"It's Mine." The Role of Psychological Ownership and Territoriality in Knowledge Hiding

Research-in-Progress

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Abstract

Recently, researchers started asking why and how people hide knowledge. One explanation is that people develop feelings of psychological ownership for their knowledge and tend to protect it by engaging in territoriality. Prior research holds that psychological ownership is an important antecedent of knowledge hiding. However, little is known about how people develop these feelings of ownership for knowledge. This research-in-progress derives a theoretical model and proposes that knowledge characteristics are triggers for the development of ownership feelings. The characteristics in the focus of this paper are knowledge complexity and knowledge uniqueness. Moreover, this paper suggests that ownership manifests in two particular territorial intentions (defending and marking), which, in turn, impact hiding behavior. This study is one of the first that focuses on knowledge characteristics to address the development of ownership feelings as the main explanation for knowledge hiding.

Keywords: knowledge hiding, territoriality, knowledge ownership, knowledge-based ownership

Introduction

Properly managed organizational knowledge is a widely recognized resource for a sustainable competitive advantage. Individual knowledge contributions lie at the core of knowledge management for organizational success (Wang and Noe 2010; Witherspoon et al. 2013). However, people turn out to be reluctant and sometimes even resistant to contributing their knowledge to a technologically supported environment (Huysman and Wulf 2005). When important knowledge or information is withheld, it might have a negative impact on organizations, varying from negative consequences for employees (e.g., Cerne et al. 2014; Guenter et al. 2014), over issues on a project level (e.g., Keil et al. 2014), to broader organizational inefficiencies (e.g., Dyne et al. 2003; Knoll and van Dick 2012; Morrison and Milliken 2000). Recently, researchers turned their attention toward knowledge withholding (Connelly et al. 2011; Peng 2013; Webster et al. 2008), in a hope to identify novel aspects of failures in organizational knowledge transfer or to prevent or mitigate the problems (Witherspoon et al. 2013). A better understanding of the underlying processes would help in identifying the technological needs of organizational knowledge management, which continues to be top of the list of business process areas requiring improvement in terms of technology (Van Decker 2012).

Research on knowledge withholding, its consequences, and its antecedents has gained recent attention. Webster et al. (2008) addressed the need to go "beyond knowledge sharing" (p. 1) to explain failures of knowledge management initiatives and offered multiple perspectives for studying knowledge withholding. Connelly et al. (2011) showed that employees engage in "knowledge hiding", i.e. an attempt to withhold or conceal knowledge, and proposed three major strategies people apply to hide. Later, Connelly and Zweig (2014) showed the interpersonal consequences of each strategy on dyadic relationships. Cerne et al. (2014) addressed the negative impact of hiding on the hider's creativity. Studies were conducted with various participants from the academic world (students (Connelly et al. 2011; Wang et al. 2014), MIS alumni (Lin and Huang 2010), scientists of U.S. universities (Haas and Park 2010)) or from the business setting (Connelly et al. 2011; Peng 2013). Reasons why people withhold knowledge vary (Garfield 2006; Goman 2002) and can be grounded in interpersonal dynamics (Connelly et al. 2011; Lin and Huang 2010; Wang et al. 2014), social identity (Wang et al. 2014), social cognition (Lin and Huang 2010), or personality (Wang et al. 2014), as well as in psychological ownership and territoriality (Peng 2013; Webster et al. 2008).

Researchers have identified perceived psychological ownership of knowledge as an important source of knowledge hiding (Peng 2013; Webster et al. 2008). Psychological ownership is a result of the innate human desire to possess and is ingrained in people with a Western cultural background (Pierce et al. 2003). In ambiguous situations with some level of uncertainty, the psychological state of ownership is likely to lead individuals to protect and keep to themselves what they feel they own. Such behaviors are called territorial behaviors and have been accounted for in the theory of territoriality (Brown et al. 2005). The context of knowledge management offers a high potential for such behaviors to occur.

