is proposition 3 to be reconciled with propositions 1 and 2? The key is to recognize that although the ideological affinity and the niche overlap arguments both produce predictions regarding interdependence between organizational populations, they do so by relying on different mechanisms. The former argument considers the congruence of ideological goals; the latter the overlap of resources necessary for organization. Further, neither position denies the basic assumptions of the other. Barnett and Woywode explicitly recognize that similarity in ideologies breeds *esprit de corps*. Similarly, social movement theorists recognize that congruence of goals 'ought to' create mutualism between SMOs, but that reliance on the same resources produces an offsetting motive to compete.

As for the arguments about ideological affinity, they have all been developed and applied with regard to organizational populations that do not rely on the same basic resources. Consider our past finding, consistent with proposition 2, that Israeli workers' cooperatives enjoyed mutualistic relationships with kibbutzim and credit cooperatives (Ingram and Simons, 2000). The workers' cooperatives relied on very different resources than those other two populations. Their potential participants were craftspeople, bus drivers, and industrial workers, not bankers and farmers. The target markets for their outputs were also dissimilar—the workers' cooperatives did not lend money, and they did not sell oranges. Of course there was some resource-overlap between these organizations, and it was probably greater because they shared cooperative ideology. For example, the transportation cooperative Egged and kibbutz Yisrael might compete over the odd lost soul who is willing to work cooperatively, but is unsure as to whether she would rather drive a bus or tend orchards. Egged would presumably face less competition from a capitalist farm, because the set of participants who might be attracted to both of those organizations would be smaller. Nevertheless, the competition between cooperatives of different sectors will typically be negligible, and cannot be expected to overwhelm the positive effect that sympathies born of shared ideology will have on their interdependence.

Reconciling these two views requires explicit recognition of the scope of their main arguments. Particularly, it matters whether or not two organizational populations rely on substantially similar resource pools, in other words, whether there is substantial overlap in their niches. When there is not, ideological goals will be most significant, and populations with similar ideologies can be expected to have mutualistic relations, while populations with dissimilar and opposing ideologies experience competition (propositions 1 and 2). When there is substantial niche overlap, resource competition will be important, and similarity in ideology will increase it, such that populations with more similar ideologies will experience more competition (proposition 3). Furthermore, ideological *esprit de corps* very quickly erodes between populations in similar niches, as even subtle differences between their ideologies pose big threats to the cohesion of their identities [thus the intensely hostile relationships that often exist between pragmatics and zealots of an ideological type (Barnett and Woywode, 2003)]. Therefore, proposition 3 dominates proposition 2 when there is substantial niche overlap between organizations with similar ideologies: the populations will compete. Empirically, 'substantially similar resource pools' will be found between populations that rely on the same output markets (such as newspapers), or the same input markets for some key organizational resource (as civil-rights organizations rely on liberal volunteers and philanthropists).

With this scope condition, propositions 1–3 capture well the existing results on ideological interdependence between populations of organizations. Consistent with proposition 1, competition exists between populations of dissimilar ideology and low niche overlap, such as breweries and temperance unions (Wade *et al.*, 1998), and agricultural/worker cooperatives and banks (Mintz and Schwartz, 1985; Simons and

Ingram, 1997; Ingram and Simons, 2000). Consistent with proposition 2, mutualism exists between organizations with similar ideology and low niche overlap, such as workers' cooperatives and credit cooperatives (Ingram and Simons, 2000), and civil-rights organizations in times of resource munificence (Minkoff, 1995). Consistent with proposition 3, greater competition exists between populations with more similar ideologies when they also have high niche overlap, as with Viennese newspapers (Barnett and Woywode, 2003) and civil-rights organizations in times of resource scarcity (Minkoff, 1995).²

In the remainder of this paper, we apply these arguments prospectively, to make predictions for community interdependence among four populations of organizations in Palestine and Israel. These include two forms of agricultural cooperatives, *moshavim* and *kibbutzim*. As we explain below, these populations have similar ideologies and high niche overlap. We also include two populations with low niche overlap with both *moshavim* and *kibbutzim*: credit cooperatives, who represent similar ideologies to the agricultural cooperatives, and corporations, who represent dissimilar ideologies. Applying the arguments above result in the following predictions:

1. Competition will exist between *moshavim* and *kibbutzim*, and it will be greater between subpopulations that have more similar ideologies (proposition 3).
2. Competition will exist between corporations and *moshavim* and *kibbutzim* (proposition 1).
3. Mutualism will exist between credit cooperatives and *moshavim* and *kibbutzim* (proposition 2).

Following Hannan and Freeman (1989), who argued that interdependence between organizational populations can be identified by examining the effect of the size of one population on the population dynamics of the other, we test these predictions by

²If you consider a two-by-two matrix of similarity/dissimilarity on the dimensions of ideology and resource niche, our predictions cover only three of the four cells. We say nothing about populations with dissimilar ideologies and similar resource bases. In our empirical analysis, and in published work that has explicitly examined ideological interdependence, that cell is empty. Barnett and Woywode (2003) suggest that conflicting forces are at work in this cell: substantial competition over resources offset by a salient rivalry that may act to steel the identities and cohesion of each population. More work is necessary to be confident as to how these conflicting influences will be resolved, but there is some evidence that suggests that they operate at different levels, with competition occurring between organizations in the rival populations, while at a collective level the populations benefit from increased cohesion through the capacity to build institutions. In support of this idea, Ingram and Inman (1996) examined interactions between neighboring hotel populations in Canada and the USA. These populations relied on the same tourism attraction (Niagara Falls) but were subject to different nationalistic ideologies. Ingram and Inman found competition between the two populations, but also documented the influence of their rivalry to promote collective action within the populations which resulted in institutions (national parks) that helped the industry as a whole. Similarly, McEvily and Ingram (2003) found that food cooperatives suffered local competition from for-profit chains in the whole food niche, but responded collectively by establishing institutions to share resources between coops in different locations.

analyzing the founding rates of two populations, moshavim and kibbutzim.³ Neither of these populations has experienced much organizational failure, and neither consists of very large organizations, so founding analysis captures the main process behind their population dynamics.

Despite being more numerous and populous than kibbutzim, moshavim have received relatively little attention from scholars. Here we present the first ecological analysis of this population, and one of very few quantitative analyses of any type. We therefore give particular attention to describing the development and ideology of this population, relative to the kibbutzim, which are better represented in the extant literature. Indeed, we were tempted to exclude the analysis of kibbutz founding completely, partly because we have analyzed that process in another paper with a different theoretical focus (Simons and Ingram, 2003). While the analysis of moshavim alone is sufficient to test all of our predictions, we decided it was useful to also present the kibbutz analysis, as the comparison of ideological interdependencies of two populations demonstrates the robustness of our arguments. Additionally, the presence among the kibbutzim of federations with slightly different ideologies allows us to present a federation-level analysis of kibbutz founding (the first in the large literature on the kibbutz) that generates more specific evidence in favor of Barnett and Woywode's (2003) claim that competition increases as ideologies become more similar.

