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A Role Based Perspective on Leadership as a Network of Relationships

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Purpose

It is proposed that executives need to be prepared to adopt roles complementary to those of other group members in order to fulfil their leadership responsibilities effectively.

Design / Methodology / Approach

A model provides insight into the distributed and networked form of leadership, and the roles that executives can adopt in formal, informal or temporary groups within the organisation's overall senior management team. The methodology adopted is qualitative, focusing on inquiry-based learning which enabled the authors to gather data on those aspects of the social structure within which they were embedded that related specifically to the leadership roles available to executives and the networks they formed.

Findings

Generically applicable links between leadership roles are identified that provides structure to the task accomplishment networks within groups executives form when discharging their leadership responsibilities. Characterising leadership in terms of role, and the task networks that executives form, is found to facilitate improvement in the speed with which groups gain productive contributions from their members.

Research Limitations / Implications

A case study of three demographically similar multinational engineering companies engaged in the design, development and manufacture of rotating turbomachinery provides the platform for the research. The concepts advanced will require validating in other organisations of different demographic profiles.

Practical Implications

The concepts advanced, and implications discussed, provide an insight into the distributed and networked form of leadership. The practical steps individual executives can take to contribute to the speed with which groups gain productive contributions from their members are highlighted.

Originality / Value

This article attempts to assist executives within a senior management team to better adapt and coordinate their behaviour with other executives. In so doing, it is suggested that executives contribute more positively to the development of groups and the speed with which the groups of which they are a part gain productive contributions from their members.

1. Introduction

When considering what leaders really do, Kotter (1990) observed that management is about coping with complexity. Good management brings a degree of order and consistency to key dimensions like quality and profitability of products. Management, according to Kotter (1990), is enacted through an organisation's formal structure. Greenleaf (1977: 59) comments that an organisation's formal structure consists of more or less definite arrangements and ways of working that are spelled out in statutes and rules or established practices. These take care of routine operations, specifying lines of reporting and authority for certain actions and expenditure, and outline steps to be taken in certain anticipated circumstances. Morgan (1997: 11) analogises the formal structure of the organisation as a machine.

In contrast to management, Kotter (1990) considered leadership to be more about coping with change. When contemplating the structure of organisations Greenleaf (1977: 59) identified two main parts, formal and informal, concluding that the informal structure responds more to leadership. Knowles (2002: 97) analogised organisations informal structures as a living system, observing that people in them tend to self organise around the work, forming patterns and networks.

Leadership research may be broadly characterised by the continued development and testing of generalisable theoretical frameworks to explain the effects of pre-existing executive and senior management team characteristics on an organisation's performance (Gupta & Govindarajan, 1984; Eisenhardt & Schoonhoven, 1990; Miller, 1991; Wiersema & Bantel, 1992). Some researchers focus on the use of historical documentation when establishing a link between characteristics and performance (Finkelstein & Hambrick, 1990; Hambrick et al, 1996) whilst others have used quasi-experimental methods to link characteristics and performance (Boon et al, 1998; Carpenter & Golden, 1997). Few studies have considered organisational outcomes in terms of psychological influences, however Miller et al (1982) and Boone & De Bradander (1996) have considered

executive's locus of control and Kets de Vries & Miller (1984) have contemplated executives neuroses.

A further branch of leadership research has been that of identifying relationships between the characteristics of executives and the effectiveness of the organisation, while at the same time being criticised (Boal & Hooijberg, 2001; Cannella & Monroe, 1997) for its positivist form. Positivism assumes that the researcher is a sort of "spectator" of the object of enquiry (Chia, 2002; 7). Reality is assumed to unproblematically exist "out there" independent of the perceptions, beliefs and biases of the researcher. For positivists, sound research consists of the "undistorted" recording of observations obtained through efficiency driven methods of investigation and the use of precise terminologies and classification in the process of documentation (Kakabadse & Kakabadse, 2005). Explanations regarding the observed pattern of regularities connecting one set of phenomena with another can then be systematically developed and empirically verified.

The research described in this article addresses the question of the extent to which a role based perspective can provide insight into the distributed and networked form of leadership. The approach adopted focuses on the creation of shared meaning amongst those executives participating, and from this creation of new knowledge. In so doing the author's intent is to explain how the roles available to executives whilst discharging their leadership responsibilities are related. To address this question the authors adopted a collaborative inquiry approach (Heron, 1981; Kakabadse & Kakabadse, 2005), in contrast to a positivist approach. Collaborative inquiry focuses on creation of shared meaning amongst co-inquirers via the co-creation of group knowledge, and as a consequence of new knowledge, change through learning, and in so doing helps to explain how characteristics of executives are related.

In this article the authors first examine the literature on leadership that supports a distributed and networked perspective. A methodology section that explains and justifies the data gathering strategy follows. The theoretical model that emerges from the gathered data is then described. The model highlights practical steps individual executives can take to identify and develop the groups of which they are a part. Mapping networks of relationships within informal and temporary groups was found to facilitate improvement in each executive's ability to discharge their leadership responsibilities within the wider formal senior management team. The article concludes with a consideration of the implications for both leadership theory and the practicing executive.

2. A Network Based Perspective on Leadership

The notion that leadership can exist in a distributed form may seem to be at odds with the definitions of leadership most commonly accepted. Many definitions of leadership (Rost, 1993) imply that leadership is a disproportionate social influence process. From this perspective, there is no leadership without leaders – that is individuals who exert more influence on the group than others do. When influence is equally shared amongst members of a group and there are no individuals who exert disproportionate influence, the group is leaderless and therefore we cannot talk about leadership. It has been argued by Shamir (1999) that the term leadership should be reserved for cases in which a single individual or small group of individuals exerts disproportionate influence on a larger group.

Other researchers view leadership in terms of functions that are important for the survival of the group and the accomplishment of its goals. From this perspective leadership may be performed by a single individual, two individuals, divided amongst group members or performed by the entire group (Avolio et al, 1996; Bowers & Seashore, 1966; Manz & Sims, 1993; Pearce & Sims, 2000). Various leadership functions may be carried out by different people who influence what the group does, how it is done, and the way people in the group relate to each other (Yukl, 1998: 3). The distribution of leadership amongst group members promotes participative decision making (Vroom & Jago, 1988). Important decisions about what to do and how to do it were observed by Yukl (1998) to be made in groups through the use of an interactive process that involves many different people who influence each other. Leadership in this context is a reciprocal process amongst group members (Yukl, 1998). This perspective is supported by Northouse's (2004) observation that leadership is a process, and secondly that leadership is not a linear, one-way event but rather an interactive event.