Knowledge-based assets are intangible and non-canonical organizational assets, offering free space for ambiguity in interpretation of these assets' ownership. Although previous studies relate to knowledge as the target of ownership, no study has investigated how knowledge properties can trigger the development of ownership feelings. This paper investigates two knowledge properties that could play a major role in the development of ownership. The first property is *knowledge complexity*, which has already been useful in the context of knowledge hiding (Connelly et al. 2011). The second variable is *knowledge uniqueness*, which is essential for a sustainable competitive advantage in a broader organizational context. Furthermore, territoriality, which has been considered as a single construct in the previous research on knowledge withholding (Peng 2013), can be classified into two major types (*marking* and *defending*) with possibly different behavioral consequences. To gain a better understanding of the dynamics underlying knowledge hiding, I address the role of knowledge properties, ownership feelings, and territoriality with the following research questions:

How do knowledge properties influence the perceived ownership of knowledge?

How does perceived ownership of knowledge influence knowledge hiding behavior?

What role do the different territorial types play in the relationship between perceived knowledge ownership and knowledge hiding?

Theoretical Background

Knowledge Hiding vs. Knowledge Sharing

Knowledge *hiding* is defined as "an intentional attempt by an individual to withhold or conceal knowledge that has been requested by another person" (Connelly et al. 2011, p. 65). This is a type of knowledge *withholding* behavior (Webster et al. 2008), when individuals contribute less knowledge to an organization than they could (Lin and Huang 2010). Other types of withholding may exist, but so far only *hoarding* has been proposed (e.g., Webster et al. 2008). Hoarding does not necessarily involve a request by another person and is defined as "the act of accumulating knowledge which may or may not be shared in the future" (Webster et al. 2008, p. 4). Should individuals, however, be neither withholding nor actively sharing their knowledge, researchers refer to *disengagement* (Ford et al. 2015), when people "are neither actively sharing […] their knowledge, nor motivated to protect it" by hiding (Ford 2008, p. 114). Connelly et al. (2011) demonstrate that hiding behavior occurs in organizations in at least 10% of knowledge requests. This percentage is likely to be higher due to a social undesirability underlying hiding (Connelly et al. 2011). Connelly et al. (2011) identify three behavioral strategies of hiding: *Playing dumb* is defined as feigning ignorance of the requested knowledge. *Evasive hiding* is defined as providing incomplete or insufficient information or promising a complete answer in the future, with no intention of doing so. And, finally, *rationalized hiding* is defined as offering a justification by giving reasons or blaming someone else. Although hiding can be beneficial (e.g., keeping organizational secrets), it is generally considered to be harmful to organizations (Cerne et al. 2014; Connelly and Zweig 2014).

Is there actually any difference between hiding and not sharing? Recently, Kang (2014) used Herzberg's motivation-hygiene theory (Herzberg et al. 1959) to theoretically separate knowledge withholding from knowledge sharing, similar to the conceptual distinction between the constructs of job satisfaction and job dissatisfaction. Kang (2014) claims that sharing and withholding are distinct constructs and that therefore "successful measures to encourage knowledge sharing may be ineffective at reducing knowledge withholding, and vice versa" (p. 2). Research on knowledge sharing would therefore not necessarily give answers to questions on knowledge withholding; the two topics must be studied separately. Other researchers (e.g., Connelly et al. 2011; Ford 2008; Webster et al. 2008) also claim that sharing and hiding behaviors are not always directly related but are independent of each other. For example, a failure due to the inability to provide knowledge is not an example of knowledge hiding. The failure is only hiding when a colleague is able to give knowledge but intentionally decides not to do so (Connelly et al. 2011). This insight portrays intentionality as a major conceptual indicator of hiding (Connelly et al. 2011; Ford and Staples 2008; Webster et al. 2008). This work focuses on knowledge hiding, i.e., situations when a colleague requests knowledge from another colleague who then intentionally withholds that knowledge.

Psychological Ownership

The question of knowledge ownership offers a high conflict potential in the organizational context (Rechberg and Syed 2013). The tendency of organizations to "own what you know" (Dulipovici and Baskerville 2007, p. 205) can raise such conflicts with and among their employees (Brown et al. 2005). Ownership can be conceptualized as both an objective and a psychological state (Pierce and Jussila 2011; Webster et al. 2008). Objective ownership is considered "real", and exists outside of minds (Etzioni 1991) and is described through organizational governance structures (e.g., organogram) or through equity holdings (e.g., capital ownership stakes) (Pierce and Jussila 2011). Psychological ownership, on the other hand, is an individually experienced feeling, defined as a "state in which individuals feel as though the target of ownership (material or immaterial in nature) or a piece of it is "theirs" (i.e. 'It is MINE!')" (Pierce et al. 2001, p. 299). This concept of ownership is rooted in the "psychology of possession" (p. 85) and is fundamental to Western cultures (Pierce et al. 2003).

