1. Introduction

The existence of firms has occupied researchers’ minds for some time and still does. In transaction-costs economics it is assumed that firms exist because under certain constellations organizing the work flow by a firm can help to minimize transaction costs, hold-ups and post-contractual hazards while economies of scale can be internalized (for example, Coase 1992; Shelanski and Klein 1995; Williamson 1985, 2002). In contrast to market transactions for realizing one’s entrepreneurial ventures, choosing a firm to do so can also be advantageous, because within the organizational framework of a firm it is, for example, possible to accumulate intangible assets like knowledge and skills (Foss 1993; Teece et al. 1994) and to achieve sufficient adherence to a firm’s goals (see Witt 1998). This issue is especially relevant when the knowledge or skills a firm requires are implicit and/or not available to one single employee which necessitates coordination to tap on these resources (ibid.). It is these firm-specific competencies that from an evolutionary point of view explain the existence of firms (Pelikan 1989; Langlois 1992; Nooteboom 1992; Foss 1993; Teece et al. 1994; Kogut and Zander 1996).

However, organizing the production process by means of a firm and to introduce a division of labor, and thus specialization, also entails some drawbacks that have to be outweighed against potential benefits. As Hayek (1945, p. 520) said, ‘the problem is precisely how to expand the span of our utilization of resources beyond the span of control of any one mind’.

First, a firm founder has to resort to incomplete contracts because the future demands of the work process are unknown to her (Simon 1951; Grossman and Hart 1986). To put it differently – ‘[n]ew firms and firms that are forced to relentlessly create new businesses, cannot be operated with detailed plans based on the fiction that all possible contingencies can be anticipated’ (Witt 1998, p. 172). Thus, contracts have to be written that rather commit the employees to engage in their work tasks for the best of their company rather than to pin down an individual employee’s specific work tasks completely and exhaustively (Witt 2005). Moreover, a firm’s intangible assets are also impossible to define. It follows that the coordination of employees has to be arranged.

Second, it has been assumed in the literature that in firms information is
distributed asymmetrically, which may result in moral hazards. Employees may pursue their (hidden) personal interests, behave opportunistically and favor their personal interests over those of the firm if the marginal benefits for doing so exceed the marginal costs (for example, Grossman and Hart 1983). Since the observation of the employees’ actions or achievements are costly to the employer and employees may thus be induced to shirk, incentives have to be provided to the employees in order to balance the potential losses incurred by their opportunistic behavior, on the one hand, and the potential gains on transaction costs resulting from the founding of the firm, on the other hand (Williamson 1985; Foss 2001).

1.1 FINDING SOLUTIONS TO THE PROBLEM OF COORDINATION AND MOTIVATION OF EMPLOYEES

Solutions that have been suggested to the problems of coordinating and motivating employees revolve around conceptions like monitoring (Alchian and Demsetz 1972), governance (Williamson 1975, 1979) or more abstract incentive structures like those proposed by Grossman and Hart (1983) in their principal–agent model.

Characteristic of the principal–agent model is the notion of asymmetric information which enables the agent to hide her true interests from the principal and to act in an opportunistic way. Following the reasoning of the principal–agent theory, one way to counteract opportunistic tendencies is to implement a close monitoring regime whereby the behavior of the employees can be kept under tight control. Thus, they can be prevented from shirking. The degree to which the asymmetric information prevails depends on how difficult and costly it is for the principal to judge the performance of the agents.

Close monitoring requires a hierarchical organizational structure that is costly not only in terms of money but also in terms of time; the more so, the bigger the organization grows (Witt 2000). In the end, ‘managerial diseconomies of scale’ might result (Mueller 1972, pp. 203ff.). Furthermore, monitoring can also have negative effects on the monitored employees’ motivation in that it dampens the employees’ creativity and intrinsic motivation (Enzle and Anderson 1993; Williams and Yang 1999). Taking into account these negative effects of monitoring, it seems debatable whether monitoring indeed presents a solution to the coordination and motivation of employees.

