

# Sticky ties among rivals for entrepreneurial leadership

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## Abstract

**Purpose** – We explore the social structure of an autocratic, entrepreneurial organization, with a focus on the enduring rivalry between its formal leader and a key employee.

**Design/methodology/approach** – This is a re-study of Team Entrepreneurship (Stewart, 1989), with different eyes and methods, using ethnographic data for social network analysis (SNA).

**Findings** – With an analysis of structural equivalence, multiplexity, Simmelian triples and intermediation, this study shows how apparently conflicting social networks—collective entrepreneurship, antagonism and analytical management—can co-exist and that the main rivalrous tie is persistent or “sticky”.

**Research limitations/implications** – Due to deep fieldwork access and a site of managerial rivalry, the findings would have damaged careers, without a wait of many years to make the findings public. The specific context also limits external validity. The strengths of this paper are methodological and conceptual.

**Originality/value** – This is a rare observational study of entrepreneurial leadership and a rare study in an organization that uses ethnographic data as inputs for SNA matrices. It shows important distinctions between inferences from observations compared with SNA.

**Keywords** Collective entrepreneurship, Simmelian ties, Autocracy, Multiplexity, Ethnography

**Paper type** Research paper

## Introduction

Our context is a re-study of “MIDA”, an auto parts manufacturer and the site of Stewart’s (1989) book *Team Entrepreneurship*. Stewart (1989) presented MIDA as an exemplar of collective entrepreneurship, based on Howard Stevenson’s (1983) view that “the ‘heart of entrepreneurship’ is seizing opportunities *without regard to resources already controlled*” (1983, p. 15). MIDA’s general manager, Peter, bought used, retrofitted machinery and hired without concern for formal credentials (Stewart, 1989, Chap. 3). The people Peter hired were not, as individuals, entrepreneurial. But viewed as a collective, their outcome was entrepreneurial, as they created new capabilities and fulfilled the contracts for their customers. They did this by “running hot”: working “over their heads,” beyond established capabilities (Stewart, 1989, p. 105). Stevenson endorsed this interpretation: “*Team Entrepreneurship* . . . clearly is written from the inside perspective and reflects an unusual understanding of how entrepreneurship really works” (publisher’s advertisement).

Stevenson’s thesis clarifies how MIDA was entrepreneurial. Another scholarly tradition clarifies how Peter was an entrepreneurial leader. Its classic statement is by the anthropologist Fredrik Barth: “to the extent that persons take the initiative, and in the pursuit of profit in some discernible form, manipulate other persons and resources, [they] are acting as entrepreneurs” (1963, p. 6). McMullen *et al.* (2021) use similar language, adding that “a certain degree of novelty” may be needed for gracing an act as entrepreneurial. From leadership studies also we find similar language, such as “attempts at influencing others and exploiting opportunity”



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(Vecchio, 2003, p. 304; see also Cogliser and Brigham, 2004, p. 773). By this logic, an entrepreneurial leader influences others with a goal of gain and some measure of innovation. This interpretation is echoed in the literature about entrepreneurial leadership (e.g. Ravet-Brown *et al.*, 2024; Renko *et al.*, 2015).

Entrepreneurial leaders are known for a participative and encouraging style of management (Cogliser and Brigham, 2004; Kim and Beehr, 2023) in which “the entrepreneur’s passion” elicits the same from employees (Hubner *et al.*, 2020, p. 1113). This “bright” leadership approach generates positive qualities in organizations, such as creativity, trust and engagement (Jing, 2018; Renko *et al.*, 2015). But not all entrepreneurial leadership is bright. Some is marked by such “dark” attributes as hubris and domination (Brownell *et al.*, 2024; Hayes *et al.*, 2015). Surprisingly, the effects of these approaches are not entirely negative (Mehraein *et al.*, 2023; Zeitoun *et al.*, 2019).

The above research findings have an important limitation: they have little if any basis in observation. Prior studies are conceptual or based on self-reports. Most elicit the views of subordinates alone; the study by Ng and Thorpe (2010) exemplifies the inverse viewpoint. The few observational studies that we find fail to examine both leaders and followers. For example, Lingo’s (2020) study of music producers, rare for its ethnographic basis, refers to no subordinates. Clearly there are gaps in our knowledge of both bright and dark entrepreneurial leaders.

Several authors (Mehmood *et al.*, 2021; Mehraein *et al.*, 2023; Soltanifar *et al.*, 2023) point to the need for more “original research related to the human and social dynamics of entrepreneurship and entrepreneurial management in small and growing organizations”—precisely the mandate of this journal. Mehraein *et al.* (2023) stress the need for deeper understanding of authoritarian leadership and for more qualitative studies. We aim to reduce these gaps with an ethnographic study of an entrepreneur who combined both bright (enabling) and dark (authoritarian) aspects of leadership.

We use abductive analysis, recommended for entrepreneurship research by Van Burg *et al.* (2022). This method aims for “plausible” answers (Golden-Biddle, 2020) to questions arising from unexpected phenomena (Haig, 2005). It is “an ongoing pragmatic process of “puzzling out” and problem solving”, an evolving process of exploration (Timmermans and Tavory, 2012, p. 167; Brandt and Timmermans, 2021). With abduction, especially when combined with ethnography, it takes time to decide “what is this a case of?” (Tavory and Timmermans, 2009, pp. 244, 248). Our answers to this question evolved, with three research approaches to understanding—we call them “windows”. Based on early fieldwork, we appeared to have a case of a triumphal return by an acknowledged “leader” who came back to revive MIDA’s business. After the next fieldwork visit, we thought this case centered on conflict and rivalry. Our third window was the use of social network analysis. It led us to a focus on persistent rivalrous ties and the co-existence of opposing managerial approaches. We organize this paper’s findings by the sequence of these windows.

### Research method: ethnography

The fieldwork for this study was conducted in 15 long days at MIDA. Visits covered about 110 h of observations. The ethnographer had prior experience in the industry and was able to interpret observations relatively easily. Data from these visits was augmented with communication with a key informant, now a senior executive elsewhere in the industry. He commented on several versions of the manuscript. Further clarifications and updates derived from phone calls. Two other managers at MIDA provided other follow-up insights. In the field, notes were taken openly.

Typed field notes amounted to 605 double spaced, narrow margin, 12-point pages. Notes were cryptic, with few reflections. Reflections were added when the data were intensively coded (more accurately, “indexed,” Seidel *et al.*, 1995) with 381 different index terms using the Ethnograph software. Randomly chosen passages of data were also indexed by two people

who differed from the ethnographer, one a younger female student and the other an older male entrepreneur. In the Ethnograph format, notes covered 718 pages of single-spaced, indexed data with 38,398 instances of tags for index terms and personal names. The index terms were documented in another 29 pages with definitions.

Several managers were keen observers of life at MIDA and eloquent informants. We quote from them extensively. Quotes were not from formal interviews. They were from discussions squeezed into the midst of their work and from speech in context. They were also from a self-moderated focus group, held off-site, with Carl, Cliff, Craig, Dean, Ralph and Marc. Figure 1 is an unofficial organization chart (there is no official chart) that depicts these and other key actors, including “Peter,” the General Manager and corporate entrepreneur, and “Cliff,” the most actively rivalrous employee.