2.3 *Moshavim and kibbutzim*

The duality of relations between organizational populations that share ideology and important resources is perfectly illustrated by the moshav and the kibbutz. The kibbutz is the slightly older of the two forms, introduced in 1910. For most of its history it was characterized by permanent location in areas of strategic importance, communal production based on a premise of self (as opposed to hired) labor, and communal consumption, including collective child-rearing (Simons and Ingram, 2000). The first moshav, Nahalal, was permanently settled in 1921 in the Jazreel Valley, but was in preparation before World War I. The ideology of the moshav rested on three primary tenets: egalitarian society that was manifested in the principle of self-labor, equal provision of means of production and mutual aid; the restoration of the Jewish people to its homeland and the land, expressed in a return to agriculture; and economic independence which combined a family farm with cooperative marketing and purchasing organizations (Weintraub *et al.*, 1969; Willner, 1969; Klayman, 1970; Baldwin, 1972; Kliot, 1978). The moshav was viewed as a family of families and the founders aspired for a high degree of social interaction, solidarity, mutual aid and equality of life chances. Additionally, a strong organizational and cooperative structure would bind the community together and provide economic institutions, services, and a framework for corporate decision making (Weintraub *et al.*, 1969).

The moshav and the kibbutz thus shared many guiding principles, such as mutual

³We do not have sufficient data to analyze the foundings, failures, or growth of the other two populations, credit cooperatives and corporations.

aid, cooperation, self-labor, and the political importance of cultivating the land. Near (1997: 320) highlights the similar roles that the two forms occupied in the implementation of the Labor Zionist ideology: 'The moshavim settled in unhealthy, undeveloped, and often dangerous areas, and developed a prosperous modern agricultural economy, as did the kibbutzim . . . [t]hey too were based on the principle of self-labour' . . . [a]nd they too absorbed immigrants . . .'. The differences between their ideologies were mainly that the moshav did not give the same priority as the kibbutz to the interests of the collective over those of the individual and family. Although this difference may seem subtle, it was significant to the participants. Moshav founders criticized the kibbutz model as a means of achieving Zionist goals, claiming that it could not create a strong bond between the individual and the soil, and it could not give adequate scope to individual initiative and energy (Weintraub *et al.*, 1969: 124). Further, the founders of the moshav, many with established families, were suspicious of the communal infringement upon the domestic domain and were unwilling to accept kibbutz practices such as communal child care and education.

Given the many similarities between the forms, it is not surprising that as the moshavim matured they dealt with many of the same issues that kibbutzim faced, such as the less ideologically committed second generation, the conflicting demands placed upon members by national duties and daily farming responsibilities, as well as social and ideological shifts that occurred in the wider society and affected each organization's own set of values and beliefs (for an account of the impact of these factors on the kibbutz, see Simons and Ingram, 2000). In Nahalal for example, the issue of hired labor became a source of contention, first in the late thirties and early forties, and later after the declaration of the State of Israel in 1948, when massive waves of immigrants arrived primarily from North Africa and Asia. At these times, hired labor was brought in to substitute for the many moshav members that were away from the community engaged in national duties (Baldwin, 1972). The fear that this arrangement would become a permanent feature of the moshav, thus undermining the principle of self-labor, made the issue of hired labor a constant item on the agenda of Nahalal's general assembly. In 1956 hired labor still appeared on the list of 'unsolved problems' on Nahalal's general assembly report (Weintraub *et al.*, 1969).

Just as proposition 3 describes, the ideological similarity of the moshavim and kibbutzim interacted with their shared reliance on certain key resources to enhance competition. At the most obvious level, these organizations competed for agricultural land and in the markets for their agricultural output. In 1981 for example, these two forms together accounted for almost seventy percent of Israel's cultivated land (37.5% for the kibbutzim and 30.1% for the moshavim) and almost eighty percent of the value of agricultural output [39.1% for the kibbutzim, 38.5% for the moshavim (Sherman, 1993: 217)]. Competition in the output market would be high between these forms regardless of ideology, but would be increased because of shared reliance on cooperative distributors, and to the extent that some consumers view 'cooperatively produced' as an attractive attribute of agricultural products. The competition for land was accentuated

because both moshav and kibbutz relied on the same Labor Zionist institutions that purchased and distributed land for the movement. They competed not just for access to the land, but also over the purchasing policy. The moshav's structure and mixed farm model required a careful consideration of the quality of the land on which it settled and thus the moshavim came to oppose the policy of buying land primarily in remote, unsettled regions. The kibbutzim on the other hand were better suited to function in such desolate, often arid areas. Moshav representatives attempted to change the policy but failed (Baldwin, 1972: 6).

The competition for participants was yet more salient, and more obviously enhanced by ideological similarity. The first moshav, Nahalal, was founded partly by members who defected from the first kibbutz, Degania. Between 1921 and 1923 more than sixty people left Degania for the fledgling moshavim, leaving only forty-three members on that kibbutz (Near, 1992: 94). The moshavim attracted kibbutz members (current and potential) who preferred a more individualistic and family-centered way of life, yet ascribed to other goals of Labor Zionism. Many have argued that the moshavim were considered as a more fitting settlement option by the mass wave of Jewish immigrants that came to Israel from North Africa, Iran and Iraq between 1948 and 1954, and as Figure 1 indicates, the moshavim did gain relative to the kibbutzim in this period.

These forms of competition were born out in the interactions of the kibbutz and moshav within the larger institutions of Labor Zionism. Relationships with these institutions were also the source of another motivation for competition, as the moshavim and kibbutzim were 'structurally equivalent' in their connections to them. Between 1921 and 1929, the moshavim benefited from the sympathies of the leaders of the Jewish Agency, who were doubtful of the kibbutzim's chances of survival (Near, 1992). Subsequently, the kibbutzim gained favor as the politics of the far left became more influential in the Zionist movement and the Jewish Agency. In this period, the moshavim complained of a subordinate position in two particularly important organizations, the Histadrut (a comprehensive federation that governed the cooperative economy) and the Histadrut's Agricultural Center. The Agricultural Center's role was to 'act as a representative of the various settler bodies within the Histadrut, and as an intermediary between them and the institutions of the Zionist movement' (Weintraub *et al.*, 1969: 230). As an indication of the moshav's subordinate stature, in 1931 there were four moshav representatives and seventeen kibbutz representatives to the Agricultural Center, at a time when there were sixteen moshavim and thirty kibbutzim.