Ensuring the employees’ motivation can also be approached by introducing contracts that imply an incentive to the employees not to shirk but to contribute their best efforts to the firm’s productivity. Consequently,
incentive compatible contracts may reduce the need for monitoring. However, these kind of contracts may also entail a number of drawbacks that have to be balanced against these benefits. First, their implementation may entail substantial costs. Second, they may fail, for example, because they are incomplete, not enforceable by a third party or because their costs outweigh their returns (Foss 2000). Third, under certain conditions incentive compatible contracts bear the risk of crowding out the employees’ potentially existent intrinsic motivation (see Frey 1997). And, fourth, assuming that an employee has to fulfill multiple tasks or multi-dimensional tasks that entail different costs of measuring may induce the employee to preferably put her efforts into those tasks that are more easily measurable than others, that may be essential but comparably hard to measure and may therefore be neglected (Holmström and Milgrom 1991).

Barnard (1948, p. 141, emphasis added) has pointed out that ‘an organization can secure the efforts necessary to its existence . . . either by the objective inducements it provides or by changing states of mind’. Whereas the organizational regimes presented above favor the former way of securing a firm’s existence, the regime that is presented in the following rather adheres to the latter.

1.2 COORDINATION AND MOTIVATION FROM AN ALTERNATIVE PERSPECTIVE

The theory of cognitive leadership suggests an alternative approach for resolving the coordination and motivation problems a firm founder has to tackle (Witt 1998, 2000, 2002, 2003, 2005). Central to this theory is the person of the entrepreneur and firm founder (see Schneider 1987; Casson 2000; Foss 2001). She is argued to have a business conception she aims at realizing. Since the entrepreneur cannot do so on her own, she founds a firm, hires employees and – consequently – faces the problems that have been outlined above: in order to realize her business conception she has to coordinate her employees’ inputs and to motivate the employees to put in their best efforts.1 In other words, she becomes a leader to her employees. The theory of cognitive leadership argues that a firm founder can solve these problems by conveying her business conception to her employees. This kind of leadership is called ‘cognitive leadership’ because the conveyance of the business conception it is argued mainly depends on cognitive processes. The underlying reasoning of this assumption is outlined below.

The business conception of the firm founder expresses what kind of business she wants to pursue and how she wants to do it. It provides a reference point for the processing and assessment of incoming information – for the
firm founder as well as for her employees (for example, Witt 1998). In this sense, it provides a coordination function to them. Furthermore, through the adoption of the business conception the employees’ personal interests are assumed to merge with those of the firm. Consequently, their motivation to achieve their tasks can be assumed to be predominantly intrinsic in nature (see Bénabou and Tirole 2003). The high level of cognitive coherence allows the firm founder to grant substantial degrees of freedom to her employees – a measure that is argued to further boost their intrinsic motivation (Deci et al. 1999). Hence, the employees rely less on extrinsic rewards which it is argued pose a threat to their intrinsic motivation since extrinsic incentives potentially crowd out intrinsic motivation. Thus, a business conception is what Ghoshal et al. (1995, p. 749) in reference to Hayek describe as a ‘coherent institutional context’:

To be able to simultaneously exploit [the] benefits of distributed and localized resources and knowledge and achieve efficiency through the economies of scale and scope and the reduction of transaction costs, [. . .] firms cannot rely either wholly or even primarily on hierarchical governance and must depend instead on creating a coherent institutional context which motivates ‘individuals to do the desirable things without anyone having to tell them what to do’. (Hayek 1945, p. 527)

The firm founder – or cognitive leader – conveys her business conception by means of communication and by being a model to her employees. Moreover, she can point out other people to her employees who can serve as models. Colleagues are also considered to potentially have an impact on the employees’ cognitive agendas by means of communication and observational learning.