Fieldwork was conducted in 1992 [1]. Why did we wait so long to publish our results? Deep fieldwork access at MIDA was a double-edged sword. Findings will show that our study, if published much earlier, would have endangered employees’ careers. Waiting has limited the value of specific findings about MIDA. But older data can be useful for method and conceptual progress. For example, Kovács’s (2010) re-analysis of data from 1941 found new models of relational similarity. Within management, a prominent example is re-conceptualizing the “Hawthorne effect” (Kompier, 2006). Other examples of the use of old data are Gulliver (1971), Oliver and Montgomery (2008) and White and Johansen (2005).

### Findings: window one: the bright “leader”

In late 1991, employees of MIDA chatted in the parking lot. Peter, their former general manager, soon would return, following a five-year stint as a Group Office executive. In his absence, high quarterly profits had turned to losses. Employees hoped that Peter would turn their business around. As a long-term employee expressed this, with Peter “we had a good leader. The moment we lost that leader, in my opinion, we started on down.” Could Peter bring in new contracts, as before? Could he continue to stir them to run hot, persistently finding new ways to work? Could he do this with people more formally trained than before, now needed for competencies in product, not just process, design? “Take a deep breath . . . OK, guys, fasten your seatbelts.”

Peter had exited to a promotion in Group Office in Quarter 4, 1986. He returned to MIDA in Quarter 4, 1991. Profits dropped soon after his exit and improved within months of his return. Scores on customer quality surveys went from marginal to excellent. Preventive maintenance and training of shop floor workers progressed. Times for changeovers dropped; accuracy of the setups improved. Peter also rebuilt revenues. At first, he did so by designing and selling prototypes of new products. As shift supervisor Dean put it, Peter “can foresee a profitable

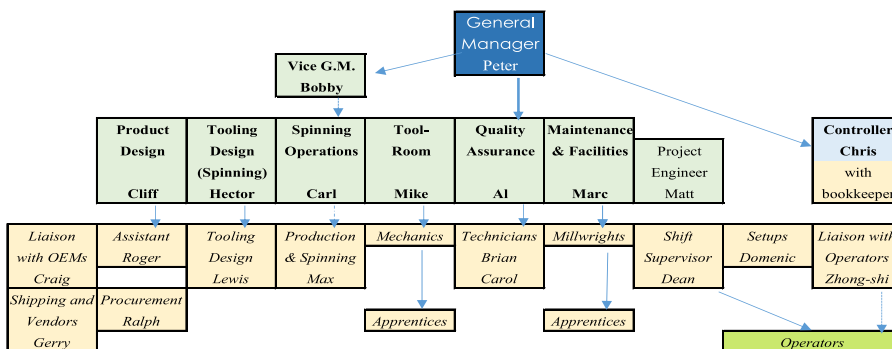


Figure 1. Organization chart, MIDA. Source: Authors’ own work

business . . . [and] he's willing to take a chance, with the [new product line]”, He sensed which innovations, however small, would catch the fancy of engineers in Dearborn and Detroit. As the Controller explained, Peter “single-handedly” got the customers interested in some “proprietary” improvement, and they funded the development. The negative financial trends after he left MIDA, and positive trends on his return, are graphed in Figure 2.

**Findings: window two: rivalry and conflict**

Peter was adept at both the “bright side” and the “dark side” of leadership (Brownell *et al.*, 2024; Hayes *et al.*, 2015). Stewart (1989) focused on the bright side, on Peter’s “helping to promote a favorable context for collective entrepreneurship” Haase and Franco (2020, p. 370). On the bright side, Peter encouraged collaborative work and tried to find opportunities for his employees to succeed (Renko *et al.*, 2015). This, we found, was not the whole picture at the time of our restudy. He also exemplified the dark side.

In a focus group with his peers, Cliff criticized Peter’s meetings. “And you dare to tell the chief guy that you don’t like his meetings at five o’clock that last until 9:30? Does anyone dare to stand up . . . ?” Cliff’s reticence was sensible. At Magna, the general managers governed employees’ careers. Peter used this authority to assign roles, to demote and to fire people; even firing, rumor had it, an employee elsewhere in a skunk works who made the mistake, Peter believed, of criticizing Peter’s marketing efforts. “It’s paranoid around here,” a manager said. “Peter doesn’t say what he means,” said another. “He pats you on the back, and then he demotes you.” Peter exhorted his puppies to be “positive,” but gained power from negativity. He generated fear. Network data show only three cases of Cliff eliciting anxiety in others, but 18 such cases for Peter.



**Figure 2.** The downturn and turnaround in MIDA’s revenue and pre-tax profit. Numbers are in 000’s. Peter was at the Group office for the time between the vertical lines. Source: Authors’ own work

Cliff, who with Peter was the lead product designer, complained that Peter took credit for his employee's ideas. A manager explained, "Cliff's view that he doesn't get enough credit for his designs is well known. His view is that he designs, say, a coffee cup, and Peter says, "why don't we move the handle up a bit; that way it'll come closer to your lip," and Cliff does this. Peter then takes credit for the design." Cliff had a related irritation: "People won't innovate. They're crushed for their honest mistakes."

### Findings: window three: what social network analysis reveals

We next draw upon social network analysis (SNA), which enables the "discovery and exploration of new phenomena that are not otherwise available to the ethnographer" (White and Johansen, 2005, p. xxix). We were inspired by Kapferer's (1969) "seminal" (Bendersky and Hays, 2012, p. 325) integration of SNA and ethnographic data, in his study of workplace conflict. Other studies have used ethnography and SNA in parallel (e.g. Wissink and Mazzucato, 2018). By contrast, Kapferer (1969), and White and Johansen (2005) used ethnographic data for the entries in their matrixes. We focus on Kapferer's study, which examined a case of workplace conflict, whereas White and Johansen examined kinship and marriage in a nomadic clan.

Questionnaires and interviews are often used to collect network data, but observations are crucial. A lengthy string of research, summarized by Corman *et al.* (2021), demonstrates that informant recall of network ties is "very inaccurate" (Marineau and Labianca, 2021, p. 89). In organizations, social networks are "multiplex", with overlapping network "relations," that is, "ties of a given kind measured on pairs of actors from a specified actor set" (Wasserman and Faust, 1997, p. 20). Direct observation is vital for capturing multiplex data as respondents do a poor job of distinguishing among relations (Johnson and Miller, 1986). The same is likely true of researchers. With ethnographic data, many relations can be considered, including sensitive relations such as antagonism. Multiplex analysis can reveal aspects of social structures that offer non-obvious understandings.