The origin of a distributed perspective on leadership can be found in the changing nature of work. The rise of the knowledge worker was observed by Drucker (1959) to be both a symptom and cause of changing patterns of organisational structure and leadership. For Drucker (1995), the shift from mostly manual labour performing repetitive tasks to educated workers applying theoretical and analytical knowledge is the process of putting knowledge to work. This Drucker (1995) concluded has had a profound impact on philosophies of leadership and the structure of organisations. When considering the implications of the shift to knowledge based working, Hooker & Csikszentmihalyi (2003) concluded that more work within organisations would become flexible and varied. This in turn will require teamwork of a new kind, one that is conducive to the expression of creativity and innovation. Hooker & Csikszentmihalyi (2003) specifically considered the implication for the leadership organisations will increasingly require, concluding that decentralised forms of leadership will become more necessary and so will shared forms of leadership.

The shift in the conceptualisation of leadership from a single person to a team model requires new concepts and methods to capture the nature and structure of leadership. Yukl (1998: 459) states that:

Viewing leadership in terms of reciprocal, recursive influence processes among multiple parties in a systems context is very different from studying unidirectional effects of a single leader on subordinates, and new research methods may be needed to describe and analyse the complex nature of leadership processes in social systems.

The social network approach is one perspective that Mayo et al (2003) considered might help provide the conceptual framework and methodological tools. The most distinguishing feature of a social network perspective is its emphasis on relationships amongst social actors and the patterns and implications of these relationships (Wasserman & Faust, 1994). Cartwright & Harary (1977) outlined the basic idea of representing groups as a collection of points connected by lines. The

resulting “sociogram” represents the network of relationships amongst group members that can be analysed.

The link or tie is the basic building block of a social network. As observed by Mayo et al (2003) a link is not the property of any single individual; rather it is a relational entity that exists only if two individuals are connected together. Some common ties examined in the literature are communication networks (Danowski, 1980), friendship and instrumental relations (Ibarra & Andrews, 1993), and help and advice relations (Krackhardt & Porter, 1986). A task network develops around work-role performance and is directly associated with the prescribed objectives of the task (Mayo et al, 2003). A friendship network is defined as organisational members’ exchanging personal information and developing close friendships (Ibarra & Andrews, 1993). An advice network develops as individuals seek advice from others in the network; it serves to identify the experts in a social system (Krackhardt & Porter, 1986). A conclusion of Mayo et al (2003) is that social influence is at the core of the leadership process.

3. Leadership Roles

The theoretical roots of role making were reviewed by Seers et al (2003: 82) who observed that over decades of research the basic process of role differentiation has been documented. With respect to leadership, Bass's (1949) analysis noted that two individual group members often emerged into complementary roles. One of these leaders was generally the member most respected for his contributions to the accomplishment of tasks within the group. The other was generally the best-liked member, who was most respected for his contribution and support of friendly interaction amongst members. Similar results were reported by Carter (1954), Slater (1955), Borgatta & Blaes (1956), Bales & Slater (1955) and Bales (1958).

The above early studies are focused on role differentiation, however it is important to note that not all of these studies consistently showed the same emergence of two high-status leadership roles and resulting follower roles for the remaining group members. Bales & Slater (1955) found that member roles were also differentiated by member activity, with Slater (1955) observing that the degree of group consensus in the identification of the status hierarchy was related to the pattern of role differentiation. The strongest consensus was generally achieved when the two most active individuals emerged into the task specialist and relationship specialist roles. Consensus was lowest when the most active member did not score highly in either task or relationship dimensions, indicating that group level conflict reduced when active group members emerged into a distinct leadership role.

A theoretical framework for organisational role theory was developed by Katz & Kahn (1966, 1978) that is particularly useful for providing insight into the task functions of groups and their members simultaneously with the psychological and social facets of group behaviour. Katz & Kahn (1978) considered roles to constitute patterns of behaviour established by interaction of members of a social unit. These roles allow individuals to know both what others expect of them

and what to expect from others. Roles evolve over time as group members exchange interactions and thus construct meaningful relationships. An important implication of roles for the members of a group is that members know what they will need to do and how interdependent others will react. As observed by Sarbin & Allen (1968) this results in less communication being required for the coordination of activity resulting in fewer misunderstandings, less wasted effort and associated psychological tensions. As such, time may be used more effectively, and therefore the group is able to accomplish its task more rapidly.

Moreland & Levine (1984) studied the role making process within groups, concluding that when role-making takes place in a newly formed group, it simultaneously constitutes the group development process. As members come to conform to their role expectations, those expectations shared in common amongst members become the norms of the group. As observed by Festinger (1950) and Weick (1979), acting together these norms consensually validate the group's social reality. A group that is generally successful in gaining productive contributions from its members through effective roles and positive norms will be better placed to achieve organisational goals. From this perspective the group owes not only its identity to how its members perceive it, but also the entirety of its performance.

In terms of discrete roles Sheard & Kakabadse (2002) developed a perspective on leadership using an ethnographic methodology whereby the roles of leaders were defined in terms of four distinct categories *legitimate*, *social*, *task* and *macro*. Sheard & Kakabadse (2002) concluded that it was entirely possible for every individual within a group to occupy one of the four leadership roles. Further, the ability of individual executives to adopt complementary leadership roles to other group members was closely correlated to their own individual effectiveness as a leader.

The *legitimate* leader was defined by Sheard & Kakabadse (2002) as the publicly appointed leader of the group who is accountable for delivery of the team's objectives. The *social* leader was defined as the individual who undertakes to build a network of relationships with other group members. Sheard & Kakabadse (2002) regarded *task* leaders as deriving their legitimacy to lead other group members from the formal allocation of responsibility for delivering a specific task by the group's *legitimate* leader. The *macro* leadership role was defined as the leadership role played by a senior executive when interacting with the group. The senior executive brings a "macro" view of the organisation to the group, and whilst Sheard & Kakabadse (2002) observed that the time the organisation's senior executives spent interacting with any one group was relatively small, the impact that this had on the group was found to be great.