For the conveyance of the business conception the cognitive leader is crucial because it depends on her capabilities and her business conception’s characteristics whether the employees adopt the business conception in the first place. Since communication and observational learning depend on the frequency of social interaction, it is further argued that a firm founder’s frequent interaction with her employees is necessary to have an impact on their cognitive agendas and to align these according to the business conception (see Reichers 1987; Langfield-Smith 1992).

Within the framework of the theory of cognitive leadership people are assumed to be boundedly rational, that is, people have limited capacities for processing information and their attention and information processing are guided by cues. The adoption of the business conception by employees thus influences their cognitive agendas in such a way that incoming information is processed from the perspective of the business conception and decisions are made conforming to it.
Contingent on the described processes, the theory of cognitive leadership puts forward a pattern of organizational development according to which a growing firm is assumed to expand (for example, Witt 2005). It is claimed that cognitive leaders and their business conceptions have a decisive influence in the evolution of firm organizations.

A number of aspects that are implied in the theory of cognitive leadership or that the theory of cognitive leadership is based on are, however, not included in it. The theory of cognitive leadership does not, for example, explain the cognitive processes basic to its assumptions nor does it explain the conditions the exertion and the success of cognitive leadership are dependent on. While it outlines characteristics of the cognitive leader that foster the conveyance of the business conception, characteristics of the employees or situational aspects are not discussed. Also, the view on the impact of incumbent employees on the exertion of cognitive leadership is limited in that they are reduced to their prospective function as models to their colleagues or to their potential to pose a threat to the initial business conception by behaving in a deviant manner. A work group’s positive contribution to cognitive leadership is not considered. Furthermore, the assumptions of the theory of cognitive leadership have not yet been subject to any empirical validation. This volume sets out to improve on this situation.

1.3 DIFFERENCES FROM CHARISMATIC LEADERSHIP

Before the aims of this volume are presented in more detail, we have to define the theory of cognitive leadership in relation to charismatic leadership. Foss and Klein (2005) have categorized cognitive leadership as one form of charismatic leadership – a perspective not adopted in the present thesis. The differences between cognitive leadership and charismatic leadership can be outlined as follows.

Charismatic leadership theories assume that a charismatic leader can influence her followers’ basic values, beliefs and attitudes so that they are willing to perform beyond what would normally be expected of them (Podsakoff et al. 1996; Conger 1999). She is able to do so by communicating her vision, by inspiring and empowering her followers, by being a model to her followers, by providing intellectual stimulation and meaning to her followers, by appealing to higher-order needs, by the setting of high expectations in her followers and by fostering a collective identity.

Although the theory of cognitive leadership is also based on the forming and shaping of the followers’ cognitive agendas by making use of
communication and modeling processes, it neither includes the shaping of the more basic values nor does it explicitly aim at inspiring, empowering or intellectual stimulation of subordinates. Also, a cognitive leader is not assumed to appeal to higher-order needs or to set high expectations in her followers. That cognitive leadership in fact fosters the emergence of a collective identity is indeed argued in the present thesis. This is put down to the development of shared mental models or – on a more general level – of an organizational culture (Levine and Moreland 1991).

The employees’ personal growth or personal needs are more indirectly addressed by cognitive leadership in that it is assumed that business conceptions that offer possibilities of personal growth and the realization of personal needs are more likely to succeed. However, a cognitive leader acts as a meaning-maker in that she determines and communicates events or facts that relate to her business conception.