Like Kapferer (1969), we found that determining which relations to explore was an iterative process, dependent on the puzzles that emerged. Like Kapferer, we began with sub-relations. For example, actor "i" said that their supervisor, "j" was "the most disorganized person in the world ... it's terrifying," displaying the files in his office, which were, as asserted, a "shambles". One cell entry went from *i* to *j* for "disparage" and another for "complaint" (because tasks were made more difficult). These are two of the nine sub-relations for the antagonism (dark) relation. We settled on five relations that were especially illuminating: business development, managerial leadership, collective entrepreneurship (as construed by Peter), antagonism (a reaction to Peter's version of collective entrepreneurship) and analytical management (another reaction) shown in Table 1.

Using QAP (in Borgatti *et al.*, 2002), we found that correlations among the relations are moderate to high. Correlations are, unsurprisingly, especially high with the two intermediation

**Table 1.** Correlations among the relations, from QAP

	Anal	Ent	BusDev	Antag	MgtLead	AMEnt
Analytical management	1.000					
Collective Entrep'p	0.588	1.000				
Business development	0.470	0.651	1.000			
Antagonism	0.446	0.455	0.497	1.000		
Managerial leadership	0.553	0.774	0.671	0.625	1.000	
AM-Ent intermed	0.882	0.688	0.549	0.446	0.646	1.000
Ent-Antag intermed	0.526	0.701	0.607	0.806	0.725	0.613

**Source(s):** Authors' own work

relations (discussed below), which draw upon two other relations. However, all relations are examined separately and are not used in equations together. The problem of multicollinearity does not arise. Further, as we will see when we examine the relations, they have meaningful differences. For example, Bobby looms relatively large in managerial leadership, due to his formal role as vice-general manager, but less so in business development.

### Network measures

For characterizing the relations, as such, we used density as an indicator of normative consensus and stability (Oliver and Montgomery, 2008). But our main indicators refer to the actors: outdegree and indegree centrality, eigenvector centrality, Simmelian tie degree and structural equivalence. This latter indicator, measured by the Jaccard coefficient, indicates which node—person, corporation, or otherwise—could best substitute for another. Thus, an employee’s structural equivalence with Peter indicates that employee’s potential rivalry with their boss (Burt, 1987, p. 1291; Jancsary *et al.*, 2017).

Outdegree centrality registers actions initiated by ego. Indegree centrality is the number of ties directed towards ego. These measures record the number of observations from *i* to *j*. Eigenvector centrality indicates “prominence” (Conti and Graham, 2020) by calculating the centrality of a focal node based on the centrality of its connected alters. Simmelian ties indicate stronger social control and entrenchment in networks than merely transitive ties (Krackhardt, 1998, 1999). Whereas a transitive triple entails three ties, Simmelian triples require six, because ties are reciprocal. Ties within Simmelian triples are “sticky” because they “are backed up by the normative power of groups, providing stability beyond that . . . [of] dyads” (Krackhardt, 1998, p. 35; Dahlander and McFarland, 2013). The Simmelian ties measure used is the number of alters in such triples; that is, degree centrality with Simmelian ties.

In summary, structural equivalence, measured by the Jaccard coefficient, indicates potential rivalry. Simmelian ties generate stickiness (persistence) among ties. These ties are stronger if multiplex, and multiplexity itself generates stickiness. Below, we also invoke intermediation, which leads to network stability.

### The five primary relations

#### *Antagonism*

Resistance by employees is “inherent in organizational life” (Courpasson *et al.*, 2012, p. 801). Therefore, contradictory modes in reaction to entrepreneurship need not all be “bright” (Audretsch and Fiedler, 2023; Mehraein *et al.*, 2023). Just as bureaucratic organization incites entrepreneurial aspirations, so too can entrepreneurial organization incite negativity and hopes of more conventional operations (Courpasson *et al.*, 2016). When entrepreneurial organizations persistently run hot, as at MIDA, divergent approaches to management can also be expected. Running hot generated what Stewart (1989, pp. 86–87) called “the politics of competence”. The shortage of apparent qualifications, whether in training or in experience, incited worries. Worries were compounded by the frequent need to generate new solutions to operating problems, a key to running hot. As Johannisson *et al.* (1998, p. 484) expressed this, running hot entails “a permanent coping with critical incidents.”

Anxieties about competence were acute between the so-called “old team”, long-term employees who were recorded in Stewart (1989), and the “new team”, people like Chris, Marc and Cliff, hired for specific capabilities. Old team members, Carol, Jerry and Ralph especially, were more prominent in antagonism than in the other relations. Many tensions refer to the need to update abilities. Here is a member of the new team criticizing a member of the old team: “what does Zhong-shi really do? When we ask this, we’re told that he’s good with people and that he has contributed a lot to the company. I always thought that you have people working for you because they DO things that make a profit for the company.” Here is an old team member, Ralph: “Peter said Jerry and I need to learn computers. I need someone to help me learn.”

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As this quote implies, Peter straddled the old team and the new. He was there from the start, but he had the capabilities of the recent hires as well.

### *Managerial leadership*

Bright leaders provide their employees “opportunities for growth, advancement, and leadership” (Clark and Bradley, 2024, p. 183). By contrast, Peter excluded others from strategic thinking. As a manager observed, “Peter’s the only one who knows the strategy or the real business status. It’s all upstairs in his head.” This observation echoed one of Cliff’s critiques: the absence of written agendas. Cliff complained that “here, it’s too easy to go straight to Peter. Too much of Peter’s time is wasted.” This matched a pattern of people popping in on Peter, which was sensible on their part, given Peter’s monopoly of business and strategic information. The refusal to delegate strategically is a way to make autocrats irreplaceable (Oehmichen *et al.*, 2017). This was one of Peter’s ploys.

Peter’s monopoly of business information created a panic when an OEM representative arrived at MIDA’s door. He proved to be Isuzu’s Assistant Manager, 2nd Purchasing Group, International Purchasing Department, Tokyo; let us call him Nakanesan. The only person who had known about the visit was Peter, who failed to call, caught in a storm while returning from Detroit. Cliff tried to deal with it. People assembled quickly in the board room to welcome the guest, with Craig at one head, Cliff at the other end opposite Nakanesan, a newly appointed Vice General Manager [2] a bit later also opposite Nakanesan, and the fieldworker beside the visitor. Eventually, Will, the Vice President of Sales and Marketing at Group, arrived and sat near Nakanesan and Cliff (Presumably Will had received an urgent phone call.). Awkwardness and subtle jabs at one another prevailed.

During a product development meeting, Al told Peter (the General Manager), there was a call for him on line one. Peter asked who was on hold. Al checked. It was Magna’s CEO. Peter gave the CEO his phone number for an upcoming (rare) vacation. Cliff: “Al, why were you so lucky?” Al: “What?” Cliff: “To take the call.” Cliff reacted this way as he recognized that Peter dominated ties with the corporation’s top managers. Cliff knew, as Peter expressed it years before, that Peter alone sat in the chair in the General Manager’s office.

For Peter, his chair symbolized the success of his management and his strategy (Stewart, 1989, p. 95). It symbolized his power and thus his capacity to sustain his approach. For him, domination of business development reflected his deepest values. As a key informant explained, “Peter is very concerned about losing it all. He needs the facilities, the people, equipment, and so on, to run hot—which is to develop new products. Running hot IS that development process. It’s what Carl, Max, Hector, Bobby, and what others do. It’s not shop floor operations.”