The research of Sheard & Kakabadse (2002) was primarily concerned with the identification of leadership issues associated with the creation of high performing task orientated project teams. Sheard & Kakabadse (2002) identified five "critical points" in the development of individuals meeting for the first time into a high performing task orientated project team. At each of the five critical points, the relative importance of the four leadership roles was characterised, highlighting the changing nature of the leadership required as a group develops.

4. Methodology

In the inquiry that is the subject of this article, the authors studied the extent to which a role-based perspective can provide insight into the distributed and networked form of leadership. To examine this issue the authors selected a number of individuals who were used for the basis of the inquiry. The individuals were drawn from the senior management teams of three organisations of similar demographic profiles, utilising a collaborative inquiry methodology.

The term “collaborative inquiry” refers to a form of qualitative research which, broadly, results from an involvement by the researcher with members of an organisation over a matter that is of genuine concern to them and in which there is an intent by the organisation’s members to take action based on the intervention. Qualitative research tends to emphasise individual’s interpretations of their environment and of their own and other’s behaviour. Sensitivity to what people say and to the context in which their actions take place is a primary consideration of collaborative inquiry.

Collaborative inquiry as a research methodology was first proposed by Heron (1981) who argued that traditional social science inquiry methods were neither adequate nor appropriate for the study of persons who are, in themselves, self determining. Collaborative inquiry starts with the assumption that people “are the authors of their own actions – to some degree actually and to a greater degree potentially” (Heron, 1981: 84). Reality is understood through experiential knowledge that is gained through participation with others. Understanding emerges through four modes of knowledge:

- (1) Propositional; theoretical ideas about things.
- (2) Practical; action related knowledge.
- (3) Experiential; as actually experienced.
- (4) Presentational; images, stories, dreams or some form of creative output.

The generation of knowledge is based on Heorn's (1981) cycle of enquiry, Figure One. Propositional knowledge was considered by Reason (1994: 326) to be "routed in and derived from the experience and practical knowledge of the subject of inquiry". An individual's experience and practical knowledge has implications for practice, as it is this that constitutes individual's skills, competences and capabilities to confront and propose solutions to the issues they face. Through the continued application of skills, competences and capabilities, experiential knowledge is gained about the nature of contact with people and events (Heron, 1981).

As new knowledge is created, by the nature of the collaborative inquiry process it is tacit. The transfer of tacit knowledge requires time and effort to surface and share experiential knowledge through democratically conducted dialogue, which is often of a dialectic nature (Guba, 1990). Dialectic disclosure unearths assumptions leading to intellectual discovery and new presentational knowledge. The new presentational knowledge emerges through the distillation of individual experience and its representation in concepts and assumed attitudes and behaviours. The overall aim is to construct a context within which "knowledge is developed and put to use, while results, which would have been traditionally characterised as applied, fuel further theoretical advances" (Gibbons et al, 1994:19).

Take in Figure One

The collaborative inquiry process aims to produce knowledge and action directly useful to groups, and to empower people to examine and construct models that meaningfully utilise their own knowledge. The scientific merits of collaborative inquiry have, however, been a contentious issue. The seminal work of Susman & Evered (1978: 589) addresses the issue of validity within qualitative research, of which collaborative inquiry is one branch. For Susman & Evered (1978) action based

research is “corrective to the deficiencies of positive science”. Some researchers have argued that validity is a tool of the positivists, and not applicable to qualitative research (Watling cited in Simco & Warin, 1997), and that understanding is more important than validity. Validity in collaborative inquiry is built into the inquiry process through the inquiry cycle of action and reflection and as such is of a consensual nature that is achieved through (Heron, 1988; Reason, 1994):

- Congruence of propositional, practical, experiential and presentational knowledge.
- Iterative inquiry cycles of action and reflection.
- Participants’ capacity to build, test and enact their propositions.
- Enactment of outcomes or intra-group validation.

5. Theory Building Through CI

Each collaborative inquiry cycle of learning consists of propositional knowledge, practical knowledge, experiential knowledge and presentational knowledge. In particular, propositional knowledge can be derived from a tacit understanding of context such as assumed social structure and observation of participant's behaviour. Similarly, practical knowledge is gleaned from observable inquirer's actions. Experiential knowledge, however, involves greater complexity. Interpretation of events, and how those participating in the collaborative inquiry, the inquirers, evolved their frame of implementation, forms the substance of this knowledge mode (Berger & Luckmann, 1966). At the completion of each cycle, new presentational knowledge constitutes the generation of a deeper level of insight into the nature of the social structure in which inquirers are embedded, and consequently a higher level of understanding (Kakabadse & Kakabadse, 2005).

Each cycle of learning as inquirers journeyed through the four stages from propositional to presentational knowledge was represented by the documentation of deliberations experienced as the inquirers collaborated in writing a summary report. Record keeping serves multiple purposes, particularly tracking that the viewpoints of inquirers are fairly represented and logged, and the degree to which inquirers demonstrate growth evidenced by each person's awareness of the alterative views raised through the inquiry process. The inquirers collaborated during the report writing process, drawing on different sources of data from each of the four collaborative inquiry stages, Table One.

Take in Table One.

Each summary was structured around three sections. Firstly, a description of the theory comprising the propositional knowledge. Secondly, a description of the new presentational knowledge. Thirdly, implications of the new knowledge for both leadership theory and practice.

The summary document always closed with the inquirers agreeing on the main points, nature of the emergent ideas and areas for further deliberation. An example extract from the summary document produced after the fifth collaborative inquiry cycle, Table Two, provides an insight into the applied nature of the conclusions reached during the early cycles of the collaborative inquiry process. It became practice for the inquirers to begin each new learning cycle with a discussion of the main conclusions and learning points from the previous cycle's summary document, and implications of the emergent theory for action during the next learning cycle.

Take in Table Two.

The inquirers produced a new summary document every one to three months. Over a five-year period (the beginning of 2000 to the end of 2004) twenty-six summary documents were produced, averaging approximately one every two and a half months. The extended time scale of the collaborative inquiry resulted in inquirers joining, contributing and leaving the collaborative inquiry group. Membership of the collaborative inquiry group always included the authors, and between four and six other inquirers. The other inquirers would typically join as a consequence of a specific organisational issue that the collaborative inquiry group was addressing and then leave when that specific issue was resolved. With the exception of the authors who were involved continuously four five years, no other inquirer was involved for more than two years, with the average being closer to eighteen months.