In the period between 1930 and 1948, prospective moshav settlers that approached the Histadrut and Agricultural Center with specific requests and needs encountered a hostile response, often involving threats to the moshav identity, as illustrated in this example:

⁴'Organization' is the name assigned to the nuclei of prospective moshav settlers.

The reception of the members of 'organization A',⁴ in particular by the functionaries of the Histadrut and the Agricultural Center, was curt and unfriendly. The Agricultural Center completely denied the request of 'organization A' to arrange for the training of some its members, who were called 'householders',⁵ in the kibbutzim; and, some years later, at a meeting in Nahalal, [David] Ben-Gurion warned the moshavim and the new organizations that they were standing on the border, that is, their membership in the labor movement was questionable. (Weintraub *et al.*, 1969: 230–231)

This disparity in political position, combined with the emerging competition for land and manpower between the moshavim and kibbutzim, prompted the moshavim to organize outside the Histadrut's framework, and they formed their own federation in 1930. Not surprisingly, the new moshav federation was not enthusiastically received by the existing institutions.

The disputes and disparate treatment of the moshavim's interests in and by the Histadrut and other agencies continued. Some of the issues concerned the locations allocated for settlement, the transition period before settlement, the size of the settlement and employment for groups organized for settlement. The last point was especially sticky since obtaining work for the group was a critical factor to prepare it for permanent settlement and preserve its unity. It was not uncommon for the Agricultural Center, which was a primary supplier of such work, to give preference to the kibbutzim's 'plugot'⁶ over the moshavim's 'organizations'. The kibbutzim had the upper hand in another dispute over the length of the transition period before settlement. Because of land and money shortages, the time that elapsed between the formation of a group for settlement and actual settlement tended to be long. This presented a real problem for the moshav settling groups, whose members had chosen the moshav because it combined individualistic and communal aspects. During the period between forming and settling, the group conducted a highly communal way of life which was difficult for many of the prospective moshav members to endure. As a result many of these groups lost substantial numbers of members during the transition period or disbanded altogether. The moshav representatives attempt to change the Agricultural Center's policy on this issue met contention from the kibbutzim, and ultimately failed.

Competition also extended to capital. Most settlements suffered from chronic shortage of funds for development during the first years of their existence. The kibbutz/moshav federations and the credit institutions of the Histadrut were the first to be approached for assistance, but since all settlements were dependent on these public funds the competition only intensified as time progressed and the number of settlements grew. One can envision then the cycle of competition and pressure as moving through the hierarchy of the institutions from within the federation, to competing for the credit resources of the Histadrut, then to the national institutions all

⁵The label 'householders' is intended as a slight on the moshav settlers' more individualistic ideology.

⁶'Plugot' (pl.) is the name assigned to the nuclei of prospective kibbutz settlers.

the way to the Zionist organizations (usually located abroad). At each level attempting to make a convincing argument for the importance of their own activities and pressure for resources (Simons and Ingram, 2000). It is quite probable that these dynamics reinforced ideological distinctions and sharpened factional and organizational differentiation (Willner, 1969).

The resulting picture is of two organizational forms which were drawn together by a common political ideology, yet cast in conflict by that same commonality. Near (1992: 95) observes with irony that 'the moshav, whose establishment had been supported by many of the leaders of the kibbutz movement, and which was in many respects its ally, was used against the kibbutz by its enemies'. Figure 1 presents basic statistics of number of organizations and population of members for both organizational forms. Table 1 compares them, and other Jewish agricultural settlements in Palestine and Israel. The first two forms in Table 1, the moshava and moshav,⁷ are types of agricultural villages which were not systematically cooperative. The next two forms, the moshav ovdim (literally, workers' moshav) and moshav shitufi (semi-communal moshav), form the category that we refer to as 'moshav' in this paper. The two sub-forms of kibbutz shown in Table 1, kvutza (a small kibbutz) and kibbutz, have historically been considered one population, with the kvutza forming the Ichud Federation, one of three major groupings of kibbutzim.

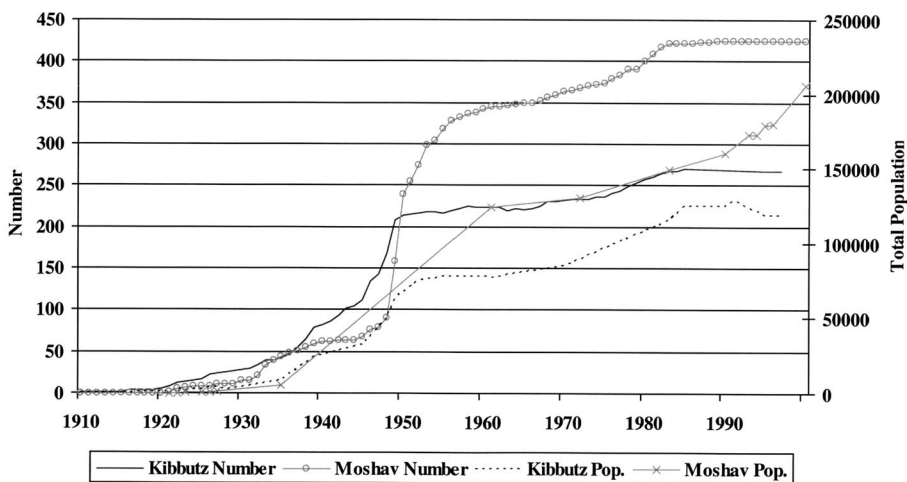


Figure 1 Number and population of moshavim and kibbutzim.

⁷This label is somewhat confusing, as this form is not included in the group of organizations that we label as 'moshav' in this paper.

Table 1 Types of agricultural communities

Common Elements			Type	Date of founding of 1 st village	Aliya (Immigration "wave")	General Description	Salient Historical Facts
J.N.F. land			Non-Cooperative Agricultural Villages:				
			Moshava (pl. moshavot)	1878 'Petach Tikva' ^a	First and following	Agricultural villages founded on privately owned land	Early Jewish immigration to Palestine, deliberate choice of farming as vocation
			Moshav (pl. moshavim)	1908, 1933	Second and fifth	Several categories, principally small-holders' villages on JNF land. Varying degrees of cooperation and reliance on public farming. Do not prohibit hiring labor nor seek to carry out an ideologically based organization	First type founded on JNF land near moshavot by members of Second Aliya. Second main type are middle-class settlements developed mainly by Fifth Aliya individuals from Germany
	Labor-Zionist principles (national land, no hired-labor, cooperative buying and selling, mutual aid); reliance on public financing		Sub Forms of Moshav:				
			Moshav ovdim (pl. moshavei ovdim)	1921 'Nahalal' ^a	Second and following	Cooperative small-holders' settlement. Family basic production and consumption unit, cooperative village economics	Initiated by former kvutza members dissatisfied with communal living
			Moshav shitufi (pl. moshavim shitufiyim)	1936	Fifth and following	Semi-communal settlement. Family basic consumption and child-rearing unit, communal production, buying and selling	Organizational feature of both kibbutz or kvutza and moshav ovdim, instituted largely by young people of the Fifth Aliya
	Communal production, buying and selling	Sub Forms of Kibbutz:					
		Kvutza (pl. kvutzot)	1911 'Degania' ^a	Second and following	Communal production, consumption, and child-rearing. Usually restricted membership	First viable and most revolutionary of the community types for Jewish land settlement inspired by Labor-Zionist ideology. Originally, restricted membership and focus exclusively on agriculture, since modified by practice	
			Kibbutz (pl. kibbutzim)	1921 'Ein-Harod' ^a	Third and following	Same as kvutza, but no limit on number of members	Initially founded by members of Labor Brigade

Source: Willner (1969: 54).