In the context of organizations, employees develop feelings of ownership toward diverse organizational objects, tangible (e.g., office, tools) and intangible (e.g., ideas, goals) (Pierce and Jussila 2011). Pierce et al. (2001; 2003) propose three major routes through which people develop this psychological attachment to a certain target. First, *controlling the target* is considered a key property of ownership because the ability to control and manipulate an object arouses feelings of possession toward the object up to the

perception of an object as an extension of the self (Pierce et al. 2003). The second route refers to associations with an object that enable individuals to *intimately know the target* (Pierce et al. 2001). Through this familiarity, a close relationship between an object and the self can be developed, which is likely to give rise to a feeling of ownership (Pierce et al. 2003). Finally, *investing the self into the target* is a possible route to psychological ownership. When individuals devote their energy or their mental or physical effort to an object, they are likely to feel ownership of what they create, form, or develop (Pierce et al. 2003). Each route can lead to feelings of psychological ownership. However, the perception of ownership tends to be stronger if multiple routes are involved because the routes complement each other and relate additively (Pierce et al. 2003).

The underlying mechanisms for these three routes to psychological ownership are categorized along three fundamental human needs: efficacy and effectance[1], home, and self-identity (Pierce et al. 2001). The first need, efficacy and effectance, is the human desire to be able to act and to interact effectively in an environment. It implies an ability to be in control over a tangible or intangible object (Pierce et al. 2003). The second need, the need for home, refers to the desire to have a place, a sense of belonging to a certain place "in which to dwell" (Pierce et al. 2001, p. 300). Finally, the need for self-identity refers to the ability of objects to be integrated into the self, becoming then expressions and extensions of the self (Pierce et al. 2003). These needs, also named innate human needs, are antecedents of ownership and have to be aroused by a potential target for ownership feelings to develop. The potential target should thus possess some characteristics that can become a triggering mechanism for the development of ownership feelings. If triggered, the development follows one or more routes and satisfies at least one innate need (Pierce and Jussila 2011).

Consequences of the ownership feelings are multifold. They allow individuals to value, to feel responsible for, and to be emotionally involved with their belongings. However, feelings of ownership, especially over intangible objects, may include a high level of uncertainty and ambiguity, as there is a risk that others could claim ownership too (Pierce and Jussila 2011). This perspective has been neglected in organizational research but is highly present in organizations (Brown, Crossley, et al. 2013). Feelings of ownership do not involve objective possession rights. Consequently, individuals tend to engage in a certain behavior to communicate and protect the object of ownership – territorial behavior (Pierce and Jussila 2011). In the context of knowledge management, with knowledge and information so intangible in terms of possession and ownership, territoriality is likely to occur.

Territoriality

Psychological ownership is a cognitive phenomenon internal to an individual. Territoriality is its social behavioral representation: the major statement of territoriality ("it's mine, not yours") has to be addressed toward another party (Brown et al. 2005). Organizational life is territorial in nature: in any office you will find nametags at the doors, personal items on desks, and desks and computers in a certain order, signaling the employees' territories. This marking makes people feel safe and comfortable at work (Brown, Crossley, et al. 2013). Rooted in biology, territoriality helps employees to "establish, communicate, and control their relationships with elements of organizational life" (Brown et al. 2005, p. 577). For example, in the context of knowledge management systems, someone may not be invited to a project space or can exclude others from accessing a certain wiki page.

The theory of territoriality suggests that territorial behavior can be classified into *marking*, i.e., claiming and communicating a territory, and *defending*, i.e., protecting the territory against others (Brown, Crossley, et al. 2013). In marking, individuals claim and communicate their territories by labeling them to define possessions and their boundaries (Brown et al. 2005). Marking can serve to address the control (control-oriented marking) over a territory, such as publicly stating that one has developed an idea (Webster et al. 2008). It can also be used to build and express one's identity (identity-oriented marking) and communicate it to others (Brown et al. 2005). This study investigates the control-oriented type of marking. The identity-oriented marking is more relevant to privacy questions, when individuals do not want to disclose their personal information. In control-oriented marking, clarifying ownership borders

[1] *Effectance* represents a motivational aspect of competence, resulting from the perceived ability to successfully explore and influence the environment (White 1959).

without withholding the object could be sufficient. Sometimes, however, individuals have to defend their territories due to a potential or actual infringement (Brown and Robinson 2011). Here researchers refer to *defending* responses and classify them into anticipatory and reactionary. Anticipatory defenses usually take place prior to a possible conflict, whereas reactionary ones represent actions after an invasion (Brown et al. 2005). Reactionary defense is often driven by strong emotions (e.g., anger) (Brown and Robinson 2011). This study refers to anticipatory defenses when mentioning defending.