### *Business development*

When Peter returned to MIDA, product design innovation, not just process design efficiency, was crucial for gaining new business. In a meeting on new products, Peter said that “we’re working for [two and three years down the road]. We’re working to book, scoop up, the business.” Nine months or so later, MIDA was winning profitable new contracts for “programs”—the term for accepted product lines. Business development was the arena for creating credibility with customers, and delegated authority from Magna. The Group President, according to Chris, had “been trying to turn [Magna’s] divisions into a homogeneous entity, clean, white, and so on. But what customers get with MIDA isn’t Corporate, and it isn’t MIDA, it’s Peter. He’s who they know. And he’s why they keep coming back. So long as he’s here, there will be the business. And what they’re buying . . . is differentiated . . . a bit different colour, and people, and equipment . . . All contact with the customer is mediated by Peter. This is one of Peter’s sources of power. You never get close to that network, never.”

This monopoly of customer networks frustrated Cliff. In his view, the customers’ engineers appreciated his contributions; certainly more than Peter did. In the second re-study trip Cliff

was asked, “what innovations is Peter responsible for?” He drew a blank. “None that I am aware of,” he said, surprised. The ethnographer was also surprised, not yet aware of his negative take on Peter’s contributions. Cliff’s potential rivalry reflected his job at MIDA. According to Dean, after Peter left MIDA for Group, Cliff was transferred from the Group with the task of taking on Peter’s work as an “engineer.” Cliff was the only person, other than Peter, who designed new products and hence facilitated new business. This seemed to encourage Cliff to identify with the leader’s role. He told us early in the fieldwork that “If I were Peter, I’d say, “Bobby, you work on making . . . operations profitable, and I’ll work on new developments [an ambiguous pronoun that we interpret to mean Cliff himself]. Just get your guys to concentrate on cutting down on waste, that’s what I’d say.” Cliff was also the only one at MIDA, Peter excepted, to pass along information on possible new programs. The data include three such incidents.

#### *Collective entrepreneurship*

Peter preferred and preached a mode of work termed “running hot”, distinguished by “spontaneous organizing and improvisation” (Johannisson, 2011, p. 144). As Chris expressed work at MIDA, “planning is boring. It’s exciting here without it. When the [latest crisis] comes along it hits you between the eyes.” In another conversation, he said that running hot “at the ultimate, pinnacle level” is survey [customer audit] preparation, with its “reconciliation process” between how they really work and how the customers believe they ought to work. He added, “I zig zag as much as the others do.” Peter was pleased that Chris was “positive” again, realizing it didn’t matter if we do things “by the book” so long as we get it done. In this, Peter expressed the running hot perspective.

#### *Analytical management*

For Cliff, the paucity of “information” and analyses particularly grated. “You can’t ask why we don’t do analyses of the costs of our setups. The customers ask these questions. So there will be a few [mock] analyses, but they’re all for show.” Cliff’s experience had been with leaders whose worldview was, like his own, more linear than Peter’s. Cliff was a European-trained engineer, “methodical and careful.” He wished above all to see more attention to financial considerations. However, financial analysis can make tradeoffs explicit, which Peter opposed.

In decisions about production and quotes for new business, Cliff argued, “What is missing is the dollar sign.” He added that “we just don’t have a clear [understanding of] what we are wasting.” Marc spoke up in agreement: “I think we have to create some system that we measure our performance. That’s what we don’t have.” Marc’s practice was true to his word. He made Pareto analyses of workstation downtime. His approach to winning Peter’s approval was by documenting improvements in facilities. He created a baseline, with numerical data augmented by photographs. He also developed a database and a costing system. In QA, Al created Pareto charts with a cost analysis of scrap for each of the workstations. Matt focused on analysis even more than Marc or Al. As a newly minted industrial engineer, not yet integrated into operations, he contributed to the scientific management of quality assurance, inventory management, and production scheduling. Carol praised that work, and credited Brian as well, for his work as SPC (statistical process control) coordinator. Even Ralph, adept in the zig-zagging arts, told us that “Max, Dean, and Zhongshi are good at production, but they can’t keep track of 40 [programs] at once. Matt is an industrial engineer, and he can.”

Chris explained that “indirectly,” Peter gave credit to these efforts, by requesting charts like Marc’s from others as well. “It became a joke around here, and everyone was trying to learn to do pie charts.” Peter was not opposed to analysis, apparently not regarding analysis as impinging on his domain. He would complain, mildly, about the “zig zagging” methods (his expression) that proliferate in the running hot way of working. Therefore, the analysis relation was an arena for rivalry, if only for approbation. Analytical work was, nonetheless, counter cultural. As Cliff complained, much of the analysis was really pretense for the customers.

Craig also complained that only Cliff “maintained the log” for Advanced Quality Planning (AQP), but that was unsurprising. The AQP model was intended for show. An impressive AQP poster in Peter’s office was, he confided, intended only for the customers. Chris explained that “it really is against the grain [at MIDA] to keep up with documentation.”

## Social network findings

### Antagonism

This relation is comprised of the sub-relations Anger, Anxiety (in both directions: the person causing anxiety and the person affected), Blame, Complain, Defend (also in both directions), Disparage, Muddle, Rivalry and Social Distance. Figure 3 is a sociogram of the antagonism relation. The SNA results for the eight members of Peter’s frequent operational meetings are in Table 2.

Antagonism has, unsurprisingly, lower density and embeddedness (Simmelian tie) scores than collective entrepreneurship. Yet it is also quite dense, and it harbors 96 Simmelian ties. On a quick inspection of the sociograms, it is similar. The main difference is the scores for Cliff. He is much the most prominent subordinate in antagonism, with a high Jaccard coefficient—he has a high level of structural equivalence with Peter. Based on these SNA scores, he would seem to be at risk of Peter’s retribution.

### Managerial leadership

This relation is comprised of the sub-relations Assign Resources, Authority, Autocracy, Command and Strategy. Figure 4 is a sociogram of the managerial leadership relation. The SNA results for the eight members of Peter’s frequent operational meetings are in Table 3.

Cliff is active in this relation, but his SNA scores do not suggest a rival to Peter. Cliff has no Simmelian ties in this relation, compared with eight for Al and six for Marc. All Simmelian tie scores are low as this relation has only 36 in all. Al, the quality assurance manager, seems perhaps the most important at his rank, but no one rivals Peter’s scores. Bobby has the highest structural similarity to Peter, based on this role of vice general manager. However, his behavior in that role was low key, as reflected in his outdegree scores which were about 6% of his indegree scores. Others directed ties to him, but unlike Peter he directed few ties to others.