Just how much the characteristics of charismatic (or transformational leadership; see Shamir et al. 1993; Hunt 1999) differ from that of cognitive leadership becomes clear when the seminal paper by Conger and Kanungo (1987) is considered. With this paper the authors have outlined a framework that aims at pinning down the observable behavioral processes going on in charismatic leadership. To this end, the authors formulated 13 hypotheses concerning the basic characteristics of charismatic leadership. Seeing cognitive leadership through the lens of these hypotheses reveals that it differs markedly from charismatic leadership. Although the behavioral components of cognitive leadership can be assumed to be interrelated and, as such, form a constellation of components (Conger and Kanungo’s first hypothesis), none of the following 12 hypotheses serves as a necessary characteristic for cognitive leadership. For example, in charismatic leadership the charismatic leader’s vision is assumed to be ‘highly discrepant from the status quo’ (ibid., p. 642). Further, a charismatic leader is assumed to ‘take on high personal risks’ (ibid.), to engage in ‘novel, unconventional and counternormative’ behavior (Conger and Kanungo 1987, p. 643) and to ‘portray the status quo as negative or intolerable and the future vision as the most attractive and attainable alternative’ (Conger and Kanungo 1987, p. 644). No such features are included in the theory of cognitive leadership as characterizing cognitive leadership. Thus, we can conclude that cognitive leadership cannot be completely merged in Conger and Kanungo’s framework of charismatic leadership (see Witt 2005). Cognitive leadership relies on influencing the followers’ mental models by communication and learning processes, without needing counternormative, novel or unconventional behavior, without high personal risks taken on by the cognitive leader and without characterizing the status quo as intolerable. Also, the business conception is not idealized ‘as
the most attractive and attainable alternative’ to the status quo (Conger and Kanungo 1987, p. 644) but as the desirable alternative envisioned by the cognitive leader that stands in competition with other entrepreneurs’ business conceptions (Witt 1998). A context favoring the emergence of charismatic leadership is periods of stress or crisis, a hypothesis developed by political scientists that examined charismatic leaders in political and religious contexts, respectively (Cell 1974; Toth 1981). Referring to the empirical study conducted by Roberts and Bradley (1988) Conger concludes that critical periods as well as certain organizational characteristics, influencing the frequency and quality of interaction between a leader and her subordinates, facilitate the emergence of charismatic leadership. Although cognitive leadership views the frequency of interaction as key to the leadership process, critical periods are not assumed to have a positive impact on cognitive leadership. Bearing these differences between charismatic and cognitive leadership in mind, we can conclude that cognitive leadership is in a sense much less demanding on the cognitive leader and the context than charismatic leadership is on the charismatic leader and the context.

1.4 AIMS AND STRUCTURE OF THE BOOK

The scope of the theory of cognitive leadership ranges from explaining why an entrepreneur founds a firm, how she can succeed in coordinating and motivating her employees, to what path-dependent developmental patterns of firm growth can be assumed based on this theoretical framework. Thus, it includes more than approaching the coordination and motivation of employees from a cognitive perspective. This volume focuses on the latter. It sets out to achieve three main aims. First, it will bridge some of the missing links that can be identified in the theory of cognitive leadership with regard to the coordination and motivation of employees. Second, it will broaden the theory of cognitive leadership’s scope by investigating the group level processes that can be assumed to have an impact on the socialization of newcomers. Third, it will explore the assumptions of the theory of cognitive leadership empirically. Furthermore, the implications of the present volume as well as open questions are presented. These aims are elaborated in the following.

At the outset, in Chapter 2 the theory of cognitive leadership is presented (Section 2.1). First, the role of the entrepreneur who has a business conception and who – by founding a firm and hiring employees – turns into a leader is explained. As a cognitive leader it is her aim to shape her employees’ cognitive frames according to her business conception. How
this can be achieved is explained. Before the hypothesized benefits of cognitive leadership are presented, the potential impact of deviant behavior is explained. Finally, the path-dependent development of a firm that is in the beginning run by cognitive leadership is briefly outlined. However, this part of the theory of cognitive leadership is not considered further in the present volume since it focuses on social influence processes and their determining factors in dyadic interactions as well as in group situations.

Within the framework of the theory of cognitive leadership, the underlying assumption is that we have limited cognitive capacities or – in other words – that we are boundedly rational. In order to economize on our cognitive capacities our attention is guided by cues. Consequently, we perceive and process information selectively. The present volume elaborates on these processes in more detail in Section 2.2. It explains the functioning of attention and information processing as they are based on the organization of long-term memory. The concepts an employee – a ‘newcomer’ – has to learn on her way to becoming an ‘oldtimer’ are identified to be related to the tasks as well as to social issues. It is further explained that rather than employing the notion of cognitive frames as the theory of cognitive leadership originally does, the present volume prefers the notion of mental models.