Research Model and Hypotheses

I build on the recent empirical work of Peng (2013), who studied the direct effect of psychological ownership on hiding and a partial mediation by territoriality. This research-in-progress extends his work by including two territorial concepts: marking and defending (Brown et al. 2005; Connelly et al. 2011; Kang 2014; Webster et al. 2008). In addition, I propose two properties of knowledge, namely *knowledge complexity* and *knowledge uniqueness*, as antecedents of perceived knowledge ownership. Figure 1 shows the research model with knowledge properties as independent variables and territoriality being represented by the two territorial constructs with distinct effects on knowledge hiding: marking and defending. Furthermore, the model proposes *functionalities of information systems (IS)* to moderate the impact of the territorial constructs on knowledge hiding.

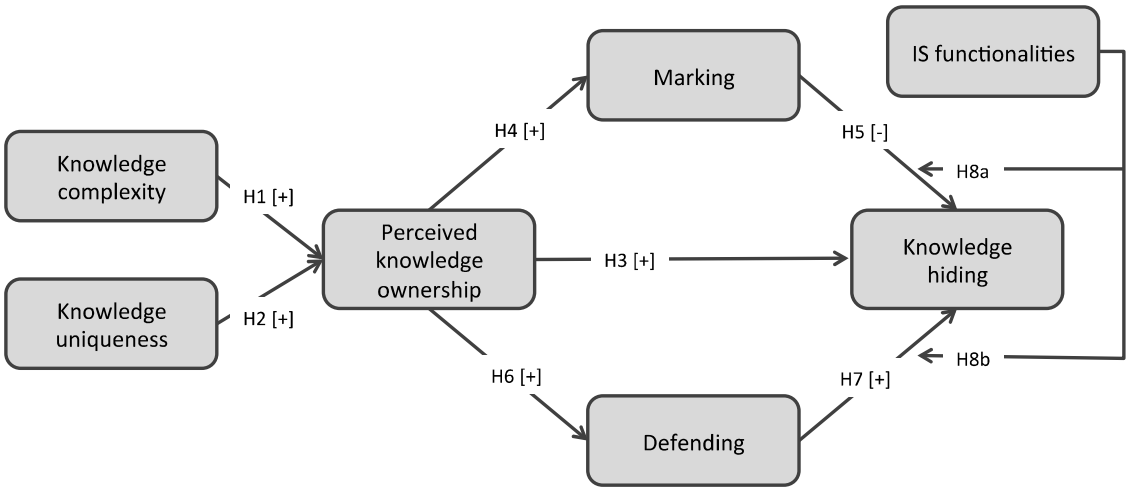

Figure 1. Research Model

Knowledge Properties and Perceived Knowledge Ownership

For knowledge to become a target of ownership (e.g., Peng 2013; Xinyan and Xin 2006), it should possess some properties that trigger the ownership development process. Two major criteria were applied to identify these properties. First, the properties should be inherent to a knowledge piece but not necessarily relevant to a person. Thus, they should not necessarily need an individual's perception but could be defined objectively, if needed. Second, they should be attractive and applicable in the context of ownership, i.e., they should be able to address the routes to develop the feelings of ownership (Pierce and Jussila 2011). Although, many potential properties exist, this paper focuses on two to start exploring their influence in details: knowledge *complexity* and knowledge *uniqueness*. Complexity of an object is an essential characteristic when addressing an object's role: e.g., job complexity in understanding development of job-related ownership (Pierce and Jussila 2009), task complexity in understanding information processing (Browne et al. 2007; Byström and Järvelin 1995), knowledge complexity in studying hiding (Connelly et al. 2011). Complexity is also a key property of knowledge (Teece 1987). Uniqueness has been chosen due to the human innate need to possess, which is an integral part of psychological ownership (Grandori 2001). With unique products and personal profiles, people hope to

show their individuality and try to differentiate themselves from others (Snyder and Fromkin 1980). In the organizational context, knowledge uniqueness is also essential for a sustainable competitive advantage (Davenport and Prusak 2000).