Membership of the collaborative inquiry group was stable as each organisational issue was addressed, and then would change as an issue was resolved and the group moved onto a new issue. Each collaborative inquiry group was, however, a relatively small sub-set of the managers who were involved in resolving a particular issue. The managers involved in the larger group changed over

time, resulting in each collaborative inquiry group working with a shifting population of managers. A shifting population assisted the collaborative inquiry process, as each collaborative inquiry group had a regularly changing population of managers with whom new theory could be tested. Each new group of managers would receive a slightly different version of theory developed by the collaborative inquiry group. Early attempts to involve those outside a collaborative inquiry group in theory development were unsuccessful, and therefore a shifting population of managers was found to be essential to provide a new audience for theory developed as a consequence of experience with a previous group of managers.

Participation in the collaborative inquiry group was on a voluntary basis. Early attempts to encourage those who were less predisposed to the role of inquirer were unsuccessful, with the individuals concerned leaving the collaborative inquiry group typically after only one meeting. By making participation voluntary, the authors found that group members were more likely to engage when adopting a spirit of openness enabling them to listen to others points of view and to question their own frame of reference in a non-defensive manner. The authors concluded that actualising sharing is a much more demanding task than was envisaged prior to establishing the collaborative inquiry group. Through such insights cycle five was a turning point for the collaborative inquiry group as the inquirers developed the confidence to formalise the theory developed to date in the form of a training course for the wider organisation's senior and middle management. The theory developed by cycle five related to group development, and the action those in leadership roles could take to ensure that individuals meeting for the first time transformed into a high performing team in the minimum of time.

The training course itself was a tangible output of the collaborative inquiry process, however it was not the only benefit to the organisation and its managers. A feature of any theory is that it

tends to draw attention away from those factors that are not included within the theory. The training course focused on the need to adopt a small-group approach to solving organisational problems, utilising goal planning to define each small group's tasks and how they inter-linked to deliver an overall solution to the problem being addressed. The training course offered theoretical insights into the best way to ensure that small groups transformed into high performing teams in the minimum of time. Whilst it would not be true to say that efficient organisation of group work was the organisation's only problem, it was an endemic issue that seriously undermined ability to deliver new product development programs on time, budget and to specification. The collaborative inquiry group estimated that research and development productivity, for example, increased by 30% within a year of rolling out the training course across the organisation.

Success of the training course gave the inquirers confidence in the value of their work and consequentially they became progressively more reflexive and to more readily share experiences. As a consequence cycles six to ten were completed in only nine months, with cycle ten constituting a turning point with emergent theory again being formalised by the inquirers. The theory developed at cycle ten was documented by Sheard & Kakabadse (2002), describing the changing relative importance of four leadership roles as a group of individuals meeting for the first time transforms into a high performing team.

The capturing of new knowledge at cycle five and ten constituted the collaborative inquiry group transforming knowledge from tacit (experiential) to explicit (presentational) knowledge. Each inquirer gradually developed the social-cognitive skills to deal with the transition of knowledge transformation. Furthermore, once each inquirer gained confidence in themselves and the process of inquiry, they started to think beyond the immediate confines of the group. This was evident by cycle fifteen, with the inquirers constructing a synopsis of the contribution of theory generated

during cycles one to five and cycles six to ten, and implications of the theory for the practicing executive elucidated during cycles eleven to fifteen. The group disseminated fifty copies of the synopsis through the organisation's senior management team, with the Human Relations director championing the dissemination process.

The synopsis was well received, confirming the value of the collaborative inquiry process itself. The inquirers recognised that whilst the theory development process was of little interest to those outside the collaborative inquiry group, the theory resulting from the development process was regarded as both relevant and useful to the organisation by the senior managers to whom the synopsis was distributed. The inquirers recognised that it was not necessary to explain in detail the process by which they had reached a theoretical position. It was enough, for example, to simply present goal planning and methods for effective small-group working as the solution to the problem of low research and development productivity. That these insights had been created as a consequence of a collaborative inquiry process was a matter of supreme indifference to the majority of those managers involved. It appeared to be enough that managers had been involved, and that those to whom they reported were enthusiastic and positive about the inquirer's output.

Dissemination of a synopsis was a high point for the inquirers, which they entered with enthusiasm and motivation. The inquirers gathered feedback from those to whom the synopsis had been circulated, and then participated in brain storming sessions in order to identify aspects of the theory in need of further development. An area that emerged from the brain storming sessions as important was the linkage between action executives could take and the development of a supportive group social structure within those groups of which they were a part. A further eleven cycles however (cycles sixteen to twenty-six) were needed before emergent theory would again be formalised.

After the first of these cycles (cycle sixteen) the inquirers identified a need to characterise the four leadership roles further if they were to gain greater insight into the linkage between executive action and development of a group social system. The approach adopted during cycle seventeen to characterising the four leadership roles was for inquirers to identify approximately one hundred separate groups responsible for the mobilisation of organisational resources. The relational ties between group members were then identified. The process used to identify relational ties was to look for evidence that two group members were engaging in dialogue for the duration of the time a group was addressing the issue that had prompted its formation. The inquirers then discussed the resulting sociograms, and the leadership role that most closely matched group member's actions assigned to each group member.

The next three cycles (cycle eighteen, nineteen and twenty) were associated with progressive attempts to provide structure to the sociograms that had been generated. During cycle eighteen the inquirers reviewed the sociograms, concluding that those ascribed *social* or *task* leadership roles were predominately associated with activity internal to the group. This was in contrast to those ascribed *legitimate* or *macro* leadership roles that were predominantly associated with the gathering of data from other groups, the communication of the groups intended action to other groups and the receiving of feedback regarding the consequence of such action if carried out. The output of cycle eighteen was, therefore, consideration of leadership roles in terms of intra and inter-group processes.

During cycle nineteen the inquirers refined the sociograms, eliminating those individuals from them who could be considered to be members of other groups, with whom those in *legitimate* and *macro* leadership roles were conducting inter-group exchanges. The resulting sociograms contained fewer individuals, but still many relational ties with no obvious pattern emerging at a

detail level. At a general level, however, the inquirers agreed that the relational ties associated with those occupying *social* or *legitimate* leadership roles were primarily associated with relationship building within the group. In contrast those occupying *macro* or *task* leadership roles built relational ties more closely associated with goal attainment within the group. The output of cycle nineteen was, therefore, consideration of leadership roles in terms of relationship building and goal attainment.