^aName of first village and (usually) the prototypical example of the type.

2.4 Relationships to Credit Cooperatives and Corporations

Our expectations regarding relationships between the moshavim and kibbutzim, and the two other populations is relatively straightforward. Consistent with proposition 2, we expect there to be positive relations between the two types of agricultural cooperatives and the credit cooperatives. The credit cooperatives were part of the Histadrut, and were encouraged by that organization, and by their ideology, to help other cooperatives. Conversely, and in line with proposition 1, we expect the population of corporations to affect the moshavim and kibbutzim negatively. Corporations are the organizational form most closely associated with capitalism, an ideology that has struggled with socialism to govern the Jewish economy of Palestine and Israel throughout the twentieth century. Corporations may have discouraged the agricultural cooperatives through ideological coercion, and by luring away participants and other resources (Simons and Ingram, 2003).

Figure 2 summarizes our expectations regarding the interdependencies between the four organizational populations that are included in our analyses.

3. Analyses

3.1 Method

We analyzed moshav and kibbutz foundings at the level of 10×10 km regions. The exact grid was chosen because it was the one most commonly overlaid on the maps that were the source of many of our variables. Although it is more typical to analyze founding rates at the level of the country, there is precedent for regional analysis (e.g. Swaminathan, 1995). More importantly, a number of factors make the regional analysis appropriate in this case. Most significantly, competition between moshavim and kibbutzim is likely to be most intense at the regional level, as it is here that they compete over the scarce supply of appealing settlement locations. Similarly, within-population processes of competition (and mutualism) can be expected to be stronger at the regional level, as the various moshav and kibbutz federations followed strategies of geographic clustering with a goal to locating the optimum number of organizations in a

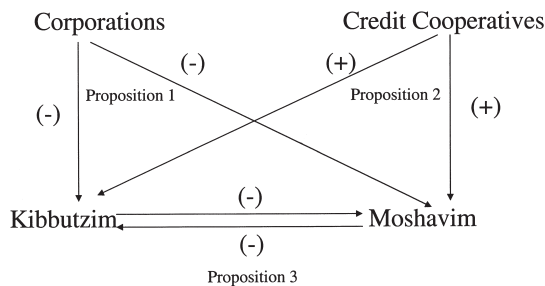


Figure 2 Community predictions of ideological competition and mutualism.

given region (Rayman, 1981; Katz, 1995). Relatedly, the supply of one of the key resources for founding these organizations—land suitable for agriculture and settlement—changes dramatically over the period we study. If this was merely a matter of changing borders then a country-level control for land available might be appropriate, but the issue is complicated by the variance in the quality of the land for agricultural purposes. For example, in 1967 Israel came to control a massive territory in the Sinai Desert and opened it for settlement. This land was, however, decidedly unappealing for agriculture and only two kibbutzim and ten moshavim were founded in an area of about 57 000 km². In the same year, Israel took control of the Golan Heights which contains excellent agricultural land. Sixteen moshavim and seventeen kibbutzim were subsequently founded there, in a territory roughly one-fiftieth the size of the Sinai (about 1200 km²). Obviously, the founding of kibbutzim and moshavim depends on both the quantity and quality of the land available, and we are better able to capture that combination at the disaggregate regional level.

Foundings in a region in a year are event counts, which are typically modeled with some variant of Poisson regression (King, 1988). As is often the case, our data violated an assumption of Poisson regression, that the conditional mean of the dependent variable equals its variance. To deal with this problem of over dispersion we employed the negative-binomial model, a variant of Poisson regression which adds a parameter to capture the dispersion of the dependent variable. Given our regional analysis, we were also concerned that observations of the same region may not be mutually independent. When they are not independent, conventional Poisson models and mixed-Poisson models such as the negative-binomial model are inappropriate because they are based on the assumption of independence (Guo, 1996). In response to this problem we added a gamma-distributed region-specific random effect to our Poisson models (Hausman *et al.*, 1984). This approach makes explicit allowance for interdependent observations by modeling unobserved influences shared by all the counts of a region. The functional form of the model is as follows:

$$\lambda_{ij}(\theta_i) = \exp(x_{ij}\beta)\theta_i$$

where λ_{ij} is the predicted foundings in region i in year j , θ_i is a gamma-distributed random effect for region i , and $x_{ij}\beta$ represents the vector of independent variables and coefficients for region i in year j .

3.2 Data

We built the data from a number of historical and archival sources. Most useful were a large number of maps that identified the location and founding dates of moshavim and kibbutzim; the boundaries of the Jewish population of Palestine and of the State of Israel; and land type and amount of annual rainfall. The Statistical Abstract of Israel (various years) and comparable volumes compiled under the British Mandate for

Palestine provided data on population and number of corporations. Data on the number of credit cooperatives came from Heth (1994).

In ecological analyses, within and between population competition and mutualism is typically operationalized using counts, called densities, of the number of organizations of a type. Our models include densities of moshavim, kibbutzim, corporations and credit cooperatives. Because moshavim and kibbutzim compete for suitable land on which to settle and farm, we operationalize those densities at the local level as the count in a given region. (Comparable results are obtained when national densities are used for these variables.) Corporation density and credit cooperative density are only available in aggregate, and in any case, the influence of these populations can be expected to be diffused rather than localized. The density variables, like all time-changing variables in our analysis, are updated at the beginning of each year.