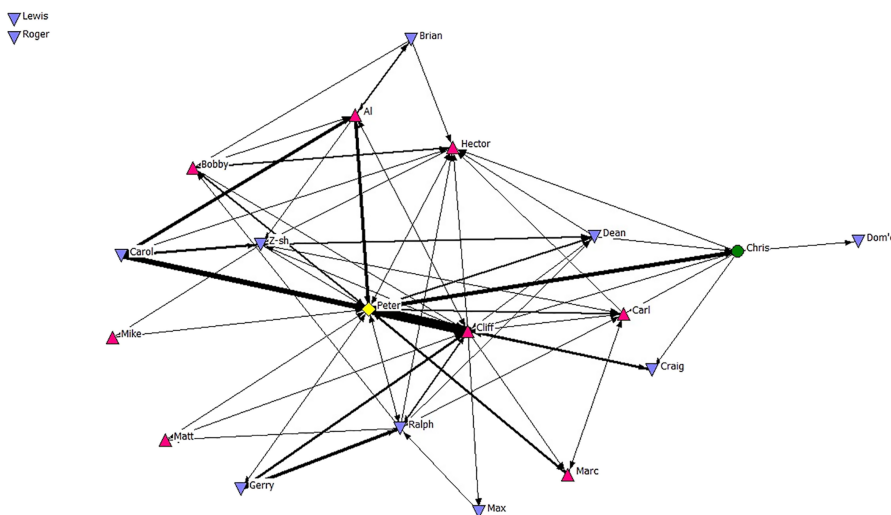


Figure 3. The antagonism relation. Source: Authors' own work

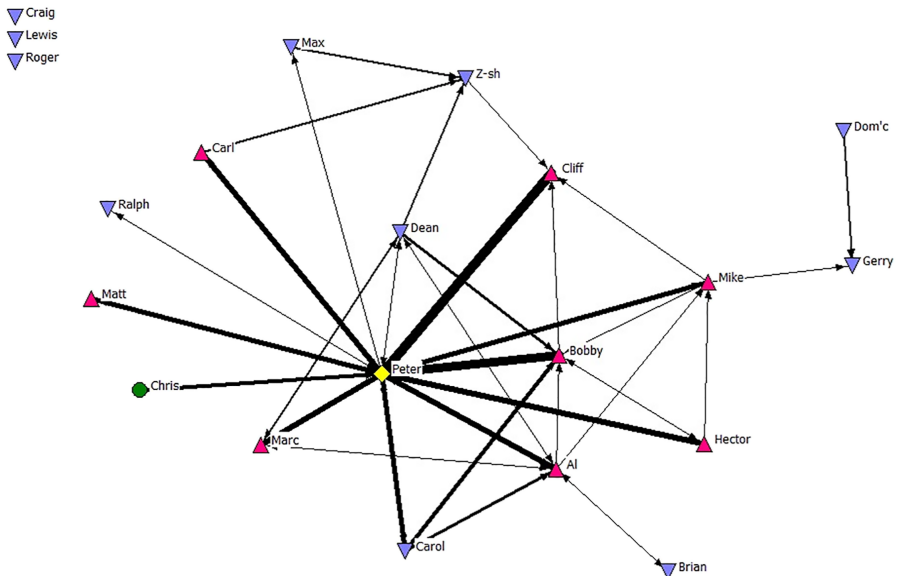
**Table 2.** SNA scores in antagonism

	Outdegree	Indegree	Eigen. Cent.	Simm. Ties	Jaccard
Peter	1.000	1.000	1.000	1.000	1.000
Cliff	0.817	0.302	0.800	0.917	0.800
Al	0.200	0.256	0.348	0.167	0.267
Carl	0.167	0.116	0.176	0.333	0.429
Bobby	0.150	0.070	0.170	0.000	0.267
Hector	0.033	0.174	0.158	0.000	0.533
Marc	0.100	0.081	0.153	0.083	0.143
Matt	0.050	0.047	0.076	0.083	0.143
Mike	0.017	0.047	0.060	0.000	0.071

**Note(s):** Simmelian Ties: 96; Density: 0.210

The mean extent of structural equivalence with Peter for these eight subordinates is 0.332

**Source(s):** Authors' own work



**Figure 4.** The managerial leadership relation. Source: Authors' own work

*Business development*

This relation is comprised of the sub-relations Innovate, New Business (revenue), Product Design and Turnaround (operations). Figure 5 is a sociogram of the business development relation. The SNA results for the eight members of Peter's frequent operational meetings are in Table 4. [3].

Business development played a crucial role, as reflected in its high correlations with managerial leadership and with collective entrepreneurship. The Jaccard coefficients demonstrate a high level of modeling behavior on Peter (These coefficient measures structural similarity of the employee with Peter.). Peter and six key people, all of whom were focused on tooling and manufacturing, formed a cohesive group, reflected in the many

**Table 3.** SNA scores in managerial leadership

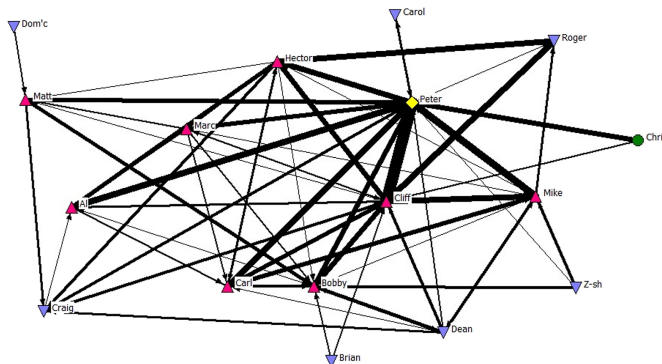
	Outdegree	Indegree	Eigen. Cent.	Simm. Ties	Jaccard
Peter	1.000	1.000	1.000	1.000	1.000
Bobby	0.040	0.667	0.523	0.200	0.500
Cliff	0.111	0.452	0.483	0.000	0.154
Al	0.131	0.405	0.364	0.800	0.385
Marc	0.071	0.310	0.305	0.600	0.167
Carl	0.040	0.238	0.289	0.000	0.000
Hector	0.030	0.238	0.281	0.200	0.167
Mike	0.040	0.238	0.277	0.000	0.308
Matt	0.010	0.167	0.200	0.000	0.000

**Note(s):** 36 Simmelian ties; Density: 0.121

The mean extent of structural equivalence with Peter for these eight subordinates is 0.216

**Source(s):** Authors' own work

- ▼ Gerry
- ▼ Lewis
- ▼ Max
- ▼ Ralph



**Figure 5.** The business development relation. Key. yellow diamond: General Manager; red up-triangles: direct reports to G.M. (including Vice G.M.); lavender down-triangles: not direct reports (although the rank of shift supervisor Dean is ambiguous); green circle: the Controller (the only person in the image who is staff, not line). Source: Authors' own work

Simmelian ties among them: 124 of the 132 such ties in this relation. As expected, Peter had the highest network scores, but Cliff was close behind, and marginally ahead with indegree centrality. On one hand, he was important for Peter's product-design-focused mission. On the other hand, his scores in this key relation made him seem a potential rival to Peter.

*Collective entrepreneurship*

This relation is comprised of the sub-relations (mutual) Accommodation, Cooperation, Credit (others), Encourage, Hustle, Jump (for customers), Learn, Stretch (capabilities) and Trust. Figure 6 is a sociogram of the collective entrepreneurship relation. The SNA results for the eight members of Peter's frequent operational meetings are in Table 5.