Researchers recognize that job design complexity is essential for the formation of job-based psychological ownership and that complexity is likely to satisfy essential human needs by following the routes to ownership (Pierce et al. 2009). Complex jobs provide opportunities to experience control and competence due to own skills and abilities (Pierce et al. 2009). Complex knowledge similarly allows individuals to experience control over the knowledge during the acquisition of such knowledge as well as to experience intimate knowing of the knowledge during its application. People are also more likely to invest the self into the job in complex environments that involve "demanding, challenging, person and time consuming endeavors than in those that can be accomplished quickly, easily, and without the expenditure of time and self [...]" (Pierce et al. 2009, p. 484). Similarly, the initial investment in understanding and internalizing the complex knowledge can address the route of investing the self into the target. Often tacit, complex organizational knowledge, such as expertise or know-how, is likely to result from personal experiences and thoughts (Constant et al. 1994). In such cases, employees invest their physical and mental effort in creating and developing knowledge, and such knowledge becomes a reflection or extension of their self-identity through the route of self-investment. Similarly to the complexity required to develop job-based psychological ownership, *knowledge complexity* is considered to trigger development of perceived knowledge ownership:

> *H1. Knowledge complexity positively influences the development of perceived knowledge ownership.*

Knowledge as a competitive advantage is not only relevant on a company level but is also true on an individual level: "knowledgeable people" enjoy respect and recognition and are usually treated well in organizations (Davenport and Prusak 2000). Being an expert is especially prestigious if the knowledge is scarce. *Uniqueness* is an important characteristic of knowledge (Cabrera and Cabrera 2002). Uniqueness is implied when only one person or a small number of people possess an object. The need for uniqueness is also a personal trait (Cheema and Kaikati 2010). Satisfaction of this need is likely to happen over the route of intimately knowing the target, as individuals' associations with being an expert and the keeper of some valuable knowledge implies that they are very familiar with the knowledge. Unique knowledge provides differentiation from others (Grandori 2001), and this knowledge is generally acquired by investing one's self into the target, as individuals position themselves in organizations by constantly improving their knowledge and thus investing time and effort. Finally, individuals can also experience controlling the knowledge if knowledge is unique, because they gain the power over knowledge (to shape and to develop it) as well as the power from possessing the knowledge (its application). Knowledge uniqueness versus knowledge commonness even further raises knowledge asymmetries and changes the power balance toward the individual possessing the knowledge. Thus, I propose that *knowledge uniqueness* is likely to address all three routes to develop the feelings of ownership:

> *H2. Knowledge uniqueness positively influences the development of perceived knowledge ownership.*

Perceived Knowledge Ownership and Information Hiding Intentions

Researchers suggest (Kang 2014; Webster et al. 2008) and demonstrate (Peng 2013) a direct effect of perceived knowledge ownership on hiding intentions (Peng (2013) labels the perceived knowledge ownership as "knowledge-based ownership"). Ownership-driven knowledge hiding can be explained in two possible ways: overvaluing of knowledge and anticipated loss of control. First, Peck and Shu (2009) show that there is a positive relationship between the feelings of ownership about a target and its valuation. Individuals overvalue those objects they feel ownership for, compared to those for which they do not have such feelings (Beggan and Brown 1994). Thus, people feel attached to their knowledge. The overvaluation can lead individuals to limit access to knowledge by others, to keep the benefits of knowledge to themselves, especially if they think they might lose some value through sharing (Ford and Staples 2005). Second, ownership provides the owner with perceived rights and responsibilities in regard to an object, i.e., the ability to control the object (Pierce and Jussila 2011). In the knowledge management

context, it could be a further development of an idea or an application of knowledge in a subjectively most appropriate way. If ideas are given away too early, others could shape and develop these ideas in, possibly, different directions. Thus, the individual encounters loss of control over an object – one of the most important characteristics of ownership. In knowledge transfer situations, they then will possibly try to preserve these knowledge ownership feelings by hiding the knowledge from others, avoiding the risk and uncertainty connected with sharing. Sidestepping sharing would help individuals to keep the feeling of control, along with ensuring stability, safety, and predictability of the situation. Based on this argumentation, the following hypothesis is proposed:

H3. Perceived knowledge ownership positively influences knowledge hiding.