Following the norms of ecological analysis, we give special attention to 'own population' densities in the analyses. A population's own density is argued to have a non-monotonic (inverted-U shaped) relationship to founding, through the processes of competing and legitimacy (Hannan and Freeman, 1989). The legitimizing effect of density is based on cognitive familiarity and is typically far flung: it has been shown to spillover national boundaries, and would sensibly be expected to extend beyond the regions within which we measure density (Hannan *et al.*, 1995). For the populations we study, however, cognitive legitimacy can be expected to be only loosely dependent on density, as the moshavim, and particularly the kibbutzim, were affected by active efforts by Zionist organizations, and later the State of Israel to legitimize, or de-legitimize, them. Such ancillary legitimizing forces could be expected to distort, or wash out, the effect of cognitive familiarizing via density. Indeed, in preliminary analyses we looked for a legitimizing impact of total (cross-region) density counts for both the kibbutzim and moshavim, and found none. Within regions, competition over land on which to settle can be expected to produce the familiar negative impact of density on founding. As for mutualism, both kibbutzim and moshavim tended to help their neighbors, and planners for both forms favored clustering organizations to gain advantages of resource sharing (for schools and transportation), defense and help in times of economic need (Katz, 1995). We therefore expect the familiar non-monotonic effect to obtain, and we tested for it by including regional moshav density and its square in the analysis of moshav founding, and regional kibbutz density and its square in the models of kibbutz founding.⁸ Following convention, we logged the first-order own-density measures (Barron *et al.*, 1994).

Our models include two variables designed to reflect the attractiveness of a region for agriculture. Land quality is a continuous variable ranging from 0 to 1. It was created by measuring the amount of various types of land in each region from agricultural maps. Relying on the maps' categorizations regarding the suitability of the land-types

⁸Our theoretical arguments regarding the influence of other populations' densities on moshav/kibbutz founding predict monotonic effects. In supplementary analysis we allowed for the possibility that their effects were nevertheless non-monotonic; they were not.

for agriculture, in consultation with an Israeli agronomist, we assigned a value of one to land types that were most appropriate for agriculture (e.g. the coastal plain and the Yisrael Valley); one-half was given to land of mixed quality (e.g. the Galilee Hills); zero represented land that was not well suited for agriculture (e.g. the Judean Hills) and desert. Since this variable was based on land area of the various types, it also reflects the fact that regions had less opportunity for kibbutz settlement if they were less than 100 km² because they spanned borders or bodies of water. The rainfall variable represents the average annual rainfall in centimeters in the region.

In addition to land, the moshavim and kibbutzim relied fundamentally on the supply of potential members. We operationalize this supply with the variable Jewish population, the number of Jews in the country at the start of a given year, which we expect to positively affect founding (Simons and Ingram, 2003). Finally, we include Israeli State, a dichotomous variable coded one for 1950 (the first year after the end of war that began in 1948 with the declaration of the State of Israel) and subsequent years, and zero otherwise. Simons and Ingram (2003) argued that the Israeli State suppressed kibbutz founding by substituting for the kibbutz to manage the defense of the Jewish population, the occupation of strategic land, and the absorption of immigrants. The moshavim were less renown in their efforts to contribute to these national needs pre-state, and less targeted in the post-state struggle for power, but were nevertheless prominent in the Labor Zionist organizational system that was reduced by statism. Therefore, we expect that the moshavim will also experience a lower founding rate when the State is operating. Table 2 summarizes our expectations for the influence of each variable on the founding rate of moshavim and kibbutzim.

3.3 Results

Table 2 presents full models of moshav (model 1) and kibbutz founding (model 2). The models confirm each of the predictions we made by applying propositions 1–3 to these populations, and yield expected results for all other variables. Most notably, there is inter-population competition between the moshavim and kibbutzim, despite their ideological similarity (proposition 3). This is indicated by the negative coefficient of kibbutz density in the analysis of moshav founding, and the negative coefficient of moshav density in the analysis of kibbutz founding. In contrast, density of credit cooperatives, who share ideology with the moshavim and kibbutzim, but rely on a different resource base, increases the founding rate of both populations (proposition 2). Rounding out the picture, the density of corporations, who represent a conflicting ideology, reduces the founding rate for both moshavim and kibbutzim (proposition 1).

Both populations demonstrate the inverted-U shaped influence of own population density predicted by the theory of density dependence, with a positive first-order and negative second-order effect (in both cases the maximum is obtained within the observed range of own-density). Also as expected, both populations are more likely to be founded in regions with better agricultural land and more rainfall, and when the Jewish population is higher. Finally, the founding rate of both populations is lower after

Table 2 Random-effects negative-binomial models of moshav and kibbutz founding, 1910–1997

Variable	Model 1: moshavim		Model 2: kibbutzim	
	Prediction and source	Estimate	Prediction and source	Estimate
Moshav density	+ Hannan and Freeman (1989)	0.225** (0.062)	– Proposition 3	–0.166** (0.044)
(Moshav density) ²	– Hannan and Freeman (1989)	–0.012** (0.002)		
Kibbutz density	– Proposition 3	–0.093* (0.055)	+ Hannan and Freeman (1989)	0.268** (0.080)
(Kibbutz density) ²			– Hannan and Freeman (1989)	–0.050** (0.134)
Credit cooperative density	+ Proposition 2	0.016** (0.004)	+ Proposition 2	0.019** (0.004)
Corporation density	– Proposition 1	–0.314** (0.031)	– Proposition 1	–0.206** (0.027)
State of Israel	– Simons and Ingram (2003)	–0.466* (0.230)	– Simons and Ingram (2003)	–2.079** (0.255)
Jewish population	+ Simons and Ingram (2003)	0.432** (0.038)	+ Simons and Ingram (2003)	0.332** (0.034)
Rainfall	+ Resource availability (e.g. Baum and Oliver, 1992)	0.134** (0.044)	+ Resource availability (e.g. Baum and Oliver, 1992)	0.088* (0.049)
Land quality	+ Resource availability (e.g. Baum and Oliver, 1992)	3.157** (0.333)	+ Resource availability (e.g. Baum and Oliver, 1992)	3.133** (0.387)
Constant		–7.352** (0.392)		–4.365** (0.528)
Log-likelihood		–1568.72**		–1286.70**

* $P < 0.05$; ** $P < 0.01$.

the formation of the Israeli State. Consistent with our observation that the State was particularly hostile to the kibbutzim, its negative effect is greater on that population (in the post-state period, the kibbutz founding rate is 12.5% what it would otherwise be, while the moshav rate is 62.75% of its *ceteris paribus* level).⁹

⁹In supplementary analyses (available from the authors), we also examined the robustness of our results

The similarity in the determinants of the founding rates of the moshavim and kibbutzim raises a challenge to our arguments: perhaps, despite the qualitative evidence of rivalry between these forms, they are actually undifferentiated as to what caused them to flourish or flounder. The difference between own- and other-population density effects shown in Table 2 might obtain because we allowed own-density to be non-monotonic but included only first-order effects of other density. In supplementary models we included a squared effect of kibbutz density in the analysis of moshav founding, and a squared effect of moshav density in the analysis of kibbutz founding. In both case, the influence of other density was found to be monotonic, and competitive. As a further test that these populations were indeed different, we randomly assigned the foundings of agricultural cooperatives to either 'moshav' or 'kibbutz' depending on the base rates for each population. In the resulting analysis the pattern of own- and other-density effects shown in Table 2 did not obtain. Our conclusion, therefore, is that the moshavim and kibbutzim are indeed different populations, and that there was competition between them.