Taken together cycle eighteen and nineteen facilitated creation of a distributed model of leadership, Figure Two. The four leadership roles are modelled in terms of their goal attainment and relationship building plus intra and inter-group orientation. The model may be considered to be a distributed model of leadership as the four leadership roles were conceptualised by Sheard & Kakabadse (2002) as collectively embodying every aspect of leadership required of those who presume to step into leadership.

Take in Figure Two

Cycle twenty continued the process of adding structure to the sociograms by identifying the most important relational ties between those occupying each leadership role. The process of defining leadership roles in terms of relationship building and goal attainment enabled the inquirers to contemplate relational ties between individuals occupying different leadership roles in terms of relationship building and goal attainment. Specifically the inquirers identified networks amongst group members that could be considered to be associated with friendship, advice and task accomplishment.

When inquirers focused on those relational ties between groups members associated with the group's task accomplishment network, each leadership role was discovered to be associated with only one or two task related relational ties. Specifically, the individual occupying the *task* leadership roles was characteristically associated with a relational tie to the individual occupying the *social* leadership role. When contemplating the *social* leadership role, relational ties to those occupying *task* and *legitimate* leadership roles were identified. Those occupying *legitimate* leadership roles had characteristic relational ties to those occupying *social* and *macro* leadership roles. Lastly, those occupying *macro* leadership roles had characteristic relational ties with those occupying *legitimate* leadership roles, Figure Three.

Take in Figure Three.

During cycle twenty-one the inquirers reviewed their sociograms, considering each in turn and contemplated the appropriateness of relational ties between individuals occupying each leadership role identified as part of the group's task accomplishment network. It was with mounting excitement that the inquirers realised that whilst advice and friendship networks varied randomly from one sociogram to another, the task accomplishment relational ties between leadership role holders appeared to be generically applicable to all sociograms. The exact form of the task accomplishment network varied from one sociogram to another as the number of *task* leaders linking to a *social* leader varied between one and seven and the number of *social* leaders linking to a *legitimate* leader varied between one and three. This gave a theoretical lower limit of four, and upper limit of twenty six group members. In practice the smallest sociogram contained five individuals (one *macro*, one *legitimate*, one *social* and two *task* leaders) and the largest nineteen individuals (one *macro*, one *legitimate*, one *social* with three *task*, one *social* with four *task* and lastly, one *social* with seven *task* leaders.

The authors recognised that by defining the leadership roles to which each leadership role could link when forming a task accomplishment network, a mechanism had been created that enabled a generic task accomplishment network to form within a group, without being prescriptive as to how many individuals would comprise the group or what leadership role any specific individual must adopt. As such relatively complex task accomplishment networks could emerge in larger groups whilst each individual within the group followed simple guide lines as to their primary relational ties given the leadership role they were contemplating adopting.

Cycles twenty-two and twenty-three were associated with progressively more focused effort on the part of inquirers to encourage group members to adopt one of the four leadership roles (cycle twenty-two) and to form relational ties with the those occupying other leadership roles of primary importance to the group's task accomplishment network (cycle twenty-three). The authors observed that in larger groups where more than seven *task* leaders were attempting to establish relational ties to one *social* leader, invariably a new *social* leader would emerge from amongst the *task* leaders enabling both the task and the group to be split such that no *social* leader was maintaining relational ties with more than seven *task* leaders. Within the sociograms, only one occurrence of a *social* leader sustaining relational ties with seven *task* leaders was observed. Over ninety percent of *social* leaders established relational ties with two, three or four *task* leaders.

Cycles twenty-four and twenty-five were associated with progressively more assertive effort on the part of inquirers to define the action needed from each group member in terms of the goal attainment and relationship building orientation appropriate to the leadership roles group members were occupying at the time; and secondly the intra and inter-group orientation of each leadership role.

By the twenty-sixth cycle, group members were able to associate themselves and others with appropriate leadership roles and pro-actively initiate dialogue with those other leadership role holders associated with the group's task accomplishment network. Further, group members were aware of the goal attainment and relationship building plus intra and inter-group orientation of each role, and were able to conceive the action required of them in such terms. The group associated with cycle twenty-six was characterised by gaining rapid productive contributions from its members plus low individual and group level conflict. The inquirers considered the time taken for the group associated with cycle twenty-six to complete its task, estimating that this had been achieved in approximately twenty percent of the time that would have been considered typical during cycles one to ten.

6. Networked Leadership – A Framework

The last eleven cycles of the collaborative inquiry process were characterised by the authors' involvement in informal and temporary group discussions with inquirers and other group members as they contemplated the networked and distributed nature of the leadership required of them. By the end of cycle nineteen, definition of leadership roles in terms of goal attainment and relationship building plus intra and inter-group processes facilitated development of a distributed model of leadership. Leadership is distributed as the tasks of leadership are distributed amongst all members of a group. Each group member occupies one of four leadership roles, with each leadership role being defined in terms of its goal attainment and relationship building plus intra and inter-group orientation. Further, definition of leadership roles in terms of intra and inter-group processes helped to define the boundary around groups clarifying who was indeed a part of any given group, and who was actually part of a different group with whom inter-group exchanges needed to take place.

Many of those outside the collaborative inquiry group regarded leadership exclusively in terms of activity associated with task accomplishment. The introduction of a social dimension into the distributed model of leadership helped to raise awareness of the need for social networking. The managers involved had little explicit vocabulary for the social arena, and did not feel comfortable discussing social aspects of their role as managers explicitly. The distributed leadership model's inclusion of a social dimension effectively transformed discussion of social aspects of role, with which managers were not comfortable, into a more general discussion about leadership, with which they were.

The conceptualisation of leadership in terms of goal attainment and relationship building enabled the relationships observed between group members to be contemplated in such terms. By cycle twenty the concept of a characteristic and generic task accomplishment network had emerged, defined by specific task orientated relational ties between each leadership role holder and the

remaining group members occupying other leadership roles. The existence of specific task accomplishment relational ties between group members could be used to identify a task accomplishment network within a group's overall network of relationships.

Moreland & Levine (1984) studied the role making process within groups, concluding that when role making takes place in a newly formed group, it simultaneously constitutes the group development process. The adoption of leadership roles by group members and crystallisation of a task accomplishment network within the group may be considered to be a role making process that can be contemplated in terms of group development. When meeting for the first time, group members would be no more than a collection of individuals, Figure 4a. Over time each individual would develop relational ties with other group members who they liked personally (friendship networks) and whose opinion they respected (advice networks), Figure 4b.