Mediation by Territoriality

Psychological ownership is the conceptual core of territorial behavior (Brown, Pierce, et al. 2013). The degree of ownership directly relates to the degree of territoriality, which can be demonstrated by communication (marking) and protection (defending) of a territory (Brown et al. 2005). Building on the two facets of territoriality and, thus, on the two types of underlying intentions, this work proposes that they mediate the influence of psychological ownership on knowledge hiding behavior.

Marking is related to claiming and communicating ownership, emphasizing that an idea or information is held by an individual (Brown et al. 2005). Should a knowledge object be theirs, individuals will develop territorial intentions to communicate and claim it. In this mode, territoriality does not necessarily lead to conflicts and hiding behavior. Sometimes it is sufficient to appoint a territorial claim by communicating, i.e. *marking*, the territory. If marking is possible, it could be sufficient to communicate ownership through a set of gestures and activities and to discourage others from claiming rights over an object, whether tangible or intangible in nature (Brown et al. 2005). If marking is accepted by the third party, the perceived threat decreases and individuals do not necessarily have to defend the object any further. In the knowledge management context, such intentions could be directed toward addressing the ownership, for example, communicating being the author of improvements in production processes to the organizationally significant others. If others recognize the claim, the perceived risk of a possible future invasion decreases, and individuals feel they have maintained control over the knowledge and kept their territory. Thus, they do not necessarily need to hide their knowledge.

H4. Perceived knowledge ownership positively influences marking intentions.
H5. Marking intentions negatively influence knowledge hiding.

Defense is a stronger form of territoriality when an individual intends to protect his or her territory from an anticipated invasion (Brown and Robinson 2011). Should a knowledge object be theirs, individuals will develop territorial intentions to communicate and protect it. In this mode, individuals have strong tendencies to defend their territories in conflict situations of a territorial infringement, which are often associated with strong negative feelings such as anger (Brown and Robinson 2011). To defend knowledge, individuals partake in dysfunctional behaviors, such as hiding it. These behaviors occur in knowledge transfer situations. Such situations are considered weak because the environmental uncertainty of future consequences of sharing is high. Individuals take preventive measures to overcome a potential conflict in the first place through hiding strategies, such as playing dumb. Hiding is referred to as an anticipated defense, i.e. a preventive sanction serving to avoid a conflict or power loss. Thus, hiding is a prototypically anticipated defense intention, guided by a perceived control and/or power loss, or other negative consequences, such as a threat to self-identity.

H6. Perceived knowledge ownership positively influences defending intentions.
H7. Defending intentions positively influence knowledge hiding.

Although there is still potential for improvement (Van Decker 2012), knowledge management systems have become inevitable for organizational knowledge management practices (Alavi and Leidner 2001). Electronic repositories, virtual communities, portals, and messengers belong to a standard technological landscape, especially in larger companies. Contemporary knowledge management systems should not

only consider technological and managerial interests but should also address individual and social aspects of organizational dynamics (Huysman and Wulf 2005). These systems can help individuals to develop and sustain their ownership by marking and, thus, communicating it to others (Comuzzi and Jarvenpaa 2008). For example, knowledge authorship could be maintained in the system through metadata, maintaining the author's (owner's) name persistently (Comuzzi and Jarvenpaa 2008; Ma and Agarwal 2007). IS thus provide functionalities that communicate ownership of knowledge and are able to address individuals' marking intentions. If people are able to apply marking, their intentions to hide the object of ownership decrease, because the ownership is defined and communicated to others. Similarly, other features could help individuals to behaviorally represent defending intentions. For example, individuals could limit access permissions to a team or even explicitly exclude someone from accessing information.

H8a. Marking-enabling IS functionalities moderate the relationship between marking intentions and knowledge hiding by enabling individuals to communicate knowledge ownership.

H8b. Defending-enabling IS functionalities moderate the relationship between defending intentions and knowledge hiding by enabling individuals to restrict access to knowledge.