Running hot as a culture of work and a practice is not directly observable. Stewart (1989) came to recognize it by participating as a MIDA employee. When we analyze this relation, with its high levels of density and embeddedness in 293 Simmelian ties, we can see that Peter

**Table 4.** Social network analysis (SNA) scores in business development

	Outdegree	Indegree	Eigen. Cent.	Simm. Ties	Jaccard
Peter	1.000	0.983	1.000	1.000	1.000
Cliff	0.663	1.000	0.899	1.000	0.786
Mike	0.163	0.661	0.554	0.833	0.615
Hector	0.465	0.356	0.539	0.750	0.692
Carl	0.337	0.339	0.522	0.750	0.538
Bobby	0.093	0.746	0.479	0.667	0.643
Al	0.058	0.407	0.388	0.083	0.462
Marc	0.174	0.153	0.283	0.250	0.538
Matt	0.105	0.220	0.260	0.000	0.357

**Note(s):** 132 Simmelian ties; Density: 0.193

All SNA scores are sorted from highest to lowest eigenvector centrality

Jaccard coefficients are for structural similarity with Peter, who is always 1.000. The mean extent of structural equivalence with Peter for these eight subordinates is 0.579

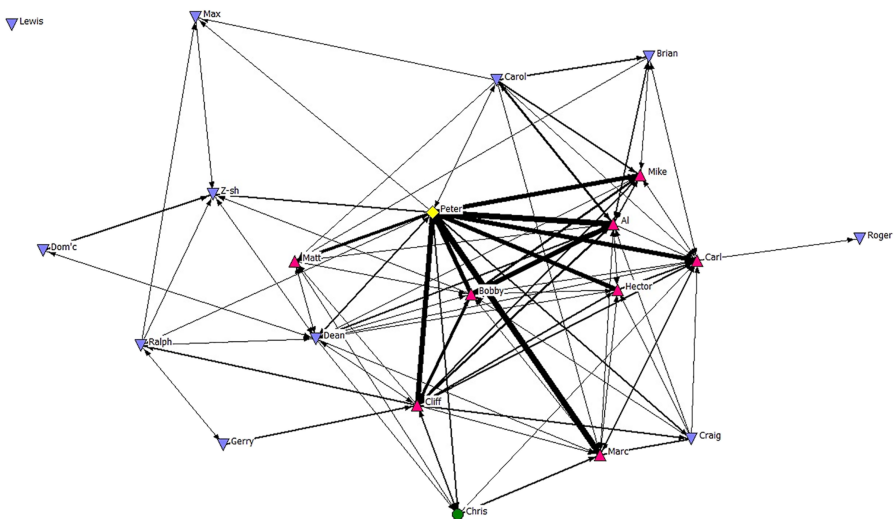
**Source(s):** Authors' own work

was right in believing that MIDA was still running hot. Everyone except Lewis, who worked with his door shut before he was let go, has connections, many of them strong. Even the newcomer Matt was starting to join in, as did Chris, the controller and the only M.B.A.

*Analytical management*

This relation comprises the sub-relations Analysis, Document (as a verb), Compute (noun and verb) and Financial Considerations. Figure 7 is a sociogram of the analytical management relation. The SNA results for the eight members of Peter's frequent operational meetings are in Table 6.

The ethnographic record showed that analytical management “went against the grain” of the prevailing hot way of working. But it also showed that Peter was not opposed to analysis, provided it did not slow down service to customers. These scores demonstrate further that he



**Figure 6.** The collective entrepreneurship relation. Source: Authors' own work

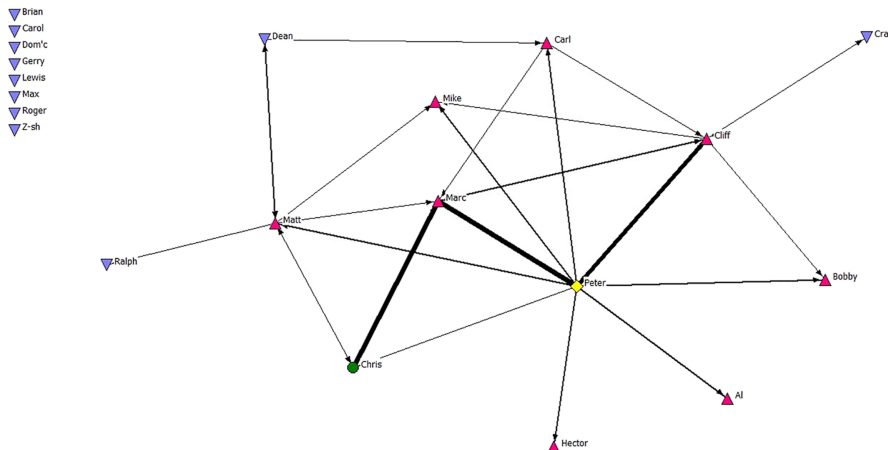
**Table 5.** SNA scores in collective entrepreneurship

	Outdegree	Indegree	Eigen. Cent.	Simm. Ties	Jaccard
Peter	1.000	0.825	1.000	1.000	1.000
Bobby	0.122	1.000	0.605	0.684	0.714
Al	0.314	0.778	0.620	0.737	0.667
Cliff	0.282	0.857	0.536	0.789	0.733
Marc	0.090	0.667	0.457	0.211	0.643
Carl	0.115	0.587	0.380	0.579	0.625
Mike	0.128	0.429	0.375	0.789	0.400
Hector	0.096	0.476	0.355	0.263	0.500
Matt	0.026	0.302	0.191	0.053	0.400

**Note(s):** 234 Simmelian ties; Density: 0.293

The mean extent of structural equivalence with Peter for these eight subordinates is 0.585

**Source(s):** Authors' own work



**Figure 7.** The analytical management relation. Source: Authors' own work

actively co-opted the analytical efforts. They also show that Cliff was on safer ground in this relation, as he was one of only three, along with Peter and Marc, to be linked in a Simmelian triple. Otherwise, the relation is sparse, with low scores in structural equivalence to Peter.