As the group developed an embryonic social system, group members learnt to adopt one of the four available leadership roles. This phase in the group development was marked by agreement between group members that the group contained the right individuals to occupy the leadership roles, with new members joining, and others leaving to be considered members of different groups with whom inter-group exchanges needed to take place. This development phase could be considered complete when group members agreed each had adopted a leadership role appropriate to the needs of the group, given the specific goal the group was tasked with achieving, Figure 4c.

The final phase in the group development was marked by crystallisation of a task accomplishment network. Emergence of the task relational ties as dominant amongst group members corresponded with the group first gaining productive contributions from its members, Figure 4d. Whilst the task accomplishment network is embedded in a constellation of relationships

within the group (Figure 4d), if examined it becomes apparent that it has the same form as a generic task accomplishment network (illustrated in Figure 3) based on the defined relational ties associated with each leadership role.

Take in Figure Four.

Amongst the first to chart a group's development was Tuckman (1965) who identified four stages in the development of a group, *forming*, *storming*, *norming* and *performing*. The four stages of group development identified by the inquirers can be analogised to the four stages identified by Tuckman (1965). The *forming*, *norming* and *performing* stages are analogous to the first, third and fourth stage (Figure 4a, c & d). The second stage of Tuckman (1965) group development sequence, *storming*, is associated with conflict, however the inquirers observed little overt conflict. The second group development stage identified by the inquirers (Figure 4b) is, nevertheless, associated with conflict. The inquirers concluded that as the social skills of the executives involved were good, conflict was seldom expressed overtly. The process of establishing friendship and advice networks was the process of identifying those with whom executives could relate, and it would seem that rather than expressing conflict overtly executives simply chose to ignore those who they felt unable to cooperate and collaborate with.

A contribution of the distributed model of leadership was to provide a mechanism for reducing covert conflict associated with the underlying dislike of managers for one another. The process of adopting a leadership role and then specifically seeking out other managers who were adopting leadership roles with which they must form task based relational ties assisted in overcoming blocks to communication. That relational ties were task accomplishment relational ties rather than friendship or advice relational ties helped managers who would otherwise not have

chosen to work together to do so. The effort made to establish relational ties resulted in managers behaving differently to the way they had done previously, helping those involved to overcome their preconceptions about other managers and in so doing reduce group level conflict.

Taken together, the distributed model of leadership and task relational ties between leadership roles provide structure to the leadership role theory first advocated by Sheard & Kakabadse (2002). Executives are provided with a framework for action by:

- (1) Identifying themselves and others with specific leadership roles in a new group situation, providing a vocabulary to discuss aspects of leadership needed in a new situation.
- (2) Providing structure to the focus of each group member by defining leadership roles in terms of goal attainment and relationship building plus intra and inter-group process orientation.
- (3) Defining the primary relational ties group members must endeavour to establish and develop within a group, given the leadership role they choose to adopt.
- (4) Providing a mechanism for individual and group level conflict management by defining an individual's contributing in terms of role, and in so doing helping to specify the limit of each group member's authority and responsibility.

7. Concluding Comments

The process of familiarising executives with the leadership roles available to them constitutes a form of role analysis. Role analysis is an intervention strategy, helping to define limits of responsibility and authority amongst executives who must work together if an organisation's senior management team is to effectively address those issues with which it is faced. An understanding of the roles an individual can adopt, and those available to others within a group in which they must work, helps individuals to interpret a range of events in similar ways, and in so doing adoption of leadership roles helps build supportive work-based relationships.

The existence of generic task accomplishment relational ties between leadership roles complements the previous work of Sheard & Kakabadse (2002) who initially conceptualised all tasks associated with leadership as being distributed amongst four separate and distinct leadership roles. The distributed leadership model helps group members to consider leadership roles in terms of goal attainment and relationship building plus intra and inter-group processes. This further characterisation of leadership roles is helpful during the process of defining the boundary around a group, identifying those individuals who should be a part of the group, and those outside the group with whom inter-group exchanges need to take place.

The authors conclude that during the current study in many situations focus of the executives involved was excessively biased towards either goal attainment or relationship building. When the focus was biased towards goal attainment, mobilisation of organisational resources was compromised as poor inter-personal relationships acted as a block to raising and discussing sensitive issues. Further, when the focus was biased towards relationship building the executives involved had a tendency to lose sight of the urgent business issue that required resolution, resulting in a lack of focus on goal attainment and a resulting failure of the groups of which they were a part to deploy organisational resources optimally.

The existence of informal and temporary groups within the wider formal senior management team was found to be a primary issue when contemplating the limits of authority and responsibility of executives occupying one of the four leadership roles. In many situations executive's focus would be excessively biased towards either issues internal to the group of which they were a part, or alternatively excessively biased towards issues external to the group associated with the practical difficulty of working with other groups within the senior management team. When the focus was biased towards internal group processes, goal attainment was compromised due to an inability to effectively gather data and feedback from other groups within the senior management team. When focus was biased towards inter-group processes, goal attainment was compromised by a failure to provide the necessary structure and drive internally within the group.

When contemplating the impact of the current study, the authors concluded that those executives who were consistently associated with groups that effectively attained their goal were able to:

- (1) Adopt the leadership role most appropriate when joining a new group.
- (2) Encourage other group members to adopt complementary leadership roles.
- (3) Identify when no individual was able to adopt a particular role and pro-actively seek a new group member to fulfil the role.
- (4) Identify when an individual was actually a member of another group with whom inter-group exchanges needed to take place, and encourage other group members to regard them in this way and not as a member of the group.
- (5) Focus on pro-actively developing the task network relational ties associated with the leadership role they had chosen to adopt, and by encouraging others to do the same help catalyse crystallisation of the group's task accomplishment network.

The authors conclude that effective executives help to ensure everyone within a group adopts one of the four leadership roles, that all roles are adequately represented and that appropriate inter-group relational ties are established. The process of adopting complementary leadership roles was the process of defining limits of authority and responsibility. The process of ensuring that a group contained members who collectively possessed the skills and knowledge to ensure every leadership role was represented was the process of ensuring a group was able to effectively discharge its leadership responsibility. The process of establishing appropriate inter-group relational ties was the process of ensuring that the group communicated with other groups, gathering feedback on the result of proposed action and also information as to the changing nature of the organisational environment into which the group's output would have to be accepted. The process of crystallising a task accomplishment network was the process of formalising how individuals would work together, and in so doing gain productive contributions from them.