Braced by this supplementary analysis, the results presented in Table 2 support our arguments in every respect. The moshav/kibbutz context presents us with another opportunity to examine the combined influence of ideological similarity and niche overlap, in the form of sub-populations of (slightly) varying ideologies. Both the moshavim and the kibbutzim contain sub-forms which are more or less cooperative or communal. An extension of the logic behind proposition 3 would suggest that within a given population, a sub-form that is more ideologically similar to the other population will suffer more competition from it than a sub-form which is less similar. If ideological similarity enhances resource overlap, then greater ideological similarity should result in more competitive relationships between organizational types.

Table 1 shows that the moshav shitufi was more ideologically similar to the kibbutz than the moshav ovdim, as the former sub-form employed a communal approach to consumption. Therefore we would expect that kibbutz density would have a larger negative influence (more competition) on the moshav shitufi founding rate than on the moshav ovdim rate. Unfortunately, there were fewer than fifty foundings of moshavim shitufiyim, not enough to analyze separately, so we cannot conduct the analysis of sub-form founding necessary to test that prediction.

Fortunately, the kibbutzim can be divided into a number of ideologically distinct sub-forms which are amenable to analysis. The kibbutzim organized into political federations based on different interpretations of Labor Zionist ideology. The three major federations were Ha'Kibbutz Ha'Meuchad (from now on, Meuchad, accounting for ninety-three foundings during the period we studied), Ha'Kibbutz Ha'Artzi (Artzi,

to the inclusion of a time trend (first- and second-order specifications of the years since the founding of the populations). These variables were not significant, and their inclusion in the models did not affect any of our other results. We therefore have added confidence that the coefficients we report represent interdependencies between the organizational forms, and not just the impact of unmeasured historical processes.

eighty-three foundings) and Ichud Hakvutzot Vehakibbutzim (Ichud, ninety-four foundings). (Two smaller federations included Judaism in their ideology. There are too few of these to allow for a separate analysis.) In terms of ideology, the major federations were ordered, from left to far left: Ichud, Meuchad, Artzi. As Table 1 indicates, the Ichud kibbutzim were most proximate in ideological terms to the moshavim. They followed a non-Marxist, moderate form of socialism, and were more disposed than the other federations to change ideologically determined elements of their structure in response to pragmatic concerns and external pressure. Next most proximate to the moshavim were the Meuchad kibbutzim, who operated large organizations within a centralized federation. The Meuchad followed what they called 'constructive socialism', and gave more emphasis than Ichud to waging an ideological war against the class system and capitalism. Farthest from the moshavim was the Artzi movement, radical Marxists who were the most adamant among the kibbutzim in their adherence to communal organization, and in their hostility to capitalism.

Based in ideological similarity to the moshavim, we would expect Ichud kibbutzim to suffer the most competition from the moshavim, followed by Meuchad and then Artzi. This is exactly the pattern that emerges in Table 3, which presents analyses of foundings for each federation separately (although the differences between adjacent federations in these non-nested models do not appear to be statistically significant). The Ichud founding rate in a region falls 18.8% with each additional moshav in the region, while the corresponding numbers for Meuchad and Artzi are 14.1% and 8.5%. The significance of federation ideology as a determinant of interdependence with other populations is further evidenced by the effects of corporation density and credit cooperative density. The two federations that were explicit about a war with capitalism, Meuchad and Artzi, suffer more competition from corporations than does the more pragmatic Ichud. And Artzi, most adherent among the federations to socialist values, enjoys a greater benefit from the credit cooperatives than do the other two.

4. Discussion

There has recently been a swell of interest in how ideology affects inter-organizational relations. Work on this topic shares an emphasis on the interplay between political and organizational processes, and is rightly coded as part of an emergent research program. While the work is kindred enough to generate *esprit de corps*, it also represents significant differences in the theoretical mechanisms that are seen as underpinning ideological competition and mutualism. Two distinct approaches are apparent. The first, which we call ideological affinity, emphasizes the significance of the ideological end-states that organizations pursue, predicting mutualism between those with similar ideologies, and competition between those with divergent ideologies (Rothschild and Whitt, 1986; Simons and Ingram; 1997; Wade *et al.*, 1998; Ingram and Simons, 2000). The second, which we call niche overlap, emphasizes overlap in the resources that enable organization, and claims that organizations with similar ideologies rely on more

Table 3 Random-effects negative-binomial models of kibbutz founding by federation, 1910–1997

Variable	Model 3 Pragmatic: ichud kibbutzim	Model 4 Socialist ideology: meuhad kibbutzim	Model 5 Radical: artzi kibbutzim
Moshav density	–0.208* (0.090)	–0.152* (0.092)	–0.089 (0.073)
Kibbutz density	0.311** (0.116)	0.296* (0.134)	0.228* (0.129)
(Kibbutz density) ²	–0.080 (0.006)	–0.741* (0.333)	–0.689** (0.285)
Credit cooperative density	0.016** (0.006)	0.014* (0.007)	0.023** (0.007)
Corporation density	–0.135** (0.052)	–0.294** (0.063)	–0.263** (0.057)
State of Israel	–1.067* (0.473)	–2.151** (0.549)	–2.093** (0.464)
Jewish population	0.178** (0.068)	0.398** (0.069)	0.388** (0.064)
Rainfall	–0.013 (0.082)	0.225** (0.084)	0.125 (0.085)
Land quality	2.919** (0.577)	2.830** (0.666)	3.027** (0.631)
Constant	–4.428** (0.796)	7.719 (1.62)	–4.211* (1.62)
Each additional moshav reduces the founding rate by (%):	18.8	14.1	8.5
Log-likelihood	–494.387**	–386.85**	–429.78**

* $P < 0.05$; ** $P < 0.01$.

of the same resources, and therefore compete more intensely (Zald and McCarthy, 1987; Minkoff, 1995; Barnett and Woywode, 2003). In this paper we engage both positions, claiming that they can be reconciled with a scope condition. Specifically, we claim that it matters whether two organizational populations rely in some significant way on the same key resources. If so, then the niche overlap argument applies, if not, their relations will be determined by ideological affinity.

We examined the set of predictions that result from the application of the scope condition to pre-existing propositions in an analysis of community ecology in Palestine and Israel. The analysis considered interdependencies between four populations of organizations which covered all of the theoretically relevant combinations of ideological and niche overlap. The results supported all of our predictions. In terms of

diffuse interdependencies, we found mutualism between populations with similar ideologies (credit cooperatives and both moshavim and kibbutzim) and competition between populations with conflicting ideologies (corporations and both moshavim and kibbutzim). For the two ideologically similar populations that shared a resource base, moshavim and kibbutzim, we found competition. Furthermore, that competition was more intense between sub-forms of these populations that were more proximate in terms of ideology.