It is argued that our limited information processing capacities result in a more or less engaged processing of incoming information. The factors that determine the extent of an individual’s engagement in information processing are presented and it is reasoned that most of the time a rather superfluous processing of information that relies on our long-term memory can be assumed for most individuals. Section 2.3 summarizes Chapter 2.

A cognitive leader takes advantage of this selectivity by aiming at establishing her business conception as a basis to her employees’ attention and information processing. This is achieved by frequently communicating with the employees. Moreover, the employees learn about the business conception by observational learning.

These issues are discussed in Chapter 3. This volume argues that for an individual employee to adopt a business conception she has to be motivated to do so. It is argued that she can be assumed to be motivated because of her need for certainty and affiliation (Section 3.1). Furthermore, it is concluded that immediately after joining a new organization a newcomer is most susceptible to the influence of others – be it the cognitive leader or her colleagues.

Whereas the theory of cognitive leadership concentrates on communication and observational learning for the conveyance of the business conception, this focus is broadened in the present volume (Section 3.2). Classical conditioning as well as operant learning are presented as the most basic
forms of learning that, on the one hand, are important to observational learning but that, on the other hand, also contribute to an individual’s learning in their own right. With regard to observational learning, the focus of the theory of cognitive leadership is widened in that this volume outlines the determining factors of an individual’s learning by observing others. The same approach is taken with regard to learning from communication. Again, the determining factors of learning from communication are explored. It is argued that the effects of communication depend on the individual’s engagement in information processing, the cognitive leader’s characteristics and behavior and the business conception’s characteristics. A summary of Chapter 3 is offered in Section 3.3.

The theory of cognitive leadership addresses the impact of employees on the implementation and maintenance of cognitive leadership to a limited extent by proposing that employees can serve as models to their colleagues. While these models may be coherent with the business conception, in some cases they may potentially threaten the cognitive leadership by introducing deviant behavior to the work group.

Social influence has been shown to be a dyadic as well as a group-level phenomenon. The Chapter 4 therefore broadens the approach of the theory of cognitive leadership by directing the attention to group-level processes. These are argued to have a substantial impact on the implementation and maintenance of cognitive leadership. As an example of the potential impact a work group can have on an individual employee, a newcomer’s joining of a firm is analysed from both perspectives, that of the newcomer as well as that of the work group she enters (Sections 4.1 and 4.2, respectively).

From a newcomer’s point of view, she has to learn task-related concepts (for example, shared mental models about the work group’s way of processing the mail) as well as group-related concepts (that is, shared mental models about the work group’s social norms and social roles) on her way to become a full group member. These shared mental models constitute a ‘common frame of reference’ or – in other words – the work group’s culture (Levine and Moreland 1991). The tactics a newcomer employs for gaining such information are outlined.

Taking the oldtimers’ perspective, the functions of social norms, social roles and other work-related shared mental models are then presented. What motivation fosters the provision of information to a newcomer is discussed as well as what tactics oldtimers employ for doing so. Since the impact on a newcomer is reasoned to be highest during her initial time spent with a firm the analysis focuses on this period. It is concluded that the socialization of newcomers is likely to have a stabilizing effect on the work group’s social norms, social role and other work-related shared
mental models and that individual employees who cannot be socialized successfully leave the work group or organization. Consequently, work groups and organizations can be expected to grow more homogenous over time (Schneider 1987; O’Reilly et al. 1989). Section 4.3 turns to the occurrence of deviant behavior in work groups. The origins of deviant behavior are shown to lie with the oldtimers as well as with the newcomers. The conditions under which deviant behavior are found attractive by others are more closely examined. Section 4.4 summarizes Chapter 4.