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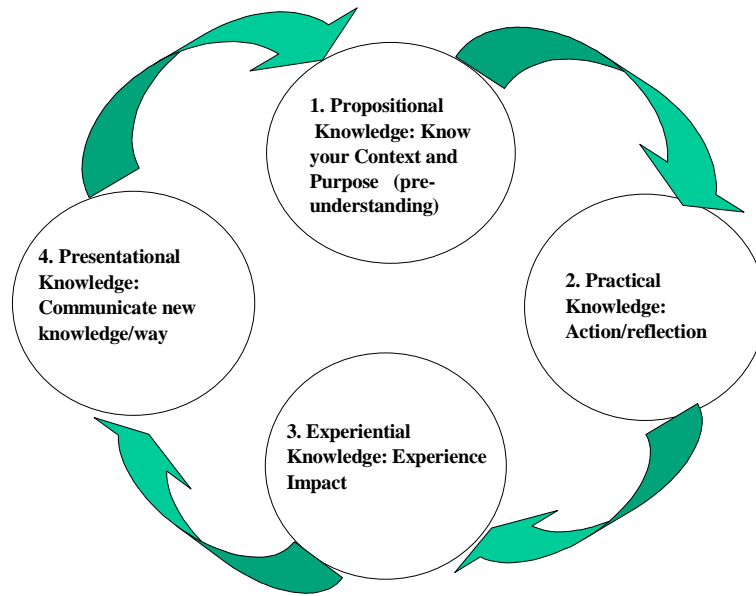
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Mode of Knowledge (Heron, 1981)	Example Quote	Example Source
Propositional (Derived from observed behaviour and actor's statements.)	"Now we have an understanding that group development is important, we should start to gather existing group development theory."	Derived from a number of individual statements during discussion.
Practical (Derived from observed behaviour and actor's statements.)	"Most of the theory is already available within journal articles and other material group members possess individually."	Observed and noted in journal and minutes of meeting.
Experiential (Reflective in vivo participant experience.)	"Group members have an enthusiastic approach, and practical ideas for applying the group development theory."	Recorded in personal journal.
Presentational (Reflexivity on experience and rationalisation of presentational material.)	"We need the assistance of an expert in the ordering and systematic recording of data we gather."	Minutes of meeting.

Table 1: Example Quotes of Participants From Collaborative Inquiry Cycle #005.

No.	Conclusion
1	The organisation should use formal goal planning sessions during all new teams' first meeting, to facilitate the process of breaking down a top-level goal into a set of inter-linked sub-goals. This gives team members an insight into the context within which they are undertaking a specific sub-goal, and is an excellent form of communication.
2	As a part of the goal planning exercise, the point at which external reviews will be conducted should be defined, and then reviews conducted as planned when these critical milestones are reached.
3	Significance of good quality team leadership is such that the organisation should put in place a selection process that identifies potential team leaders according to key professional criteria, followed by a personal development program for them.
4	The optimum team size and duration equates to a team objective requiring approximately two man-years of effort to deliver. At present the organisation breaks down its top-level product development strategy into approximately six man-year work packages. By defining its product development strategy in terms of two man-year work packages, the organisation would define it in optimal terms for a team-based approach to its implementation.
5	An effective mechanism for load / capacity balancing is required. This is vital if the organisation is to adequately resource those tasks that are undertaken, and prevent it from committing to undertake work that it does not have the capacity to deliver.

Table 2: Example Extract From Collaborative Inquiry Cycle #005 Conclusions.



Source: Adapted from Heron (1981), Heron and Reason (1981) and Kakabadse and Kakabadse (2003)

Figure 1: The Collaborative Inquiry Cycle.

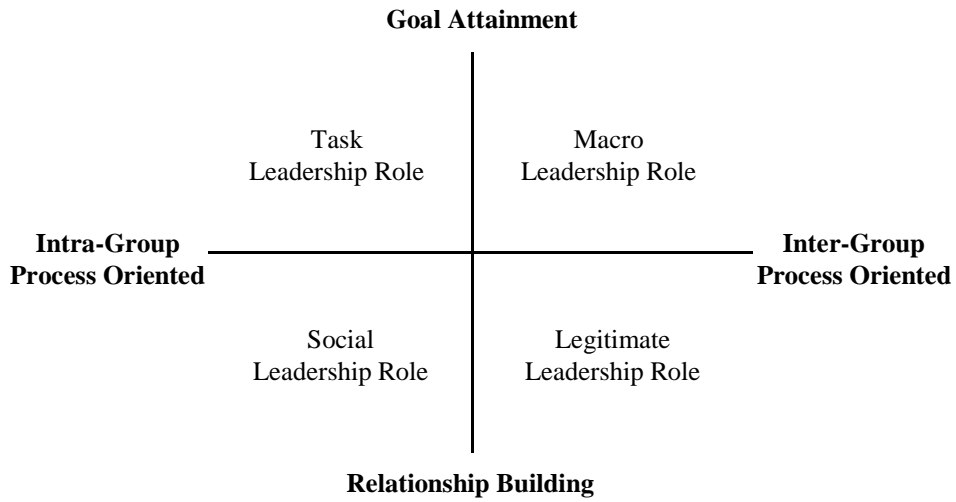


Figure 2: A distributed role based model of leadership.