These findings have implications for the pursuit of ideological ends through organizational means. In the case of ideologically proximate organizations that rely on the same resources, they suggest a natural barrier to the joint pursuit of shared goals. Indeed, there can be little doubt that the cause of agricultural cooperatives in Palestine and Israel was undermined by the existence of two organizational forms that were similar enough to be viewed in lock-step by resource suppliers, but different enough to develop an intense, and sometimes bitter, rivalry among themselves. Energy and resources that could have been dedicated to achieving shared goals were instead diverted to fights over details that were more important for differentiating between these two models of organizational life than between them and all of the other models that were less preferable to champions of both the moshav and the kibbutz.

For organizations engaged in ideological pursuits, this observation suggests a refinement of the popular belief that organizational groups benefit from a common enemy who promotes in-group cohesion and cooperation. The social psychological evidence regarding in-group/out-group effects points not only to increases in in-group cohesion, but also to increases in out-group competition (Sherif *et al.*, 1961). When the in-group and out-group share similar ideological goals, the benefit of intra-group cohesion must be weighed against the cost of inter-group competition. So, it is not necessarily true that the moshavim were better off for the existence of the kibbutzim. Doubtless they were more cohesive, but much of that cohesion was directed towards competition with a group of organizations which pursued similar ideological goals. This competition appears to have undermined both moshavim and kibbutzim. For example, both populations must have suffered from the public contention they waged before the Jewish Agency, the Histadrut, and other prominent institutions. It may be possible to win such an engagement in the relative sense, but absolutely, it is better not to have engaged in the first place.

In terms of more diffuse relations, our results show the most prominent ideologies of the twentieth-century, capitalism and socialism, dueling in the arena of organizational interaction. As all ideologies manifest themselves partly through organization, it follows that organizational processes and interorganizational relations must have a fundamental influence on the rise and fall of ideologies. The propositions presented here, derived from previous work by us and others, may therefore form the foundation of an ecology of ideology, a theory and method that may ultimately explain not only the portfolio of organizational forms, but also the portfolio of beliefs and values in society.

What are the next research steps toward an ecology of ideology? One fertile topic for

future research is to detail the mechanisms through which ideological interdependence is expressed. Our own work on cooperatives has emphasized patronage between co-ideologues, and coercion between those that represent rival ideologies. Others have pointed to attacks on legitimacy and identity (Barnett and Woywode, 2003) and the manipulation of legal endorsement (Wade *et al.*, 1998) as avenues of ideological influence. Are there other options? And when is any particular option most likely and most effective? Yet another developing research topic is the role of ideology type and strength on internal organizational processes such as change and robustness (Haveman and Khaire, 2003). There are many important unanswered questions regarding the interdependence of inter- and intra-organizational manifestations of ideology (Simons and Ingram, 1997).

All of these topics are worthy of increased attention. Still, we have a pet question, one whose resolution would advance the theory of ideological interdependence and social science broadly: *When are ideologies similar enough to evoke esprit de corps, or different enough to evoke rivalry?* We suspect that the answer has relatively little to do with the ideologies *per se*, and more to do with the processes through which ideologies are perceived and understood, and the background against which ideologies are compared. Organizational participants may play an active and even strategic role in characterization of ideologies, through processes of framing that manipulate perceptions of similarities and differences (Benford and Snow, 2000). For example, an institutional entrepreneur with the right motivation may have been able to convince Vienna's fascist right and clerical center that they wanted enough of the same things that they should cooperate rather than compete. The collaboration between those ideological positions in Germany demonstrates that antagonism between them in Vienna was not fated.

As for the context of comparison, the ideologies of the moshavim and kibbutzim serve as a powerful illustration. In the first half of the twentieth century the variants of agricultural cooperation reflected between and within these populations seemed salient, and produced substantial contention. For example, the Meuchad federation of kibbutzim went through an intense ideological crisis in the early 1950s, when Stalin's death prompted questions as to whether their prime allegiance should be with Zionism or international socialism. The crisis was resolved with a split of the federation. In some cases whole communities were rendered in two, in others people left the tight social systems they had built through hardship, or known all their lives. More recently, as capitalism has emerged as the dominant ideology in Israeli society, distinctions between forms of socialism have faded. The federations the Meuchad split into have merged (indeed, soon all of the kibbutz federations will be one), and the generation that lived through the ideological crisis has been left bewildered as to what all the fuss was about (Lieblich, 1984).

Framing and the context of ideological comparisons overlay the processes examined here with yet another level of complexity. Our predictions took as their starting point the perceived similarity of ideological positions, but those perceptions are themselves a function of interactions between organizations and ideologies. Clearly there is much

work to do regarding the interrelationship between ideology and organization. To us, the magnitude of the task is offset by the promise of its achievement. The project promises to locate organizations at the heart of the ‘what and how’ of society (Hannan and Freeman, 1977).

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References

- Baldwin, E. (1972), *Differentiation and Co-operation in an Israeli Veteran Moshav*. Manchester University Press: Manchester.
- Bar-El, R. (ed.) (1978), *Rural Industrialization in Israel*. Westview Press: Boulder, CO.
- Barnett, W. P. and M. Woywode (2003), ‘From Red Vienna to the Anschluss: ideological competition among Viennese newspapers during the rise of National Socialism,’ working paper, Stanford University.
- Baron, J. N., M. T. Hannan and M. D. Burton (2001), ‘Labor pains: organizational change and employee turnover in young, high-tech firms,’ *American Journal of Sociology*, **106**, 960–1012.
- Barron, D. N., E. West and M. T. Hannan (1994), ‘A time to grow and a time to die: growth and mortality of credit unions in New York, 1914–1990,’ *American Journal of Sociology*, **100**, 381–421.
- Baum, J. A. C. and C. Oliver (1992), ‘Institutional embeddedness and the dynamics of organizational populations,’ *American Sociological Review*, **57**, 540–559.
- Baum, J. A. C. and J. Singh (1994), ‘Organizational niches and the dynamics of organizational mortality,’ *American Journal of Sociology*, **100**, 346–380.
- Bendix, R. (1956), *Work and Authority in Industry*. University of California Press: Berkeley.
- Benford, R. and D. Snow (2000), ‘Framing processes and social movements: an overview and assessment,’ *Annual Review of Sociology*, **26**, 611–639.
- Beyer, J. M. (1981), ‘Ideologies, values, and decision making in organizations,’ in P. C. Nystrom and W. H. Starbuck (eds), *Handbook of Organizational Design*, pp. 166–202. Oxford University Press: New York.
- Carroll, G. R. and M. T. Hannan (2000), *The Demography of Corporations and Industries*. Princeton University Press: Princeton, NJ.