The theory of cognitive leadership argues that cognitive leadership mainly has two intertwined effects. On the one hand, the cognitive coherence achieved by it facilitates the employees’ coordination. On the other hand, the cognitive coherence between the firm’s goals and the personal interests of the employees constitutes the employees’ intrinsic motivation while it allows the cognitive leader to grant substantial liberties to her employees. Chapter 5 returns to this dyadic perspective of social influence processes and explores the characteristics of cognitive leaders as well as the hypothesized effects of cognitive leadership on the employees’ coordination and motivation empirically. To this end, 14 hypotheses concerning the employees’ coordination and motivation are proposed. Subsequently, the method employed in the exploration is described in Section 5.2. Before the measures and the analyses are described, the sample is presented. The data collected from 107 participants is analysed with regard to the characteristics of cognitive leaders. The results of the empirical exploration are presented in Section 5.3. The factor analysis reveals that the 25 characteristics of cognitive leaders assumed in the theory of cognitive leadership can be grouped on seven meaningful dimensions. The factor values of all participants on each of the seven factors are divided into four percentiles and the resulting groups are interpreted to indicate the extent to which the respective participant exerts this characteristic factor. The correlations of the factor values with the effects items are computed and it turns out that some of the hypothesized effects are found, whereas some hypotheses are not supported. Section 5.4 summarizes Chapter 5.

Chapter 6 presents some implications of the present volume along with an outlook. Implications apply to dyadic interactions as well as to the shaping of group processes (Section 6.1). It is argued that a cognitive leader can aim at shaping dyadic and group-level processes by adhering to some basic rules which are explained.

An exhaustive treatise of the theory of cognitive leadership is not possible to achieve within the scope of this volume and, thus, a number of questions remain unanswered. These are outlined in Section 6.2. Since the importance of the socialization of newcomers has already been pointed out, the importance of selecting the ‘right’ employees is especially
highlighted. It is argued that the selection of employees who fit the organization can lessen the need for socialization (for example, Rentsch and Hall 1994). Dimensions of fit that can be found in the literature and those that relate to the theory of cognitive leadership are presented. It is suggested that they include the employees’ background as well as the fit of the newcomer to the organization, the work group and the supervisor with regard to their values and personalities.

The importance of a fit between a newcomer and the new organization is further emphasized by the findings of Higgins (2005). She argues that it is not the accumulated experiences of an employee that predominate her behavior in the workplace but that an employee’s early and midcareer professional socialization experiences have an enduring impact on her behavior throughout her professional life. This ‘career imprint’ results from the combined impact of three factors: (1) the place (including an organization’s strategy, structure and culture), (2) the individual’s characteristics and (3) the individual’s career paths followed within a particular organization. Higgins suggests that the greater the alignment of these three factors is, the stronger the career imprint. Hence, the socialization of a newcomer can be assumed to be facilitated as well as impeded by the individual’s career imprint and choosing recruits who do not fit to an organization may result in substantial investments in their socialization that may turn out to be to no avail. Further open questions are discussed. A summary of Chapter 6 is offered in Section 6.3.

NOTES

1. Other constellations of a firm founding, for example by a group of entrepreneurs, are neither considered in the theory of cognitive leadership nor in this volume.
2. Note that this volume’s perspective on the issue of intrinsic and extrinsic motivation is based on the assumption that in principle both kinds of motivation co-exist and that only their extents vary. Consequently, when speaking, for example, about intrinsically vs extrinsically motivated employees this is to say that their predominant source of motivation is either intrinsic or extrinsic and that the respective counter motivation is also present albeit to a lesser extent. This perspective acknowledges that intrinsically motivated employees desire fair pay just as extrinsically motivated employees do.
3. See also Barnard’s ‘moral factor’ (Barnard 1948).
4. Formal training programs designed to train a newcomer on her entry to a firm are excluded from the present discussion.
5. However, we cannot conclude that a cognitive leader’s aura of charisma is by any means harmful to cognitive leadership.