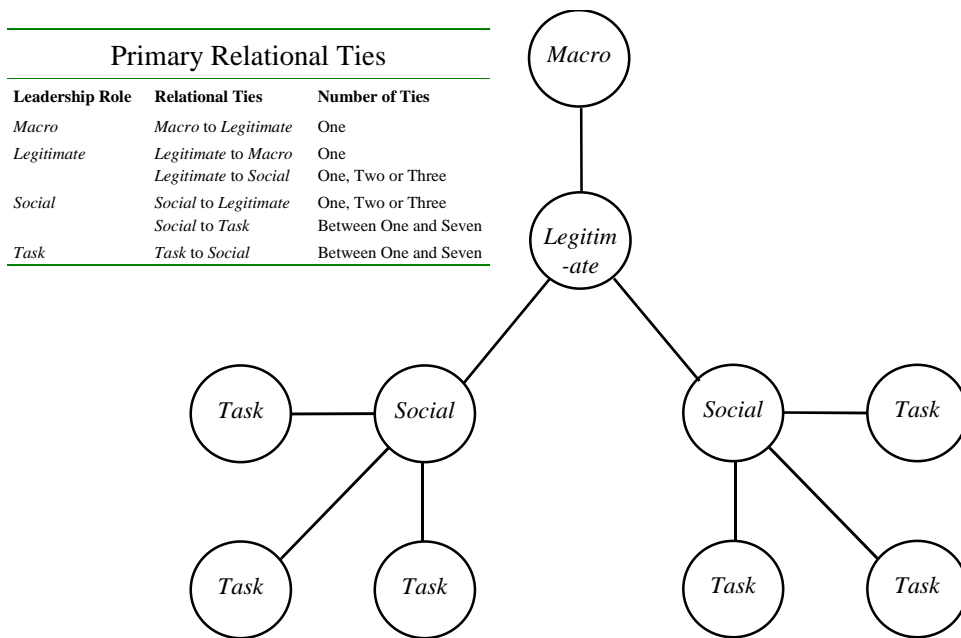


Figure 3: An example of the relationships that develop as individuals adopt complementary leadership roles and develop a characteristic task accomplishment network.

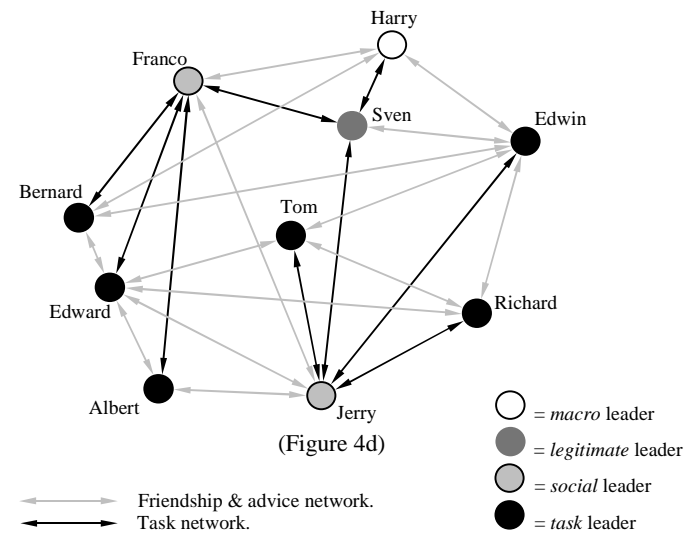
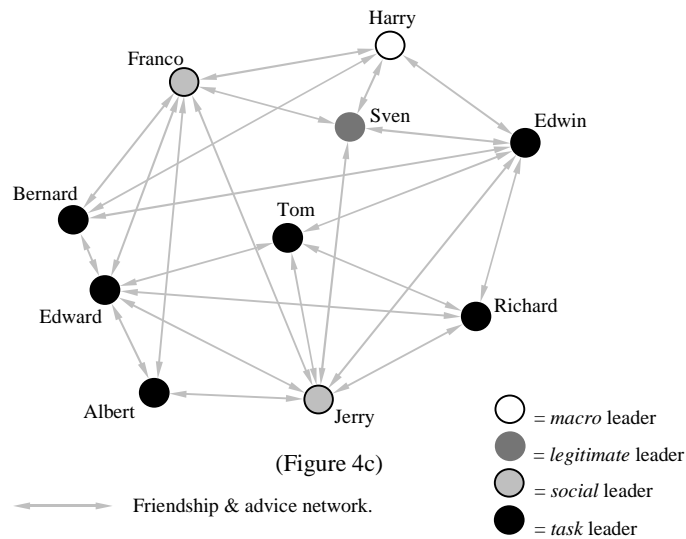
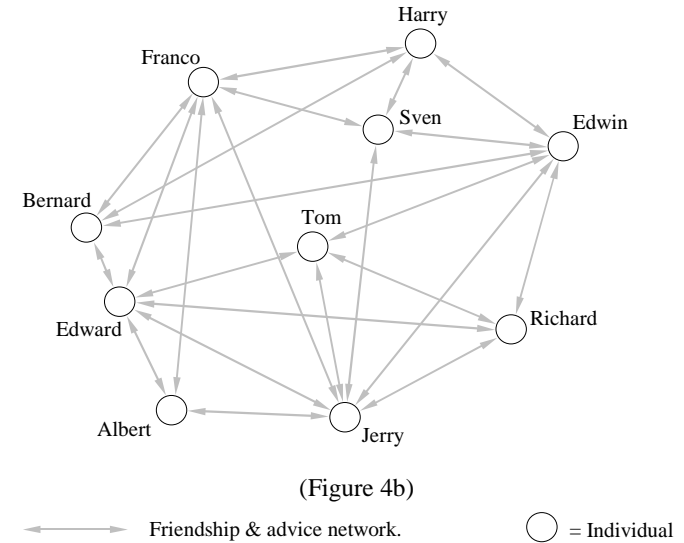
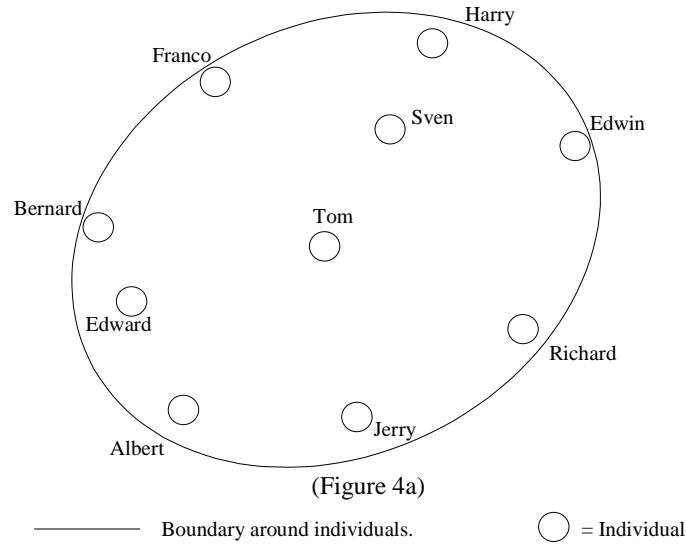


Figure 4: How relational ties develop as individuals brought together for the first time adopt complementary leadership roles and evolve a task accomplishment network.