Research Methodology

I plan to conduct a survey to empirically test the derived hypotheses. To prepare the survey, scales for the independent variables knowledge complexity and uniqueness have to be developed. For this purpose, I will follow a rigorous instrument development process proposed by MacKenzie et al. (2011). For the constructs *hiding intentions*, *marking*, *defending* and *perceived knowledge ownership*, I will rely on validated instruments. The dependent variable *knowledge hiding* is defined as "an intentional attempt to withhold or conceal knowledge that has been requested by another individual" (Webster et al. 2008, p. 2). I will measure this construct by applying validated scales for hiding and the different types of hiding (Connelly et al. 2011; Peng 2013) with items such as: "Said I did not know, even though I did", or "Withhold helpful information or knowledge from others". The mediator *marking* is defined as anticipated "labeling [of] an object to communicate the boundaries of a territory and clarifying who possesses psychological ownership over it" (Brown, Crossley, et al. 2013, p.468) with items such as: "I intend to let others know the knowledge has been claimed", or "I intend to show others that the knowledge belongs to me". The mediator *defending* is defined as an anticipated "action to prevent others from successfully taking or using their territory" (Brown, Crossley, et al. 2013, p. 468) with items such as: "I intend to protect the knowledge so others don't know about it until I want them to", or "I intend to make the knowledge hard to access". The construct of *perceived knowledge ownership* is defined as a state in which individuals feel as though the knowledge or a piece of knowledge belongs to them, i.e., is "theirs" (based on Pierce et al. 2001; Pierce and Jussila 2011). The measurement of this construct relies on adopted instruments (Brown, Crossley, et al. 2013; Peng 2013; Van Dyne and Pierce 2004), with sample items such as "This is MY knowledge", or "I feel a very high degree of personal ownership of the knowledge". The results from the currently ongoing scale development will be integrated into the final study. The study applies a quantitative methodology for socially undesirable behavior. To overcome this limitation, I plan to introduce anchoring vignettes (King and Wand 2006) at the beginning of the survey, allowing for an anchor for differences in individual evaluations across participants (Auspurg and Hinz 2014). Existing studies (Peng 2013; Wang et al. 2014) provide quantitative evidence for the analysis of hiding with Chinese samples. I assume that empirical results from Western background would also be significant.

Discussion

This research-in-progress makes several theoretical contributions. First, this study positions knowledge to play a central role in the development of ownership feelings, territoriality and hiding and proposes two inherent characteristics of knowledge as triggers for these feelings. Although previous studies addressed knowledge as a target of ownership (e.g., Peng 2013; Xinyan and Xin 2006), they have not considered how knowledge becomes such a target. With knowledge as a central individual and organizational asset, it is useful to understand how it brings any dynamics into knowledge-related processes. Second, while building on the existing research on territoriality in knowledge hiding (Peng 2013), this work proposes

two types of territorial behavior that have different impacts on hiding. Defending is the prototypical explanation for hiding and increases its likelihood. Marking, on the other hand, decreases the likelihood of hiding because individuals can claim and communicate their ownership over knowledge through marking. This disentangling helps to understand why territoriality might not result in hiding and could help organizations to link their employees towards a more desirable path. Finally, in the organizational context, the model emphasizes IS as enablers in communicating knowledge ownership to (Comuzzi and Jarvenpaa 2008) and defending own knowledge from others. Different functionalities of IS have a potential to decrease or increase the influence of ownership on hiding behavior by features addressing marking or hiding intentions of individuals, respectively. The model provides a theoretical underpinning for these effects.

Along with the contributions of this paper, important limitations should be mentioned. First, the current research-in-progress implicitly addresses the processes of development of psychological ownership. An explicit modeling of the routes to perceived knowledge ownership instead of their application in hypotheses' development would be beneficial in addressing all explanatory factors and pathways to development of ownership feelings. Second, the paper does not yet explicitly differentiate between explicit and tacit knowledge. In the current version, this topic is, however, implicitly addressed by the adopted view of knowledge possession (Blackler 1995), which was necessary to apply the ownership perspective. This view assumes that knowledge is something that can be possessed by individuals, teams, or organizations, and it has to be made explicit for a transfer (Newell 2006). Finally, the study does not address individual differences, which, however, are expected to strongly influence individual hiding practices (Connelly et al. 2011). In the final study, I plan to at least control for territorial predispositions, as proposed by (Webster et al. 2008). The knowledge withholding research stream still has many open topics that must be addressed if the flaws in knowledge transfer in organizational context are to be understood and mitigated.

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