### Two derivative relations

We created two other relations. These are derived from the five primary relations. We know that diverging logics can co-exist in organizations (Judge *et al.*, 2009; Zeitoun *et al.*, 2019). But how is this possible? How do dark and bright organization co-exist, and how do non-analytical and analytical management co-exist? We drew upon the concept of intermediation across divergent institutional or managerial logics. Divergent logics can persist in organizations due to the activities of intermediaries. Alternatively, intermediaries can facilitate the dominance of one logic over the other. Intermediaries can hold roles designed for intermediation (Jancsary *et al.*, 2017). They can also be, as at MIDA, individuals with credibility among the adherents of each logic (Oliver and Montgomery, 2008). Therefore, we created one relation for intermediation between the collective entrepreneurship relation and the antagonism

**Table 6.** SNA scores in analytical management

	Outdegree	Indegree	Eigen. Cent.	Simm. Ties	Jaccard
Peter	1.000	0.667	1.000	1.000	1.000
Marc	0.500	1.000	0.902	1.000	0.500
Cliff	0.450	0.417	0.626	1.000	0.444
Matt	0.300	0.417	0.369	0.000	0.300
Carl	0.100	0.250	0.338	0.000	0.222
Mike	0.000	0.333	0.279	0.000	0.250
Bobby	0.000	0.250	0.245	0.000	0.125
Al	0.000	0.167	0.186	0.000	0.000
Hector	0.000	0.167	0.186	0.000	0.333

**Note(s):** 6 Simmelian ties; Density: 0.069

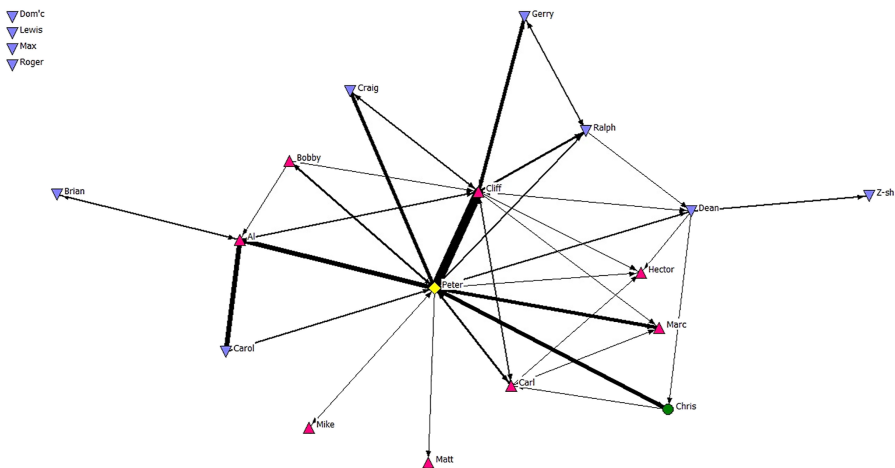
The mean extent of structural equivalence with Peter for these eight subordinates is 0.272

**Source(s):** Authors' own work

relation. We created another relation for intermediation between collective entrepreneurship and analytical management. These intermediation relations use the minimum of the  $i-j$  and  $j-i$  cells across collective entrepreneurship and antagonism and across collective entrepreneurship and analytical management.

The entrepreneurial–antagonism intermediation relation is composed of the minimum of the corresponding matrix cells in the collective entrepreneurship and antagonism relations. **Figure 8** is a sociogram of the entrepreneurial–antagonism relation. The SNA results for the eight members of Peter’s frequent operational meetings are in **Table 7**.

The entrepreneurial–analytical intermediation relation is composed of the minimum of the corresponding matrix cells in the collective entrepreneurship and analytical relations. **Figure 9** is a sociogram of the entrepreneurial–antagonism relation. The SNA results for the eight members of Peter’s frequent operational meetings are in **Table 8**.



**Figure 8.** The entrepreneurial–antagonism intermediation relation. Source: Authors' own work

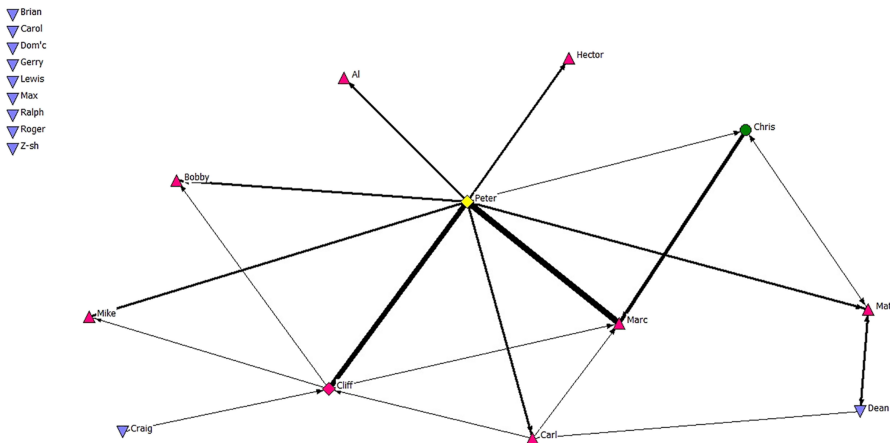
**Table 7.** SNA scores in the entrepreneurial–antagonism intermediation relation

	Outdegree	Indegree	Eigen. Cent.	Simm. Ties	Jaccard
Peter	1.000	1.000	1.000	1.000	1.000
Cliff	0.558	0.432	0.777	0.600	0.800
Al	0.256	0.364	0.458	0.400	0.267
Carl	0.163	0.159	0.303	0.400	0.429
Marc	0.140	0.159	0.292	0.200	0.143
Bobby	0.140	0.091	0.289	0.000	0.267
Hector	0.023	0.136	0.197	0.000	0.533
Matt	0.000	0.068	0.134	0.000	0.143
Mike	0.023	0.045	0.096	0.000	0.071

**Note(s):** 30 Simmelian ties; Density: 0.129

The mean extent of structural equivalence with Peter for these eight subordinates is 0.579

**Source(s):** Authors’ own work



**Figure 9.** The entrepreneurial–analytical intermediation relation. Source: Authors’ own work

**What did social network analysis add to the ethnography?**

Peter used his power over employee careers, to block transfers, to fire, to demote and to hire. He also used these to retain employees who could handle the stress of running hot. He blocked transfers to other Magna divisions for Carol and for Carl. He “would be very sad to see one of his puppies have to get a job somewhere else”, a manager believed. These were people who “could never work for anyone else”, as Carol said, and who “WILL work the 18 hours if needed” as the Controller told me. These people lacked comparable alternatives: “Once you’ve been Peterized, it’s very difficult to leave Peter, and people elsewhere think that Peterized people are well paid and are specialized in [their] training.” As Audretsch and Fiedler asserted, the entrepreneur’s “coercive power stems from dependency” (2023, p. 1575).

For all his power over employees, Peter seemed to ignore a threat to his position from Cliff. Peter knew of Cliff’s opinions. He told the fieldworker that Cliff is “very straightforward in his views.” Yet Peter and Cliff continued together for three years after the fieldwork, at which time Cliff moved to another Magna unit, run by a corporate-level rival of Peter’s. Why did they

**Table 8.** SNA scores in the entrepreneurial–analytical intermediation relation

	Outdegree	Indegree	Eigen. Cent.	Simm. Ties	Jaccard
Peter	1.000	0.800	1.000	0.000	1.000
Marc	0.200	1.000	0.736	0.000	0.375
Cliff	0.400	0.400	0.594	0.000	0.444
Carl	0.100	0.300	0.357	0.000	0.222
Bobby	0.000	0.300	0.270	0.000	0.125
Mike	0.000	0.300	0.270	0.000	0.125
Matt	0.100	0.500	0.266	0.000	0.111
Al	0.000	0.200	0.209	0.000	0.000
Hector	0.000	0.200	0.209	0.000	0.000

**Note(s):** 0 Simmelian ties; Density: 0.057

The mean extent of structural equivalence with Peter for these eight subordinates is 0.175

**Source(s):** Authors' own work

persist with so much disagreement and so many complaints? Why was Cliff not promptly dismissed? Bobby, an equally senior manager, was dismissed [4]. Social network analysis shows why these apparent adversaries remained with one another so long. These reasons also demonstrate how contradictory forces can co-exist in entrepreneurial organizations.