- Daniel, A. (1989), *Cooperatives in Israel Success and Failure*. Sifriat Hapoalim: Tel Aviv [in Hebrew].
- DiMaggio, P. M. and W. W. Powell (1983), 'The iron cage revisited: institutional isomorphism and collective rationality in organizational fields,' *American Sociological Review*, **48**, 147–160.
- Dunbar, R. L. M., J. M. Dutton and W. R. Torbert (1982), 'Crossing mother: ideological constraints on organizational improvements,' *Journal of Management Studies*, **19**, 91–107.
- Festinger, L. (1957), *A Theory of Cognitive Dissonance*. Stanford University Press: Stanford, CA.
- Guillen, M. F. (1994), *Models of Management: Work, Authority, and Organization in a Comparative Perspective*. University of Chicago Press: Chicago, IL.
- Guo, G. (1996), 'Negative multinomial regression models for clustered event counts,' *Sociological Methodology*, **26**, 113–132.
- Hannan, M. T. and J. Freeman (1977), 'The population ecology of organizations,' *American Journal of Sociology*, **82**, 929–964.
- Hannan, M. T. and J. Freeman (1989), *Organizational Ecology*. Harvard University Press: Cambridge, MA.
- Hannan, M. T., G. R. Carroll, E. A. Dundon and J. C. Torres (1995), 'Organizational evolution in a multinational context: entries of automobile manufacturers in Belgium, Britain, France, Germany, and Italy,' *American Sociological Review*, **60**, 509–528.
- Hausman, J., B. H. Hall and Z. Griliches (1984), 'Econometric models for count data with an application to the patents—R&D relationship,' *Econometrica*, **52**, 909–937.
- Haveman, H. A. and M. V. Khair (2003), 'Survival beyond succession? The contingent impact of founder succession on organizational failure,' *Journal of Business Venturing*, in press.
- Heth, M. (1994), *Banking in Israel Part One: Historical Survey*. The Jerusalem Institute for Israel Studies: Jerusalem [in Hebrew].
- Hinings, C.R. and R. Greenwood (2002), 'Disconnects and consequences in organization theory?' *Administrative Science Quarterly*, **47**, 411–421.
- Ingram, P. and C. Inman (1996), 'Institutions, intergroup rivalry, and the evolution of hotel populations around Niagara Falls,' *Administrative Science Quarterly*, **41**, 629–658.
- Ingram, P. and T. Simons (2000), 'State formation, ideological competition, and the ecology of Israeli workers' cooperatives, 1920–1992,' *Administrative Science Quarterly*, **45**, 25–53.
- Kaplan, H. and G. Burt (2002), 'Revised product policy now complete,' *Karma Chronicle*, **April/May**, 15–16.
- Katz, Y. (1995), 'The religious kibbutz movement and its credo, 1935–1948,' *Middle Eastern Studies*, **31**, 253–280.
- King, G. (1988), 'Statistical models for political science event counts: bias in conventional procedures and evidence for the exponential Poisson regression model,' *American Journal of Political Science*, **32**, 838–863.
- Klayman, I. M. (1970), *The Moshav in Israel: A Case Study of Institution-Building for Agricultural Development*. Praeger Publishers: New York.
- Kliot, N. (1978), 'The political landscape: a geographical analysis of the impact of ideology on the landscape,' Ph.D. dissertation, Clark University, Worcester, MA.
- Lieblich, A. (1984), *Kibbutz Makom*. Pantheon: New York.

- McEvily, B. and P. Ingram (2003), 'David vs. Goliath: ideological competition in the retail grocery industry,' unpublished manuscript, Carnegie Mellon University.
- McPherson, J. M. (1983), 'An ecology of affiliation,' *American Sociological Review*, **48**, 519–535.
- Minkoff, D. C. (1995), *Organizing for Equality*. Rutgers University Press: New Brunswick, NJ.
- Mintz, B. and M. Schwartz (1985), *The Power Structure of American Business*. University of Chicago Press: Chicago, IL.
- Near, H. (1992), *The Kibbutz Movement*, vol. 1. Oxford University Press: Oxford.
- Near, H. (1997), *The Kibbutz Movement*, vol. 2. Littman: London.
- Pólos, L., M. T. Hannan and G. R. Carroll (1999), 'Identities, form and populations,' unpublished manuscript, Stanford University.
- Rayman, P. (1981), *The Israeli Kibbutz: Community and Nation Building*. Princeton University Press: Princeton, NJ.
- Rothschild, J. and J. A. Whitt (1986), *The Cooperative Workplace: Potentials and Dilemmas of Organizational Democracy and Participation*. Cambridge University Press: New York.
- Rothschild-Whitt, J. (1979), 'The collectivist organization: an alternative to rational-bureaucratic models,' *American Sociological Review*, **44**, 509–527.
- Sherif, M., O. J. Harvey, B. J. White, W. R. Hood and C. W. Sherif (1961), *Intergroup Conflict and Cooperation: The Robbers Cave Experiment*. Institute of Group Relations: Norma, OK.
- Sherman, N. (1993), 'Kibbutzim and moshavim,' in E. Ben-Zadok (ed.), *Local Communities and the Israeli Polity*, pp. 211–239. SUNY Press: Albany, NY.
- Simons, T. and P. Ingram (1997), 'Organization and ideology: kibbutzim and hired labor, 1951–1965,' *Administrative Science Quarterly*, **42**, 784–813.
- Simons, T. and P. Ingram (2000), 'The kibbutz for organizational behavior,' *Research in Organizational Behavior*, **22**, 383–423.
- Simons, T. and P. Ingram (2003), 'Enemies of the State: interdependence between institutional forms and the ecology of the kibbutz, 1910–1997,' working paper, Carnegie Mellon University.
- Swaminathan, A. (1995), 'The proliferation of specialist organizations in the American wine industry, 1941–1990,' *Administrative Science Quarterly*, **40**, 653–680.
- Wade, J. B., A. Swaminathan and M.-S. Saxon (1998), 'Normative and resource flow consequences of local regulations in the American brewing industry, 1845–1918,' *Administrative Science Quarterly*, **43**, 905–935.
- Weintraub D., M. Lissak and Y. Azmon (1969), *Moshava, Kibbutz, and Moshav: Patterns of Jewish Rural Settlement and Development in Palestine*. Cornell University Press: Ithaca, NY.
- Willner, D. (1969), *Nation-building and Community in Israel*. Princeton University Press: Princeton, NJ.
- Zald, M. N. and J. D. McCarthy (eds) (1987), *Social Movements in an Organizational Society*. Transaction: New Brunswick, NJ.
- Zuckerman, E. (1999), 'The categorical imperative: securities analysts and the illegitimacy discount,' *American Journal of Sociology*, **104**, 1398–1438.