Based on observations at MIDA, Cliff and Peter had much the most negative relationship. We see this in the antagonism relation. If we strip that relation down to just the blame, complain and disparage sub-relations, we illustrate even more strikingly the sorts of actions that are easily observed. With these negative ties, Cliff's ties to Peter stand apart. We observed 17 such ties compared with 13 for all other employees. An example is Cliff's complaint that Peter takes responsibility for his (Cliff's) innovations. SNA showed that these relatively readily noted observations must be heavily qualified.

Within MIDA, Peter and Cliff shared 23 Simmelian ties (Table 9). The highest number for any of other employees—for Carl and for Al—was 14. Prior research (Krackhardt, 1998, 1999; Zhang and King, 2021) finds that Simmelian ties are not readily sundered. Another reason is multiplexity. Cliff and Peter were active in all seven relations. Multiplex ties are “sticky” (Verbrugge, 1979), even with negative ties (Bellotti, 2015, p. 102), due to their greater strength (Dahlander and McFarland, 2013). Samila *et al.* (2022) found that collaborative ties persist the more they are embedded in a triad (whether Simmelian or not), and the more that the

**Table 9.** Structural equivalence and shared Simmelian ties with Peter

	Mean SE with peter	S.T. with peter
Cliff	594.43	23
Hector	394.00	9
Bobby	377.29	9
Marc	358.43	10
Carl	352.14	14
Al	284.00	14
Mike	262.86	9
Matt	207.71	2

**Note(s):** Mean SE (structural equivalence) with Peter: The mean across the seven relations

S.T. with Peter: total number of Simmelian ties with Peter

**Source(s):** Authors' own work

third party is helpful. With Peter and Cliff, especially helpful thirds included Mike in both business development and collective entrepreneurship, and Mike in analytical management.

When we also examine Cliff's network profile, we better understand that he was a valuable employee. He had the highest structural similarity with Peter in both the intermediation relations. He was the most prominent employee for integrating the bright and dark relations of collective entrepreneurship and antagonism. He was one of the two prominent employees, with Marc, integrating the analytical and entrepreneurial management relation. Cliff also had the highest structural equivalence with Peter across the seven relations, well ahead of the next highest employees, Hector, Bobby, Marc and Carl. He was the most structurally equivalent to Peter in the bright relations of business development and collective entrepreneurship, and second most in analytical management.

Cliff was the most nearly equivalent in antagonism. However, in managerial leadership he had a modest similarity, only the sixth of the eight subordinates. Further, in this relation, he had no Simmelian ties. Despite his criticisms of Peter's management approach, he was not a threat to Peter's position. We do not know if Peter had an intuitive understanding of SNA reasons why Cliff was not a threat. However, we can see in the data that Peter succeeded, with a cool, almost remote interpersonal style, to dominate all seven relations in our study. He was able to dominate both analytical management and running hot, despite their conceptual incompatibility.

### Limitations

Two fundamental limitations are the long lag in publishing our data and the limitless combinations of data and of network relations that are possible. We present in this paper the data and relations that we found to be the most illuminating. But many alternatives are possible and there is no recognized standard for judging our choices. Further, this is a "realist tale" with only a dash of reflexivity (Van Maanen, 2011). Another limitation of this study is its specific contextualization and lack of generalizability due to its lack of randomly collected data across a sample of firms. Such an effort is unimaginable for topics such as antagonism.

### Inferences: outcomes for employees and for business

Many studies have found that entrepreneurial leaders are empowering (Kim and Beehr, 2023; Jing, 2018, 2020; Ravet-Brown *et al.*, 2024). These leaders offer their subordinates broad participation in management. Peter generated little self-confidence. "I'm convincing myself that I'm not doing a good job," said one of MIDA's managers. Before Peter left for the Group office, he "called us idiots and said he'd replace us." Autocratic leadership such as Peter's diminishes self-efficacy of the followers (Shu *et al.*, 2018). A metaphor conveyed the employees' frustration. One of Peter's direct reports described himself and his peers as "Peter's puppies, his so-called management team." "We're all puppies," he added. "Even me. Even Cliff. He may be the largest, and he may bark the loudest, but when Peter says "sit," he sits, with his paws in the air."

Bright entrepreneurial leaders—most entrepreneurial leaders—offer public recognition of employees' creative work and "bolster confidence" in these efforts (Renko *et al.*, p. 67; see also Clark and Bradley, 2024; Gupta *et al.*, 2004). By contrast, Peter seldom praised his employee's efforts. A MIDA manager explained that the praise he offered "would never be direct". He added that what mattered "wasn't about receiving praise, it was about avoiding blame and negativity . . . in the gallows, no noose is good noose!"

Peter's failure to develop professional managers left MIDA vulnerable to changes in the auto parts sector. Over time, the automotive OEMs offloaded more and more challenges to their tier one suppliers: quality assurance and process design at the time of Stewart (1989), product design at the time of the restudy and the creation of complex modular components shortly thereafter (Yoon and Sohn, 2024). We are not certain that MIDA's eventual failure, in 2017, resulted from its failure to develop a true management team. We have only the report of

one informant. We can be certain that an increasingly challenging industry would have needed increasingly sophisticated management.

### Implications for researchers

For entrepreneurship scholars, we offer, as plausible proposals to explore, that skilled entrepreneurial leaders “manipulate other persons”, as Barth (1963) proposed, to create social “structural transformation”, as McMullen *et al.* (2021) argued. These leaders (1) use their power over employees (2) to craft multiplex networks that (3) include collective entrepreneurial organization, with (4) contradictory but co-existing approaches to management.

Kapferer’s use of ethnographic data for social network analysis has seldom been used by any researchers, let alone management scholars. But it is powerful. Ethnographic data—provided access in the field is deep enough—generates meaningful distinctions among network relations, distinctions that self-reports fail to discern. Multiplexity can provide surprising findings, in our case, the sticky persistence of rivalrous ties. We were surprised to discover the antagonism and rivalry between Peter and Cliff. But a bigger surprise was that Cliff and Peter’s relationship was functional and sustainable. An implication is to be wary of drawing conclusions about entrepreneurial organizations based only on direct observations.

### Notes

1. Two authors, an ethnographer and a social network scholar, conducted this research, but the fieldwork was conducted by one author. Therefore, we use the first-person plural but “the fieldworker” or “the ethnographer” when appropriate.
2. This person had been in the role before. His re-appearance was met with widespread distress.
3. These are the line managers with the closest structural equivalence to Peter, as measured by the Jaccard coefficient.
4. We were told that Bobby had run afoul of powerful people elsewhere at Magna. This would demonstrate a limitation of data from the division alone, as our SNA gives no reason to think he was at risk.

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